



BenguetCorp

May 14, 2021

**SECURITIES AND EXCHANGE COMMISSION**

Secretarial Building, PICC Complex  
Roxas Boulevard, Pasay City 1307

Attention: **Mr. VICENTE GRACIANO P. FELIZMENIO, JR.**  
Director, Market & Securities Regulation Department

**THE PHILIPPINE STOCK EXCHANGE**

6F Philippine Stock Exchange Tower  
5<sup>th</sup> Avenue corner 28<sup>th</sup> Street  
Bonifacio Global City, Taguig City

Attention: **Ms. JANET A. ENCARNACION**  
Head, Disclosure Department

Gentlemen:

In compliance with the reportorial requirements of the Securities and Exchange Commission (SEC) and Philippine Stock Exchange (PSE) pursuant to SEC Memorandum Circular No. 5, S 2021 dated 08 April 2021, we submit Benguet Corporation's Annual Report 2020 (SEC Form 17-A) with the following attachments:

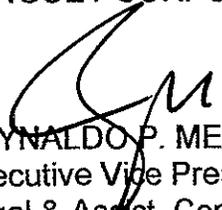
- (a.) Benguet Corporation and its Subsidiaries Audited Consolidated Financial Statements for fiscal year ended December 31, 2020;
- (b.) Benguet Corporation's (Parent) Audited Financial Statements for fiscal year ended December 31, 2020; and
- (c.) Sustainability Report 2020

We trust that you will find everything in order.

Very truly yours,

**BENGUET CORPORATION**

By:

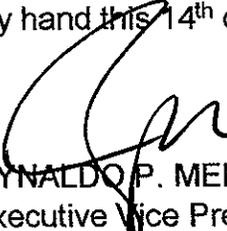
  
**REYNALDO P. MENDOZA**  
Executive Vice President  
Legal & Assist. Corporate Secretary

## CERTIFICATION

I, REYNALDO P. MENDOZA, Executive Vice President and Assistant Corporate Secretary of BENGUET CORPORATION with SEC registration number 11341 and principal office at 7<sup>th</sup> Floor, Universal Re Building, 106 Paseo de Roxas, Makati City, on oath state:

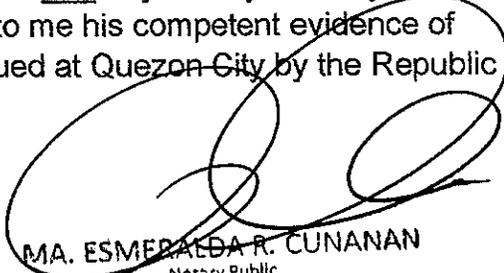
1. That I have caused this Annual Report 2020 (SEC Form 17-A) including Benguet Corporation and Subsidiaries Audited Consolidated Financial Statements for fiscal year ended December 31, 2020; Benguet Corporation (Parent) Audited Financial Statements for fiscal year ended December 31, 2020; and Sustainability Report 2020 as attachments to be prepared on behalf of Benguet Corporation;
2. That I read and understood its contents which are true and correct based on my own personal knowledge and/or on authentic records;
3. That the Company, Benguet Corporation will comply with the requirements set forth in SEC Notice dated 12 May 2021 to effect a complete and official submission of reports and/or documents through electronic mail; and
4. That the E-mail account designated by the Company pursuant to SEC Memorandum Circular No. 28, s. 2020 shall be used by the Company in its online submissions to CGFD.

IN WITNESS WHEREOF, I have hereunto set my hand this 14<sup>th</sup> day of May 2021.

  
REYNALDO P. MENDOZA  
Executive Vice President  
and Assistant Corporate Secretary

MAY 14 2021

SUBSCRIBED AND SWORN to before me this \_\_\_ day of May 2021 by affiant who personally appeared before me and exhibited to me his competent evidence of identity consisting of SSS ID No. 03-3865936-9 issued at Quezon City by the Republic of the Philippines.

  
MA. ESMERALDA R. CUNANAN

Notary Public

Until December 31, 2021

Appt. No. M-27 (2020-2021) Attorney's Roll No. 34562

MCLÉ Compliance No. V1-0008196/4-23-2018

PTR No. 8533031/1-4 2021/Makati City

IBP Lifetime Member Roll No. 05413

Ground Level, Dela Rosa Carpark

Dela Rosa St. Legaspi Village,  
Makati City

DOC. NO. 219;  
PAGE NO. 45;  
BOOK NO. XVI;  
SERIES OF 2021

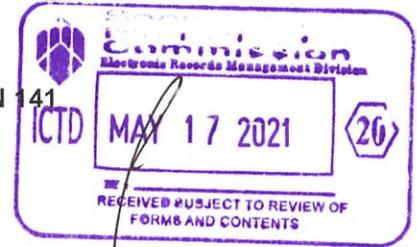


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**SEC FORM 17-A**

**ANNUAL REPORT PURSUANT TO SECTION 17  
OF THE SECURITIES REGULATION CODE AND SECTION  
OF THE CORPORATION CODE OF THE PHILIPPINES**



1. For the fiscal year ended .....DECEMBER 31, 2020.....
2. SEC Identification Number ....11341..... 3. BIR Tax Identification No. ...000-051-037....
4. Exact name of issuer as specified in its charter .....BENGUET CORPORATION.....
5. ....PHILIPPINES..... 6.  (SEC Use Only)  
Province, Country or other jurisdiction of Industry Classification Code:  
incorporation or organization
7. 7F UNIVERSAL RE-BUILDING, 106 PASEO DE ROXAS, MAKATI CITY .....1226.....  
Address of principal office Postal Code
8. .... (632) 7751-9137 / 8812-1380 .....  
Issuer's telephone number, including area code
9. ....  
Former name, former address, and former fiscal year, if changed since last report.

1. Securities registered pursuant to Sections 8 and 12 of the SRC, or Sec. 4 and 8 of the RSA

<u>Title of Each Class</u>	<u>Number of Shares of Common Stock Outstanding and Amount of Debt Outstanding (as of December 31, 2020)</u>	
Convertible Preferred Class A ₱3.43 par value		217,061 shares
Common Class A Stock ₱1.00 par value		370,909,460 shares*
Common Class B Stock ₱1.00 par value		245,212,922 shares*

(\*) – Net of Treasury Shares

Total consolidated outstanding principal loans payable as of December 31, 2020- ₱270.06 Million

11. Are any or all of these securities listed on a Stock Exchange.

Yes [  ] No [  ]

If yes, state the name of such stock exchange and the classes of securities listed therein:

**The Convertible Preferred Class A, Common Class A and Common Class B shares of the Company are listed in the Philippine Stock Exchange (PSE).**

12. Check whether the issuer:

(a) has filed all reports required to be filed by Section 17 of the SRC and SRC Rule 17.1 thereunder or Section 11 of the RSA and RSA Rule 11(a)-1 thereunder, and Sections 26 and 141 of The Corporation Code of the Philippines during the preceding twelve (12) months (or for such shorter period that the registrant was required to file such reports);

Yes [  ]      No [  ]

(b) has been subject to such filing requirements for the past ninety (90) days.

Yes [  ]      No [  ]

13. State the aggregate market value of the voting stock held by non-affiliates of the registrant. The aggregate market value shall be computed by reference to the price at which the stock was sold, or the average bid and asked prices of such stock, as of a specified date within sixty (60) days prior to the date of filing. If a determination as to whether a particular person or entity is an affiliate cannot be made without involving unreasonable effort and expense, the aggregate market value of the common stock held by non-affiliates may be calculated on the basis of assumptions reasonable under the circumstances, provided the assumptions are set forth in this Form.

Not Applicable.

**APPLICABLE ONLY TO ISSUERS INVOLVED IN  
INSOLVENCY/SUSPENSION OF PAYMENTS PROCEEDINGS  
DURING THE PRECEDING FIVE YEARS:**

14. Check whether the issuer has filed all documents and reports required to be filed by Section 17 of the Code subsequent to the distribution of securities under a plan confirmed by a court or the Commission.

Yes [  ]      No [  ]

**DOCUMENTS INCORPORATED BY REFERENCE**

15. If any of the following documents are incorporated by reference, briefly describe them and identify the part of SEC Form 17-A into which the document is incorporated:

- (a) Any annual report to security holders;
- (b) Any information statement filed pursuant to SRC Rule 20;
- (c) Any prospectus filed pursuant to SRC Rule 8.1.

## PART I – BUSINESS AND GENERAL INFORMATION

### ITEM 1. BUSINESS

#### 1. BUSINESS DEVELOPMENT

Benguet Corporation (“Benguet” or the “Company”) was established on August 12, 1903 to engage in gold mining. It has since expanded into refractory chromite operation in 1934, quicklime and hydrated lime production in 1950, copper production in 1971, and then into nickel mining operation in 2007. From Benguet Consolidated Mining Company in the 1900s to Benguet Consolidated Inc. in the decades of the 1950s to 1980s, and finally to its present corporate name, Benguet Corporation, the Company looks with pride at its 117 years of existence as a testament to its adaptability and resiliency in the highs and lows brought about by global events, natural phenomena, economic conditions, and industry trends.

Benguet operates gold mines in Benguet Province, nickel mines in Zambales Province, limestone production facility in Baguio City and has mining interest in various parts in the Philippines and as well as mining properties in Royston Hills, Nevada. Aside from mining and mineral exploration, the Company is also into healthcare and diagnostics services through its subsidiary, Benguetcorp Laboratories, Inc. (BLI) and port and shipping services through its subsidiary, Keystone Port Logistics and Management Services Corporation (KPLMSC). In 1980, the Company established Benguet Management Corporation (BMC), a wholly owned non-mining subsidiary, primarily to invest in projects and enterprises that diversify, stabilize and strengthen the investment portfolio of the Benguet Group of Companies. BMC is involved in other lines of business which include logistics services through its subsidiary, Arrow Freight Corporation (AFC); trading of construction materials, equipment and supplies through its subsidiary, Benguetrade, Inc. (BTI); bottled and bulk water through Aqua de Oro Venture Corporation (AOV); and real estate development and lime kiln operation through its subsidiary, BMC Forestry Corporation (BFC).

In 1950, Benguet acquired the Irisan Lime Project (ILP) from Mr. Richard L. Lile (formerly Lime Products Manufacturing). ILP is engaged in the production and trading of quicklime and hydrated lime.

In 2002, Benguet reopened Benguet Gold Operation (BGO) on a limited scale through the Acupan Contract Mining Project (ACMP) now renamed as the Acupan Gold Project (AGP). ACMP was initially conceived as a community based underground mining operation which started commercial operation in January 2003.

In 2007, Benguet developed the Sta. Cruz Nickel Project (SCNP), a surface nickel mining operation in Zambales, Province operated by its wholly owned subsidiary, Benguetcorp Nickel Mines, Inc. (BNMI). On December 10, 2010, subject to DENR approval, the Company transferred the mining permit denoted as Mineral Production Sharing Agreement (MPSA) No. 226-2005-III of its SCNP, to BNMI. The transfer of the MPSA was approved by the Mines and Geosciences Bureau (MGB) on January 16, 2012.

For the past three years, Benguet and its subsidiaries have not been involved in any bankruptcy, consolidation, or purchase/sale of significant amount of assets not in the ordinary course of business.

#### MINING OPERATIONS

##### **Benguet Gold Operation (BGO) in Itogon, Benguet Province:**

AGP generated ₱704.3 million revenue for this year, 19% higher than the revenues of ₱593.3 million in 2019 and ₱616.5 million in 2018 despite lower volume of gold sold this year. Gold average selling price however increased by 25% averaging US\$1,750.25/Au.oz., as compared to average selling price of \$1,395.43/Au.oz in 2019 and US\$1,274.67/Au.oz in 2018. As a results, AGP pre-tax

income soared 689% this year to ₱106.5 million this year against ₱34.3 million pre-tax income in 2019 and from the net loss of ₱27.0 million in 2018.

AGP milled a combined 43,756 tons of ore at an average mill head of 5.74 Au.g/t, producing 8,081 ounces of gold, compared to 41,151 tons of ore milled with average mill head of 6.18 grams Au.g/t, producing 8,175 ounces in 2019 and 44,073 tons of ore milled with average mill head of 6.50 Au.g/t, producing 9,204 ounces in 2018. AGP ended the year with average milling rate of 120 tons per day (tpd), as compared 113 tpd in 2019 and 121 tpd in 2018.

AGP is currently adapting to the new normal whilst the province of Benguet is still under the Modified General Community Quarantine (MGCQ) due to the COVID-19 pandemic. Some parts of the CAR region, including nearby Baguio City is under General Community Quarantine (GCQ). Covid-19 restrictions affected the attendance of ACMP contractors' miners. However, production was sustained. The revised mine development and production expansion programs for the BC team, where aggressive development of the Acupan underground increased mining areas as well as upgraded mine and mill equipment coupled with improved milling processes cushioned the impact of Covid-19 pandemic. Negotiation is concluded with the lower downstream community representatives on the delayed TSF2 dam raising project. Now that TSF2 dam raising issue is resolved, improved crushing system for the Mill is being planned to attain 200 tpd mill capacity. At present, maximum mill capacity is only at 170-171 tpd. Study on renewed use of TSF3 as alternate tailings disposal facility is ongoing. AGP has renewed contracts of 16 mining contractors.

BGO passed another ISO Audit by TUVR, with a new certificate awarded on March 10, 2019 valid until March 9, 2022. Since March 2016, BGO has been ISO 14001:2015 certified by an accredited certifying body TÜVRheinland®.

**Sta. Cruz Nickel Project (SCNP) in Sta. Cruz, Zambales Province:**

2020 was a momentous year for BNMI when its mining suspension since 2016 was lifted. On October 29, 2020, BNMI received a letter from the MGB – Region III dated October 20, 2020 stating that DENR has lifted/set aside the MPSA cancellation order dated February 8, 2017 and the MGB mining suspension order dated June 23, 2015. With the lifting of mining suspension, BNMI started actual mining operations on November 20, 2020 and the approval of its tree cutting permit allowed ample elbow room for mining activities.

BNMI contributed revenue of ₱818.34 million to the Company, higher as compared to ₱64.65 million revenue in 2019 and ₱226.52 revenue in 2018 mainly attributable to better nickel price and higher volume of exported nickel ores which were sourced from the old stockpiled. This year, BNMI shipped a total of 9 boatloads of 1.2% to 1.4% nickel ore grades aggregating 483,952 tons, higher as compared to 1 boatload of 1.5% nickel ore weighing 55,000 tons in 2019 and 4 boatloads of 1.4% to 1.5% nickel ore aggregating 218,635 tons in 2018. The increase in sales volume and price resulted to net income of ₱169.9 million this year, a turnaround from the net losses of ₱191.2 million in 2019 and ₱169.3 million in 2018.

The nickel business experienced record-high prices for all range of ore grade around November 2020, allowing the sale of 1.2% Ni grade which resulted in increased inventory of marketable stockpile. This is reflected in the increased average selling price of BNMI's nickel exports this year to US\$34.91/ton, 52% higher than the average price of US\$22.50/ton in 2019 and US\$19.73/ton in 2018. To maximize the opportunity to address demand at such high prices, BNMI updated its ore inventory from old stockpile areas which yielded 9.5 boatloads of 1.2% ores, 5 boatloads of 1.3% and 3 boatloads of 1.4% nickel, or total of 17.5 boatloads. With the sale of 6 boatloads scheduled in March to April, remaining inventory is at 11.5 boatloads, comprising of 5.5 boatloads 1.2%, 5 boats of 1.3% and 1 boatload of 1.4% nickel.

BNMI continues to sustain its ISO certification, having passed another ISO Audit by TUVR, with a new certificate awarded on October 17, 2019 valid until October 16, 2022. Since March 2016, BNMI is ISO 14001:2015 certified by an accredited certifying body TÜVRheinland®.

**Irisan Lime Project (ILP) in Baguio City:**

The Company's ILP generated ₱63.2 million revenue for this year, lower as compared to the revenues of ₱106.6 million in 2019 and ₱96.5 million in 2018. Sales volume dropped by 32% to 6,612 tons this year from 9,671 tons in 2019 and 9,434 tons in 2018, mainly due to the COVID-19 pandemic and intermittent rains which slowed down orders from Lepanto and other buyers. Lime products were sold at average price of ₱10,268 per ton this year versus ₱11,021 per ton in 2019 and ₱10,233 per ton in 2018. The decreased in sales volume and price resulted to pre-tax income of ₱15.6 million this year, against pre-tax income of ₱34.0 million in 2019 and ₱15.5 million in 2018.

ILP shut down its second kiln when orders declined and has been operating only 1 kiln since. ILP is applying for renewal of quarry permit of its limestone property in Alaminos, Pangasinan quarry; one of its sources of raw material.

**Benguet Antamok Gold Operation (BAGO) in Itogon, Benguet Province:**

The revised Antamok Final Mine Rehabilitation and Decommissioning Plan (FMRDP) was re-submitted by the MGB-CAR to the Contingent Liability and Rehabilitation Fund Steering Committee (CLRFSC) for approval due to new development, particularly on the actual rehabilitation needs considering current physical status of the area. The revised total costs to be incurred over a 4-year period starting 2019 was reduced from ₱43 million to ₱30 million. The aim of the FMRDP is principally to mitigate environmental risks and provide a sustainable final land use over the area. It includes long-term programs such as the proposed Ecological Solid Waste Management Project with Temporary Residual Containment Area (TRCA), and Waste to Energy (WtE) facilities; the Eco-tourism Water Park Project; and Minahang Bayan.

**EXPLORATION, RESEARCH AND DEVELOPMENT**

Exploration, research and development are currently undertaken by the Company's in-house team, with or assisted by consultants and other service providers, like engineering and/or drilling contractors.

**Balatoc Tailings Project (BTP) in Itogon, Benguet Province:**

With the expiration and non-renewal of Mineral Processing Permit (MPP), BTP was reconveyed from Balatoc Gold Resources Corporation (BGRC) to BenguetCorp as viability of the tailings reprocessing project will be enhanced if made as an integral part of the Acupan Gold Project.

The Company updated the BTP information memorandum and negotiation on engagement terms of potential financial consultant is ongoing.

**Pantangan Gold Prospect in Bagac, Bataan Province:**

The Pantangan property is a viable prospect for epithermal gold mineralization and aggregates. On the gold prospect, the results of initial/Phase 1 drilling showed interesting gold value indications intersected at lower depth. The Company will implement its Phase 2 drilling upon engagement of a new drilling contractor. The drilling program consists of 6-8 diamond drillholes aggregating 1,200 meters for the two promising vein systems (V-2 and V-9) to further delineate the deposit. On the Pantangan aggregates prospect, the Company is prioritizing the permitting of the 40 hectares Quarry Permit Area (QPA) outside the MPSA, over the large scale quarry in PAB-1 & 2 which still needs drilling for Declaration of Mining Project Feasibility (DMPF). The MGB has issued area clearance in the QPA and the Company is working on LGU consent, tree inventory, NCIP certification, and ECC process. In the meantime, the Company continues to do topographic/road surveys and apply for road-right-of-way permits.

**Ampucao Copper-Gold Prospect in Itogon, Benguet Province:**

The Ampucao is a viable prospect for the discovery of deep-seated porphyry copper-gold deposit corresponding to surface and underground initial geological evaluation done by geologists of the Company. Copper bearing formation hosted by intensely silicified quartz diorite was delineated in outcropping on a river within the Hartwell claims and at the mine levels of 1500 and 2300 of BC's

Acupan Mine. A one-(1) kilometer long deep hole of surface drilling has been suggested to probe the down-dip extension of the projected mineralization in the Ampucao prospect, but this activity has been put on-hold pending resolution of the Application for Production Sharing Agreement (APSA) denial. The Company is awaiting decision on its appeal filed on the APSA denial under DMO No. 2010-04 (DENR Use it, Lose it Policy).

**Zamboanga Gold Prospect (BOLCO) in R.T. Lim Zamboanga del Sur:**

The Company has ongoing talks with claimowner, Orelina Mining Corporation for its consent to proposed Minahang Bayan (MB) that will allow the small scale miners cooperative in the San Fernandino vein area to continue with their livelihood activities under a regulated system. The conditions are - to allow the Company to conduct exploration/drilling works, assist in securing Free, Prior and Informed Consent (FPIC) from the Indigenous People. Duration of MB is 3 years or when the Company is ready to start large scale mining.

The Company has an operating agreement with Orelina Mining Corporation to explore and operate the property comprising of 399.03 hectares. The property is about 150 kilometers northeast from Zamboanga City. It straddles the common boundary of R.T. Lim, Zamboanga Sibugay and Siocon, Zamboanga del Norte.

**Surigao Coal Project in Lianga, Surigao del Sur:**

Benguet Corporation (BC) acquired a coal property in Surigao del Sur through a Royalty Agreement with Diversified Mining Company in 1981. The property consists of 12-coal blocks measuring total area of 12,000 hectares. Six-(6) coal blocks were extensively explored by way of mapping, trenching, drilling, electrical logging and topographic surveying. The ground evaluation works of the Company resulted in the delineation of seven-(7) coal seams of lignitic to sub-bituminous coal quality (steam grade). The Company at present has submitted all the requirements for the application of a new Coal Operating Contract (COC) with the Department of Energy (DOE).

**Financial Technical Assistance Agreement:**

Benguet Corporation (BC) through its subsidiary company, Sagittarius Alpha Realty Corporation (SARC), holds two (2) pending applications for Financial Technical Assistance Agreement (FTAA) denominated as AFTA No. 003 and AFTA No. 033. AFTA No. 003 with an area of 21,513.37 hectares is within the provincial jurisdiction of Ilocos Norte, whereas AFTA No. 033 consisting of 51,892.92 hectares is situated in Apayao province. Both mineral claims lie within the porphyry copper-gold and epithermal gold mineralization belt of Northern Luzon and are still greenfield for mineral exploration. BC already negotiated and signed four-(4) out of the five-(5) Memorandums of Agreement (MOA) with the Indigenous People (IP) of Ilocos Norte and now awaiting confirmation from the National Commission on Indigenous People (NCIP) of the Free, Prior and Informed Consent (FPIC) requirement.

**SUBSIDIARIES AND AFFILIATES**

**A. LOGISTICS**

**- Arrow Freight Corporation (AFC)**

AFC a logistics provider of the Company generated ₱ 32.15 million revenue for this year, as compared to revenues of ₱14.16 million in 2019 and ₱20.22 million in 2018. Increased in revenue resulted a net income of ₱11.6 million, higher than the net income of ₱1.9 million last year, in contrast to the net loss of ₱12.5 million in 2018. AFC purchased 4 units of dump truck to increase its operational hauling fleet to 10 units.

**- Keystone Port Logistics Management & Services Corporation (KPLMSC)**

KPLMSC the port and barging services provider of the Company generated ₱32.98 million revenue for this year, higher as compared to revenues of ₱5.50 million in 2019 and ₱26.30 million in 2018 due to higher revenues from port usage on account of 483,952 tons nickel ore exports handled this year against 55,000 tons last year and 267,994 tons handled in 2018. As a

result, KPLMSC reported net income of ₱13.9 million, a turn-around from the net loss of ₱5.3 million in 2019 and ₱40.2 million in 2018.

**B. REAL ESTATE**

**- BMC Forestry Corporation (BFC)**

BFC manages the lime kiln operation of Irisan Lime Project and various real estate projects. BFC continues to develop and sell subdivision lots in its real estate project in Rosario, La Union, the Woodspark Subdivision which market has affected by the COVID-19 pandemic and reported net loss of ₱0.4 million this year, against net income of ₱1.6 million in 2019 and ₱0.3 million in 2018. BFC continues to collect monthly amortizations and sell the remaining lots.

On its Kelly Ecozone project, the Company has ongoing talks with Philippine Economic Zone Authority (PEZA) for phased development of the proposed project.

**C. HEALTHCARE**

**- BenguetCorp Laboratories Inc. (BCLI)**

BCLI generated total revenue of ₱33.14 million this year, compared to 2019 revenue of ₱36.0 million and ₱42.9 million in 2018. BCLI temporarily closed its 2 Baguio clinics during ECQ period from March to April 2020 as mandated by the Baguio City government. Number of walk-in clients were down due to fear of Covid infection, coupled by health protocol restrictions, particularly for elderly and vulnerable sectors. As a result, BCLI reported a net loss of ₱3.9 million, much lower compared to the net loss of ₱18.0 million in 2019 and ₱34.9 million in 2018.

BCLI provided additional services for antigen tests and completed one of 3 years clinic management and medical services contracts with Texas Instrument for Baguio City and in Clark, Pampanga hubs, and focused on the Health Management Organizations catering to corporate and institutional clients, both from the private and government sectors. On the other hand, MOOG requested BCLI to provide full clinic management services in its site and contract negotiation is ongoing for target implementation in April 2021. BCLI maintained its ISO certification, with a new certificate awarded last Feb. 2, 2021. Since January 2018, BCLI has been ISO 9001:2015 – Quality Management System, certified by an accredited certifying body TÜVRheinland®. BCLI is the only private standing clinic in Baguio City and BLIST area that is ISO Certified.

**D. BENGUETCORP INTERNATIONAL LIMITED (BIL) IN HONGKONG**

- In 1988, the Company acquired BenguetCorp International Limited (BIL), a Hongkong-based and wholly owned subsidiary for international operations, which remains largely inactive. BIL's subsidiary, BenguetCorp USA Limited (BUSA) continue to hold interest as claimowner in about 259 hectares of mineral property for gold/silver at Royston Hills, Nevada, USA, which are currently being offered for sale to interested parties.

**2. BUSINESS OF ISSUER**

*Products or Services/Sales and Market & Distribution Method*

The Company currently produces and markets gold (with silver by-product) from its AGP, nickel laterite ore from BNMI, and quicklime and hydrated lime from ILP. AGP directly sell gold produced to Bangko Sentral Ng Pilipinas; BNMI principally export nickel ores, and ILP's quicklime products is mainly sold to local customers. Through the Company's subsidiaries, it provides logistic services under AFC, port and shipping services under KPLMSC, healthcare services under BCLI and real estate projects under BFC.

*Percentage of Sales/Revenue*

The Company's sales/revenue of product/services which contributed ten percent (10%) or more to sales/revenues for the past three years are as follows:

	2020 (% to total revenue)			2019 (% to total revenue)			2018 (% to total revenue)		
	Local	Foreign	Total	Local	Foreign	Total	Local	Foreign	Total
Gold	44%	-	%	72%	-	72%	61%	-	61%
Lime	4%	-	%	13%	-	13%	10%	-	10%
Nickel	-	50%	%	-	8%	8%	-	22%	22%
Logistics & Others	2%	-	%	7%	-	7%	7%	-	7%

Status of Any Publicly-Announced New Product or Service

The Company and its subsidiaries have no publicly-announced new products or service introduced in 2020 whether prototypes that are existing or in planning stage.

Competition

The gold produced by the Company are directly sold to BSP. The price of gold is currently at above average historical level but there is no assurance that the upward trend will continue. The selling price is based on world spot market prices posted by the London Metal Exchange. There is virtually no competition in the industry and gold producers can easily sell their products.

The Company principally competes in selling its nickel ores outside the Philippines. The method of competition is basically in price. However, the Company believes it can effectively compete in price with other companies due to lower operating cost and proximity of the mine to major buyers/users in Asia and China. Prices of the company's products are dictated by the world market.

Sources of Raw Materials and Supplies

The ore mined from the Company's gold properties is the raw material for processed gold (silver by-product), while in Sta. Cruz Nickel Project (SCNP) of the Company, the nickel laterite ore actually mined is directly exported/sold to foreign buyers. The limestone ore is the basic raw material of quicklime and hydrated lime produced by ILP.

In the process of producing gold (silver by-product), nickel laterite ore and quicklime, labor, materials and supplies, power, and other services are employed and utilized. Labor is generally provided by the Company's regular employees, augmented by outsourced workers and contractors for certain projects and seasonal activities in the gold, lime and nickel mining operations. In the Company's AGP, it engaged the services of accredited mining contractors to do large scale underground mining. Operating supplies, equipment and spare parts, which are generally available, are obtained on competitive basis from sources both locally and abroad. The Company has no existing major supply contracts. Electrical power to run the Company's mining operations in Itogon, Benguet Province is currently sourced from Aboitiz Power Corporation through its wholly owned subsidiary Therma Luzon, Inc. (TLI) under the terms of 20-year contract up to 2031.

Customers

The gold produced by the Company's AGP which is directly sold to Bangko Sentral Ng Pilipinas represents 44% of the total sales. The Company and its subsidiary, BNMI has an existing off-take agreements with Chinese and Korean trading companies for the sale of nickel ore. BNMI is free to sell its nickel ore to other traders or refineries.

Transactions with and/or Dependence on Related Parties

In the normal course of business, the Company has transactions with its subsidiaries which principally include: (a) Purchase of materials and supplies and services needed in its mining operations which are consummated at competitive prices, (b) Sales of mine products, (c) Rental of office space and certain machinery and equipment, and (d) Other transactions comprising non-interest bearing cash advances for working capital requirements. The Company has dealings with its subsidiaries as follows:

- a. On August 8, 2011, the Company was appointed as the exclusive marketing agent of its wholly owned subsidiary BNMI for a marketing fee per ton of nickel ore shipped. The marketing agreement is still in effect as intended by both parties.
- b. AFC, a wholly subsidiary of the Company through BMC, continued to provide equipment services to the Company for the mining operation of BNMI and freight services to AGP.
- c. KPLMSC, a wholly subsidiary of the Company through BMC, continued to provide port and barging services to BNMI.

Please see Note 29 - Related Party Transactions, of the Company's 2019 Audited Consolidated Financial Statements for details.

Terms and Expiration Dates of Royalty Contracts

The Company does not own any trademark, patent, copyright, franchise or concession. The Company has Operating Agreement with the following claimowners: Balanga Bataan Minerals Corporation (BBMC) for its Pantingan Gold Prospect in Bagac, Bataan and Orelina Mining Corporation (OMC) for its Zamboanga Gold Prospect (BOLCO) in R.T. Lim, Zamboanga del Sur. Duration is up to end of mine life.

Government Regulations and Approval

The following Mineral Production Sharing Agreement (MPSA) applications of the Company are under evaluation and pending resolution of appeal by the Mines and Geosciences Bureau (MGB): (a.) MPSA application denominated as Production Sharing Agreement (APSA) No. 009 CAR for the Company's Benguet Gold Operation, Antamok Gold Operation and Ampucao Copper-Gold Prospect in Itogon, Benguet; (b.) and MPSA application denominated as APSA No. IX-015 for the Company's Zamboanga Gold Prospect in R.T. Lim Zamboanga del Sur; and (c.) The Foreign Technical Assistance Agreements (FTAA) in Ilocos Norte (AFTAA- 003) which is undergoing Free, Prior and Informed Consent (FPIC) process under the NCIP Regional Office while the Apayao (AFTAA-033) is pending with the MGB-Cordillera Administrative Region.

The Company have secured all necessary business licenses and permits required for the continuous operation, production and sale of products, including new licenses or permits as well as those that have to be renewed periodically.

Effect of Existing or Probable Governmental Regulations

The effect of existing governmental regulations are mainly on their corresponding costs of compliance. In the case of probable government regulations, the effect or impact of such probable governmental regulations on the Company's operations could only be determined upon their passage and implementation. The indecisive stance of some government bureaus to approve and issue much-needed permits and licenses may also cause delays in the mining and/or operating activities of the Company and its Subsidiaries.

Research/Developmental Expenses

The Company's total expenses for exploration and development activities for the last three (3) years as follows:

	Amount in Millions	% to Total Revenue
2020	₱10.8	0.7%
2019	₱4.0	0.5%
2018	₱0.8	0.1%

Costs and Effects of Compliance with Environmental Laws

The costs and effects of compliance with environmental laws are numerous. The costs are mainly on the compliance and non-compliance on the part of the Company. It is good business to have an environmentally compliant operation as it enhances the image of the Company as good corporate citizen, promotes goodwill with community where it operates and set good track record with regulators for future projects.

The nickel and gold mining operations of the Company are ISO 14001:2015 Certified since March 2016. Guided by the standards of the ISO, the Company continues to implement environmental mitigation and enhancement programs, not only to meet compliance requirements but also to address community environmental issues, protection and sustainability for its mining operations. Based on approved Environmental Protection and Enhancement Program (AEPEP) in 2020, the Nickel and Gold operations implemented Land Resources Management Activities which include Reforestation, Greening and Enrichment Planting activities and maintenance inside the tenement, in TRP and outside tenement areas, Mining/hauling road repairs and maintenance. In response to the COVID-19 Pandemic which gave rise to global health crisis and posed the greatest challenge that the world is facing now, the Company also implemented "Sustainable Agroforestry" as a strategy to address biodiversity enhancement and conservation and as well as protection of mine workers' health against COVID 19. Also the Company continuously carry-out its ecological responsibilities through the active support of the Mining Forest Program of MGB and National Greening Program of DENR. Since 2009 a total of 875.7 hectares inside the mining tenement of the nickel operations have been planted with 2.2 million seedlings of various tree species having a 95% survival rate; this is inclusive of a 12 hectares bamboo plantation. Outside the BNMI tenement, BNMI reforested 457.2 hectares with 231 thousand trees at 95% survival rate. Another 1 hectare area in Cabaluan river was assigned to BNMI for bamboo plantation. A total of 3,250 bamboo culms have been planted with 95% survival rate. The Gold operations on the other hand, have planted to-date about 1,291,689 seedlings of various plant/tree species all over its tenements at 82% survival rate. Likewise, both operations implemented Water Resources Management such as rehabilitation, improvement, maintenance and desilting of drainage canals, settling ponds, silt traps, spillways, tailings storage facility, diversion tunnels, river systems, related engineering structures. The Company's periodic Water, Noise, and Ambient Air Quality monitoring were also conducted to ensure the welfare of its stakeholders and the quality of environment where the Companies operate. Regular housekeeping, sanitation, waste collection, segregation, disposal and transport in all of Company's operational areas have been regularly undertaken and form part of the Waste Management Program Component. The Nickel and Gold operations are committed to ensure the sustainability and viability of its environmental protection and enhancement programs. The Nickel operations spent in 2020 a total of ₱10.4 million bringing its expenditures to-date to ₱272.7 million since 2010 while the Gold operations spent ₱7.7 million in 2020, bringing its expenditures to-date to ₱76.0 million since 2015,

Community Relations/Social Development & Management Programs

The Company continues to fulfill its social development obligations through implementation of various Social Development and Management Programs (SDMP) which supplemented the general welfare programs of the national and local governments through the provision of health, medical, peace and order, safety, livelihood, educational, waste management, public infrastructure services, IEC, DMTG, and scholarship program which continues to benefit high school and college students in its host and neighboring communities. All programs were implemented in coordination with the Local Government Units, various government agencies and organizations, and the host communities in Zambales and Benguet. The Company continued to promote public awareness and education on mining activities and technology. These are in the form of print and radio campaigns on the social programs of the Company, installation of signages, infrastructure projects, and production of Company's and Barangay's newsletters, among others. The Company's Gold operations spent ₱9.2 million in SDMP in 2020, bringing its expenditures to-date to ₱48.6 million since 2005, and the Nickel operations has spent ₱750 thousand in 2020, bringing its expenditures to-date to ₱47.4 million since 2013.

Total Number of Employees

The Company has a total manpower complement of 1,252 as of December 31, 2020. This is broken down as follows:

Type of Employee	2020
Administrative	171
Clerical	37
Exploration/Operation	223

Outsourced Staff (seasonal, project based, security guards, janitors & retainers/consultants)	821
Total	1,252

The total number of employees is likely to increase in 2021 because of manpower requirement of BNMI which started mining operations in November 2020. There are no labor unions in the Company and its subsidiaries nor were there any labor actions against the Company and its subsidiaries during the past three years. The Company provides free housing for managers at mine site, free water and power to minesite based employees; basic and major medical benefits; education benefit; transportation allowance; vacation/sick/ paternity/birthday leave with pay; free protective and safety paraphernalia; Integrated Retirement Plan; Group Life and Personal Accident Insurance; and Stock Option Plan among others.

**Business Risks**

The Company recognizes, assesses, and manages certain risks that could materially and adversely affect its business, financial condition, results of operations and prospects. Regulatory risks are changes in regulations, policies, and law that will affect the mining industry and Company in particular.

- a. The operations of the Company's business are subject to a number of national and local environmental laws and regulations which should be adhered to. Non-compliance or failure to comply may delay mining operations or could result in substantial fines and penalties. In ensuring compliance, the Company is obliged to allot a considerable amount from its operational funds for reforestation and other environmental protection projects in the areas of operations. The Company maintains liaison with regulatory agencies to allow the Company to identify potential regulatory risks and proactively respond to these risks. While the Company believes it is in substantial compliance with all material environmental regulations, it can give no assurance that changes in these regulations will not occur in the future which may impact its operation and/or impose added costs to the Company.
- b. The Company's exploration for, development and exploitation of, mineral properties entail significant operating risks. There is no certainty that the activities of the Company, which by the character of its business involve substantial expenditures and capital investments, in the exploration and development of its resource properties will result in the discovery of mineralized materials in commercial quantities and thereafter in a viable commercial operation. The Company tries to temper its exposure to these risks by prudent management and the use of up-to-date technology.
- c. The Company's revenues are directly affected by the prices of the metal it produces, which are gold and nickel ore. The Company has experienced, and expects to continue to experience, significant fluctuations in operating results due to a variety of factors, including among others, appreciation of the Philippine Peso against the US Dollar, ore grades, and mineable ore reserves. The ultimate outcome of this matter cannot presently be determined and related effects will be reported as they become known. The metal prices in the world market are US Dollar denominated. The Company's reporting currency in its financial statements is the Philippine Peso. Changes in the US\$:Php exchange rate may adversely affect the financial condition of the Company. The Company exports the saleable stockpiled nickel ores at favorable market price while the gold produced is directly sold to Bangko Sentral Ng Pilipinas.
- d. The operations of the Company's business is subject to various other risks which are beyond its control. These include typhoons, earthquakes, floodings, landslides, and virus outbreak among other natural disasters which may disrupt its operations. There can be no assurance that these risks will not have an adverse effect on the Company. To mitigate the risks, management meetings are conducted to identify, assess and formulate related contingency plans to manage or minimize the adverse impacts of potential risks and to ensure that concerned units manage or promptly address identified risks.

- e. The Company faces competition from large metal producers who have greater financial and technical resources (resulting to lower production cost) thereby flooding the market with cheaper metal produce. This competitive pressure could result not only in sustained price reductions, but also in a decline in sales volume, which would have a material adverse effect in the long term on the Company's business, operating results and financial condition. The Company principally competes in selling its nickel outside the Philippines. However, the Company believes it can effectively compete in price with other companies due to lower operating cost and proximity of the mine to major buyers/users in Asia and China. For gold, there is no competition in the industry and gold producers may easily sell their product.
- f. The Company depends on certain key personnel, and its business and growth prospects may be disrupted if their services are lost. There is no assurance that certain key officers and employees which are critical to the continued operation of the Company business will remain employed. Should several of these key personnel will resign from their present posts, the Company may face difficulties in hiring replacements and the business and operations may be temporarily disrupted as a result, which may adversely affect the financial condition and operations of the Company. To maintain their employment, the Company continuously review and ensure that compensation and benefit packages for officers, managers and rank and file are competitive with industry standards. Continuous trainings are provided to ensure that their knowledge and skill are continually updated.

Additional Requirements as to Certain Issues or Issuers –

The Parent Company's outstanding principal debt subject to the 1992 Restructuring Agreement was reduced to ₱85.06 million. The Company remains committed to a final and comprehensive settlement of all the old debt or to arrange a suitable restructuring of the remaining obligations.

Certain parcels of land of the Company was used as collateral to secure loan which was fully settled and mortgage annotation also cancelled in 2020. Information on loans payable is presented in Note 14 of the Notes to 2020 Audited Consolidated Financial Statements under "Secured Loans".

**ITEM 2. PROPERTIES**

The Company owns patented lands, mining, milling, various automotive equipment/vehicles and support facilities for its gold mining operations in Itogon, Benguet Province and Irisan Lime Project in Baguio City. The Company also owns various artworks, vehicles, office furniture and computer units in its corporate office in Makati City. It likewise owns milling and support facilities at Zamboanga Gold Prospect in R.T. Lim Zamboanga del Sur, which are currently on care and maintenance basis.

The Company continues to lease a unit at the Universal Re Building, 106 Paseo de Roxas, Makati City where its Corporate Head Office is situated. Rental is ₱-542,080.00 per month subject to 10%% escalation yearly up to June 30, 2023.

Subsidiaries: - BNMI is the holder of MPSA No. 226-2005-III with an area of 1,406.74 hectares located in Sta. Cruz, Zambales. It owns assaying/laboratory equipment and various automotive equipment/vehicles for its mining business operations. BNMI continues to lease at ₱75,000.00 per month for office occupancy in Sta. Cruz, Zambales. The lease is renewable every 5 years.

BFC owns 2 office condominium units (Unit 304 with a floor area of 138.27 square meters and Unit 305 with a floor area of 186.20 square meters) located at 3<sup>rd</sup> Floor One Corporate Plaza Condominium, Pasay Road, Legaspi Village, Makati City. BFC continues to develop and sell the remaining five (5) lots with an aggregate area of 1,763 square meters in its real estate project Woodspark Rosario Subdivision Project located in Rosario, La Union.

BTI owns 2 residential lots where a 3 storey residential building staff house is erected with a floor area of 283 square meters. The two (2) lots have an aggregate area of about 708 square meters and are located at Monterraza Village, Barangay Tuding, Itogon, Benguet.

BCLI continues to lease for its business operation occupancies in SM Baguio at P286,650.00 per month and in Central Mall, Baguio City at P112,299.44 per month. Due to the rental holiday mandated by the City Government of Baguio during the COVID10 pandemic, both lessors granted BCLI with rental holiday/discount of 70%. The lease is renewable yearly.

AFC owns an industrial lot in Brgy. San Antonio, San Pedro, Laguna containing an aggregate area of about 2,045 square meters. The property is located in an area where land development is for industrial purposes. AFC owns various automotive equipment/vehicles for logistics business operations.

The Company and its subsidiaries have no intention at present to acquire any significant property in the next 12 months.

Please refer to Item I of this report under title "Business Development" as to the conditions of the mining operations/projects and non-mining properties/projects of the Company.

### **ITEM 3. LEGAL PROCEEDINGS**

As of December 31, 2020, the Company and its subsidiaries have no pending legal proceedings where claims exceed ten percent (10%) of total assets on a consolidated basis. The Company and its subsidiaries are involved in litigation on a number of cases and are subject to certain claims which arise in the normal course of business, none of which, in the opinion of management, is expected to have a material adverse effect on each of the Company's operations.

### **ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

In the November 11, 2020 virtual Annual Stockholders' Meeting of the Company, no election of directors was held because the 1993 Supreme Court Temporary Restraining Order (TRO) enjoining the holding of elections of directors, has not been lifted. Since no election of directors was held, the Company's incumbent directors (the composition of the Board of Directors is presented in Item 9 of this report) remained in office on hold-over capacity until their successors shall have been duly elected and qualified.

Except for the matters taken up in the November 11, 2020 Annual Stockholders' Meeting of the Company, there were no other matters submitted to a vote of security holders during the period covered by this report. All matters taken up and voted upon at the annual meeting including tabulation of votes in person and by proxy for approval, against and abstention to each matter and the results of annual stockholders' meeting were disclosed under SEC Form 17-C to the SEC on November 12, 2020 and PSE on November 11, 2020. The disclosure was posted in the Company's website.

## **PART II – OPERATIONAL AND FINANCIAL INFORMATION**

### **ITEM 5. MARKET FOR ISSUER'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS**

#### **Market Information**

The Company has three classes of shares, two of which (the Common Class A with a par value of P1.00 per share and Convertible Preferred Class A shares with a par value of P3.43 per share) can be owned only by Philippine nationals and the other class of the Company's share is Common Class B with a par value of P1.00 per share which may be owned by anyone regardless of nationality. The Company's shares are listed and traded on the Philippine Stock Exchange (PSE) under the trading symbol of "BC" for Common Class A; "BCB" for Common Class B; and "BCP" for Convertible Preferred Class A share.

The closing price of the Company's Class A share in the PSE on May 10,2021 is ₱3.28 per share and the Class B share is ₱3.20 per share on May 6, 2021. The closing price of the Company's Convertible Preferred Class A on the last trading day of April 7, 2021 is ₱18.90 per share.

a.) For each Quarter 2020, 2019 and First Quarter 2021, the high and low prices of the Company's shares in the PSE are as follows:

	1 <sup>ST</sup> QUARTER		2 <sup>ND</sup> QUARTER		3 <sup>RD</sup> QUARTER		4 <sup>TH</sup> QUARTER		2021 1 <sup>st</sup> Quarter
	2020	2019	2020	2019	2020	2019	2020	2019	
<b>CONVERTIBLE PREFERRED CLASS A*</b>									
Highest Price/Share	₱ -	₱ -	₱ -	₱ -	₱ -	₱ -	₱12.00	₱ -	₱27.00-
Lowest Price/Share	-	-	-	-	-	-	12.00	-	18.00
<b>COMMON CLASS A</b>									
Highest Price/Share	₱1.30	₱1.50	₱1.46	₱1.80	₱3.12	₱1.25	₱3.50.	₱1.28	₱3.73
Lowest Price/Share	0.96	1.12	0.70	1.08	1.09	1.10	2.45	0.98	2.26
<b>COMMON CLASS B</b>									
Highest Price/Share	₱1.20	₱1.57	₱1.39	₱1.75	₱3.03	₱1.30	₱3.30	₱1.15	₱3.60
Lowest Price/Share	0.89	1.11	0.95	1.11	1.14	1.02	2.34	1.02	2.39

(\*) No trading transactions in the 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> Quarter 2020 and the whole year of 2019.

#### Holders:

- a.) As of March 31, 2021, the Company's public float is 45.5% of the 617,725,192 outstanding shares of the Company consisting of 371,734,383 common Class A, 245,773,748 common class B and 217,061 Convertible Preferred Class A shares with a total of 16,912 stockholders.
- b.) Of the 617,725,192 outstanding shares of the Company, 89,852,109 common Class B shares or 14.54% are owned by foreign nationals/institutions as of March 31, 2021.

The list of top 20 stockholders for Common Class "A", Common Class "B" and Convertible Preferred Class "A" shares of the Company as of March 31, 2021 are as follows:

#### A. Common Class "A" Share

Name	Number of Shares Held	Percent to Total Outstanding/Class
PCD Nominee Corporation (Filipino)	176,909,069	47.60%
Palm Avenue Holding Company, Inc.	65,624,727	17.65%
Palm Avenue Holdings Co. and/or Palm Avenue Realty Corp.	63,920,490	17.19%
Palm Avenue Holdings Co. and/or Palm Avenue Realty Corp.	30,834,375	8.29%
House of Investment, Inc.	8,545,911	2.30%
FEBTC TA 4113-000204-5 (ESPP)	5,067,846	1.36%
FEBTC TA 4113-00204-5	3,016,623	0.81%
Cynthia Manalili Manalang	1,500,000	0.40%
RP Land Development Corporation	960,000	0.26%
Sysmart Corporation	868,956	0.23%
Pan-Asia Securities Coporation	590,400	0.16%
Paredes, Gabriel M. or Paredes, Marianne G.	564,900	0.15%
Pan Malayan Management and Investment Corporation	431,844	0.12%
RCBC TA #74-034-9	363,129	0.10%
Sun Hung Kai Sec. A/C# YUO34	356,625	0.10%
Marilex Realty Development Corporation	331,200	0.09%
Enrique T. Yuchengco, Inc.	257,376	0.07%
Luis Juan L. Virata	234,003	0.06%
Franciso M. Vargas	219,000	0.06%
The First National Investment Company	188,130	0.05%

B. Common Class "B" Share

Name	Number of Shares Held	Percent to Total Outstanding/Class
PCD Nominee (Filipino)	106,906,160	43.50%
Palm Avenue Realty and Development Co.	43,680,000	17.80%
PCD Nominee (Non-Filipino)	31,778,480	12.93%
Cede & Co	29,674,860	12.07%
David L. Sherman	2,961,747	1.20%
Pan Malayan Management & Investment Corporation	2,100,000	0.85%
Michael Vozar TOD Sharon K. Vozar Sub To Sta Tod Rules	736,260	0.30%
Charles F Carroll TTEE, UA 05/24/95 FBO Carroll Family Trust 1	543,000	0.22%
National Financial Services	504,033	0.20%
Fairmount Real Estate, Inc.	484,257	0.20%
Independent Realty Corporation	483,441	0.20%
Evelyn B. Stephanos TR US 05/12/11 Elizabeth Bakas Irrev Trust	450,000	0.18%
Richard Soltis & Veronica T. Soltis JT Ten	396,000	0.16%
Arthur H. Runk TTEE of Arthur H. Runk Liv Tr U/A dtd 08/17/1990	354,000	0.14%
HSBC Private Bank (Suisse) SA 9-17 Quai Des Bergues	303,795	0.12%
Edmund S. Pomon	300,000	0.12%
William David Courtright	300,000	0.12%
William T. Coleman	300,000	0.12%
Garry A. Gil TTEE FBO Arthur Weir Gill Rev Tr	300,000	0.12%
Sanford E. Halperin	251,364	0.10%

C. Convertible Preferred Class "A" Share

Name	Number of Shares Held	Percent to Total Outstanding/Class
PCD Nominee Corporation (Filipino)	65,290	30.08%
Fairmount Real Estate	59,262	27.30%
Jose Concepcion, Jr.	5,000	2.30%
Reginaldo Amizola	1,737	0.80%
Evengeline Alave	1,720	0.79%
Maverick Marketing Corporation	1,720	0.79%
Jayne Jalandoni	1,380	0.63%
Rosendo U. Alanzo	1,376	0.63%
Romelda E. Asturias	1,376	0.63%
Rosalina O. Ariacho	1,324	0.61%
CMS Stock Brokerage Inc.	1,324	0.61%
Luisa Lim	1,238	0.57%
Delfin GDN Jalandoni	1,118	0.51%
Ventura O. Ducat	1,032	0.47%
Conchita Arms	1,000	0.46%
Equitiworld Securities, Inc.	1,000	0.46%
Benito V. Jalbuena	1,000	0.46%
Remedios Rufino	1,000	0.46%
Carlos W. Ylanan	1,000	0.46%
B & M Incorporated	952	0.44%

**Dividends** – The Company has not declared any dividends in the two (2) most recent fiscal years 2020 and 2019 due to restrictions provided for in the Company's loan agreements with creditor banks. The dividend rights and restrictions of the Company's Convertible Preferred Class A, Common Class A and Common Class B stocks are contained in the Amended Articles of Incorporation of the Company, to wit:

"For a period of ten years after issuance, the holders of each shares of Convertible Preferred Stock shall be entitled to receive out of surplus profits of the Corporation earned after issuance of such

Stock, when and as declared by the Board of Directors, cash dividends equal to the peso amount of and payable at the same time as that declared on each share of Common Class A or Common Class B Stock. The total cash dividends payable at any given time on Common Class A, Common Class B and Convertible Preferred Stock shall not exceed seventy-five per centum (75%) of the total after-tax earnings for any current fiscal year of the Corporation from all sources.

Immediately upon the expiration of ten years from issuance, the holders of shares of Convertible Preferred Stock still outstanding shall be entitled to receive out of surplus profits of the Corporation, when and as declared by the Board of Directors, cash dividends at the fixed annual rate of eight percentum (8%) of the par value of such Stock before any cash dividends shall be declared or set apart for holders of Common Class A and Common Class B Stock. The balance of the net profits of the Corporation available for cash dividends shall be distributable exclusively to holders of Common Class A and Common Class B Stock. Dividends accrued and unpaid, if any, on the Convertible Preferred Stock at the end of any given fiscal year of the Corporation shall be cumulated, provided and to the extent that the net profits of the Corporation earned during such fiscal year are at least equal to the amount of such accrued and unpaid dividends; no cash dividends shall be declared and paid to holders of Common Class A and Common Class B Stock until after such accumulated, accrued and unpaid dividends on the Convertible Preferred Stock shall have been paid or provision for payment thereof made. Holders of Convertible Preferred Stock shall not be entitled to any part of stock dividends declared and issued on outstanding Common Class A and Common Class B and no stock dividends may be declared and issued on Convertible Preferred Stock.”

#### **Recent Sales of Unregistered or Exempt Securities**

Under the present implementation of the Company's Stock Option Plan (the "Plan"), below are the transactions of sold stocks/exercised options in the past three years ended December 31, 2020, 2019 and 2018:

1. In the May 3, 2011 stock option grant:
  - a) 158,000 Class "A" shares at option price of ₱1.69/share with par value of ₱1.00/share;
  - b) 181,700 Class "B" shares at option price of ₱1.91/share with par value of ₱1.00/share.
2. In the September 7, 2012 stock option grant – There were no options exercised.

Other than the above transactions, the Company has not sold or issued any securities within the past three years ended December 31, 2020, 2019 and 2018 which are not registered under the SRC including the sales of reacquired securities, securities issued in exchange of property, services, or other securities, and new securities resulting from the modification of outstanding securities.

#### **ITEM 6. MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION**

The following discussion and analysis of financial performance of the Company should be read in conjunction with the Company's Audited Consolidated Financial Statements (ACFS) and related notes as of December 31, 2020 and 2019 prepared in conformity with Philippine Financial Reporting Standards (PFRS). The results and plan of operation of the Company and its subsidiaries are presented and discussed under Business Development in Item 1-Business of this report.

#### **I. FOR THE YEARS ENDED DECEMBER 31, 2020 VERSUS. 2019**

##### **CONSOLIDATED RESULTS OF OPERATIONS**

Consolidated net income for 2020 amounted to ₱381.4 million, more than triple the net income of ₱115.7 million in 2019 and ₱119.0 Million in 2018. The increase in net income was the net effect of the following:

##### **Revenues**

The Company registered consolidated revenues of ₱1.6 Billion, 100% higher than ₱802 million in 2019 and 60% higher than ₱1.0 Billion in 2018. Revenues were composed mainly of nickel, gold and lime sales.

	2020	2019	2018
Nickel	₱818.34	₱64.65	₱226.52
Gold	704.30	593.30	616.50
Lime and others	97.09	144.12	165.68
Gross Revenue	1,619.73	802.07	1,008.70

The substantial increase in revenues is attributed to the above par performance of its nickel subsidiary, BNMI which exported 9 boatloads of 1.2% to 1.4% nickel ore aggregating 483,952 tons at an average price of US\$34.21/ton versus only 1 boatload of 1.5% nickel ore aggregating 55,000 tons at an average price of US\$22.50/ton in 2019 and 4 boatloads of 1.4% to 1.5% nickel ore aggregating 218,635 tons at an average price of US\$19.73/ton in 2018. Nickel sales, which accounted to 50% of gross revenues, grew by 1,165% or over 12 times to ₱818.34 million from ₱64.65 million in 2019 and 261% or over three times than in 2018 from ₱226.52 million. Gold similarly improved by 19% on account of better price this year. The Acupan Gold Project (AGP) sold 8,080.71 ounces of gold at average price of US\$1,750.25/ounce against 8,236.65 ounces of gold at an average price of US\$1,395.43/ounce in 2019 and 9,263.23 ounces at US\$1,274.67/ounce in 2018.

#### Operating and Other Expenses

Cost and operating expenses increased to ₱1.27 Billion from ₱923.8 million in 2019 and ₱1.2 billion in 2018 mainly due to higher shipment tonnage of nickel ore this year.

Other income this year amounted to ₱141.0 million mainly from the ₱154.8 million gain on revaluation investment properties. In 2019, other income amounted to ₱272.1 million mainly from the ₱287.2 million gain on revaluation of investment property, ₱68.6 million gain on sale of investment property and ₱22.5 million gain on settlement of trade and other liabilities partly offset by the ₱94.9 million provision for impairment on deferred mine exploration cost. Other income in 2018 of ₱337.7 million was attributable mainly from the ₱605.8 million revaluation gain on investment property, ₱53.0 million gain on settlement of trade and other liabilities partly offset by the ₱72.1 million provision for impairment on deferred mine exploration cost, ₱95.4 million provision for impairment on other noncurrent assets and ₱60.4 million retirement of property, plant and equipment.

The provision for income tax of ₱101.9 million this year pertains to the Regular Income Tax (RCIT), Minimum Corporate Income Tax (MCIT) and Provision for deferred tax assets of Benguet Corporation (Parent company), Benguetcorp Nickel Mines, Inc. (BNMI), Arrow Freight Corporation and Keystone Port Logistics and Management Services Corporation (Keystone).

#### FINANCIAL POSITION

##### Assets

The Company's consolidated total assets as of December 31, 2020 increased 6.6 % year-on-year to ₱7.38 billion from the ₱6.92 billion in 2019. The increase is the net effect of the following:

Cash and cash equivalent increased by 252% to ₱271.5 million mainly from the collection of nickel ore sold this year and the previous year.

Receivables increased to ₱475.3 million from ₱290.0 million last year. The increase pertains to the nickel ore sold this year and collected the following year.

Decrease in inventories to ₱101.1 million from ₱132.2 million was mainly due to the 9 boatloads of stockpiled nickel ore sold this year.

Other current assets increased by 27% to ₱398.7 million from ₱314.1 million. The increase is attributable to the input tax on various purchases of goods and services this year.

Deferred mine exploration costs increased to ₱456.8 million from ₱449.2 million in 2019. The increase is mainly due to the cost of phase 1 drilling conducted in the Pantingan Gold Prospect in Bataan.

Investment properties increased by 6% to ₱2,633.7 million from ₱2,478.9 million in 2019 mainly from the ₱154.8 million revaluation gain booked this year.

Decrease in deferred tax assets to ₱6.7 million from ₱47.7 million in 2019 was mainly due to the write-off of allowances for inventories, application of NOLCO and MCIT for current year's taxable income.

Other noncurrent assets decreased to ₱406.8 million from ₱482.0 million last year. Decrease pertains to reclassification of input tax from noncurrent to current assets.

#### Liabilities

Total consolidated liabilities as of December 31, 2020 increased to ₱2,599.4 million from ₱2,509.9 million as of December 31, 2019. The decrease was due to the following:

Trade and other payables increased to ₱620.7 million from ₱576.9 million mainly due to down payment received from buyer of nickel ore.

Pension liability increased to ₱81.8 million from ₱62.6 million last year mainly due to the additional year of service earned by employees and the newly hired employees this year.

Increase in deferred tax liability to ₱882.5 million from ₱848.0 million in 2019 pertain to deferred tax liability on revaluation increment of land.

#### Equity

Stockholders Equity at year-end amounted to ₱4,780.0 million, higher than the ₱4,411.7 million in 2019. The increase is mainly attributable to the income earned this year and revaluation increment on investment properties.

#### Consolidated Cash Flow

The net cash flow generated from operating activities for 2020 amounted to P259.3 million, against the ₱281.0 million cash used in operating activities last year. The net cash flow realized is attributable mainly to the export sale of 9 boatloads of nickel ore and 8,080.71 ounces of gold sold this year. During the year, the company invested ₱10.8 million in exploration activities and ₱27.3 million in mining equipment for the expansion of its Acupan Gold Project and Sta Cruz Nickel Operation in Zambales. The Company also received ₱634 thousand from employees' exercise of stock options and issuance of stocks.

## **II. FOR THE YEARS ENDED DECEMBER 31, 2019 VERSUS 2018**

### **CONSOLIDATED RESULTS OF OPERATIONS**

Consolidated net income for 2019 amounted to ₱115.7 million, slightly lower than the net income of ₱119.1 million in 2018. The increase/decrease in net income was the net effect of the following:

#### Revenues

The Company registered consolidated revenues of ₱802 million in 2019, 21% lower than ₱1,008.7 million in 2018. The negative variance is due to lower shipment volume of nickel ore and gold sold this year. BNMI sold only 1 boatload of 1.5% nickel ore aggregating 55,000 tons at an average price of US\$22.50/ton versus 4 boatloads of 1.4% to 1.5% nickel ore aggregating 218,635 tons at an average price of US\$19.73/ton in 2018. AGP sold 8,069 ounces of gold at average price of US\$1,384.64/ounce lower than the 9,263 ounces at US\$1,274.67/ounce in 2018. The decline is due to lower tons milled. AGP milled 41.2 thousand tons this year compared to 44.1 thousand tons last year.

### Operating and Other Expenses

Cost and operating expenses in 2019 decreased by 24% to ₱923.8 million from ₱1,209.1 million in 2018 mainly due to lower shipment tonnage of nickel ore this year.

Other income in 2019 amounted to ₱272.1 million, mainly from the ₱287.2 million gain on revaluation of investment property, ₱68.6 million gain on sale of investment property and ₱22.5 million gain on settlement of trade and other liabilities partly offset by the ₱94.9 million provision for impairment on deferred mine exploration cost. Other income in 2018 of ₱337.7 million was attributable mainly from the ₱605.8 million revaluation gain on investment property, ₱53.0 million gain on settlement of trade and other liabilities partly offset by the ₱72.1 million provision for impairment on deferred mine exploration cost.

Provision for income tax of ₱32.6 million in 2019 pertains to the regular and minimum corporate income tax of the BC (Parent company), Benguetcorp Nickel Mines, Inc. (BNMI) and Keystone Port Logistics and Management Services Corporation (Keystone).

### **FINANCIAL POSITION**

#### Assets

The Company's consolidated total assets as of December 31, 2019 increased by 4 % to ₱6.92 billion from ₱6.63 billion in 2018. The increase is the net effect of the following:

Cash and cash equivalent in 2019 decreased by 74% to ₱77.2 million mainly due to ₱302.1 million funds used in operation and exploration projects and payment of bank loan.

Receivables increased to ₱290.0 million in 2019 from ₱210.9 million in 2018, mainly due to advances to suppliers and contractors.

In 2019, inventories slightly increased to ₱132.1 million from ₱129.0 million in 2018

In 2019, other current assets decreased by 14% to ₱542.8 million from ₱632.1 million in 2018. The decrease was mainly due to applied VAT refund amounting to ₱40.23 million and creditable withholding tax used in payment of income tax liabilities.

Property, plant and equipment at revalued amount increased to ₱1,673.3 million in 2019 from ₱1,236.5 million in 2018 mainly due to the revaluation increment on land as determined by an independent appraiser.

Investment properties increased by 12% to ₱2,478.9 million in 2019 from ₱2,217.6 million in 2018 mainly from the ₱287.2 million revaluation gain booked this year.

Deferred mine exploration costs decreased to ₱449.2 million in 2019 from ₱539.0 million in 2018. The decrease is due to the reversal of provision for impairment losses of ₱94.9 million booked in 2019.

Decrease in deferred tax assets to ₱47.7 million in 2019 from ₱73.6 million in 2018 was mainly due to deferred tax assets on NOLCO and Minimum Corporate Income Tax (MCIT).

Other noncurrent assets decreased to ₱253.4 million in 2019 from ₱307.6 million in 2018. The decrease pertains to advances and prepayments to contractors and suppliers for exploration and other related activities and projects.

#### Liabilities

Total consolidated liabilities as of December 31, 2019 decreased to ₱2,509.9 million from ₱2,689.4 million as of December 31, 2018. The decrease was due to the following:

Trade and other payables decreased to ₱576.9 million in 2019 from ₱858.6 million in 2018 mainly due to payment of suppliers and contractors.

Loan payable decreased in 2019 mainly due to the full settlement of loans from Malayan Savings Bank

Income tax payable decreased in 2019 mainly attributable to the payment of ₱22.9 million payables in 2018.

Liability for mine rehabilitation slightly increased to ₱91.6 million in 2019 from ₱90.3 million in 2018.

Pension liability increased to ₱62.5 million in 2019 from ₱54.1 million in 2018 mainly due to the additional service costs earned by employee and the newly hired employee this year.

Increase in deferred tax liability to ₱848.0 million in 2019 from ₱725.7 million in 2018 pertain to deferred tax liability on revaluation increment on land.

#### Equity

Stockholders' Equity at year-end 2019 amounted to ₱4,411.7 million, higher than the ₱3,938.1 million in 2018. The increase is mainly attributable to the income earned this year and revaluation increment on investment properties.

#### Consolidated Cash Flow

The net cash used in operating activities for 2019 amounted to ₱280.1 million mainly due to repayment of trade payables compared to the ₱268.0 million cash inflows last year.

In 2019, the Company generated ₱144.6 million from the sale of its 2,768,540 square meters land located in San Marcelino Zambales, ₱6.0 million from the sale of Namayan lot, and ₱3.2 million from the sale of some disposable equipment. The Company invested ₱4.0 million in exploration activities and ₱28.0 million in mining equipment for the expansion of its Acupan Gold Project.

In 2019, the Company fully paid its outstanding loan of ₱22.8 million loan with Malayan Savings Bank and spent ₱12.8 million in the rehabilitation of its mined-out areas.

### III. Key Performance Indicators

The Company's considered the following top five key performance indicators:

#### Working Capital

Working capital (current assets less current liabilities) and current ratio (current assets over current liabilities) measures the liquidity or debt paying ability of the Company. As of December 31, 2020, the Company's current ratio is 1.06:1 versus 0.73:1 in 2019 and 0.92:1 in 2018.

#### Metal Price

The Company's revenue is largely dependent on the world market prices for gold and nickel. Favorable metal prices will also have a favorable impact on the Company's revenue. The market price of gold in the Bangko Sentral ng Pilipinas which is based on world spot market prices provided by the London Metal Exchange for gold is the key indicator in determining the Company's revenue level. Average market prices for gold sold were at US\$1,750.25 per ounce in 2020, US\$1,395.43 per ounce in 2019 and US\$1,274.67 per ounce in 2018. Nickel ore was sold at effective average price of US\$34.21/ton this year versus US\$22.50/ton in 2019 and US\$19.73/ton in 2018.

#### Tons Milled and Ore Grade

Tons milled and ore grade are key measures of operating efficiency. A lower unit production cost both in ore milled and smelting operation will result in the Company meeting, if not exceeding, its profitability targets. Tons milled totaled 43,756 in 2020 with average grade of 5.74 grams per ton of

gold, compared to 41,151 tons in 2019 with average grade of 6.18 grams per ton of gold and 44,073 tons in 2018 with average grade of 6.50 grams per ton of gold. Gold sold in 2020 were 8,081 ounces versus 8,175 ounces sold in 2019 and 9,204 ounces sold in 2018. In 2020, BNMI sold 1.2% to 1.4% grade nickel ore with an aggregate volume of 483,952 tons, higher than in 2019 with 55,000 tons of 1.5 grade nickel ore and in 2018 at 218,635 tons of nickel ore ranging from 1.4% to 1.5% Ni grade.

#### Foreign Exchange Rate

The Company's sales proceeds of its gold and nickel are mainly in U.S. dollars. A higher Philippine peso to U.S. dollar exchange rate means higher peso sales but would also reflect a foreign exchange loss on the restatement of the Company's dollar obligations. Conversely, a lower exchange rate reduces the Company's revenue in pesos but brings foreign exchange income on the loans. As of December 31, 2020, the peso to dollar exchange rate was at ₱48.021 lower as compared to ₱50.635 in 2019 and ₱52.58 in 2018.

#### Earnings Per Share

The earnings per share ultimately reflects the Company's financial and operational growth as a result of its performance in cost management, productivity and will provide investors comparable benchmarks relative to similar companies. The increase in the sale of gold and shipment of nickel will have a favorable impact on the Company's net sales and income. The reported Company earnings per share in 2020 is ₱0.62, better than the earnings per share of ₱0.19 in 2019 and earnings per share of ₱0.19 in 2018.

#### **D. Known Trends, Events or Uncertainties**

The Company is continuously implementing precautionary measures in response to the COVID-19 pandemic to protect the health and safety of its employees. As allowed by the Mines and Geosciences Bureau (MGB) to realign the unspent budget for 2019 which was carried over to 2020 Annual Social Development and Management Program (2020 Annual SDMP) in support of the Bayanihan to Heal as One Act, the Company spent ₱5.8 million from the SDMP and Safety/Health funds for relief goods, medicines/ vitamins, personal protective equipment to frontliners and indigent families in the host and neighboring communities of BNMI, AGP and ILP; and repairs/ refurbishment of some buildings, as well as building of a quarantine facility in Kias. The company has a total quarantine/ isolation capacity for 59 persons (17 in the 4 container vans in Kias; 20 in BTP cottage, 16 in Antamok Staff mess and 6 in Irisan).

Notwithstanding the current COVID-19 pandemic, the Company does not foresee any cash flow or liquidity problems over the next twelve (12) months. BNMI resumed mining operations and continues to market saleable nickel ores inventory from old stockpile, ILP continues to maintain steady market for quicklime products, AGP is expected to improve gold production with the refurbishment and repair of ball mill #1 and #2 and procurement of additional brand new LHD equipment, and the Company and its subsidiaries continues to claim applicable tax refunds from the Bureau of Internal Revenue.

Within the ensuing twelve months, the Company anticipates changes in the number of employees due to manpower requirements of AGP for its underground workers and BMNI which resumed mining operations in November 2020.

The known trends, demands, commitments, events or uncertainties that may have a material impact on net sales or revenues or income from continuing operations of the Company are the prices of nickel and gold in the world market, the dollar to peso exchange rate, changes in the DENR's rules and regulations, and the present economic condition affected by the Covid-19 pandemic.

There are no known events that will trigger direct or contingent financial obligation that is material to the Company, including any default or acceleration of an obligation that have not been booked although, the Company could be contingently liable for lawsuits and claims arising from the ordinary course of business which are not presently determinable. Accordingly, efforts to reduce debt levels are continuing. The Parent Company's outstanding principal debt subject to the 1992 Restructuring

Agreement was reduced to ₱85.06 million. The Company remains committed to a final and comprehensive settlement of all the old debt or to arrange a suitable restructuring of the remaining obligations.

There are no material off-balance sheet transactions, arrangements, obligations (including contingent obligations), and other relationship of the Company with unconsolidated entities of other persons created during the reporting period.

Except for what has been noted in the preceding paragraph, there were no material events or uncertainties known to management that had material impact on past performance, or that would have a material impact on the future operations, in respect of the following:

- Significant elements of income or loss that did not arise from the Company's continuing operations;
- Material commitments for capital expenditures that are reasonably expected to have a material impact on the Company's short-term or long-term liquidity;
- Seasonal aspects that had a material impact on the Company's results of operations; and
- Material changes in the financial statements of the Company.

#### **ITEM 7. FINANCIAL STATEMENTS**

The Audited Consolidated Financial Statements (Benguet Corp & Subsidiaries) for the period ended December 31, 2020 is presented in Part V, Exhibits and Schedules, which said audited financial statements form part of this Annual Report (SEC Form 17-A).

#### **ITEM 8. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

The Company's independent public accountants, Sycip Gorres Velayo and Company (SGV) was re-appointed by the Board of Directors and approved/ratified by the stockholders of the Company on September 9, 2020 and November 11, 2020, respectively. Audit services of SGV for the calendar year ended December 31, 2020 included the examination of the parent and consolidated financial statements of the Company, assistance in the preparation of annual income tax return and other services related to filing of reports made with the Securities and Exchange Commission (SEC).

The Company is in compliance with SRC Rule 68, paragraph (3)(b)(iv) requiring the rotation of external auditors or engagement partners who have been engaged by the Company for a period of five (5) consecutive years. The Company's audit engagement partner for calendar year 2020 is Mr. Peter John R. Ventura- SEC accredited auditing partner of SGV and previously, Mr. Alexis C. Zaragoza. This is Mr. Ventura's second year as engagement partner for the Company. No event has occurred where SGV and the Company had any disagreement with regard to any matter relating to accounting principles or practices, financial statement disclosures, or auditing scope or procedures.

For the last two fiscal years, the aggregate audit fees inclusive of VAT and out-of-pocket expenses billed by SGV & Company are ₱5.53 million for 2020 and ₱5.5 million for 2019. There are no other services rendered by the external auditor other than the usual audit services as mentioned above.

Prior to the commencement of audit work, the external auditor presented their program and schedule to the Company which included discussion of issues and concerns regarding the audit work to be done. The external auditor presented to the Audit Committee the audited financial statements of the Company for the year for approval and endorsed to the Board for final approval prior to release/issuance by the external auditor. Representatives of SGV are expected to be present at the stockholders' meeting to respond to appropriate questions and will be given the opportunity to make a statement if they so desire.

## PART III – CONTROL AND COMPENSATION INFORMATION

### ITEM 9. DIRECTORS AND EXECUTIVE OFFICERS OF THE ISSUER

#### A. DIRECTORS

The Directors of the Company are elected at the Annual Stockholders' Meeting to hold office until the next succeeding annual meeting or until their respective successors have been elected and qualified. In the November 11, 2020 Annual Stockholders' Meeting, no election was held because the Temporary Restraining Order (TRO) issued by the Supreme Court enjoining the election of directors remained in force. The incumbent directors of the Company continued to remain in office on holdover capacity and below is a summary of their attendance to board meetings for the year 2020.

Board	Name	Date of Election/ Appointment	No. of Meetings Held During the Year	No. of Meetings Attended	% Attended
Chairman/ Independent	Bernardo M. Villegas*	Nov 07, 2019	6	6	100%
Member	Maria Remedios R. Pompidou	Oct 25, 2000	6	5	83%
Member	Luis Juan L. Virata	Aug 08, 1995	6	5	83%
Member	Jose Raulito E. Paras	Aug 16, 2018	6	6	100%
Independent	Rhodora L. Dapula	Aug 16, 2018	6	6	100%
Independent	Reginald S. Velasco	Aug 16, 2018	6	6	100%
Member	Jesse Hermogenes T. Andres	Aug 16, 2018	6	6	100%
Member	Andrew Patrick R. Casiño	June 04, 2020	6	5**	100%
Member	Lester C. Yee	Sept. 09, 2020	6	4***	100%
Member	Kwok Yam Ian Chan	Sept 25, 2020	6	3****	100%
Member	Anthony M. Te	Sept 25, 2020	6	3****	100%

(\*) *Mr. Bernardo M. Villegas became Chairman of the Board of Directors effective November 7, 2019. He has been a Director of the Company since June 25, 1998 and appointed as Independent Director since 2002.*

(\*\*) *Five (5) board meetings were held after his appointment as member of the Board of Directors on June 04, 2020.*

(\*\*\*) *Four (4) board meetings were held after his appointment as member of the Board of Directors on September 09, 2020.*

(\*\*\*\*) *Three (3) board meetings were held after their appointment as member of the Board of Directors on September 25, 2020.*

Below are the ages, citizenship, brief descriptions of business experience for the past five (5) years of below named incumbent directors. None of the Directors of the Company are government employees.

DIRECTORS REPRESENTING HOLDERS OF CONVERTIBLE PREFERRED CLASS A AND COMMON CLASS A STOCKS OF THE COMPANY:

**JOSE RAULITO E. PARAS**, Director

Member of Board Risk Oversight Committee and Related Party Transactions Committee

Atty. Jose Raulito E. Paras, Filipino, 48 years old, first became a Director of the Company by appointment on August 16, 2018 and holds over as a director since then. He is currently a partner at the Andres Padernal & Paras Law Offices since 2004 and Director of *listed companies*, Zeus Holdings, Inc. and Manila Mining Corporation. He obtained his Bachelor of Laws degree from the San Beda University (*class valedictorian*). After placing 5<sup>th</sup> in the 1997 Bar Exams, he started as an associate of the PECABAR law firm. He then joined the Lepanto Consolidated Mining Company and

affiliates as General Counsel until 2003. He completed his Masters of Laws in Environmental Law at the University of Sydney.

**MARIA REMEDIOS R. POMPIDOU**, Director  
Member of Executive Committee

Ms. Maria Remedios R. Pompidou, Filipino, 53 years old, first became a Director of the Company by appointment on October 25, 2000 and holds over as a director since then. She is currently the Chairman of BenguetCorp Laboratories, Inc., a wholly owned subsidiary of the Company (2013 to present); Trustee of Doña Remedios Trinidad Romualdez Medical Foundation Inc., Dr. V. Orestes Romualdez (DVOR) Educational Foundation Inc., and RTR Foundation for Scientific Research and Development Inc.; and Director of Sequioa Business Management Corporation, Perea Realty and Development Corporation and Red Palmtree Realty and Development Corporation.

**LUIS JUAN L. VIRATA**, Director  
Member of Related Party Transactions Committee

Mr. Luis Juan L. Virata, Filipino, 66 years old, first became a Director of the Company by appointment on August 8, 1995 and holds over as a director since then. He is currently Director of listed company, Nickel Asia Corporation. He is Chairman and Chief Executive Officer of CLSA Exchange Capital, Inc., an investment banking joint venture formed in 2001 between CLSA Emerging Markets of Hong Kong and Exchange Capital of Manila. Exchange Capital was founded in 1987, formerly with Jardine Fleming of Hong Kong. He is also the President of Exchange Properties Resources Corporation; a major Shareholder and Director of Nickel Asia Corporation; Chairman of Cavite Holdings Inc.; and Director and major Shareholder of Amber Kinetics, Inc., a battery storage company in California. His other activities include being a Member of the Huntsman Foundation of Wharton School of the University of Pennsylvania, and Founder, Trustee of Asia Society Philippine Foundation and the Metropolitan Museum of Manila. Other previous positions he held include Director and interim President of Philippine Airlines. Mr. Virata received an MBA degree from the Wharton School of the University of Pennsylvania, USA in 1979 and a BA/MA in Economics from Trinity College, Cambridge University, UK in 1976.

**ANDREW PATRICK R. CASIÑO**, Director  
Member of Audit Committee

Atty. Andrew Patrick R. Casiño, Filipino, 53 years old, first became a Director of the Company by appointment on June 4, 2020 and holds over as a director since then. He is a litigation lawyer with 25-year work experience as practicing lawyer in New York State in the fields of: - Criminal matters (domestic violence, DWI, orders of protection, misdemeanors), Commercial litigation, Philippine law matters (counselling and review of legal documents), Real estate (sale and purchase), Family and domestic matters (custody, child support, orders of protection, spousal support), Probate of last will and testaments, Petitions for administration of estates, Family based immigration, Employment based Immigration, US naturalization, Deportation proceedings, Petitions for political asylum, Loan contracts, Employment contracts, Commercial & Residential leases, Settlement agreements, Loan disputes, Trademarks and copyrights, Divorce and legal separation. Presently, he is collaborator on all legal matters in the United States of Philippine based law firms, Florello R. Jose and Associates and Law Firm of Ocampo Manalo. He graduated from the University of the Philippines with a degree of Bachelor of Science in Economics in 1987 and Bachelor of Laws in 1991. He obtained his Masters of Laws in Intellectual Property from the Franklin Pierce Law School, University of New Hampshire in 1999. Mr. Casiño passed the Philippine Bar Examinations in 1991 and New York State Bar Examinations in 1996.

**ANTHONY M. TE**, Director  
Member of Executive Committee, Salary and Stock Option Committee and Nomination Committee

Mr. Anthony M. Te, Filipino, 50 years old, first became a Director of the Company by appointment on September 25, 2020 and holds over as director since then. He is currently a Director of listed company, Marcventures Mining & Development Corporation; Chairman of the Board of Asian Appraisal Company, Inc., Amalgamated Project Management Services, Inc., Asian Asset Insurance Brokerage Corporation and AE Protiena Industries Corporation. He serves as Chairman and Chief Finance Officer of Mactel Corporation, and as Director and Treasurer for Manila Standard Today Management, Inc. Mr. Te is a licensed soliciting official for Non-Life Insurance with the Philippine Insurance Commission. He previously sat as Director in the following companies: AG Finance, Inc., Balabac Resources & Holdings Company Inc., Commonwealth Savings & Loans Bank, EBECOM Holdings, Inc., Equitable PCI BANK, MRC Allied Industries, Inc., Oriental Petroleum & Minerals Corporation, PAL Holdings, Inc., PGA Cars, Inc., and Phoenix Energy Corporation. Mr. Te graduated from De La Salle University with a degree of Bachelor of Arts in Business Management.

**RHODORA L. DAPULA**, Independent Director  
Chairman of Audit Committee and Member of Corporate Governance Committee

Atty. Rhodora L. Dapula, Filipino, 43 years old, first became Independent Director of the Company by appointment on August 16, 2018 and holds over as independent director since then. She is a partner in Dapula, Dapula and Associates Law Offices since August 2007; and President/CEO of G.D. Brains and Castles Inc., and Proficientlink Realty Corporation since 2017. She is a CPA-Lawyer, Professional Regulation Commission (PRC) Licensed Real Estate Broker, PRC Licensed Real Estate Appraiser, PRC Licensed Real Estate Consultant, PRC Licensed Environmental Planner and Licensed Life and Variable Life Financial Advisor. She is a PRC accredited lecturer for Real Estate Service Seminars and Trainings.

**REGINALD S. VELASCO**, Vice Chairman of the Board / Independent Director  
Chairman of Board Risk Oversight Committee, Member of Nomination Committee, Corporate Governance Committee, Salary and Stock Option Committee and Related Party Transactions Committee

Mr. Reginald S. Velasco, Filipino, 69 years old, first became Independent Director of the Company by appointment on August 16, 2018 and holds over as independent director since then. He is the Secretary General of National Unity Party since 2013. He graduated MA Political Science and candidate for Doctor of Philosophy in Political Science at the University of the Philippines. He also took special study in Investment Negotiation Course at the Georgetown University Washington, D.C. USA. Formerly, he was Director of U.S. Section-Office of American Affairs (1991-1992) and Office of ASEAN Affairs of the Department of Foreign Affairs (Manila) in 1992-1993. His other professional experience includes, Appointment as Lecturer at the University of the Philippines (Manila) in 1973-1974 & 1981-1982 and Lyceum of the Philippines (Manila) in 1973-1974; Chief – International Division, Policy Coordination Staff of the National Economic and Development Authority (Manila) in 1978-1982; Second Secretary & Consul & Chief of Economic Section of the Philippine Embassy Washington, D.C. USA in 1989-1991; Vice President for Project Financing, Venture Industries Management (Makati City) and Development Corporation (1993-1994); and Public and Media Relations Consultant, Micron Public Affairs, Inc. (Makati City) in 1994-1995.

**REPRESENTING HOLDERS OF COMMON CLASS B STOCK OF THE COMPANY:**

**BERNARDO M. VILLEGAS**, Chairman of the Board / Independent Director,  
Chairman of Related Party Transactions Committee, Nomination Committee and Corporate Governance Committee; Member of Executive Committee, Board Risk Oversight Committee, Audit Committee and Salary & Stock Option Committee

Mr. Bernardo M. Villegas, Filipino, 81 years old, has been the Chairman of the Board since November 7, 2019. He first became a Director of the Company by appointment on June 25, 1998. He was designated Independent Director of the Company since 2002 up to present, although he has been a Director prior to the issuance of SEC Circular No. 16 dated November 29, 2002. He is

currently a Director of listed company, Filipino Fund, Inc. He holds, among others, the following directorships/positions: Independent Director of Benguetcorp Nickel Mines, Inc. (2012 to present), a wholly owned subsidiary of the Company; Director and Consultant of Transnational Diversified, Inc. (1998 to present); Director, PHINMA Properties (2011 to present); Director, Dualtech Foundation (1998 to present); and Columnist, Manila Bulletin (1964 to present). Formerly, he was Director of Alaska Milk Corporation (1999-2019); Director, Makati Business Club (1981-2010); Director, Phinma Foundation (1995-2001); Director, Pilipinas Shell Foundation (1995-2001); Senior Vice President, University of Asia and the Pacific (2004-2006); Chairman, Center for Research and Communication (1995); President, Philippine Economic Society (1972-1974); Chairman, Department of Economics-De La Salle University Manila (1964-1969), Committee on the National Economy & Patrimony (1986); Director, Economic Research Bureau and Graduate School of Business-De La Salle University Manila (1967-1968); Project Director, Philippine Economic History under the National Historical Commission (1969-1972); Member, Preparatory Commission for Constitutional Reforms and Constitutional Commission (1999); Consultant, Productivity Development Center-National Economic Council and Program Implementation Agency (1968-1969).

**JESSE HERMOGENES T. ANDRES**, Director,  
Chairman of Executive Committee, Salary & Stock Option Committee and Nomination Committee

Atty. Jesse Hermogenes T. Andres, Filipino, 56 years old, first became a Director of the Company by appointment on August 16, 2018 and holds over as director since then. He is a litigation lawyer and since July 1, 2011, he has been the Managing Partner at Andres Padernal & Paras Law Offices. He is currently an Independent Director of BDO Network Bank from 2018 up to the present. From 1996 to 2003, he was a Partner at PECABAR Law Offices, where he became Co-Head of its Litigation Department in 2001. He was also Chief of Staff (Undersecretary) of the Office of the Vice-President (2004-2010). In September 2004, he was appointed member of the Board of Trustees of the Government Service Insurance System (GSIS) where he also served as the Chairman of the Corporate Governance Committee for six (6) years. He was also Chairman of the Board of GSIS Family Bank from June 2007 to October 2010. Atty. Andres holds a Bachelor of Arts Degree in Economics from the School of Economics, University of the Philippines (U.P.) and a Bachelor of Laws degree from the U.P. College of Law. He has attended various international seminars on Alternative Dispute Resolution Methods, Corporate Governance and Risk Management.

**KWOK YAM IAN CHAN**, Director  
Member of Executive Committee

Mr. Kwok Yam Ian Chan, British, 33 years old, first became a Director of the Company by appointment on September 25, 2020 and holds over as director since then. He is also a Director of Zenith System and Heavy Equipment, Seaborne Shipping Inc., Isky Empire Realty Inc., Megalifters Cargo Handling Corporation, King Dragon Realty Corporation and DK Ventures Inc. Previously, he was President (2013-2017) and Managing Director (2010-2017) of Dunfeng Philippines International Inc.; and served as Director of Mannage Resource and Trading Inc. (2015-2017). Mr. Chan graduated from DLS- College of St. Benilde with a Bachelor of Science degree in Business Administration major in Export Management. He obtained his master's degree in Economics, major in Finance at California Polytechnic University.

**LINA G. FERNANDEZ**, Director  
Compliance Officer, Corporate Governance Committee

Atty. Lina G. Fernandez, Filipino, 56 years old, first became a Director by appointment on March 18, 2021 to replace Mr. Lester C. Yee. She was elected as President of the Company since March 18, 2021. Before her election/appointment, Atty. Fernandez served as one of the designated Officers-In-Charge of the Company (Oct.2018-Mar 2021), and concurrently Senior Vice President for Finance and Comptroller since Mar 2018-Mar 2021). Atty. Fernandez previously served the Company as its Senior Vice President for Finance and Nickel Marketing Officer (November 2015-March 2018); Vice

President for Corporate Planning, Chief of Staff (August 2006-November 2015); Risk Management Officer (March 2011-March 2018) and Compliance Officer for Corporate Governance (Dec 2016-March 2018). She also holds several positions and directorship in the following subsidiaries of the Company: She is concurrent Vice President-Marketing and Director of BenguetCorp Nickel Mines, Inc. (2014-present); Chairman of Arrow Freight Corporation and Batong Buhay Mineral Resources Corporation; Acting Chairman/President of Benguet Management Corporation; Acting Chairman/President of BC Property Management, Inc.; Acting Chairman of Keystone Port Logistics and Management Services Corporation, BMC Forestry Corporation, Benguet Pantukan Gold Corporation and Berek Land Resources Inc; Acting Chairman/Treasurer of Balatoc Gold Resources Corporation and Benguetrade, Inc.; Director/Acting President of Ifaratoc Mineral Resources Corporation; Director and President of Pillars of Exemplary Consultants, Inc.; Director/Treasurer of Agua de Oro Ventures Inc.; and Director of BenguetCorp Laboratories Inc., Sagittarius Alpha Realty Corporation and Acupan Gold Mines, Inc. Formerly, she was Director of Kingking Copper-Gold Corp. (2008-2011).

**B. EXECUTIVE OFFICERS**

The executive officers of the Company are appointed or elected annually to a one-year term (subject to removal) by the Board of Directors immediately following the Annual Stockholders' Meeting.

Below are their respective ages, citizenships, positions held in the Company and its subsidiaries and brief description of business experiences. None of the executive officers of the Company are government employees.

**LINA G. FERNANDEZ**, Filipino, 56 years old, is the President of the Company since March 18, 2021.

**REYNALDO P. MENDOZA**, Filipino, 63 years old, is the Executive Vice President for Legal since March 18, 2021 and Assistant Corporate Secretary (2002 to present). He previously served as one of the two Officers-In-Charge of the Company (Oct. 2018-Mar. 2021) and concurrently Senior Vice President for Legal (Aug. 2006-Mar 2021). Currently, he also holds several positions and directorship in the following subsidiaries of the Company: He is concurrent Chairman and Acting President of Acupan Gold Mines, Inc.; Acting Chairman of BenguetCorp Nickel Mines, Inc., Agua de Oro Ventures, Inc., Ifaratoc Mineral Resources Corp. and Pillars of Exemplary Consultants, Inc.; Acting Chairman and President of Sagittarius Alpha Realty Corporation; Director and President of Batong Buhay Mineral Resources Corp.; Director and Acting President of Benguet Pantukan Gold Corporation and Berek Land Resources, Inc.; Director of BenguetCorp Laboratories, Inc., BMC Forestry Corporation, Balatoc Gold Resources Inc. Benguetrade, Inc. and BC Property Management; Director and Corporate Secretary of Benguet Management Corporation, Arrow Freight Corporation and Keystone Port Logistics and Management Services Corp. Before joining Benguet Corporation, he was Staff Lawyer of PDCP (1987-1988) and Malayan Insurance Company (1986-1987); Associate Lawyer, Castro, Villamor & Associate (1985-1986); Legal Assistant/Apprentice Lawyer, Gono Law Office (1985).

**MAX D. ARCEÑO**, Filipino, 59 years old, is the Senior Vice President for Finance and Treasurer of the Company since March 18, 2021. He previously served the Company as its Vice President for Finance & Treasurer (Nov. 2019-Mar. 2021); Vice President for Finance, Treasurer, Taxation/Materials (March 2018-November 2019); Vice President for Accounting and Treasurer (March 2013-March 2018) and Assistant Vice President for Treasury (July 2011-February 2013). He also holds several positions in the following subsidiaries of the Company. He is concurrent Director/Treasurer of BenguetCorp Laboratories, Inc. (Feb. 2013 to present); Director/President and General Manager of Arrow Freight Corporation and Benguetrade, Inc.; Director and President of Keystone Port Logistics and Management Services Corp., Director/Treasurer of BenguetCorp Nickel Mines, Inc., Benguet Management Corporation, BMC Forestry Corporation, Berek Land Resources, Inc. BC Property Management, Inc. Batong Buhay Mineral Resources Corp., Acupan Gold Mines, Inc. and Pillars and Exemplary, Inc. Director/VP and Treasurer of Benguet Pantukan Gold Corporation; and Director of Balatoc Gold Resources Corp., Sagittarius Alpha Realty Corp., Agua de

Oro Ventures, Inc. and Ifaratoc Mineral Resources Corp. Mr. Arceño graduated from the University of the East (Batch 1983) with a degree in BSBA-Accounting and passed the board examination for Certified Public Accountant in 1984. He joined the Company in 1985 as Accounting Staff I, where he rose from the ranks.

**VALERIANO B. BONGALOS, JR.**, Filipino, 71 years old, is the Vice President/Resident Manager of Benguet District Operations of the Company since January 15, 2020. He previously served the Company as its Consultant (May 2018-January 14, 2020); Vice President & General Manager of Benguet District Operations (July 2013-Sept 2015), and Mine Manager of Benguet Gold Operation, Antamok Northern Division (1978-1980 and in 1984-1992). He was Mine Manager, Lepanto Consolidated Mining Co., Lepanto, Mankayan, Benguet (2016-2017); Vice President for Operations and Resident Manager, Apex Mining Co., Compostella Valley, Mindanao. Inc. (May 2010-July 2011); Mine Manager, Phuoc Son Gold Company, Ltd., Quang Nam, Vietnam (November 2006-July 2009); Mine Planning Manager, Ban Phuc Nickel Mines in Hanoi, Vietnam (March to June 2006); Mine Superintendent, Lepanto Consolidated Mining Company (1999-2001); Tunnel Superintendent, San Roque Multipurpose Dam (1998); Mine Manager, Base Metal Mineral Res. Corp. (1996-1997), Davao del Norte; Project Manager, Ground Specialist, Inc.-Contractor (1994-1995), Lepanto Mine, Mankayan; Drilling & Blasting Engineer, Al Dhary International Group in Tabuk, Saudi Arabia (1993-1994); Senior Assistant Mining Engineer, Zambia Consolidated Copper Mines (Underground Copper Mine) in Zambia, Africa (1980-1983); Project Engineer, Argonaut Mineral Exploration (1975-1978); and Shift Foreman, Long Beach Mining Corporation (1974). He is a BS Mining Engineering graduate of Mapua Institute of Technology (1973) and completed his Management Development Program at AIM in 1987. He obtained his Mining Engineering license in 1974.

**PAMELA M. GENDRANO**, Filipino, 54 years old, is the Assistant Vice President for Environmental Compliance since November 6, 2019 and Risk Management Officer since November 11, 2020. She previously served the Company as its Assistant Vice President for Environmental Compliance-BNMI (Feb. 20, 2012-Nov. 6, 2019). Her previous work experiences include: Freelance Environment Consultant (2008-2011); Technical Operations Manager/Senior Environment Management Specialist (GEOSPHERE Technologies, Inc., (2005-2008); Technical Operations Manager (Geographic Management Services Company (2002-2004); Senior Project Officer (BOI, JICA Study in Environmental Management w/ Public and Private Ownership (2002); Environment Management Specialist (Tetra Tech. Environmental Management, Inc. (1999-2001); EIA/IEE Consultant (1999); Project/Program Evaluator, Philippine-Canada Development Fund (1999); Section Chief, Strategic Coordination and Special Projects Section, DENR/EMB (1994-1999); Project Officer, Institute of Environment Science and Management-CIDA/Research Associate, UPLB-College of Forestry-JICA (1991-1995); Research Forester, DENR-Policy Planning Division (1987). Ms. Gendrano is a Masteral Degree holder of Environmental Studies and Community Development from the University of the Philippines at Los Baños where she gained it in 1992 and a Bachelor's Degree in Forestry from the same university in 1988. She was also one of the seven (7) Filipinos accredited by the Environmental Protection Agency (EPA) of the United States of America to undertake Environmental Compliance Monitoring and Enforcement Trainings and an accredited Environmental Impact Assessment Study Preparer by the DENR-Environmental Management Bureau (EMB).

**HERMOGENE H. REAL**, Filipino, 64 years old, is the Corporate Secretary of the Company since October 25, 2000. She is currently Director of publicly-listed Company, Bright Kindle Resources and Investment, Inc., where she is Assistant Corporate Secretary (2014 to present). She is also Director of Arrow Freight Corporation; Director of Benguetcorp Laboratories, Inc.; Director of Philippine Collectivemedia Corporation (2008 to present); Director, Brightgreen Resources Corporation (2014 to present); Director, Southern Alluvial Minerals and Alumina Resources Inc. (2017 to present); Director, Brightgreen Resources Holdings Inc. (2017 to present); Director, Strong Mighty Steel, Inc. (2017 to present); Director/Assistant Corporate Secretary, Mairete Asset Holdings Inc. (2017 to present); Corporate Secretary, Universal Re Condominium Corporation (1997 to 2009, 2010 to present); Corporate Secretary, Benguetcorp Nickel Mines, Inc. (2014 to present); Assistant Corporate Secretary of Doña Remedios Trinidad Romualdez Medical Foundation, Inc. (1996 to present); and Practicing Lawyer, D.S. Tantuico and Associates (1998 to present).

### Resignation of Directors/Officers

- a) Mr. Lester C. Yee, resigned as Director effective March 18, 2021.
- b) Mr. Romeo L. Go, resigned as Director effective September 23, 2020.
- c) Mr. Edgar Dennis A. Padernal, resigned as Director effective September 23, 2020.

### Significant Employees

Other than the executive officers, other employees are expected by the Company to make significant contribution to the business.

### Family Relationship

None of the Directors or Executive Officers is related to another by affinity or consanguinity.

### Involvement in Certain Legal Proceedings

The Company is not aware of any bankruptcy proceeding against any of its directors and officers during the past five (5) years. Neither is the Company aware of any conviction by final judgment in any criminal proceeding, or the involvement, of any of its directors or officers, in any case where such officer or director has been subject to any order, judgment or decree of competent jurisdiction, permanently or temporarily enjoining, barring, suspending, or otherwise limiting his involvement in any type of business, including those connected with securities trading, investments, insurance or banking activities.

## ITEM 10. EXECUTIVE COMPENSATION

### Summary Compensation Table

The aggregate compensation paid or incurred during the last two fiscal years and estimated to be paid in the ensuing fiscal year to the President, four most highly compensated executive officers and all other directors and officers of the Company as a group are as follows:

<u>Name</u>	<u>Principal Position</u>
1. Lina G. Fernandez	President ( <i>Elected President effective March 18, 2021</i> )
2. Reynaldo P. Mendoza	Executive Vice President, Legal & Asst. Corporate Secretary ( <i>Promoted EVP effective March 18, 2021</i> )
3. Max D. Arceño	Senior Vice President, Finance & Treasurer ( <i>Promoted SVP effective March 18, 2021</i> )
4. Valeriano B. Bongalos, Jr.	Vice President/Resident Manager-Benguet District Operation
5. Pamela M. Gendrano	Asst. Vice President, Environmental Compliance

	Year	Salary (In-Million)	Bonus (In-Million)	Other Annual Compensation
All above-named officers as a group	2021*	₱16.9	₱1.5	₱1.1
	2020**	14.6	1.5	0.7
	2019**	19.3	1.7	1.7
All other directors and officers as a group unnamed	2021*	₱3.4	₱0.3	₱1.2
	2020**	5.1	0.5	1.7
	2019**	8.7	0.8	1.3

(\*) - Estimate      (\*\*) – Actual

### Employment Contract with Executive Officers

The Company has no special employment contracts with its executive officers. In the ordinary course of business, the Company has employment contracts with all its employees, including officers, in compliance with the applicable labor laws and regulations. There are no compensatory plan or arrangements with any executive officers, which results or will results from the resignation, retirement or any other termination of the executive officer's employment or from a change-in-control in the Company or a change in the executive officer's responsibilities following a change in control of the Company.

### **Compensation of Directors**

The non-executive directors of the Company do not receive any regular compensation from the Company, except for every regular, special or committee meeting actually attended, for which members of the Board of Directors receive a per diem of ₱15,000.00 (gross). There are no other material terms of, nor any other arrangements with regard to compensation as to which directors are compensated, or are to be compensated, directly or indirectly, for any services provided as a director.

### **Retirement Plan**

The Company maintained a qualified, noncontributory trusted pension plan covering substantially all of its executive officers and employees. Normal retirement age under the plan is age 60, except for non-supervisory underground mine workers who have the option to retire at age 55. An employee shall also be entitled to a benefit equal to 50% of his monthly basic salary or the normal benefit, whichever is higher, if his employment is terminated for reasons beyond his control, such as death, disability or government policy. Benefits are dependent on the years of service and the respective employee's compensation.

### **Incentive Bonus Plan**

The Company has an Incentive Bonus Plan of the Company. The purposes of the Plan are: (1) to attract, employ and retain management personnel of outstanding competence, and (2) to motivate its management personnel to deliver superior performance in pursuing the goals and business interests of the Company. The Plan provides for a bonus award, calculated on the basis of net income, to top operating executives, managers and members of the Board of Director. Bonus awards are either paid in full directly to the awardees or are transferred to a trust fund and are payable to the awardees in three installments generally over a period of two years. Bonus awards for any year shall be paid in cash, or in common stock. Either Common Class A or Common Class B shares may be issued under the Plan subject to the legal limitations on ownership of Common Class A shares which can be owned only by Philippine citizens. From 1995 to 2020, there was no amount set aside for payment of bonuses in accordance with the Plan.

### **Warrants and Options Outstanding**

Since 1975, the Company provided Stock Option Plan (the "Plan") for its and subsidiaries selected staff employees, directors and consultants. The purpose in granting options are: (1) to encourage stock ownership in the Company, and thereby generate an interest in the Company and its subsidiaries, (2) to promote its affairs, and (3) to encourage its staff employees, directors and consultants to remain in the employ of the Company. The Plan have been amended several times and among others, there have been several amendments to extend the termination date of granting stock options. The latest amendment was approved by the Board of Directors on March 17, 2017 and by the stockholders of the Company during the November 8, 2018 annual stockholders' meeting, extending the termination date of granting stock options under the Plan until May 31, 2023.

The following changes in the stock option grants was approved by the Board in its meeting held on August 31, 2016 and by the stockholders during the November 8, 2019 Annual Stockholders' Meeting due to change in par value of both Class A and B shares from ₱3.00 to ₱1.00 per share: (a.) Change in the total number of unexercised shares on the May 3, 2011, September 7, 2012 and May 28, 2014 grants and corresponding change in the exercise price; (b.) Change in the maximum number of shares per grant: from 500,000 to 1,500,000 shares; and (c.) Repricing of the unexercised options in the May 3, 2011, September 7, 2012 and May 28, 2014 grants. The exercised price (net of 25% discount) is ₱1.69 per share for Class "A" and ₱1.91 per share for class "B". (The exercised price is based on closing price of August 18, 2016: Class A – ₱2.25 and Class B – ₱2.55 less 25% discount pursuant to the provisions of the Plan of the Company) The repricing was brought about by the low turn-out in the availment of the grant due to high exercise price compared to market price.

In the current implementation of the Company's Plan, as of December 31, 2020, the following stock options are still valid from the date of the grant.

- a. On May 3, 2011, under the Plan, the Company granted stock option to its officers, directors, managers and consultants totaling 2,200,332 common shares with a par value of ₱3.00 per share consisting of 1,320,199 class "A" common shares at an exercise price of ₱16.50 per share and 880,133 class "B" common shares at an exercise price of ₱17.50 per share. Due to change in par value of both Class A and B shares from ₱3.00 to ₱1.00 per share and change of exercise prices from ₱16.50 to ₱1.69 per share for Class "A" and ₱17.50 to ₱1.91 per share, the total number of unexercised shares were adjusted to 6,600,996 common shares consisting of 3,960,597 class "A" shares and 2,640,399 class "B" shares. The granted stock option came entirely from the unissued/cancelled shares of the April 6, 2006 option grant consisting of 7,004,000 common shares with par value of ₱3.00 per shares (adjusted to 21,012,000 common shares with par value of P1.00 per share) under the current implementation of the amended Plan. The shares are exempted from registration under SRC rules and the listing was approved by the PSE. As of December 31, 2020, the number of options granted to, exercised, and unexercised by the President, four (4) other most highly compensated executive officers and all other officers and directors of the Company under this grant are as follows:

	Option Grants		Option Exercise Price/Share		Options Exercised		Options Unexercised		Options Cancelled (Cessation from employment/ directorship)	
	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B
LG Fernandez	99,000	66,000	₱1.69	₱1.91	99,000	20,500	-	45,500	-	-
Four Highest Paid Named Exec. Officers:										
RP Mendoza	108,000	72,000	₱1.69	₱1.91	-	-	108,000	72,000	-	-
MD Arceño	86,988	58,000	₱1.69	₱1.91	-	-	86,988	58,000	-	-
VB Bongalos, jr.	-	-	-	-	-	-	-	-	-	-
PM Gendrano	-	-	-	-	-	-	-	-	-	-
All Other Officers and Directors as a Group Unnamed	234,000	156,000	₱1.69	₱1.91	72,000	48,000	162,000	108,000	-	-

The options are non-transferable and 100% exercisable. Shares included in each installment may be exercised in whole at any time, or in part from time to time, until the expiration of the option. All shares purchased shall be paid in full, in cash, at the time of the exercise of the option. No option is exercisable after ten years from the date of the grant.

- b. On September 7, 2012, under the amended Plan, the Company granted stock option to officers, directors/members of the stock option committee and independent directors. The option grants of 828,000 common shares with a par value of P3.00 per share consisting of 496,800 class "A" common shares at an exercise price of ₱17.96 per share and 331,200 class "B" common shares an exercise price of ₱17.63 per share came entirely from the current balance of unissued / cancelled stock options under the present implementation of the Plan. Due to change in par value of both Class A and B shares from ₱3.00 to ₱1.00 per share and change of exercise prices from ₱17.96 to ₱1.69 per share for Class "A" and ₱17.63 to ₱1.91 per share, the total number of unexercised shares were adjusted to 1,872,000 common shares consisting of 1,123,200 class "A" shares and 748,800 class "B" shares. As of December 31, 2020, the number of options granted to, exercised, and unexercised by the President, four (4) other most highly compensated executive officers and all other officers and directors of the Company under this grant are as follows:

	Option Grants		Option Exercise Price/Share		Options Exercised		Options Unexercised		Options Cancelled (Cessation from employment / directorship)	
	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B

LG Fernandez	-	-	-	-	-	-	-	-	-	-
Four Highest Paid Named Exe. Officers:										
RP Mendoza	-	-	-	-	-	-	-	-	-	-
MD Arceño	-	-	-	-	-	-	-	-	-	-
VB Bongalos, jr.	-	-	-	-	-	-	-	-	-	-
PM Gendrano	-	-	-	-	-	-	-	-	-	-
All Other Officers and Directors as a Group Unnamed	306,000	204,000	₱1.69	₱1.91	-	-	306,000	204,000	-	-

Under the amended Plan, options are non-transferable and 100% exercisable. Options are exercisable to the extent of 30% after one year from the grant, 60% after two years from the grant, and 100% after three years from the grant. Shares included in each installment may be exercised in whole at any time, or in part from time to time, until the expiration of the option. No option is exercisable after ten years from the date of the grant. Payment may be made in full and in cash or installment over three years, at the time of the exercise of the option, provided that the stock certificate shall be issued only upon full payment of the option price.

- c. On May 28, 2014, under the amended Plan, the Company granted stock option to certain directors in recognition of their long years of service to the Company. The option grants of 600,000 common shares with Par Value of ₱3.00 per shares consisting of 360,000 class "A" common shares at an exercise price of ₱7.13 per share and 240,000 class "B" common shares an exercise price of ₱7.13 per share came entirely from the current balance of unissued / cancelled stock options under the present implementation of the Plan. Due to change in par value of both Class A and B shares from ₱3.00 to ₱1.00 per share and change of exercise prices from ₱7.13 to ₱1.69 per share for Class "A" and ₱7.13 to ₱1.91 per share, the total number of unexercised shares were adjusted to 1,800,000 common shares consisting of 1,080,000 class "A" shares and 720,000 class "B" shares. As of December 31, 2020, the number of options granted to, exercised, and unexercised by the President, four (4) other most highly compensated executive officers and all other officers and directors of the Company under this grant are as follows:

	Option Grants		Option Exercise Price/Share		Options Exercised		Options Unexercised		Options Cancelled (Cessation from employment / directorship)	
	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B
LG Fernandez	-	-	-	-	-	-	-	-	-	-
Four Highest Paid Named Exec. Officers:										
RP Mendoza	-	-	-	-	-	-	-	-	-	-
MD Arceño	-	-	-	-	-	-	-	-	-	-
VB Bongalos, jr.	-	-	-	-	-	-	-	-	-	-
PM Gendrano	-	-	-	-	-	-	-	-	-	-
All Other Officers and Directors as a Group Unnamed	648,000	432,000	₱1.69	₱1.91	-	-	648,000	432,000	-	-

Under the amended Plan, options are non-transferable and 100% exercisable. Options are exercisable to the extent of 30% after one year from the grant, 60% after two years from the grant, and 100% after three years from the grant. Shares included in each installment may be exercised in whole at any time, or in part from time to time, until the expiration of the option. No option is exercisable after ten years from the date of the grant. Payment may be made in full and in cash or

installment over three years, at the time of the exercise of the option, provided that the stock certificate shall be issued only upon full payment of the option price.

- d. On March 17, 2017, under the amended Plan, the Company granted stock option to qualified staff employees, directors and consultants of the Company and its subsidiaries who have rendered at least two (2) years of service as of March 11, 2017. The options grant of 8,414,375 common shares were sourced from the cancelled, expired and forfeited shares from previous stock option grants consisting of 5,048,625 Class A shares at exercise price of P1.38 per share and 3,365,750 Class B shares at exercise price of P1.43 per share. The shares are exempted from registration under SEC's MSRD Resolution No. 5 Series 2020 dated February 28, 2020 and the listing was also approved in principle by the PSE in its Notice of Approval dated March 4, 2021. As of December 31, 2020, the number of options granted to, exercised, and unexercised by the President, four (4) other most highly compensated executive officers and all other officers and directors of the Company under this grant are as follows:

	Option Grants		Option Exercise Price/Share		Options Exercised		Options Unexercised		Options Cancelled (Cessation from employment / directorship)	
	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B
LG Fernandez	138,600	92,400	P1.38	P1.43	-	-	138,600	92,400	-	-
Four Highest Paid Named Exec. Officers:										
RP Mendoza	138,600	92,400	P1.38	P1.43	-	-	138,600	92,400	-	-
MD Arcéño	127,050	84,700	P1.38	P1.43	-	-	127,050	84,700	-	-
VB Bongalos, jr.	-	-	-	-	-	-	-	-	-	-
PM Gendrano	66,000	44,000	P1.38	P1.43	-	-	66,000	44,000	-	-
All Other Officers and Directors as a Group Unnamed	462,000	308,000	₱1.38	₱1.43	-	-	462,000	308,000	-	-

Under the Plan, options are exercisable to the extent of 30% after one year from the grant, 60% after two years from the grant, and 100% after three years from the grant. Shares included in each installment may be exercised in whole at any time, or in part from time to time, until the expiration of the option. Payment may be made in full and in cash or installment over three years, at the time of the exercise of the option, provided that the stock certificate shall be issued only upon full payment of the option price. Options are non-transferable and no option is exercisable after ten (10) years from the date of the grant.

#### ITEM 11. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

##### Security Ownership of Certain Beneficial Owners

The following table sets forth certain information about persons (or "groups" of persons) known by the Company to be the directly or indirectly the record or beneficial owner of more than five percent (5%) of any class of the Company's outstanding stocks as of March 31, 2021.

Title of Class	Name, Address of Record Owner And Relationship with Issuer	Name of Beneficial Owner & Relationship with Record Owner	Citizenship	Number of Shares Held	Percent Per Class
	PCD Nominee Corporation (Filipino), G/F MSE Bldg., Ayala Avenue, Makati City. (Stockholder)	( see note <sup>1</sup> )	Filipino	176,909,069	47.60%

<sup>1</sup> PCD Nominee Corporation ("PCDNC") is a wholly-owned subsidiary of Philippine Central Depository, Inc. ("PCD"). The beneficial owners of such shares registered under the name of PCDNC are PCD's participants

Class A Common	Palm Ave. Holding Company, Inc. 3F Universal Re-Building, 106 Paseo de Roxas, Makati City (Stockholder)	( see note <sup>2</sup> )	Filipino	65,624,727	17.65%
	Palm Avenue Holdings Company and/ or Palm Avenue Realty Corp., MM, Phil. Sequestered by the Republic of the Philippines, Presidential Commission on Good Government under Executive Order Nos. 1 & 2 c/o PCGG, IRC Bldg., #82 EDSA, Mandaluyong City. (Stockholder)	( see note <sup>3</sup> )	Filipino	63,920,490	17.19%
	Palm Avenue Holdings Company and/or Palm Avenue Realty Corporation, Metro Manila, Philippines. Sequestered by the Republic of the Philippines thru PCGG under E.O. Nos. 1 & 2 and reverted to Palm Avenue as sequestered shares per Supreme Court Entry of Judgment dated March 15, 1993 in G.R. No. 90667 entitled Republic of the Philippines vs. Sandiganbayan, Palm Avenue Realty Development Corp. and Palm Avenue Holdings Company c/o PCGG, IRC Bldg., #82 EDSA Mandaluyong City. (Stockholder)	( see note <sup>3</sup> )	Filipino	30,834,375	8.29%
Class A Convertible Preferred	PCD Nominee Corporation (Filipino), G/F MSE Bldg., Ayala Avenue, Makati City. (Stockholder)	( see note <sup>2</sup> )	Filipino	65,290	30.08%
	Fairmount Real Estate c/o PCGG 6 <sup>th</sup> Floor, PhilComcen Bldg., Ortigas Avenue cor. San Miguel Avenue, Pasig City (Stockholder)	( see note <sup>3</sup> )	Filipino	59,262	27.30%
Class B Common	PCD Nominee Corporation (Filipino), G/F MSE Bldg., Ayala Avenue, Makati City. (Stockholder)	( see note <sup>2</sup> )	Filipino	106,906,160	43.50%
	Palm Ave. Realty & Devt. Corporation, 3F Universal Re-Building, 106 Paseo de Roxas, Makati City (Stockholder)	( see note <sup>3</sup> )	Filipino	43,680,000	17.80%
	PCD Nominee Corporation (Non-Filipino), G/F MSE Bldg., Ayala Avenue, Makati City. (Stockholder)	( see note <sup>2</sup> )	American	31,778,480	12.93%
	CEDE & CO. (Non-Filipino), P.O. Box 20, Bowlig Green Str. New York NY 10274	( see note <sup>4</sup> )	American	29,674,860	12.07%

who hold the shares in their own behalf or in behalf of their clients. The PCD is prohibited from voting these shares, instead the participants have the power to decide how the PCD shares in Benguet Corporation are to be voted.

- <sup>2</sup> The Company is not aware of who is/are the direct or indirect beneficial owner/s of the stocks issued to Palm Avenue Holdings Company, Inc. and Palm Avenue Realty and Development Corporation (the "Palm Companies). In the November 11, 2020 Annual Stockholders' Meeting of the Company, the Palm Companies issued a proxy in favor of its legal counsels, Attys. Otilia Dimayuga-Molo/Andrea Rigonan-Dela Cueva, to vote in all matters to be taken up in the stockholders' meeting.
- <sup>3</sup> Sequestered shares which is presently in trust by PCGG and the record owner of which is Fairmount Real Estate. The Company is not aware of who is/are the direct or indirect beneficial owner/s of the stocks issued to Fairmount Real Estate.
- <sup>4</sup> Cede & Co is the registered owner of the shares in the books of the Company's transfer agent Stock Transfer Service, Inc (STSI). Cede & Co operates as a subsidiary of Depository Trust Company (DTC) a New York City-based central securities depository, the securities holding bank for most stock brokerages, shares of stock that are held in brokerage accounts. During stockholders' meeting, DTC provides Omnibus Proxy as soon as possible after the record date. The Omnibus Proxy assign Cede & Co. consenting on voting rights to Cede's participants to whom account securities are credited on the record date. To the best knowledge of the Company, there are no participants under the Cede & Co account who own more than 5% of the Company's voting

Please note that: (a) Palm Avenue Holding Company, Inc. and Palm Avenue Holdings Company are one and the same corporation, and (b) Palm Avenue Realty and Development Corporation and Palm Avenue Realty Corporation are one and the same corporation.

The following are participants under the account of PCD Nominee who hold five percent (5%) or more of any class of the Company's outstanding capital stocks as of March 31, 2021.

Title of Class	Name, Address of Record Owner And Relationship with Issuer	Name of Beneficial Owner & Relationship with Record Owner	Citizenship	Number of Shares Held	Percent Per Class
Class A Common	RYM Business Management Corporation, Universal Re Building, 106 Paseo de Roxas, Makati City (Stockholder)	( see note <sup>5</sup> )	Filipino	62,930,820	16.93%
Class B Common		(see note <sup>6</sup> )	Filipino	60,108,441	24.46%

### Security Ownership of Management

The following table sets forth certain information as of March 31, 2021, as to each class of the Company's securities owned by the Company's directors and officers. The Company is not aware of any indirect beneficial ownership of Directors and Executive Officers of the Company.

Title of Class	Name of Beneficial Owner	Citizenship	Amount and nature of beneficial ownership	Percent Per Class
A	Maria Remedios R. Pompidou	Filipino	15	0.00%
A	Rhodora L. Dapula	Filipino	1	0.00%
A	Jose Raulito E. Paras	Filipino	1	0.00%
A	Reginald S. Velasco	Filipino	1	0.00%
A	Anthony M. Te	Filipino	3	0.00%
A	Luis Juan L. Virata	Filipino	234,003	0.06%
B			69,600	0.02%
A	Andrew Patrick R. Casiño	Filipino	3	0.00%
B			3	0.00%
B	Kwok Yam Ian Chan	British	1	0.00%
B	Jesse H.T. Andres	Filipino	1	0.00%
B	Bernardo M. Villegas	Filipino	3	0.00%
A	Lina G. Fernandez	Filipino	99,566	0.02%
B			30,500	0.01%
A	Reynaldo P. Mendoza	Filipino	6,666	0.00%
A	Max D. Arceño	Filipino	1,533	0.00%
A	Hermogene H. Real	Filipino	125,100	0.03%
B			48,300	0.02%

### As a Group

Class A Convertible Preferred	Filipino	59,262 shares <sup>6</sup>	27.30%
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securities. Cede & Co. and DTC, the securities holding bank for most stock brokerages in U.S., is not in any way related to the Company.

<sup>5</sup> The Company is not aware of who is/are the direct or indirect beneficial owner/s of the stocks issued to RYM Business Management Corporation. In the November 7, 2019 Annual Stockholders' Meeting of the Company, the RYM Business Management Corporation issued a proxy in favor of its legal counsel, Atty. Remegio C. Dayandayan, Jr., and/or its Corporate Secretary, Minda P. De Paz, to vote in all matters to be taken up in the stockholders' meeting.

<sup>6</sup> Include 59,262 Convertible Preferred Class A shares, the record owner of which is Fairmount Real Estate which is presently in trust by PCGG. In the past stockholders' meetings of the Company, the shares of Fairmount Real Estate were not voted by any person or proxies. The Company is not aware of who is/are the direct or indirect beneficial owner/s of the stocks issued to Fairmount Real Estate

Class A Common	Filipino	223,777,304 shares <sup>7</sup>	60.20%
Class B Common	Filipino	103,936,849 shares <sup>8</sup>	42.29%

#### Voting Trust Holders of 5% or More

There are no voting trust holders of 5% or more.

#### Changes in Control of the Registrant

There had been no changes in control of the Company that had occurred since the beginning of the last fiscal year. Furthermore, management is not aware of any arrangement, which may result changes in control of the Company.

#### ITEM 12. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

- a) There are no transactions or proposed transactions during the last two years in which the registrant or any director or executive officers, any nominee for election as director, any security holder or member of their immediate families, is a party and the amount of which exceeds P500,000.00. None of the directors, officers or affiliates of the Company, or beneficial owner of more than 10% of any class of voting securities of the Company, or any associate of any such director or security holder, or any of its subsidiaries, has a material interest adverse to the Company or any of its subsidiaries.
- b) There were no transactions with promoters since the Company was organized far beyond the five (5) years period requirement.
- c) The Company has no parent company.
- d) Intercompany transactions are eliminated in the consolidated financial statements. Items eliminated are separately disclosed in a schedule in accordance with Philippine SEC requirements under SRC Rule 68, as Amended (2011). Information regarding related party disclosure is discussed and presented on Note 29 – Related Party Disclosures of the Notes to 2020 Audited Consolidated Financial Statements of the Company.

### PART IV – CORPORATE GOVERNANCE

#### ITEM 13. CORPORATE GOVERNANCE

The Company continues to further improve its current code of corporate governance practices and develop an efficient and effective evaluation system and process to measure the performance of the Board of Directors and management or determine the level of compliance of the Board of Directors and management with the new Manual of Corporate Governance (the "Manual") of the Company. The new Manual was adopted to institutionalize the principles of good corporate governance in the entire organization and in compliance with SEC Memorandum Circular No. 19, S2016, Corporate Governance Code for Publicly Listed Companies. The Company formalized the Board Risk Oversight Committee Charter and new policies on Related Party Transaction; Anti-Fraud, Corruption and Whistleblowing; Enterprise Risk Management Framework; and self-assessment forms for Board, AuditCom and Board Risk Oversight Committee (BROC). The Company submitted to the Commission and Exchange, the SEC mandated annual report on Integrated Annual Corporate Governance Report 2019 (I-ACGR 2019) and Sustainability Report 2020.

The directors, officers and employees adhere to the leading practices and principles of good corporate governance. Corporate governance policies and principles were established to ensure that the interest of stakeholders are always taken into account; that directors, officers and employees are conducting

<sup>7</sup> Include 30,834,375 and 63,920,490 sequestered Common Class A shares, the record owners of which are Palm Avenue Holdings Company and/or Palm Avenue Realty Corporation and presently held in trust by PCGG. Also included is 65,624,727 Common Class A shares, the record owner of which is Palm Avenue Holding Co., Inc. and 62,930,820 Common Class A shares, the record owner of which is RYM Business Management Corporation (PCD Nominee).

<sup>8</sup> Include 43,680,000 Common Class B shares, the record owner of which is Palm Avenue Realty and Development Corporation and 60,108,441 Common Class B shares, the record owner of which is RYM Business Management Corporation (PCD N

business in a safe and sound manner; and that transactions entered into between the Company and related interests are conducted at arm's length basis and in the regular course of business. There are no incidences of deviation from the Company's Manual requiring disclosure as to the person/s and sanction/s imposed.

The Company's Corporate Governance Committee composed of three independent directors and compliance officer namely: Mr. Bernardo M. Villegas is the Chairman and the members are: Mr. Reginald S. Velasco and Atty. Rhodora L. Dapula and the Compliance Officer is Atty, Lina G, Fernandez.

In compliance with SEC Memorandum Circular 4 Series of 2019, attached to this Annual Report (SEC form 17-A) is the Company's Sustainability Report for the year ended 2020 (Annex "A").

## PART V – EXHIBITS AND SCHEDULES

### ITEM 14. EXHIBITS AND REPORTS ON SEC FORM 17-C

#### (A) Exhibits and Schedules

1. Benguet Corporation & Subsidiaries - Audited Consolidated Financial Statements for fiscal year ended December 31, 2020:
  - Statement of Management's Responsibility for Consolidated Financial Statements
  - Independent Auditors' Report
  - Audited Consolidated Financial Statements & Notes for the year ended December 31, 2020
  - Independent Auditors' Report on Supplementary Schedules
    - Schedule I : Reconciliation of Retained Earnings Available for Dividends Declaration
    - Schedule II : Schedule of Financial Ratios
    - Schedule III: Map Showing the Relationship of the Companies within the Group
    - Schedule as Required by SRC Rule 68-E
      - Schedule A. Financial Assets
      - Schedule B. Amounts Receivable from Directors, Officers, Employees, Related Parties and Principal Stockholders (Other than Related Parties)
      - Schedule C. Amounts Receivable from Related Parties which are Eliminated during the Consolidation of Financial Statements
      - Schedule D. Long Term Debt
      - Schedule E. Indebtedness to Related Parties
      - Schedule F. Guarantees of Securities of Other Issuers
      - Schedule G. Capital Stock
2. Benguet Corporation (Parent) Audited Financial Statements for fiscal year ended December 31, 2020.
  - Statement of Management's Responsibility for Financial Statements - Independent Auditors' Report
  - Audited Financial Statements & Notes for fiscal year ended December 31, 2020
  - Independent Auditors' Report on Supplementary Schedules
    - Schedule I: Reconciliation of Retained Earnings Available for Dividends Declaration

(B) The following disclosures have been reported and disclosed to the SEC and PSE under SEC Form 17-C during the last six months period covered by this report including disclosure up to the date of filing this report:

Date of SEC Form 17-C	Description of Disclosure
05.06.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options
05.05.2021	Report on the implementation of stock option plan for the month of April 2021

05.04.2021	Report on shares by lot for the month of April 2021
04.29.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
04.16.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
04.15.2021	List of Top 100 stockholders of the Company with PCD Beneficial Owner Participants for the quarter ended March 31, 2021.
04.14.2021	Report on the minimum public ownership for the quarter ended March 31, 2021.
04.14.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
04.08.2021	Report on the implementation of stock option plan for the month of March 2021.
04.07.2021	Report on shares by lot for the month of March 2021.
04.05.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
03.29.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
03.18.2021	Board approval on the following: a. 2020 BC audited financial statements (APFS) and consolidated financial statements (ACFS) as of year ended 31 December 2020 b. Authorized the issuance of BC's APFS and ACFS as audited by SGV & Co. c. Stock option grant under the existing stock option plan consisting of 3,007,627 common shares at exercise price per share of P2.19 for Class "A" and P2.05 for Class "B". d. Resignation of Director, Mr. Lester C. Yee effective March 18, 2021. e. The Board elected Atty. Lina G. Fernandez as the President and also appointed her as member of the board of directors. f. Promotion of Atty. Reynaldo P. Mendoza as Executive Vice President-Legal and Asst. Corporate Secretary and Mr. Max D. Arceño as Senior Vice President-Finance and Treasurer
03.18.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
03.12.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
03.09.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
03.03.2021	Report on shares by lot for the month of February 2021
03.03.2021	Report on the implementation of stock option plan for month of February 2021.
02.09.2021	Disclosure regarding the annual verification and certification of the Mines and Geosciences Bureau (MGB)
02.05.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
02.04.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
02.02.2021	Report on shares by lot for the month of January 2021.
02.02.2021	Report on the implementation of stock option plan for the month of January 2021
01.14.2021	Change in number of issued and outstanding shares of the Company due to exercised stock options.
01.14.2021	Report on the top 100 stockholders of the Company for the quarter ended December 31, 2020
01.07.2021	Attendance of Independent Director/Chairman, Dr. Bernardo M. Villegas in Corporate Governance seminar by Institute of Corporate Directors
01.07.2021	Report on the computation of minimum public ownership for the quarter ended December 31, 2020
01.06.2021	Report on shares by lot for the month of December 2020.
01.06.2021	Report on the implementation of stock option plan for month of December 2020

01.05.2021	Attendance of Directors to board meetings for the year 2020.
01.04.2021	Attendance of Director, Jose Raulito E. Paras in corporate governance webinar on Corporate Governance Updates and Economic Briefing conducted by Center for Global Best Practices.
12.31.2020	Annual report on the implementation of the stock option plan for the year ended December 31, 2020
12.18.2020	Change in number of issued and outstanding shares of the Company due to exercised stock options.
12.14.2020	Change in number of issued and outstanding shares of the Company due to exercised stock options.
12.02.2021	Report on shares by lot for the month of November 2020.
12.02.2021	Report on the implementation of stock option plan for the month November 2020.
11.18.2020	Attendance of Directors and Officers in corporate governance webinar on 2020 Annual Corporate Governance Seminar: "Stay Updated in New Normal" conducted by Center for Training and Development, Inc. on November 13, 2020.
11.11.2020	Results of Organizational Meeting of the Board of Directors held on 11 November 2020, 3:30 p.m. at the Company's board room via virtual and livestreaming through <a href="http://www.benquetcorp.com">www.benquetcorp.com</a>
11.11.2020	Results of Annual Meeting of the Stockholders held on 11 November 2020, 3:00 p.m. at the Company's board room via virtual and livestreaming through <a href="http://www.benquetcorp.com">www.benquetcorp.com</a> .
11.05.2020	Report on the implementation of stock option plan for the month October 2020.
11.04.2020	Report on shares by lot for the month of October 2020.
10.29.2020	Receipt of letter from MGB-Region III dated 20 October 2020 on BNMI lifting/setting aside the MPSA cancellation order dated 8 February 2017 and the MGB mining suspension order dated 23 June 2015, subject to compliance with environmental standards and submission of pertinent reports.
10.12.2020	Report on Top 100 stockholders for the quarter ended September 30, 2020
10.09.2020	Report on the computation of minimum public ownership for the quarter ended September 30, 2020.
10.02.2020	Report on the implementation of stock option plan for the month September 2020.
10.02.2020	Report on shares by lot for the month of September 2020.
09.25.2020	Board approval on the appointment of new directors, Mr. Anthony M. Te and Mr. Kwok Yam Ian Chan and appointment of Atty. Jesse Hermogenes T. Andres as member of the Nomination Committee.
09.23.2020	Board accepted the resignation of Directors, Messrs. Romeo L. Go and Edgar Dennis A. Padernal
09.21.2020	Change in number of issued and outstanding shares due to exercised stock option.
09.09.2020	Board approval on the appointment of a new Director, Mr. Lester C. Yee
09.03.2020	Report on shares by lot for the month of August 2020.
09.03.2020	Report on the implementation of stock option plan for the month of August 2020.
08.05.2020	Report on the implementation of stock option plan for the month of July 2020.
08.04.2020	Report on shares by lot for the month of July 2020.
07.15.2020	Report on Top 100 stockholders for the quarter ended June 30, 2020.
07.03.2020	Report on the computation of minimum public ownership for the quarter ended June 30, 2020.
07.03.2020	Report on the implementation of stock option plan for the month of June 2020.
07.03.2020	Report on shares by lot for the month of June 2020.

**SIGNATURES**

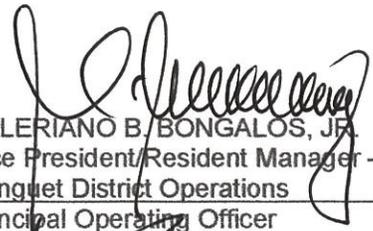
Pursuant to the requirement of Section 17 of the Code and Section 141 of the Corporation Code, this report is signed on behalf of the issuer by the undersigned, thereunto duly authorized, in the City of Makati on May 14, 2021.

**BENGUET CORPORATION**

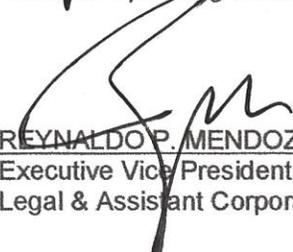
(Issuer)

By:

  
LINA G. FERNANDEZ  
President  
Principal Executive Officer

  
VALERIANO B. BONGALOS, JR.  
Vice President/Resident Manager –  
Benguet District Operations  
Principal Operating Officer

  
MAX D. ARCEÑO  
Senior Vice President, Finance & Treasurer  
Principal Financial/Accounting Officer

  
REYNALDO P. MENDOZA  
Executive Vice President  
Legal & Assistant Corporate Secretary

REPUBLIC OF THE PHILIPPINES )  
MAKATI CITY : S.S.  
X-----X

**MAY 14 2021**

SUBSCRIBED AND SWORN to before me this 14<sup>th</sup> day of May, 2021 at Makati City, Affiants exhibited to me their identifications to wit: Atty. Lina G. Fernandez with Social Security System (SSS) No. 03-75370258, Valeriano B. Bongalos, Jr. with SSS No. 03-31004128, Max D. Arceno with SSS No.03-82056688; Atty. Reynaldo P. Mendoza with SSS No. 03-82056688, all are issued by the Office of the Social Security System, Philippines.

Doc. No. 396  
Page No. 9  
Book No. 102  
Series of 2021.

  
**ATTY. GEORGE DAVID D. SITON**  
NOTARY PUBLIC FOR MAKATI CITY  
APPT. NO. M-382 UNTIL DEC. 31, 2021  
ROLL NO. 68402/ MCLE COMPLIANCE NO. VI-0021936/3-29-2019  
IBP O.R No.2275859-LIFETIME MEMBER MAY. 8, 2017  
PTR No.8533058- JAN 04, 2021-MAKATI CITY  
EXECUTIVE BLDG. CENTER MAKATI AVE., COR., JUPITER ST. MAKATI CITY



BenguetCorp

### STATEMENT OF MANAGEMENT'S RESPONSIBILITY FOR CONSOLIDATED FINANCIAL STATEMENTS

The management of Benguet Corporation (the "Company") is responsible for the preparation and fair presentation of the consolidated financial statements including the schedules attached therein, for the years ended December 31, 2020, 2019 and 2018, in accordance with the prescribed financial reporting framework indicated therein, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The Board of Directors is responsible for overseeing the Company's financial reporting process.

The Board of Directors reviews and approves the consolidated financial statements including the schedules attached therein, and submits the same to the stockholders.

Sycip Gorres Velayo & Co., the independent auditor appointed by the stockholders, has audited the consolidated financial statements of the Company in accordance with Philippine Standards on Auditing, and in its report to the stockholders, has expressed its opinion on the fairness of presentation upon completion of such audit.

*Bernardo M. Villegas*  
BERNARDO M. VILLEGAS  
Chairman of the Board

*Lina G. Fernandez*  
LINA G. FERNANDEZ  
President

*Max D. Arceño*  
MAX D. ARCEÑO  
Senior Vice President  
Finance & Treasurer

Signed on this 7 th day of April, 2021.

REPUBLIC OF THE PHILIPPINES)  
CITY OF MAKATI : S.S.

APR 07 2021  
SUBSCRIBED AND SWORN to before me this \_\_\_th day of April, 2021 in Makati City, affiants exhibited to me their valid identification to with: Mr. Bernardo M. Villegas with SSS No. 03-12455042; Atty. Lina G. Fernandez with SSS No. 03-75370258; and Mr. Max D. Arceño with SSS No. 03-82056688, all issued by the Office of the Social Security System, Philippines.

*MA. ESMERALDA R. CUNANAN*  
Notary Public  
Until December 31, 2021  
App. No. M-27 (2020-2021) Attorney's Roll No. 34567  
MCLE Compliance No. V1-0008196/4-23-2018  
PTR No. 8533031/J-4 2021/Makati City  
IBP Lifetime Member Roll No. 05413  
Ground Level, Dela Rosa Carpark I  
Dela Rosa St. Legaspi Village,  
Makati City

Doc. No. 320  
Page No. 45  
Book No. xiii  
Series of 2021.

# COVER SHEET

for  
**AUDITED FINANCIAL STATEMENTS**

SEC Registration Number

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**COMPANY NAME**

B	E	N	G	U	E	T	C	O	R	P	O	R	A	T	I	O	N	A	N	D	S	U	B	S	I	D
I	A	R	I	E	S																					

**PRINCIPAL OFFICE** (No. / Street / Barangay / City / Town / Province)

7	t	h	F	l	o	o	r	,	U	n	i	v	e	r	s	a	l	R	e	-	B	u	i	l	d	i	
n	g	,	1	0	6	P	a	s	e	o	d	e	R	o	x	a	s	,	1	2	2	6	M				
a	k	a	t	i	C	i	t	y																			

Form Type

A	A	C	F	S
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Department requiring the report

C	R	M	D
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Secondary License Type, If Applicable

N	/	A
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**COMPANY INFORMATION**

Company's Email Address	Company's Telephone Number	Mobile Number
BCCorpSec@benguetcorp.com	(02) 8812-1380	09166100630
No. of Stockholders	Annual Meeting (Month / Day)	Fiscal Year (Month / Day)
16,904	First Wednesday in November	December 31

**CONTACT PERSON INFORMATION**

The designated contact person **MUST** be an Officer of the Corporation

Name of Contact Person	Email Address	Telephone Number/s	Mobile Number
Mr. Max D. Arceño	marceno@benguetcorp.com	(02) 8812-1380	N/A

**CONTACT PERSON'S ADDRESS**

<p><b>Lot 8 Block 8 Gumamela St., Metrocor Homes, Camarin, Caloocan City</b></p>
--

**NOTE 1:** In case of death, resignation or cessation of office of the officer designated as contact person, such incident shall be reported to the Commission within thirty (30) calendar days from the occurrence thereof with information and complete contact details of the new contact person designated.

**2:** All Boxes must be properly and completely filled-up. Failure to do so shall cause the delay in updating the corporation's records with the Commission and/or non-receipt of Notice of Deficiencies. Further, non-receipt of Notice of Deficiencies shall not excuse the corporation from liability for its deficiencies.



## INDEPENDENT AUDITOR'S REPORT

The Board of Directors and Stockholders  
Benguet Corporation  
7th Floor, Universal Re-Building  
106 Paseo de Roxas, Makati City

### Opinion

We have audited the consolidated financial statements of Benguet Corporation and its subsidiaries (the Group), which comprise the consolidated statements of financial position as at December 31, 2020 and 2019, and the consolidated statements of income, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for each of the three years in the period ended December 31, 2020, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2020 and 2019, and its consolidated financial performance and its consolidated cash flows for each of the three years in the period ended December 31, 2020 in accordance with Philippine Financial Reporting Standards (PFRSs).

### Basis for Opinion

We conducted our audits in accordance with Philippine Standards on Auditing (PSAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the Code of Ethics for Professional Accountants in the Philippines (Code of Ethics) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Philippines, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.



### *Valuation of Land at Fair Value*

The Group accounts for its land as investment properties using the fair value model and as property, plant and equipment using the revaluation model. As at December 31, 2020, land classified as investment properties amounting to ₱2,633.68 million and land classified as property, plant and equipment amounting to ₱1,621.15 million represented 36% and 22% of the consolidated total assets, respectively. The determination of the fair values of these properties involves significant management judgment and estimations. The valuation also requires the assistance of external appraisers whose calculations also depend on certain assumptions, such as sales and listing of comparable properties registered within the vicinity and adjustments to sales price based on internal and external factors. Thus, we considered the valuation of land as a key audit matter.

The disclosures relating to investment properties are included in Note 12 while those relating to property, plant and equipment are included in Note 10 to the consolidated financial statements.

### *Audit Response*

We evaluated the competence, capabilities and objectivity of the external appraiser by considering their qualifications, experience and reporting responsibilities. We involved our internal specialist in the review of the methodology and assumptions used in the valuation of the investment properties. We assessed the methodology adopted by referencing common valuation models and reviewed the relevant information supporting the sales and listings of comparable properties. We also inquired from the external appraisers the basis of adjustments made to the sales price.

### *Recoverability of Deferred Mine Exploration Costs*

As at December 31, 2020, the carrying value of the Group's deferred mine exploration costs amounted to ₱456.81 million. These deferred exploration costs pertain to the expenditures incurred by the Group for the mining properties located in Benguet, Zambales and Bataan. Under PFRS 6, *Exploration and Evaluation of Mineral Resources*, these deferred exploration costs shall be assessed for impairment when facts and circumstances suggest that the carrying amounts exceed the recoverable amounts. The ability of the Group to recover its deferred mine exploration costs would depend on the commercial viability of the reserves. We considered this is a key audit matter because of the materiality of the amount involved, and the significant judgment required in assessing whether there is any indication of impairment.

The Group's disclosures in relation to deferred exploration costs are included in Note 11 to the consolidated financial statements.

### *Audit Response*

We obtained management's assessment on whether there is any indication that deferred mine exploration costs may be impaired. We inquired the status of each exploration project as of December 31, 2020, as certified by the Group's technical group head and compared it with the disclosures submitted to regulatory agencies. We reviewed contracts and agreements, and budgets for exploration and development costs. We inspected the licenses, permits and correspondences of each mine exploration project to determine that the period for which the Group has the right to explore in the specific areas has not expired, will not expire in the near future, and will be renewed accordingly. We also inquired about the existing concession areas that are expected to be abandoned or any exploration activities that are planned to be discontinued in those areas.



### ***Impairment Testing of Property, Plant and Equipment***

In the event that an impairment indicator is identified, the assessment of the recoverable amount of property, plant and equipment requires significant judgment and involves estimation and assumptions about future production levels and costs, as well as external inputs such as commodity prices, discount rate, and foreign currency exchange rates. In addition, because of the coronavirus pandemic, there is heightened level of uncertainty on the future economic outlook and market forecast. Hence, such assessment is a key audit matter in our audit.

The disclosures in relation to property, plant and equipment are included in Note 10 to the consolidated financial statements.

### ***Audit Response***

We involved our internal specialist in evaluating the methodologies and the assumptions used. These assumptions include the expected life of the mining project, future production levels and costs as well as external inputs such as commodity prices, discount rate and foreign currency exchange rates. We compared the key assumptions used against the mine life based on the ore reserve reports, production reports from the operations departments, forecasted average market price of gold and nickel, discount rate based on industry weighted average capital cost, and forecasted foreign currency exchange rates of various financial institutions, taking into consideration the impact associated with coronavirus pandemic. We tested the parameters used in the determination of the discount rate against market data. We also reviewed the Group's disclosures about those assumptions to which the outcome of the impairment test is most sensitive, specifically those that have the most significant effect on the determination of the recoverable amount of property, plant and equipment.

### **Other Information**

Management is responsible for the other information. The other information comprises the information included in the SEC Form 20-IS (Definitive Information Statement), SEC Form 17-A and Annual Report for the year ended December 31, 2020 but does not include the consolidated financial statements and our auditor's report thereon. The SEC Form 20-IS (Definitive Information Statement), SEC Form 17-A and Annual Report for the year ended December 31, 2020 are expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audits of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audits, or otherwise appears to be materially misstated.

### **Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements**

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with PFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.



In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

### **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with PSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with PSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements.



- We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Peter John R. Ventura.

SYCIP GORRES VELAYO & CO.

*Peter John R. Ventura*

Peter John R. Ventura

Partner

CPA Certificate No. 0113172

SEC Accreditation No. 1735-A (Group A),

January 15, 2019, valid until January 14, 2022

Tax Identification No. 301-106-741

BIR Accreditation No. 08-001998-140-2018,

December 17, 2018, valid until December 16, 2021

PTR No. 8534379, January 4, 2021, Makati City

March 18, 2021



**BENGUET CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION**  
**(Amounts in Thousands)**



	2020	2019
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash and cash equivalents (Note 4)	P271,548	P77,172
Trade and other receivables (Note 5)	475,251	289,955
Inventories (Note 6)	101,140	132,157
Other current assets (Note 7)	398,720	314,147
<b>Total Current Assets</b>	<b>1,246,659</b>	<b>813,431</b>
<b>Noncurrent Assets</b>		
Property, plant and equipment (Note 10)		
At revalued amount	1,673,288	1,673,288
At cost	942,002	963,864
Financial assets measured at fair value through other comprehensive income (FVOCI) (Note 8)	13,361	13,168
Deferred mine exploration costs (Note 11)	456,806	449,181
Investment properties (Note 12)	2,633,677	2,478,862
Deferred tax assets - net (Note 31)	6,712	47,732
Other noncurrent assets (Note 13)	406,777	482,014
<b>Total Noncurrent Assets</b>	<b>6,132,623</b>	<b>6,108,109</b>
<b>TOTAL ASSETS</b>	<b>P7,379,282</b>	<b>P6,921,540</b>
<b>LIABILITIES AND EQUITY</b>		
<b>Current Liabilities</b>		
Trade and other payables (Note 15)	P620,719	P576,856
Loans payable (Note 14)	508,998	507,893
Lease liabilities (Note 16)	1,678	2,476
Liability for mine rehabilitation (Note 17)	38,136	25,007
Income tax payable	2,006	721
<b>Total Current Liabilities</b>	<b>1,171,537</b>	<b>1,112,953</b>
<b>Noncurrent Liabilities</b>		
Lease liabilities - net of current portion (Note 16)	4,476	5,583
Liability for mine rehabilitation - net of current portion (Note 17)	67,470	66,575
Pension liability (Note 30)	81,831	62,562
Deferred tax liabilities - net (Note 31)	882,514	848,016
Other noncurrent liabilities (Note 18)	391,412	414,201
<b>Total Noncurrent Liabilities</b>	<b>1,427,703</b>	<b>1,396,937</b>
<b>Total Liabilities</b>	<b>2,599,240</b>	<b>2,509,890</b>
<b>Equity</b>		
Capital stock (Note 19)	617,215	616,863
Capital surplus (Note 19)	388,969	380,382
Retained earnings	2,598,788	2,217,403
Other components of equity (Note 19)	1,183,086	1,205,018
	4,788,058	4,419,666
Treasury shares (Note 19)	(8,016)	(8,016)
<b>Total Equity</b>	<b>4,780,042</b>	<b>4,411,650</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>P7,379,282</b>	<b>P6,921,540</b>

See accompanying Notes to Consolidated Financial Statements.



**BENGUET CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF INCOME**  
(Amounts in Thousands, Except Earnings Per Share)

	Years Ended December 31		
	2020	2019	2018
<b>REVENUE</b> (Note 21)	<b>₱1,619,725</b>	<b>₱802,067</b>	<b>₱1,008,704</b>
<b>COSTS AND OPERATING EXPENSES</b>			
Costs of mine products sold (Note 22)	(725,772)	(504,267)	(688,362)
Costs of services and other sales (Note 23)	(39,167)	(49,795)	(67,980)
Selling and general expenses (Note 24)	(408,390)	(340,343)	(407,618)
Excise taxes and royalty fees (Notes 21 and 33)	(101,026)	(29,375)	(45,163)
	<b>(1,274,355)</b>	<b>(923,780)</b>	<b>(1,209,123)</b>
<b>INTEREST EXPENSE</b> (Notes 14 and 16)	<b>(3,130)</b>	<b>(2,031)</b>	<b>(4,828)</b>
<b>OTHER INCOME</b> - net (Note 27)	<b>141,028</b>	<b>272,073</b>	<b>337,690</b>
<b>INCOME BEFORE INCOME TAX</b>	<b>483,268</b>	<b>148,329</b>	<b>132,443</b>
<b>PROVISION FOR INCOME TAX</b> (Note 31)	<b>101,883</b>	<b>32,592</b>	<b>13,401</b>
<b>NET INCOME</b>	<b>₱381,385</b>	<b>₱115,737</b>	<b>₱119,042</b>
<b>BASIC EARNINGS PER SHARE</b> (Note 32)	<b>₱0.62</b>	<b>₱0.19</b>	<b>₱0.19</b>
<b>DILUTED EARNINGS PER SHARE</b> (Note 32)	<b>₱0.61</b>	<b>₱0.19</b>	<b>₱0.19</b>

*See accompanying Notes to Consolidated Financial Statements.*



**BENGUET CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
(Amounts in Thousands)

	Years Ended December 31		
	2020	2019	2018
<b>NET INCOME</b>	<b>₱381,385</b>	<b>₱115,737</b>	<b>₱119,042</b>
<b>OTHER COMPREHENSIVE INCOME, NET OF TAX</b>			
<i>Item to be reclassified to profit or loss in subsequent periods:</i>			
Translation adjustment on foreign subsidiaries	(1,997)	871	(127)
<i>Items not to be reclassified to profit or loss in subsequent periods:</i>			
Remeasurement loss on pension liability (Note 30)	(11,823)	(2,788)	(5,073)
Unrealized gain on equity instruments designated at FVOCI (Note 8)	193	83	336
Revaluation of land (Note 10)	-	316,392	119,241
Revaluation of artworks (Note 10)	-	21,562	-
Unrealized gain on intangible asset (Note 13)	-	135	-
	<b>(11,630)</b>	<b>335,384</b>	<b>114,504</b>
<b>OTHER COMPREHENSIVE INCOME, NET OF TAX</b>	<b>(13,627)</b>	<b>336,255</b>	<b>114,377</b>
<b>TOTAL COMPREHENSIVE INCOME</b>	<b>₱367,758</b>	<b>₱451,992</b>	<b>₱233,419</b>

See accompanying Notes to Consolidated Financial Statements.



**BENGUET CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY**  
**FOR THE YEARS ENDED DECEMBER 31, 2020, 2019 AND 2018**  
**(Amounts in Thousands)**

	Other comprehensive income - net of deferred tax effect										Total	
	Capital stock (Note 19)	Capital surplus (Note 19)	Cost of share-based payment (Notes 19 and 20)	Revaluation increment on land and artworks (Note 19)	Cumulative translation adjustment on foreign subsidiaries (Note 19)	Remeasurement gain on pension liability (Note 30)	Unrealized gain on financial assets at FVOCI (Note 8)	Unrealized gain on intangible asset (Note 13)	Total other comprehensive income	Retained earnings		Treasury shares (Note 19)
Balances at January 1, 2018	₱616,863	₱375,726	₱26,327	₱720,428	₱32,848	₱29,274	₱1,059	₱-	₱783,609	₱1,910,135	₱(8,016)	₱3,704,644
Cancellation of stock options	-	1,238	(1,238)	-	-	-	-	-	-	-	-	-
Transfer of fair value reserve on disposed financial assets at FVOCI	-	-	-	-	-	-	(382)	-	(382)	382	-	-
Net income	-	-	-	-	-	-	-	-	-	119,042	-	119,042
Other comprehensive income (loss)	-	-	-	119,241	(127)	(5,073)	336	-	114,377	119,042	-	114,377
Total comprehensive income (loss)	-	-	-	119,241	(127)	(5,073)	336	-	114,377	119,042	-	233,419
Balances at December 31, 2018	₱616,863	₱376,964	₱25,089	₱839,669	₱32,721	₱24,201	₱1,013	₱-	₱897,604	₱2,029,559	₱(8,016)	₱3,938,063
Cancellation of stock options (Note 19)	-	3,418	(3,418)	-	-	-	-	-	-	-	-	-
Realization of revaluation increment on sale of investment property (Note 12)	-	-	-	(50,387)	-	-	-	-	(50,387)	50,387	-	-
Realization of deferred tax liability on sale of investment property (Note 12)	-	-	-	-	-	-	-	-	-	21,595	-	21,595
Transfer of fair value reserve on disposed financial asset at FVOCI	-	-	-	-	-	-	(125)	-	(125)	125	-	-
Net income	-	-	-	337,954	871	(2,788)	83	135	336,255	115,737	-	115,737
Other comprehensive income (loss)	-	-	-	337,954	871	(2,788)	83	135	336,255	115,737	-	336,255
Total comprehensive income (loss)	-	-	-	337,954	871	(2,788)	83	135	336,255	115,737	-	451,992
Balances at December 31, 2019	₱616,863	₱380,382	₱21,671	₱1,127,236	₱33,592	₱21,413	₱971	₱135	₱1,183,347	₱2,217,403	₱(8,016)	₱4,411,650
Exercise of stock options (Note 19)	352	2,239	(1,957)	-	-	-	-	-	-	-	-	634
Cancellation of stock options (Note 19)	-	6,348	(6,348)	-	-	-	-	-	-	-	-	-
Net income	-	-	-	-	(1,997)	(11,823)	193	-	(13,627)	381,385	-	381,385
Other comprehensive income (loss)	-	-	-	-	(1,997)	(11,823)	193	-	(13,627)	381,385	-	(13,627)
Total comprehensive income (loss)	-	-	-	-	(1,997)	(11,823)	193	-	(13,627)	381,385	-	367,758
Balances at December 31, 2020	₱617,215	₱388,969	₱13,366	₱1,127,236	₱31,595	₱9,590	₱1,164	₱135	₱1,169,720	₱2,598,788	₱(8,016)	₱4,780,042

See accompanying Notes to Consolidated Financial Statements.



**BENGUET CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(Amounts in Thousands)

	Years Ended December 31		
	2020	2019	2018
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Income before income tax	P483,268	P148,329	P132,443
Adjustments for:			
Depreciation and depletion (Notes 10 and 26)	54,269	38,502	83,130
Noncapitalizable additions to liability for mine rehabilitation (Notes 17 and 27)	-	18,373	-
Change in estimate of liability for mine rehabilitation (Notes 17 and 27)	5,290	(9,672)	(8,226)
Movements in pension liability	10,179	4,452	457
Accretion expense (Notes 17 and 27)	3,376	6,467	4,940
Interest expense (Notes 14 and 16)	3,130	2,031	4,828
Interest income (Notes 4, 13 and 27)	(819)	(1,727)	(261)
Provision for impairment loss on input VAT	5	8,714	11,135
Provision for impairment loss on other noncurrent assets (Notes 13 and 27)	-	1,838	95,374
Provision for impairment losses on deferred mine exploration costs (Note 11)	-	94,930	72,059
Loss (gain) on:			
Revaluation on investment property (Notes 12 and 27)	(154,815)	(287,213)	(605,820)
Net foreign exchange (Note 27)	(13,015)	(11,491)	15,598
Settlement of liabilities	(5,535)	-	-
Disposal of property, plant and equipment (Notes 10 and 27)	(35)	-	(1,507)
Sale of investment property (Notes 12 and 27)	-	(68,592)	-
Retirement of property, plant and equipment (Notes 10 and 27)	-	-	60,404
Write-off of deferred mine exploration costs (Notes 11 and 27)	-	-	11,462
Legal settlement	-	-	9,425
Operating income (loss) before working capital changes	385,298	(55,059)	(114,559)
Decrease (increase) in:			
Trade and other receivables	(184,285)	(13,961)	276,210
Inventories	31,440	(2,853)	38,275
Other current assets	(11,806)	73,049	267,530
Increase (decrease) in trade and other payables	42,649	(281,800)	(165,868)
Net cash flows generated from (used in) operations	263,296	(280,624)	301,588
Income taxes paid	(3,327)	(32)	(29,006)
Interest received	819	1,727	261
Interest expense paid	(1,488)	(2,031)	(4,828)
Net cash flows from (used in) operating activities	259,300	(280,960)	268,015
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Proceeds from disposal of:			
Property, plant and equipment (Note 10)	35	3,173	3,551
Financial assets at FVOCI (Note 8)	-	3,163	1,928
Investment properties (Note 12)	-	144,614	-
Additions to:			
Property, plant and equipment (Note 10)	(27,307)	(28,019)	(8,235)
Deferred mine exploration costs (Note 11)	(10,811)	(4,018)	(848)
Financial assets at FVOCI (Note 8)	-	(5,450)	(949)
Payments from (advances to) contractors and suppliers	(16,087)	(15,696)	18,258
Net cash flows from (used in) investing activities	(54,170)	97,767	13,705
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Payments of:			
Principal portion of lease liability (Note 16)	(2,070)	(2,699)	-
Loans payable (Note 14)	-	(22,777)	(57,223)
Proceeds from:			
Employees' exercise of stock options (Note 19)	634	-	-
Availment of loans (Note 14)	-	-	10,000

(forward)



	Years Ended December 31		
	2020	2019	2018
Rehabilitation costs (Note 17)	₱-	(₱12,788)	₱-
Contributions and benefits paid (Note 30)	(7,800)	-	-
Increase (decrease) in other noncurrent liabilities	-	(3,554)	3,077
Net cash flows from (used in) financing activities	(9,236)	(41,818)	(44,146)
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>195,894</b>	<b>(225,011)</b>	<b>237,574</b>
<b>EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS</b>	<b>(1,518)</b>	<b>65</b>	<b>16</b>
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR</b>	<b>77,172</b>	<b>302,118</b>	<b>64,528</b>
<b>CASH AND CASH EQUIVALENTS AT END OF YEAR (Note 4)</b>	<b>₱271,548</b>	<b>₱77,172</b>	<b>₱302,118</b>

*See accompanying Notes to Consolidated Financial Statements.*



## BENGUET CORPORATION AND SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in Thousands, except number of shares, per share data and when indicated)

#### 1. Corporate Information and Status of Business Operations

##### Corporate Information

Benguet Corporation (the Ultimate Parent Company) was incorporated on August 12, 1903 in the Philippines and was listed in the Philippine Stock Exchange (PSE) on January 4, 1950.

The Parent Company is currently engaged in gold, nickel, and other metallic and nonmetallic mineral production, exploration, research and development and natural resource projects. The nature of business of the Parent Company's subsidiaries are summarized in Note 2 to the consolidated financial statements.

The Parent Company's registered office address is 7th Floor Universal Re-Building, 106 Paseo de Roxas, 1226 Makati City.

##### Status of Business Operations

##### Quasi-reorganization

On December 5, 2011, the Philippine SEC approved the application of the Parent Company for quasi-reorganization to wipe out its deficit as at December 31, 2010, setting it off against its capital surplus and revaluation increment as follows:

	<i>Prior to quasi-reorganization</i>	<i>Effect of quasi-reorganization</i>	<i>After quasi-reorganization</i>
Capital surplus	₱1,153,579	(₱1,153,579)	₱-
Revaluation increment	1,561,048	(1,010,848)	550,200
Deficit	(2,164,427)	2,164,427	-

For purposes of dividend declaration, the retained earnings of the Parent Company shall be restricted to the extent of the deficit wiped out by the revaluation increment amounting to ₱1.01 billion until the asset to which the revaluation increment relates is disposed. In addition, the retained earnings of the Parent Company shall be restricted further by the accumulated fair valuation gains of investment properties amounting to ₱1,042,846 and ₱851,692 as at December 31, 2020 and 2019, respectively.

On December 11, 2012, the Philippine SEC approved the application of Benguet Management Corporation (BMC), a subsidiary, for quasi-reorganization to reduce its deficit as at December 31, 2011 against its revaluation increment and capital surplus as follows:

	<i>Prior to quasi-reorganization</i>	<i>Effect of quasi-reorganization</i>	<i>After quasi-reorganization</i>
Capital surplus	₱300,000	(₱300,000)	₱-
Deposit for future stock subscription	40,000	(40,000)	-
Revaluation increment	12,019	(12,019)	-
Deficit	(364,830)	312,019	(52,811)

After the quasi-reorganization, the Parent Company made an additional deposit for future stock subscriptions in BMC amounting to ₱160.00 million.



Of the ₱158.98 million and ₱199.85 million retained earnings of BMC as at December 31, 2020 and 2019, respectively, the amount of nil and ₱1.00 million, which represent the remaining revaluation increment that was offset against the deficit as at those dates, cannot be declared as dividend.

Significant developments in the Parent Company's and its subsidiaries' (collectively, the Group) operations follow:

a. Mining Projects

*Benguet Gold Operations (BGO)*

The Group produces gold from the Benguet mines, consisting of the Acupan and Kelly underground mines, which were suspended in 1992, following the 1991 earthquake, which flooded the said underground mines. In 2003, BGO resumed operations and production is partly carried out through independent mining contractors in Acupan Contract Mining Project (ACMP) which is a community-based underground mining project.

The Parent Company is currently working on exploration and drilling programs to upgrade BGO's capacity. The exploration and geology group completed the design for the surface and underground diamond drilling program for the Phase 1 of the Greater Acupan Project.

The related feasibility study for Greater Acupan Project was approved in 2013 and the Parent Company is still raising the necessary funds to start the execution of the project.

On March 18, 2019, TUV Rheinland, an independent evaluation and certification service body, issued to BGO the ISO 14001:2015, which is an internationally accepted certification and standard for environmental management system. The issuance of the said certification, which is valid until March 15, 2022, makes BGO fully compliant with the requirement of Department of Environment and Natural Resources (DENR) Administrative Order (DAO) No. 2015-07. On October 28, 2016, the Parent Company received from the DENR the mine audit report dated October 21, 2016, which was conducted pursuant to DENR Memorandum Circular No. 2016-01 requiring audit of all operating mines which recommended the suspension of the Parent Company's mining operations and required the Parent Company to submit an explanation thereof within seven days from the date of receipt.

On November 1, 2016, the Parent Company submitted an explanation to the DENR stating that there are no legal and factual bases to recommend the suspension of the Parent Company's operations due to the following reasons:

- Based on the mine audit report, there are no significant findings of violations that would warrant the suspension order.
- None of the alleged violations found pose imminent danger or threat to the community that would justify the suspension of operation.
- The deficiencies cited, which are mostly permitting issues or operational concerns, can easily be remediated without need of suspending the Parent Company's operation.

On February 14, 2017, the Parent Company received from DENR a cancellation order dated February 8, 2017 cancelling its authority to undertake mining operations under Patent Claim (PC-ACMP-002-CAR) in Itogon, Benguet for violation of certain provisions of mining and environmental laws, rules and regulations such as the following:

- Republic Act (RA) No. 6969, otherwise known as the 'Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990'
- DAO No. 2013-22 or the 'Revised Procedures and Standards for the Management of Hazardous Wastes'
- RA No. 7942, otherwise known as 'The Philippine Mining Act of 1995'



- DAO No. 2010-21 or the 'Revised Implementing Rules and Regulations of RA No. 7942'

On February 22, 2017, the Parent Company filed a Notice of Appeal before the Office of the President, which stayed the execution of the cancellation order. On March 22, 2017, the Parent Company submitted to the Office of the President its Appeal Memorandum. As of March 18, 2021, the Office of the President has not yet resolved the appeal.

In November 2019, the DENR directed the regional offices of the Mines and Geosciences Bureau (MGB) and Environmental Management Bureau (EMB) to validate the environmental compliance of BGO as input to early resolution of the appeal. In January 2020, MGB submitted a favorable validation report to DENR. As of March 18, 2021, the Parent Company is still awaiting the decision of DENR.

*Sta. Cruz Nickel Project (SCNP)*

On December 10, 2010, the Parent Company and Benguetcorp Nickel Mines, Inc. (BNMI) entered into a Deed of Exchange, whereby the Parent Company transferred its interest in the nickel laterite mine in Sta. Cruz, Zambales. The transfer covers Mineral Production Sharing Agreement (MPSA) No. 226-2005-III, mine technical data and all related environmental and other permits of the nickel laterite mine. BNMI issued 1.0 billion ordinary shares to the Parent Company, with par value of ₱1 per share, as consideration for the transfer. In line with the transfer, BNMI applied for an increase in authorized capital stock from 10.0 million shares to 2.0 billion shares, with par value of ₱1 per share. On February 28, 2011, the Philippine SEC approved the amended Articles of Incorporation of BNMI covering the increase in authorized capital stock from 10,000,000 to 2,000,000,000 shares, with par value of ₱1 per share and increase in number of directors from five to seven. The transfer of the MPSA was approved by the MGB on January 16, 2012.

On March 11, 2016, TUV Rheinland, an independent evaluation and certification service body, issued to the BNMI the ISO 14001:2015, which is an internationally accepted certification and standard for environmental management system. The issuance of the said certification, which is valid until March 10, 2019, makes the BNMI fully compliant with the requirement of Department of Environment and Natural Resources (DENR) Department Administrative Order (DAO) No. 2015-07. In August 2019, BNMI passed the recertification audit.

On July 8, 2016, BNMI received from the regional offices of the DENR, MGB, and EMB a joint suspension order, which suspended its mining operations subject to conditions such as the resolution of issues arising from tree-cutting and earth-balling operations, rehabilitation of mined out areas and construction of an exclusive mine haul road.

The suspension order is based on the following grounds:

- The Writ of Kalikasan case filed in the Supreme Court in the case filed by the Concerned Citizens of Sta. Cruz, Zambales
- Executive Order No. 1 issued by the provincial government of Zambales declaring moratorium on mining operations in the said province
- Continuing complaints of various groups against alleged adverse impact of mining operations

The Supreme Court referred the Writ of Kalikasan case to the Court of Appeals for trial proceeding.



On October 18, 2016, BNMI received the mining audit report dated October 3, 2016. The report states that BNMI violated several conditions of its Environmental Compliance Certificate and the provisions of several other laws and regulations.

On October 22, 2016, BNMI filed before the Pampanga Regional Trial Court, a petition for certiorari with injunction to assail the joint suspension order issued by the MGB, EMB and DENR.

BNMI replied to the DENR that it takes strong exception to the mine audit report particularly on the recommendation to maintain the status quo of the suspension order issued by the DENR on July 7, 2016, on grounds summarized as follows:

- The conduct of the audit was irremediably flawed.
- The transparency and fairness of the audit report is under question because the audit team failed to follow its own protocol.
- Assuming the mine audit report was regularly conducted, it is very apparent that none of the findings of deficiencies therein were serious enough (even if taken collectively) to warrant the imposition or the continuance of the suspension order.
- The recommendation of status quo of the suspension order in the mine audit report will have far-reaching effect on its business, employees and the community.

On February 13, 2017, BNMI received from the DENR an order cancelling its MPSA. The cancellation order alleged that BNMI's operations had overlapped a watershed area and that BNMI has violated several laws and regulations, majority of which were previously raised in the mine audit report.

On February 22, 2017, BNMI filed a Notice of Appeal before the Office of the President to reverse the cancellation order received. In the appeal, BNMI among others alleged it is operating within the Zambales Chromite Mineral Reservation, a mineral reservation which has been excluded from government declared watersheds. BNMI's nickel project is operated outside of any known critical or declared watershed. BNMI filed before the Office of the President its appeal memorandum on March 21, 2017.

On March 28, 2017, the local government of Zambales issued a Manifestation of Consent which lifted the moratorium and allowed BNMI to proceed with hauling and shipment of its nickel ore inventory, which was mined before the suspension took effect, to avoid any adverse impact on the environment.

On May 22, 2017, the Court of Appeals denied the petition for the Writ of Kalikasan case. Thereafter, the petitioners filed a Motion for Reconsideration.

On December 14, 2017, the Court of Appeals denied the Motion for Reconsideration. Accordingly, the prohibitory injunctive provisional Writ on the Kalikasan case issued by the Supreme Court was lifted.

On July 2, 2020, MGB Regional Office No. III in its Memorandum recommends granting the appeal of the Company on the DENR order dated February 8, 2017 cancelling the MPSA agreement.

In August 2020, after a series of meetings, exchanges of communications and actual validation to address the issues noted in the joint suspension order issued on July 8, 2016, the DENR has determined that BNMI has fully addressed the violations and has complied with the



recommendations raised by the MICC Review Team. Indicated also in the letter is an approval from the secretary of the DENR.

On September 22, 2020, BNMI received a Memorandum dated September 17, 2020 from Acting Director of MGB Regional Office No. III concurring with the recommendation to lift the current suspension order provided that BNMI has submitted and secured approval of the required documents/reports.

On October 29, 2020, BNMI likewise received a Memorandum dated October 20, 2020 from DENR-MGB Regional Office No. III in reference to the previous memorandum dated September 17, 2020 stating that the Regional Director DENR-MGB Regional Office No. III concurs with the recommendation of MGB Acting Director to lift the current suspension order still subject to its full compliance with the requirements.

Immediately after the submission of the documents on November 17, 2020, BNMI further notified the MGB Regional Office No. III through letter dated November 18, 2020 the planned resumption of its mining operations starting November 20, 2020.

BNMI now operates in Areas 2 and 3 of its MPSA, doing activities in accordance with the Three-year Development and Work Program that it resubmitted on December 15, 2020, after getting the previous version approved last July 1, 2020 by the Director of MGB Regional Office No. III.

On the other hand, the Company will continue to transport and hauled for shipment the ore inventory stockpiles in Areas 1 and 3 of the mining tenements which were recently given Ore Transport Permit (OTP) by MGB Central Office for environmental reasons.

BNMI significantly considers the last letter received from the MGB R3 dated October 20, 2020 as the concurrence of DENR to the recommendation of lifting the suspension.

*Irisan Lime Project (ILP)*

The Parent Company's ILP in Irisan, Baguio is engaged in the production and trading of quicklime. ILP produced 7,072 tons, 9,671 tons and 9,820 tons of quicklime in 2020, 2019 and 2018, respectively. On September 4, 2017, the Mineral Processing Permit (MPP) for the ILP was renewed for a period of five years or until September 3, 2022.

*Benguet Antamok Gold Operation (BAGO)*

The Parent Company's BAGO in Itogon, Benguet has been suspended since August 1998. BAGO has an estimated resource of about 12.4 million tons, averaging 3.45 grams of gold per ton, at the end of 1999. Pursuant to DAO No. 2010-04, the Parent Company's Application for Mineral Production Sharing Agreement (APSA) No. 009-Cordillera Administrative Region (CAR) was denied on February 8, 2011. Subsequently, the Parent Company filed an appeal on April 15, 2011 in MGB Central Office.



In October 2016, a leak occurred in BAGO's tailings dam which affected the Liang River. On November 23, 2016, the Company received from DENR a letter requiring the Company to show cause why its operation should not be suspended and/or mining contract be cancelled in view of the tailings spill.

On December 26, 2016, the Parent Company argued that there was no negligence because the incident is due to force majeure and the tailings leak was immediately remediated. The Parent Company also emphasized that it has no existing mining operations in BAGO as it has long been suspended. The BAGO open pit mine and the BAGO underground mine have not operated since 1998 and 1989, respectively. The Parent Company contended that its infrastructure in BAGO has been under care and maintenance since then up to the present. On January 1, 2017, the case was elevated to the Pollution Adjudication Board (PAB) from the EMB out of which the Parent Company submitted a position paper on May 8, 2017.

On May 9, 2017 a technical conference hearing was held in PAB regarding the case and as a result, the Parent Company submitted a supplemental motion on June 9, 2017. As of March 18, 2021, the Parent Company is still awaiting the decision of PAB.

*Masinloc Chromite Operation (MCO)*

From 1934 to 2007, the Parent Company managed the Coto mines under an operating agreement with its claimowner, Consolidated Mines, Inc. (CMI). With the expiration of the operating agreement on July 8, 2007, the Parent Company has transferred back the mine to CMI. As at March 18, 2021, the Parent Company is still engaged in discussion with CMI over the liquidation of MCO's assets.

b. Exploration, Research and Development Projects

*Balatoc Tailings Project (BTP)*

The Parent Company's Board of Directors (BOD) approved an initial ₱10.0 million research and development fund for the Balatoc Tailings Project (BTP) in Itogon, Benguet for the study on the feasibility of reprocessing 16.7 million tons of tailings resource with an average of 0.69 grams gold per ton and is estimated to contain 371,000 ounces of gold. A core research and development team, together with the Beijing Geological Research Institute of Mining and Metallurgy, has done the analysis toward the preparation and completion of the bankable feasibility study.

On October 21, 2009, the Group appointed ATR Kim Eng Capital Partners, Inc. as financial advisor to raise additional development capital for the BTP.

On the same date, the Parent Company entered into a processing agreement with Balatoc Gold Resources Corporation (BGRC), a subsidiary, to implement the BTP. The Parent Company has completed the bankable feasibility study of the BTP and engaged external Competent Persons to prepare and review reports as required under the Philippine Mineral Reporting Code modeled after the Joint Ore Reserve Committee of Australia.

On September 2010, the Parent Company signed a Deed of Assignment with BGRC, to transfer MPP No. 13-2010-Cordillera Administrative Region covering the BTP subject to approval by the DENR. The MPP allows reprocessing of the impounded mill tailings from the Acupan mines for recovery of residual gold. In November 2011, the transfer of the MPP was approved by the DENR-MGB.



BGRC signed contracts and undertook activities for the detailed engineering of the project, rehabilitation of the tailings ponds and reinforcement of the silt dam. BGRC continued the activities on expansion and rehabilitation of its penstocks at Tailings Pond Nos. 2 and 3 and earthmoving works on the silt dam at Gold Creek and the Ambalanga River pumping station, and the ridge enhancement works on Tailings Ponds Nos. 2 and 3. The excavated materials from its expansion and rehabilitation activities will be used for the raising of the embankment of Tailings Ponds Nos. 2 and 3 to the level in which the BTP will be able to pump the tailings to a processing plant in Balatoc.

On January 17, 2013, the Parent Company's BOD authorized and approved the deed of exchange between the Parent Company and BGRC covering all of the Parent Company's rights and interest in BTP in exchange of BGRC's shares.

Following the expiration of MPP No. 13-2010-CAR, BGRC reconveyed to the Parent Company on March 16, 2016, all rights and interest in BTP, including liabilities to third parties, so that the reprocessing of tailings can be made part of the Acupan operation once more. The reconveyance was approved by the DENR-MGB on May 31, 2016.

#### *Antamok Tailings Project (ATP)*

The ATP, which targeted the BAGO mill tailings pond, was conceived as a possible additional resource that could be developed similar to BTP. The BAGO tailings pond, located a few hundred meters downstream from the BAGO open pit mine, contains some 7.64 million tons of tailings produced from the BAGO milling operations. In addition, a considerable tonnage of extraneous materials, estimated at about 1.95 million tons washed from the BAGO pit over the years from the Otek marginal grade material dump and from the numerous illegal miners' workings, found its way into the pond and is now resting on top of the tailings deposit. A preliminary sampling of these extraneous materials showed that these can be considered for exploitation together with the original tailings in the pond. More core drilling, however, may be required to firm up the resource estimate of these impounded materials.

The Parent Company has approved an initial ₱7.50 million research fund for the ATP for the feasibility study on the reprocessing. The Parent Company is conducting a feasibility study on the reprocessing of tailings from the BAGO, which are impounded in the tailings pond downstream of the old BAGO mill. The initial drilling conducted to test the impounded materials indicates a grade of 4.0 grams of gold per ton.

As at December 31, 2020, the Parent Company intends to transfer to Benguet-Pantukan Gold Corporation (BPGC), a wholly owned subsidiary of BMC, the planned ATP.

#### *Surigao Coal Prospect (SCP)*

Pre-development activities for the SCP were put on hold in 2011 due to DENR Circular Executive Order (EO) 23, series of 2011, which declares a moratorium on the cutting of timber in the natural and residual forests. The City Environment and Natural Resources Office of the Municipality of Lianga denied the Group's request for a tree inventory, which is preparatory to the application for a cutting permit. The decision was reversed in January 2012 after the issuance of a memorandum from the Executive Secretary, which exempted exploration and mining activities from the said EO. The Parent Company is in the process of completing the requirements to secure permits for the development of the project. A preliminary hydrology study was done at the nearby Hubo river's water source to assess if the volume capacity of the river system can support a hydro plant, which will complement the Coal Power Plant Study. In 2012, the Parent Company also participated in the bidding under the Philippine Energy



Contracting Round four for coal to possibly secure other prospective coal areas. The result of the bidding is awaiting the decision of the Department of Energy.

As at December 31, 2020, the Parent Company plans to transfer the SCP to Batong Buhay Mineral Resources Corporation (BBMRC), a subsidiary, when the said prospect materializes.

*Ampucao Copper-Gold Prospect (Ampucao Prospect)*

The Ampucao prospect is located inside the contract claims of Pugo Mining Company in the southern part of Benguet's Acupan gold mine. The initial exploration work conducted by the Parent Company's geologists indicates a porphyry copper-gold mineralization hosted in diorite below the 2000 level. Two test holes have been programmed to be drilled within the area, but have been put on-hold pending the resolution of the related APSA, which also covers the BAGO.

*Pantingan Copper Gold Prospect (PGP)*

The PGP in Balanga, Bataan consists of 1,410 hectares covered by MPSA No. 154-2000-III. The property is under an operating agreement with Option to Purchase, with Balanga Bataan Minerals Corporation, signed in March 1996. Surface mineralization consists of quartz and clay veins, ranging from 0.70 meters to 10 meters wide, with values as much as 1.0 gram of gold and 9.60 grams of silver. The Group has implemented drilling programs in the property in 2020 and will continue to do so in 2021.

Recent geological works in the Pantingan property have also led to the identification of two parcels composed of Block-1 and Block-3 area located inside the mineral tenement hosting high quality mountain rock deposits with favorable potential for rock aggregates. The potential rock formations comprise of consolidated volcanic conglomerate and massive andesite units based on actual ground analysis.

*Zamboanga Gold Prospect (ZGP)*

The ZGP in R.T. Lim, Zamboanga Sibugay consists of 340.3 hectares of land area and is under an operating agreement with Orelina Mining Corporation (OMC). A drilling program to evaluate the gold potential of the main structure at depth has been put on-hold pending the resolution of the APSA No. 000015- IX of OMC. The APSA which was denied on May 12, 2010 and subject of an appeal filed on January 30, 2013, was reinstated by the DENR November 4, 2020.

*Financial or Technical Assistance Agreement (FTAA) Application*

The Parent Company and its subsidiary, Sagittarius Alpha Realty Corporation (SARC), have two pending FTAA applications consisting of land area totaling 72,806,291 hectares. The FTAA application in Ilocos Norte (denominated as AFTA-000003-I) and Apayao (denominated as AFTA No. 033-CAR) are undergoing Free, Prior and Informed consent requirement through the Regional Office of the National Commission of Indigenous Peoples. Exploration work for the two areas will be undertaken as soon as the applications have been approved by the Philippine government.

c. Water Projects

*Baguio City Bulk Water Supply Project (BCBWSP)*

On August 16, 2005, the BOD of the Baguio Water District (BWD) issued to the Parent Company a Notice of Award covering the BCBWSP. The Parent Company's proposal is to convert its mined-out 440 Vein Open Pit into a water reservoir with the capability of supplying, at least, 50,000 cubic meters of potable water per day to Baguio City.



On September 7, 2007, the BWD issued Board Resolution Number 30-2007, which resolved to terminate the bulk water supply contract negotiation and to scrap the project. The resolution cited grounds such as the irreconcilable differences of the parties on the contract provisions of parametric formula and rate rebasing, among others. On these issues, the BWD is concerned with the affordability and acceptability of the water tariff to the end-consumers. On the other hand, the Parent Company raised a concern on the delay in implementation and its effect on the viability of the project as justification for the contract provisions. The Parent Company has likewise requested the BWD to conduct a public hearing on these issues, which the BWD has deemed premature. The Parent Company filed a request for reconsideration on September 13, 2007.

On November 29, 2007, the BWD issued a Board Resolution denying the Parent Company's request for reconsideration. The Parent Company then filed a case against BWD with the Regional Trial Court.

In 2019, pursuant to a Memorandum of Agreement with Manila Water Company, Inc. (MWCI) regarding the assignment of water rights in Laboy River in connection with MWCI's bulk water supply proposal to Baguio City, the Parent Company has withdrawn the case for specific performance against BWD without prejudice to filing of a new case for recovery of cost and damages due to the aborted bidding award.

*Water Rights of Agua de Oro Ventures Corporation (ADOVC)*

ADOVC, a subsidiary of BMC, has water permits in various locations in Tuba, Benguet: Kairuz Spring granted on September 12, 2001, Amliang Spring granted on October 17, 2002, and Kias Creek granted on August 13, 2004.

The water permits give ADOVC water access to these water sources, except for Kairuz Spring. The owner sold the water source on August 2012. The new owner denied ADOVC to access the water source. In an order dated September 12, 2001, the transfer of the water permit was approved subject to the rights of ADOVC equivalent to 11.60 liters per second. The diversion of the water shall be from the source and for the purpose indicated in the permit and in no case should said use exceed the quantity and period indicated therein. As of December 31, 2020, management is still awaiting resolution of the issue.

As at December 31, 2020 and 2019, the cost and accumulated amortization of the water rights amounted to ₱4.59 million. The Company accrued and paid water permit fees amounting to ₱0.03 million in 2020 and 2019, respectively.

d. Land Development Project

*Kelly Special Economic Zone (KSEZ)*

The Parent Company has approved an initial ₱4.9 million for the feasibility study covering the KSEZ and the potential of other real estate project of the Group. The Parent Company plans to transfer the said properties to BC Property Management, Inc. (BCPMI), a subsidiary of BMC. The capital expenditures related to the implementation of the project will then be infused as equity of the Parent Company in BCPMI. As at December 31, 2020, the said project has not yet materialized.

e. Logistics Services

On August 31, 2017, the BOD approved the dissolution of Calhorr 1 Marine Services Corporation (CMSC) and Calhorr 2 Marine Services Inc. (CMSI), wholly owned subsidiaries of KPLMSC, by shortening their corporate term until September 30, 2017. CMSC and CMSI are awaiting the clearance letter from the Bureau of Internal Revenue (BIR) before it could apply for liquidation with the Philippine SEC. Final liquidation will take place after the Philippine SEC's



approval of the said application. As at March 18, 2021, CMSC and CMSI have not yet received the clearance letter from the BIR.

f. Health Care Services

The Parent Company spun off its Benguet Laboratories (BL) Division on September 19, 2012 through its wholly owned subsidiary, Benguetcorp Laboratories, Inc. (BLI), to undertake the expansion of BL into a distinct operating unit that can raise the necessary development funds and create value for the Group. BLI operates two full-fledged tertiary multi-specialty facilities in Baguio under the trade name Benguet Laboratories. BLI operates another facility under the trade name MedCentral in San Fernando City, Pampanga and Taytay, Rizal which started its operations on December 2012 and December 2013, respectively.

On a regular meeting of the BOD of BLI on January 27, 2016, the President informed the BOD that the Department of Health (DOH) license and Philhealth accreditation for a free-standing chemo infusion was not yet obtained. The management then suspended the operations of Oncology.

Due to the continuous losses of the branches in Taytay and San Fernando, the BOD of BLI approved their closure on March 15, 2019 and August 15, 2019, respectively.

*Recovery of Deferred Exploration Costs*

The Group's ability to realize its deferred exploration costs with carrying value amounting to ₱456.81 million and ₱449.18 million as at December 31, 2020 and 2019, respectively (see Note 11), depends on the success of exploration and development work in proving the viability of its mining properties to produce minerals in commercial quantities, and the success of converting the Group's exploration permits to new mineral agreements, which cannot be determined at this time. The consolidated financial statements do not include any adjustment that might result from these uncertainties.

*Net Negative Working Capital Position of the Group*

The Group's current liabilities exceeded its current assets by ₱299.52 million as at December 31, 2019. This condition indicates the existence of a material uncertainty which may cast significant doubt on the Group's ability to continue as a going concern for the next 12 months. The Group believes that it will be able to generate sufficient cash flows from its future operations to meet its obligations as and when they fall due.

Authorization for the Issuance of the Consolidated Financial Statements

The consolidated financial statements of the Group as at December 31, 2020 and 2019 and for each of the three years in the period ended December 31, 2020, were authorized for issuance by the BOD on March 18, 2021.

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## 2. Summary of Significant Accounting Policies

Basis of Preparation

The consolidated financial statements of the Group have been prepared on a historical cost basis, except for land and artworks classified as property, plant and equipment, which have been measured at revalued amounts, financial assets at fair value through other comprehensive income (FVOCI), intangible asset under "other noncurrent assets" and investment properties, which have been measured at fair value and asset classified as held for sale in 2018 which has been measured at fair values less costs to sell. The consolidated financial statements are presented in Philippine peso,



which is the Group's functional and presentation currency under PFRSs. All values are rounded to the nearest thousands (₱000), except when otherwise indicated.

Statement of Compliance

The consolidated financial statements of the Group have been prepared in compliance with the Philippine Financial Reporting Standards (PFRSs) as issued by the Financial Reporting Standards Council (FRSC). The consolidated financial statements provide comparative information in respect of the previous period.

Basis of Consolidation and Group Information

As at December 31, 2020 and 2019, the consolidated financial statements include the accounts of the Parent Company and the following subsidiaries:

	Nature of business	Country of incorporation	Effective percentage of ownership
Berec Land Resources Inc. (BLRI)*	Exploration and development	Philippines	100.00
BNMI	Exploration and development	Philippines	100.00
BMC*	Foundry	Philippines	100.00
BMC's Subsidiaries:			
Arrow Freight Corporation (AFC)	Logistics	Philippines	100.00
Benguetrade, Inc. (BTI)*	Trading	Philippines	100.00
BMC Forestry Corporation (BFC)	Real estate	Philippines	100.00
ADOVC*	Selling of treated and untreated water	Philippines	100.00
BPGC*	Exploration and development	Philippines	100.00
BCPMI*	Management services	Philippines	100.00
KPLMSC	Logistics	Philippines	100.00
KPLMSC's Subsidiaries:			
CMSC**	Logistics	Philippines	100.00
CMSI**	Logistics	Philippines	100.00
Media Management Corporation (MMC)*	Management services	Philippines	100.00
BenguetCorp International Limited (BIL)*	Holding company	Hong Kong	100.00
BIL Subsidiaries:			
Benguet United States of America (USA), Inc.*	Exploration and development	USA	100.00
Pillars of Exemplary Consultants, Inc. (PECI)*	Professional services	Philippines	100.00
SARC*	Real estate holding	Philippines	100.00
SARC's Subsidiary:			
BGRC*	Exploration and development	Philippines	100.00
BBMRC*	Exploration and development	Philippines	100.00
Ifaratoc Mineral Resources Corporation (IMRC)*	Exploration and development	Philippines	100.00
Acupan Gold Mines Incorporation*	Exploration and development	Philippines	100.00
BLI	Health services	Philippines	100.00

\* Non-operating

\*\* In process of liquidation

Control is achieved when the Parent Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Parent Company controls an investee if, and only if, the Parent Company has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee
- The ability to use its power over the investee to affect its returns



Generally, there is a presumption that a majority of voting rights result in control. To support this presumption and when the Parent Company has less than a majority of the voting or similar rights of an investee, the Parent Company considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangements with the other vote holders of the investee
- Rights arising from other contractual arrangements
- The Parent Company's voting rights and potential voting rights

The Parent Company reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the elements of control. Consolidation of a subsidiary begins when the Parent Company obtains control over the subsidiary and ceases when the Parent Company loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Parent Company gains control until the date the Parent Company ceases to control the subsidiary.

The financial statements of the subsidiaries are prepared for the same reporting period as the Parent Company, using consistent accounting policies. All intercompany balances, transactions, unrealized gains and losses resulting from the intercompany transactions and dividends are eliminated in full.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the Parent Company. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Parent Company's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Parent Company loses control over a subsidiary, it derecognizes the related assets (including goodwill), liabilities, non-controlling interest and other component of equity, while any resultant gain or loss is recognized on profit or loss. Any investment retained is recognized at fair value.

#### Changes in Accounting Policies

The accounting policies adopted are consistent with those of the previous financial year, except that the Group has adopted the following new accounting pronouncements starting January 1, 2020. Adoption of these pronouncement did not have any significant impact on the Group's financial position or performance.

- Amendments to PFRS 3, *Business Combinations, Definition of a Business*
- Amendments to PFRS 7, *Financial Instruments: Disclosures* and PFRS 9, *Financial Instruments, Interest Rate Benchmark Reform*
- Amendments to PAS 1, *Presentation of Financial Statements*, and PAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors, Definition of Material*
- Conceptual Framework for Financial Reporting issued on March 29, 2018
- Amendments to PFRS 16, *COVID-19-related Rent Concessions*

#### Standards issued but not yet effective

Pronouncements issued but not yet effective are listed below. The Group intends to adopt the following pronouncements when they become effective. Adoption of these pronouncements is not expected to have a significant impact on the Group's consolidated financial statements.



*Effective beginning on or after January 1, 2021*

- Amendments to PFRS 9, PFRS 7, PFRS 4 and PFRS 16, *Interest Rate Benchmark Reform – Phase 2*

*Effective beginning on or after January 1, 2022*

- Amendments to PFRS 3, *Reference to the Conceptual Framework*
- Amendments to PAS 16, *Plant and Equipment: Proceeds before Intended Use*
- Amendments to PAS 37, *Onerous Contracts – Costs of Fulfilling a Contract*
- *Annual Improvements to PFRSs 2018-2020 Cycle*
  - Amendments to PFRS 1, *First-time Adoption of Philippines Financial Reporting Standards, Subsidiary as a first-time adopter*
  - Amendments to PFRS 9, *Financial Instruments, Fees in the '10 per cent' test for derecognition of financial liabilities*
  - Amendments to PAS 41, *Agriculture, Taxation in fair value measurements*

*Effective beginning on or after January 1, 2023*

- Amendments to PAS 1, *Classification of Liabilities as Current or Non-current*
- PFRS 17, *Insurance Contracts*

*Deferred effectivity*

- Amendments to PFRS 10, *Consolidated Financial Statements*, and PAS 28, *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*

Presentation of Consolidated Financial Statements

The Group has elected to present all items of recognized income and expense in two statements: a consolidated statement of income and a consolidated statement of comprehensive income.

Current versus Noncurrent Classification

The Group presents assets and liabilities in the consolidated statement of financial position based on current or noncurrent classification. An asset is current when it is:

- Expected to be realized or intended to be sold or consumed in the normal operating cycle
- Held primarily for the purposes of trading
- Expected to be realized within 12 months after the reporting period or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period

All other assets are classified as noncurrent.

A liability is current when:

- It is expected to be settled in the normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within 12 months after the reporting period or
- There is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period

The Group classifies all other liabilities as noncurrent.

Cash and Cash Equivalents

Cash consists of cash on hand and in banks. Cash in banks earns interest at the respective bank deposit rates. Cash equivalents include short-term deposits are made for varying periods of up to



three months depending on the immediate cash requirements of the Group and earn interest at the prevailing short-term investment rates.

#### Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

#### Financial Assets

##### *Initial Recognition and Measurement*

Financial assets are classified, at initial recognition, as subsequently measured at amortized cost, FVOCI, and fair value through profit or loss (FVTPL).

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at FVTPL, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under PFRS 15, *Revenue from Contracts with Customers*.

In order for a financial asset to be classified and measured at amortized cost or FVOCI, it needs to give rise to cash flows that are 'solely payment of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. Financial assets with cash flows that are not SPPI are classified and measured at FVTPL, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortized cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows while financial assets classified and measured at FVOCI are held within a business model with the objective of both holding to collect contractual cash flows and selling.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognized on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

##### *Subsequent Measurement*

The subsequent measurement of financial assets depends on their classification as follows:

- *Financial assets at amortized cost (debt instruments)*  
Financial assets at amortized cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

The Group's financial assets at amortized cost include cash in banks and short-term deposits under "cash and cash equivalents", trade receivables, receivables from lessees of bunkhouses, loans receivable under "trade and other receivables", advances to contractors and nontrade under "other current assets" and "other noncurrent assets", respectively.



- *Financial assets designated at FVOCI (equity instruments)*  
Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at FVOCI when they meet the definition of equity under PAS 32, *Financial Instruments: Presentation*, and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized as other income in the consolidated statement of income when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in the consolidated statement of comprehensive income. Equity instruments designated at FVOCI are not subject to impairment assessment.

The Group elected to classify irrevocably its UITF and quoted shares under this category.

#### *Derecognition*

A financial asset (or, where applicable, a part of a financial asset or part of a group of financial assets) is primarily derecognized (i.e., removed from the Group's consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired; or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass through' arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognize the transferred asset to the extent of its continuing involvement. In that case, the Group also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

#### *Impairment*

The Group recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original EIR. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognized in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).



For cash and cash equivalents and short-term investments, the Group applies the low credit risk simplification. The probability of default and loss given defaults are publicly available and are considered to be low credit risk investments. It is the Group's policy to measure ECLs on such instruments on a 12-month basis. However, when there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL. The Group uses publicly available ratings from (i.e. Standard and Poor's (S&P), Moody's and Fitch) to determine whether the debt instrument has significantly increased in credit risk and to estimate ECLs.

For trade receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

For other receivables, advances to contractors and deposits, the Group calculates ECLs at initial recognition by considering the consequences and probabilities of possible defaults only for the next 12 months, rather than the life of the asset. It continues to apply this method until a significant increase in credit risk has occurred, at which point the loss allowance is measured based on lifetime ECLs.

At each reporting date, the Group assesses whether there has been a significant increase in credit risk for financial assets since initial recognition by comparing the risk of default occurring over the expected life between the reporting date and the date of initial recognition. The Group considers reasonable and supportable information that is relevant and available without undue cost or effort for this purpose. This includes quantitative and qualitative information and forward-looking analysis.

Exposures that have not deteriorated significantly since origination, or where the deterioration remains within the Group's investment grade criteria are considered to have a low credit risk. The provision for credit losses for these financial assets is based on a 12-month ECL. The low credit risk exemption has been applied on debt investments that meet the investment grade criteria of the Group from the time of origination.

An exposure will migrate through the ECL stages as asset quality deteriorates. If, in a subsequent period, asset quality improves and also reverses any previously assessed significant increase in credit risk since origination, then the loss allowance measurement reverts from lifetime ECL to 12-months ECL.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

### Financial Liabilities

#### *Initial Recognition and Measurement*

Financial liabilities are classified, at initial recognition, as financial liabilities at FVTPL, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.



The Group's financial liabilities include trade payables and accrued expenses under "trade and other payables", lease liabilities, and equity of claim owners on contract operations under "other noncurrent liabilities".

*Subsequent Measurement - Financial liabilities at amortised cost (loans and borrowings)*

After initial measurement, interest-bearing loans and borrowings are subsequently measured at amortized cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on the issue and fees that are integral part of the EIR. The EIR amortization is included as finance costs in the consolidated statement of income.

This category generally applies to the Group's loans payable.

*Derecognition*

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the consolidated statement of income.

Offsetting of Financial Instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the asset and the liability simultaneously. The Group assesses that it has a currently enforceable right of offset if the right is not contingent on a future event and is legally enforceable in the normal course of business, event of default, and event of insolvency or bankruptcy of the Group and all of the counterparties.

Fair Value Measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible to the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.



All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognized in the consolidated financial statements at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

#### Inventories

Inventories are valued at the lower of cost or net realizable value (NRV).

Costs incurred in bringing each product to its present location and condition are accounted for, as follows:

- |                         |   |   |
|-------------------------|---|---|
| Materials and supplies  | - | at purchase price less purchase discount, returns and rebates on a first-in, first-out method   |
| Beneficiated nickel ore | - | at cost on a moving average production method during the year exceeding a determined cut-off grade  |
| Quicklime and slakelime | - | at cost on a moving average production method   |
| Gold buttons            | - | at cost on a moving average production method   |
| Subdivision lots        | - | at land costs, amounts paid to contractors for costs incurred in the development and improvement of the properties (planning and design costs, cost of site preparation, professional fees, property taxes, construction overheads and other related costs) |

NRV for materials and supplies represents the current replacement cost. NRV for beneficiated nickel ore, quicklime and slakelime, gold bullions or buttons, and subdivision lots is the estimated selling price in the ordinary course of business less costs of completion and estimated costs necessary to make the sale.

#### Other Current and Noncurrent Assets

Other current and noncurrent assets include various prepaid expenses, advances to contractors, value-added tax (VAT), creditable withholding taxes (CWTs), and intangible asset.

#### *Prepaid Expenses*

Prepaid expenses pertain to advance payments for insurance, rent, other services and tax credit certificates (TCC) granted by the BIR to the Group. These are stated at the estimated amortized cost.



#### *Advances to Contractors*

Advances to contractors comprise mainly of advance payments made by the Group relating to services, materials and supplies necessary for the Group's operations. These are noninterest-bearing and will be realized through offsetting against future billings from contractors, or cash payments, depending on the individual agreements.

#### *VAT*

Revenues, expenses, and assets are recognized net of the amount of VAT, if applicable.

When VAT from sales of goods and/or services (output VAT) exceeds VAT passed on from purchases of goods or services (input VAT), the excess is recognized as payable in the consolidated statement of financial position. When VAT passed on from purchases of goods or services (input VAT) exceeds VAT from sales of goods and/or services (output VAT), the excess is recognized as an asset in the consolidated statement of financial position to the extent of the recoverable amount.

Deferred input VAT arises from the Groups' unsettled purchase of services and will be claimed as input VAT upon payment.

#### *CWTs*

CWTs are amounts withheld from income of the Group subject to expanded withholding taxes. CWTs can be utilized as payments for income taxes provided that these are properly supported by certificates of creditable tax withheld at source subject to the rules of Philippine income taxation. CWTs are stated at the estimated NRV.

#### *Intangible Asset*

The Group's intangible asset pertains to a non-proprietary golf club share. The golf club share was initially measured at cost. Following initial recognition, the intangible asset is carried at a revalued amount, being its fair value at the date of revaluation less any subsequent accumulated impairment losses. The useful lives of intangible assets are assessed to be either finite or indefinite.

Intangible asset pertaining to a golf club share is not amortized, but is tested for impairment annually, either individually or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

A revaluation surplus is recorded in OCI and credited to the unrealized gain on intangible asset in equity. However, to the extent that it reverses a revaluation deficit of the same asset previously recognized in profit or loss, the increase is recognized in profit or loss. A revaluation deficit is recognized in the statement of income, except to the extent that it offsets an existing surplus on the same asset recognized as unrealized gain on intangible asset in equity.

Upon disposal, any unrealized gain on intangible asset in equity is transferred to retained earnings.

An intangible asset is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in the consolidated statement of income when the asset is derecognized.

#### Deferred Mine Exploration Costs

Exploration and evaluation activity involve the search for mineral resources, the determination of technical feasibility and the assessment of commercial viability of an identified resource.



Exploration and evaluation activity include:

- Researching and analyzing historical exploration data
- Gathering exploration data through geophysical studies
- Exploratory drilling and sampling
- Determining and examining the volume and grade of the resource
- Surveying transportation and infrastructure requirements
- Conducting market and finance studies

License costs paid in connection with a right to explore in an existing exploration area are capitalized and amortized over the term of the permit.

Once the legal right to explore has been acquired, exploration and evaluation expenditure is charged to consolidated statement of income as incurred, unless the Group concludes that a future economic benefit is more likely than not to be realized. These costs include directly attributable employee remuneration, materials and fuel used, surveying costs, drilling costs and payments made to contractors.

In evaluating whether the expenditures meet the criteria to be capitalized, several different sources of information are used. The information that is used to determine the probability of future benefits depends on the extent of exploration and evaluation that has been performed.

Expenditure on exploration and evaluation is accounted for in accordance with the area of interest method. Exploration and evaluation expenditure is capitalized provided the rights to tenure of the area of interest is current and either: the exploration and evaluation activities are expected to be recouped through successful development and exploitation of the area of interest or, alternatively, by its sale; or exploration and evaluation activities in the area of interest have not, at the reporting date, reached a stage that permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, and active and significant operations in, or relating to, the area of interest are continuing.

When the technical feasibility and commercial viability of extracting a mineral resource have been demonstrated, then, any fulfillment exploration and evaluation expenditure is reclassified as mine and mining properties and mine development costs included as part of property, plant and equipment. Prior to reclassification, exploration and evaluation expenditure is assessed for impairment.

When a project is abandoned, the related deferred mine exploration costs are written off. Exploration areas are considered permanently abandoned if the related permits of the exploration have expired and/or there are no definite plans for further exploration and/or development.

#### Assets Classified as Held for Sale

Assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. An asset is classified as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable, and the asset is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Property, plant and equipment and intangible assets are not depreciated or amortized once classified as held for sale.



Property, Plant and Equipment

Property, plant and equipment, except land and artworks, are stated at cost, excluding the costs of day-to-day servicing, less accumulated depreciation, depletion and amortization and accumulated impairment in value, if any. Such cost includes the cost of replacing part of such property, plant and equipment if the recognition criteria are met.

When significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognizes such parts as individual assets with specific useful lives and depreciates, depletes and amortizes them accordingly. Likewise, when a major inspection is performed, its cost is recognized in the carrying amount of the property, plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognized in the consolidated statement of income when incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

Construction in progress (CIP) is recorded at cost. This includes costs of construction and other direct costs. CIP is not depreciated until such time that the relevant asset is completed, transferred to the appropriate account and put into operational use. Land is carried at revalued amount less any impairment in value. Valuations are performed with sufficient frequency to ensure that the carrying amount of a revalued asset does not differ materially from its fair value.

Artworks, which the Group holds for aesthetic purposes, are also stated at revalued amount less any accumulated depreciation and accumulated impairment in value. Depreciable amount is determined after considering the residual value. The initial cost of artworks includes purchase consideration, the fair value in the case of vested assets, and those costs that are directly attributable to bringing the asset to its location and condition necessary for its intended purpose. Effective January 1, 2019, it is the Group's policy to classify right-of-use assets as part of property and equipment. Prior to that date, all of the Group's leases are accounted for as operating leases in accordance with PAS 17, hence, not recorded on the consolidated statement of financial position. The Group recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are initially measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The initial cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, lease payments made at or before the commencement date less any lease incentives received and estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

Unless the Group is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognized right-of-use assets are depreciated on a straight-line basis over the shorter of their estimated useful life and lease term, as follows:

<u>Leased assets</u>	<u>Lease terms</u>
Land	10 to 25 years
Office spaces	5 to 8 years
Clinic spaces	3 years
Machinery, tools and equipment	2 years

Right of use assets are subject to impairment.

The increment from valuation of land and artworks, net of deferred tax liability, resulting from the revaluation is credited to revaluation increment under the other components of equity caption included in the equity section in the consolidated statement of financial position. However, to the



extent that it reverses a revaluation deficit of the same asset previously recognized in the consolidated statement of income, the increase is recognized in consolidated statement of income. A revaluation deficit is recognized in the consolidated statement of income, except to the extent that it offsets an existing surplus on the same asset recognized in the revaluation increment. Upon derecognition of the revalued property, the relevant portion of the revaluation increment realized in respect of previous valuations is released from the revaluation increment directly to retained earnings.

Depreciation and amortization are computed on a straight-line basis over the estimated useful lives of the assets as follows:

<u>Category</u>	<u>Number of years</u>
Port facilities	25
Land improvements	3-25
Buildings	5-20
Machinery, tools and equipment	2-15

Depreciation and amortization of an item of property, plant and equipment begins when it becomes available for use, i.e., when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. Depreciation, depletion and amortization ceases at the earlier of the date that the item is classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with PFRS 5, *Non-current Assets Held for Sale and Discontinued Operations*, and the date the asset is derecognized.

The estimated useful lives, residual values and depreciation and amortization method are reviewed periodically to ensure these are consistent with the expected pattern of economic benefits from items of property, plant and equipment. The useful lives and residual values are reviewed at the end of each reporting period and adjusted prospectively, if appropriate.

Fully depreciated assets are retained in the accounts until these are no longer in use. No further depreciation is charged to current operation for these items.

The carrying values of property, plant, and equipment are reviewed for impairment when events or changes in circumstances indicate that the carrying values may not be recoverable.

An item of property, plant and equipment and any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statement of income in the year the asset is derecognized.

#### *Mine and Mining Properties*

Capitalized expenditure is assessed for impairment and is transferred from deferred exploration costs to mine development costs when it has been established that a mineral deposit is commercially mineable, development sanctioned, and a decision has been made to formulate a mining plan (which occurs upon completion of a positive economic analysis of the mineral deposit).

After transfer of the deferred exploration costs, all subsequent expenditure on the construction, installation or completion of infrastructure facilities is capitalized in mine development costs. Development expenditure is net of proceeds from the sale of ore extracted during the development phase to the extent that it is considered integral to the development of the mine. Any costs incurred in testing the assets to determine if they are functioning as intended, are capitalized, net of any proceeds received from selling any product produced while testing. If these proceeds exceed the cost of testing, any excess is recognized in the consolidated statement of income.



No depletion is charged during the mine development phases.

When the Group has already achieved commercial levels of production, mine development costs are moved to mine and mining properties. Commercial production is deemed to have commenced when management determines that the completion of operational commissioning of major mine and plant components is completed, operating results are being achieved consistently for a period of time and that there are indicators that these operating results will be continued.

The carrying value of mine and mining properties represents total expenditures incurred to date on the area of interest, less accumulated depletion and any impairment.

When a mine construction project moves into the production phase, the capitalization of certain mine construction costs ceases, and costs are either regarded as part of the cost of inventory or expensed, except for costs which qualify for capitalization relating to mining asset additions, improvements or new developments, underground mine development or mineable reserve development.

Mine and mining properties are subject to depletion, which is computed using the units-of-production method based on the economically recoverable reserves. Mine and mining properties include the initial estimate of provision for mine rehabilitation and decommissioning, for which the Group is constructively liable.

#### Investment Properties

Investment properties pertain to properties, which are held to earn rentals or for capital appreciation or both.

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at fair value, which reflects market conditions at the end of the reporting period. Gains or losses arising from changes in the fair values of investment properties are included in the consolidated statement of income in the period in which these arise. Fair values are determined based on the revaluation performed by an accredited external independent appraiser. Upon derecognition of the investment property, the portion of the revaluation increment realized in respect of previous valuation is released from the revaluation increment directly to retained earnings.

Investment properties are derecognized either when they have been disposed of or when they are permanently withdrawn from use and no future economic benefit is expected from their disposal. Any gains or losses on the retirement or disposal of investment property is recognized in the consolidated statement of income in the year of retirement or disposal.

Transfers are made to investment property when, and only when, there is a change in use, evidenced by ending of owner-occupation, commencement of an operating lease to another party or ending of construction or development. Transfers are made from investment property when, and only when, there is a change in use, evidenced by commencement of owner-occupation or commencement of development with a view to sale. Transfers between investment property and owner-occupied property do not change the carrying amount of the investment property transferred and they do not change the cost of the property.

If an owner-occupied property becomes an investment property that will be carried at fair value, the Group shall apply PAS 16, *Property, Plant and Equipment*, up to the date of change in use. The Group shall treat any difference at that date between the carrying amount of the property and its fair value in the same way as a revaluation in accordance with PAS 16. On subsequent disposal of the investment property, the revaluation surplus included in equity shall be transferred to retained earnings.



#### Impairment of Non-financial Assets

The Group assesses, at the end of each reporting period, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years.

Impairment losses of continuing operations, including impairment on inventories, are recognized in the consolidated statement of income in expense categories consistent with the function of the impaired asset, except for properties previously revalued with the revaluation taken to consolidated statement of comprehensive income. For such properties, the impairment is recognized in consolidated statement of comprehensive income up to the amount of any previous revaluation.

For the other assets, an assessment is made at the end of each reporting period to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset's or CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, depletion or amortization, had no impairment loss been recognized for that asset in prior years. Such reversal is recognized in the consolidated statement of income unless the asset is carried at revalued amount, in which case, the reversal is treated as a revaluation increase.

#### *Deferred Mine Exploration Costs*

The Group assesses whether facts and circumstances suggest that the carrying amount of deferred mine exploration costs may exceed its recoverable amount. Below are some of the facts and circumstances, which the Group considers in determining whether there is impairment on deferred mine exploration costs:

- the period for which the Group has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed
- substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned
- exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the entity has decided to discontinue such activities in the specific area, and



- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the deferred mine exploration costs is unlikely to be recovered in full of successful development or by sale

Full provision is made for the impairment unless it is probable that such costs are expected to be recouped through successful exploration and development of the area of interest, or alternatively, by its sale. If the project does not prove to be viable or is abandoned, all revocable cost associated with the project and the related impairment provisions are written off.

Recovery of impairment losses recognized in prior years is recorded if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. The recovery is recorded in the consolidated statement of income.

### Leases

#### The Group as a Lessee

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognized as expense in the period on which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

#### *Short-term Leases and Leases of Low-value Assets*

The Group applies the short-term lease recognition exemption to its short-term leases of clinic spaces (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

#### The Group as a Lessor

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which these are earned.

### Provisions

#### *General*

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Group expects some or all of the provision to be reimbursed, for example, under an



insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the consolidated statement of income, net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as interest expense in the consolidated statement of income.

#### *Liability for Mine Rehabilitation*

Mine rehabilitation costs will be incurred by the Group either while operating, or at the end of the operating life of, the Group's facilities and mine and mining properties. The Group assesses its mine rehabilitation provision at each reporting date. The Group recognizes a rehabilitation provision where it has a legal and constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount of obligation can be made. The nature of these restoration activities include: dismantling and removing structures; rehabilitating mines and tailings dams; dismantling operating facilities; closing plant and waste sites; and restoring, reclaiming and re-vegetating affected areas.

The obligation generally arises when the asset is installed, or the ground/environment is disturbed at the mining operation's location. When the liability is initially recognized, the present value of the estimated costs is capitalized by increasing the carrying amount of the related mining assets to the extent that it was incurred as a result of the development or construction of the mine. Any rehabilitation obligations that arise through the production of inventory are recognized as part of the related inventory item. Additional disturbances that arise due to further development or construction at the mine are recognized as additions or charges to the corresponding assets and rehabilitation liability when these occur. Costs related to restoration of site damage (subsequent to start of commercial production) that is created on an ongoing basis during production are provided for at their net present values and recognized in the consolidated statement of income as extraction progresses.

Changes in the estimated timing of rehabilitation or changes to the estimated future costs are dealt with prospectively by recognizing an adjustment to the rehabilitation liability and a corresponding adjustment to the asset to which it relates, if the initial estimate was originally recognized as part of an asset measured in accordance with PAS 16.

Any reduction in the rehabilitation liability and, therefore, any deduction from the asset to which it relates, may not exceed the carrying amount of that asset. If it does, any excess over the carrying value is taken immediately to the consolidated statement of income.

If the change in estimate results in an increase in the rehabilitation liability and, therefore, an addition to the carrying value of the asset, the Group considers whether this is an indication of impairment of the asset as a whole, and if so, tests for impairment. If, for mature mines, the estimate for the revised mine assets net of rehabilitation provisions exceeds the recoverable value, that portion of the increase is charged directly to expense.

Over time, the discounted liability is increased for the change in present value based on the discount rates that reflect current market assessments and the risks specific to the liability. The periodic unwinding of the discount is recognized in the consolidated statement of income as part of interest expense.

For closed sites, changes to estimated costs are recognized immediately in the consolidated statement of income.



Rehabilitation trust funds committed for use in satisfying environmental obligations are included in other noncurrent assets in the consolidated statement of financial position.

#### Capital Stock and Capital Surplus

Common and preferred shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction from proceeds. The excess of proceeds from issuance of shares over the par value of shares less any incremental costs directly attributable to the issuance, net of tax, is credited to capital surplus.

#### *Deposits for Future Stock Subscriptions*

Deposits for future stock subscriptions represent advance payments of stockholders for subscriptions of shares to be issued in the future but for which the Group has no sufficient unissued authorized capital stock.

In instances where the Group does not have sufficient unissued authorized capital stock, the following elements should be present as of the reporting date in order for the deposits for future subscriptions to qualify as equity:

- The unissued authorized capital stock of the entity is insufficient to cover the number of shares indicated in the contract
- There is BOD approval on the proposed increase in authorized capital stock (for which a deposit was received by the Parent Company)
- There is stockholders' approval of said proposed increase and
- The application for the approval of the proposed increase has been presented for filing or has been filed with the Philippine SEC

Otherwise, these are recognized as noncurrent liabilities.

#### Retained Earnings

Retained earnings represent the cumulative balance of periodic net income or loss, dividend declarations, prior period adjustments, effect of changes in accounting policies and other capital adjustments.

#### *Dividend Distribution*

Dividend distribution to the Parent Company's stockholders is recognized as a liability in the consolidated financial statements in the period in which the dividends are declared and approved by the BOD.

#### Other Components of Equity

The 'Other components of equity' caption in the consolidated statement of financial position consists of:

- Revaluation increment - net of deferred tax
- Cumulative translation adjustment on foreign subsidiaries - net of deferred tax
- Cost of share-based payment
- Remeasurement gain on pension liability - net of deferred tax
- Unrealized gain on FVOCI
- Unrealized gain on intangible asset

#### Treasury Shares

Own equity instruments that are reacquired (treasury shares) are recognized at cost and deducted from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Group's own equity instruments. Any difference between the carrying amount and the consideration,



if reissued, is recognized in capital surplus under the equity section of the consolidated statement of financial position.

#### Revenue Recognition

The Group is principally engaged in the business of producing gold and nickel ore. Revenue from contracts with customers is recognized when control of the goods or services is transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

The Group has generally concluded that it is the principal in its revenue contracts because it typically controls the goods or services before transferring them to the customer.

#### *Sale of Mine Products*

Revenue from sale of mine products is recognized at the point in time when the control of the asset is transferred to the customer which is normally at the time of shipment, and the selling prices are known or can be reasonably estimated. Revenue from sale of gold is measured at the prevailing international gold buying price and prevailing Philippine peso to United States dollar buying rate set by the BSP Treasury department on a daily basis and is recognized based on the initial weight and assay tests, which represent the best estimate. Revenue from sale of nickel ore is measured based on contract at the prevailing price at Ferro Alloy and prevailing Philippine peso to United States dollar buying rate and is recognized based on the initial weight and assay tests, which represent the best estimate. Subsequent adjustments to revenue due to quantity and/or quality changes are recognized upon determination of the final weight and assay tests.

#### *BSP Refining Charges*

BSP refining charges are deducted from revenue to arrive at revenue from contracts with customers since BSP refining charges are necessary expenses by BSP in determining the final gold content.

#### *Despatch/Demurrage*

Despatch/demurrage is added/deducted from revenue to arrive at revenue from contracts with customers. Despatch is earned when shipment is loaded earlier than the allowable lay time while demurrage is incurred when shipment is not loaded on time.

#### *Medical and Dental Services*

The Group has contracts with customers to provide medical and dental services. Each individual service is either sold separately or bundled together with other medical services. In determining the transaction price for the sale of medical and dental services, the Group considers the effects of variable consideration.

Revenue from medical and dental services are recognized over the period in which the medical and dental services are provided.

#### *Trucking Services*

The Group provides trucking services for the transportation of mining materials and construction supplies.

Revenue from trucking services is computed as actual delivered cubic meters multiplied by the contract price. The Group has concluded that revenue from trucking services is recognized over time since the customers simultaneously benefits as the Group performs the services.

#### *Port Services*

Revenue from port service is recognized over time upon loading of ores to the vessel.



### Contract Balances

#### *Contract Assets*

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognized for the earned consideration that is conditional.

The Group does not have any contract asset as of December 31, 2020 and 2019.

#### *Trade Receivables*

A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due).

#### *Contract Liabilities*

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognized when the payment is made, or the payment is due (whichever is earlier). Contract liabilities are recognized as revenue when the Group performs under the contract.

### Interest Income

For all financial instruments measured at amortized cost and interest-bearing financial assets, interest income is recorded using the EIR. EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability. Interest income is included in "Other income - net" in the consolidated statement of income.

Other income not directly related to the Group's normal operations is recognized when the earnings process is virtually complete. These are classified under "Other income - net" in the consolidated statement of income.

### Rental Income

Rental income arising from lease agreements is accounted for on a straight-line basis over the lease terms. Rental income from other activities is recognized when earned. These are presented in "Revenues" and "Other income-net", respectively, in the consolidated statement of income.

### Cost and Expense Recognition

Costs and expenses are decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants. Costs and expenses are generally recognized when these arise following the accrual basis of accounting.

#### *Cost of Mine Products Sold*

Cost of mine products sold is incurred in the normal course of business and is recognized when incurred. It comprises mainly of outside services, materials and supplies, depreciation, depletion and amortization, personnel expenses, power and utilities and others, which are recognized as expenses in the period when the mine products are delivered.

#### *Cost of Services and Other Sales*

Cost of services and other sales incurred in the normal course of business are recognized when the services are rendered, the goods are delivered, or the earnings process is virtually complete.



Included under this caption is the cost of real estate sold. Cost of real estate sold is recognized when the control over the subdivision lots have been transferred to the buyer. This includes land cost, costs of site preparation, professional fees for legal services, property transfer taxes, and other related costs. The cost of real estate sold recognized in consolidated income statement on disposal is determined with reference to the specific costs incurred on the subdivision lot and an allocation of any non-specific costs based on the relative size of the subdivision lot.

*Selling and General Expenses*

Selling and general expenses pertain to costs associated in the marketing and general administration of the day-to-day operations of the Group. These are generally recognized when incurred.

*Excise Taxes and Royalty Fees*

Excise taxes and royalty fees pertain to the taxes paid or accrued by the Group arising from the production of gold and nickel ore. These taxes and royalties are recognized once revenue from the sale of the related mine product is recognized.

OCI

OCI comprises items of income and expense (including items previously presented under the consolidated statement of changes in equity) that are not recognized in the consolidated statement of income.

Leases – the Group as a Lessee

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognized as expense in the period on which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

*Short-term Leases and Leases of Low-value Assets*

The Group applies the short-term lease recognition exemption to its short-term leases of clinic spaces (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

Leases – Group as a Lessor

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which these are earned.



#### Pension and Other Post-employment Benefits

The Parent Company and AFC have separate, noncontributory, defined benefit pension plans, covering all permanent, regular and full-time employees.

The net defined benefit liability or asset is the aggregate of the present value of the defined benefit obligation at the end of the reporting period reduced by the fair value of plan assets, adjusted for any effect of limiting a net defined benefit asset to the asset ceiling. The asset ceiling is the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method.

Remeasurements, comprising of actuarial gains or losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in the net interest on the net defined benefit liability), are recognized immediately in the consolidated statement of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which these occur. Remeasurements are not reclassified to consolidated statement of income in subsequent periods.

Past services costs are recognized in the consolidated statement of income on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Group recognizes related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognizes the following changes in the net defined benefit obligation under “costs of mine products sold”, “costs of services and other sales” and “selling and general expenses” in the consolidated statement of income:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements
- Net interest expense or income

Plan assets are assets that are held by a long-term employee benefit fund or qualifying insurance policies. Plan assets are not available to the creditors of the Group, nor can they be paid directly to the Group. Fair value of plan assets is based on market price information. When no market price is available, the fair value of plan assets is estimated by discounting expected future cash flows using a discount rate that reflects both the risk associated with the plan assets and the maturity or expected disposal date of those assets (or, if they have no maturity, the expected period until the settlement of the related obligations). If the fair value of the plan assets is higher than the present value of the defined benefit obligation, the measurement of the resulting defined benefit asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

#### Share-based Payment Transactions

Employees (including senior executives) of the Group receive remuneration in the form of share-based payment transactions, whereby employees render services as consideration for equity instruments (equity-settled transactions).

The cost of equity-settled transactions is determined by the fair value at the date when the grant is made using an appropriate valuation model. That cost is recognized, together with a corresponding



increase in equity, over the period in which the performance and/or service conditions are fulfilled, in employee benefits expense.

The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The profit and loss charge or credit for a period represents the movement in cumulative expense recognized as at the beginning and end of that period and is recognized in employee benefits.

No expense is recognized for awards that do not ultimately vest, except for equity settled transactions for which vesting is conditional upon a market or non-vesting condition. These are treated as vesting irrespective of whether or not the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Where the terms of an equity-settled award are modified, the minimum expense recognized is the expense computed based on the grant date fair value of the unmodified award, provided the original terms of the award are met. An additional expense, measured as at the date of modification, is recognized for any modification that increases the total fair value of the share-based payment transaction, or is otherwise beneficial to the employee. Where an award is cancelled by the Group or by the counterparty, any remaining element of the fair value of the award is expensed immediately in the consolidated statement of income.

When the terms of an equity-settled award are cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognized for the award is recognized immediately. However, if a new award is substituted for the cancelled award and designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

Where an equity-settled award expires or is cancelled, its cost is transferred to capital surplus.

Forfeitures revise the expense to reflect the best available estimate of the number of equity instruments expected to vest.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of diluted earnings per share.

#### *Transactions and Balances*

Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date.

Differences arising on settlement or translation of monetary items are recognized in consolidated statement of income with the exception of monetary items that are designated as part of the hedge of the Group's net investment of foreign operation. These are recognized in OCI until the net investment is disposed of, at which time, the cumulative amount is reclassified to consolidated statement of income. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in OCI.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair



value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss on translation of non-monetary items measured at fair value of the item is treated in line with the recognition of the gain or loss arising on the change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognized in OCI or consolidated statement of income are also recognized in OCI or consolidated statement of income, respectively).

#### *Foreign Subsidiaries*

On consolidation, the assets and liabilities of foreign operations are translated into Philippine peso at the rate of exchange prevailing at the reporting date and their statements of income are translated at the average exchange rates for the year. The exchange differences arising on the translation for consolidation are recognized in OCI. On disposal of a foreign operation, the component of OCI relating to that particular foreign operation is recognized in the consolidated statement of income.

#### Income Taxes

##### *Current Tax*

Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the tax authority. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted as of the end of the reporting period in the country where the Group operates and generates taxable income.

Current tax relating to items recognized directly in equity is recognized in equity and not in the consolidated statement of income.

##### *Deferred Tax*

Deferred tax is provided using the liability method on all temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- Where the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit (tax loss)
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled by the parent, investor or venturer and it is probable that the temporary differences will not reverse in the foreseeable future

Deferred tax assets are recognized for all deductible temporary differences, carry-forward of unused tax credits from excess of minimum corporate income tax (MCIT) over regular corporate income tax (RCIT) and unused net operating loss carry-over (NOLCO), to the extent that it is probable that sufficient future taxable profit will be available against which the deductible temporary differences, excess MCIT and unused NOLCO can be utilized, except:

- Where the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available, against which the temporary differences can be utilized



The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient future taxable profit will be available to allow all or part of the deferred tax assets to be utilized. Unrecognized deferred tax assets are reassessed at each reporting date and are recognized to the extent that it has become probable that sufficient future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized, or the liability is settled based on tax rates (and tax laws) that have been enacted or substantively enacted at the end of the reporting period.

Deferred tax relating to items recognized outside consolidated statement of income is recognized outside consolidated statement of income. Deferred tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

#### Uncertainty Over Income Tax Treatments

The Group assesses at the end of each financial reporting period whether it has any uncertain tax treatments by reviewing the assumptions about the examination of tax treatments by the taxation authority, determining taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, and considering changes in relevant facts and circumstances. The Group then evaluates how likely is it that a certain tax treatment will be accepted by the taxation authority. If it is probable that the taxation authority will accept a certain tax treatment, the Group concludes that it has no uncertain tax treatment and will measure tax amounts in line with the income tax filings. If it is not probable that the taxation authority will accept a certain tax treatment, the Group measures tax amounts based on the 'most likely amount' method (better predicts uncertainty if the possible outcomes are binary or are concentrated on one value) or 'expected value' method (better predicts uncertainty if there is a range of possible outcomes that are neither binary nor concentrated on one value). The Group presents uncertain tax liabilities as part of current income tax liabilities or deferred income tax liabilities.

#### Earnings Per Share (EPS)

Basic EPS amount is calculated by dividing net income for the year attributable to ordinary equity holders of the Parent Company by the weighted average number of ordinary shares outstanding, adjusted for any stock dividends declared during the year.

Diluted EPS amount is calculated by dividing the net profit attributable to ordinary equity holders of the Parent Company (after deducting interest on the convertible cumulative preference shares) by the weighted average number of ordinary shares outstanding, adjusted for any stock dividends declared during the year plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares into ordinary shares.

If the number of ordinary or potential ordinary shares outstanding increases as a result of a capitalization, bonus issue or share split, or decreases as a result of a reverse share split, the calculation of basic and diluted earnings per share for all periods presented shall be adjusted retrospectively. If these changes occur after the reporting period but before the financial statements are authorized for issue, the per share calculations for those and any prior period financial statements presented shall be based on the new number of shares. The fact that per share calculations reflect such changes in the number of shares shall be disclosed. In addition, basic and diluted earnings per



share of all periods presented shall be adjusted for the effects of errors and adjustments resulting from changes in accounting policies accounted for retrospectively.

#### Operating Segments

The Group's operating businesses are recognized and managed according to the nature of the products or services offered, with each segment representing a strategic business unit that serves different markets.

Segment assets include operating assets used by a segment and consist principally of operating cash, trade and other receivables, inventories and property, plant and equipment, net of allowances and provisions.

Segment liabilities include all operating liabilities and consist principally of trade and other payables, accrued expenses and bank loans. Segment assets and liabilities do not include deferred taxes.

Segment revenue, expenses and profit include transfers between business segments. The transfers are accounted for at competitive market prices charged to unaffiliated customers for similar products. Such transfers are eliminated in the consolidation.

#### Contingencies

Contingent liabilities are not recognized in the consolidated financial statements. These are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are not recognized in the consolidated financial position but disclosed when an inflow of economic benefits is probable.

#### Events After the Reporting Period

Post year-end events that provide additional information about the Group's position at the end of the reporting period (adjusting events) are reflected in the consolidated financial statements. Post year-end events that are not adjusting events are disclosed when material.

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### **3. Summary of Significant Accounting Judgments, Estimates and Assumptions**

The preparation of the consolidated financial statements in accordance with PFRSs requires the Group to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, income and expenses and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these judgements, estimates and assumptions could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Judgments, estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results could differ from such estimates.

Other disclosures relating to the Group's exposure to risks and uncertainties include capital management, financial risk management and policies and sensitivity analyses disclosures (see Note 34).

#### Judgments

In the process of applying the Group's accounting policies, management has made following judgments, which have the most significant effect on the amounts recognized in the consolidated financial statements.



### *Going Concern*

Management has made an assessment on the Group's ability to continue as a going concern and is satisfied based on its assumptions and cash flow projection that it has the resources to continue business for the foreseeable future.

### *Assessing Provisions and Contingencies*

The Group is currently involved in various legal proceedings. The estimate of the probable costs for the resolution of these claims has been developed in consultation with outside counsel handling the Group's defense in these matters and is based upon an analysis of potential results. The Group assessed that these proceedings will not have a material adverse effect on its financial position. It is possible, however, that future results of operations could be materially affected by changes in the estimates or in the effectiveness of the strategies relating to these proceedings.

### *Distinction between Investment Property and Owner-Occupied Property*

The Group determines whether a property qualifies as investment property. In making its judgment, the Group considers whether the property is not occupied substantially for use by, or in operations of the Group, not for sale in the ordinary course of business, but is held primarily to earn rental income or capital appreciation. Owner-occupied properties generate cash flows that are attributable not only to the property but also to the other assets used in the production or supply process.

In 2019, due to the change in use of the property from being an owner-occupied property to an investment property that is held for long-term capital appreciation, management concluded that its parcels of land in San Marcelino, Zambales are investment properties.

Management also concluded that the parcels of land in Irisan, Baguio City which were originally held for long-term capital appreciation have become owner-occupied properties in 2019 and are reclassified to property, plant and equipment.

### *Principal versus Agent Considerations*

The Group enters into contracts with customers wherein the Group charges the customers for the services rendered. The Group determined that it does not control the goods or services before they are transferred to customers, and it does not have the ability to direct the use of the services or obtain benefits from the services. The following factors indicate that the Group does not control the services before they are being transferred to customers. Therefore, the Group determined that it is an agent in these contracts.

- The Group is not primarily responsible for fulfilling the promise to provide the professional services.
- The Group has no discretion in establishing the price for the services provided. The Group's consideration in these contracts is only based on the difference between the Group and the customer.

The Group determined that it is an agent with respect to the professional fees of its tenant doctors. Meanwhile, the Group concluded that it is the principal in all its other revenue streams.

### *Assessment Whether an Asset is Classified as Held for Sale*

In 2018, the Board of Directors (BOD) announced its decision to sell a parcel of land presented under property, plant and equipment. The BOD considered the land to meet the criteria to be classified as held for sale for the following reasons:

- The land is available for immediate sale and can be sold to the buyer in its current condition
- The actions to complete the sale were initiated and expected to be completed within one year from the date of initial classification



- A potential buyer has been identified and negotiations as at the reporting date are at an advanced stage
- The shareholders approved the plan to sell.

In 2019, due to events and conditions beyond the control of the Group and the potential buyer, the sale of the parcel of land did not materialize. As such, the parcel of land has been reclassified back to property, plant and equipment in the same year.

#### Estimates and Assumptions

The key estimates and assumptions concerning the future and other key sources of estimation uncertainty at reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets within the next financial year, are discussed below. The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Group. Such changes are reflected in the assumptions when these occur.

#### *Provision for Expected Credit Losses on Trade and Other Receivables*

The Group uses the simplified approach and general approach model in the assessment of the ECL for its trade and other receivables, respectively. An assessment of the ECL relating to these financial assets is undertaken upon initial recognition and each financial year and involves exercise of significant judgment. Key areas of judgment include defining default, determining assumptions to be used such as timing and amounts of expected net recoveries from defaulted accounts, determining debtor's capacity to pay, and incorporating forward looking information.

Provision for ECLs recognized in 2020 and 2019 amounted to nil and ₱20.09 million, respectively (see Notes 5 and 24). The carrying amount of trade and other receivables amounted to ₱475.25 million and ₱289.96 million as at December 31, 2020 and 2019, respectively (see Note 5).

#### *Estimating Ore Reserves*

Ore reserves estimates are, to a large extent, based on the interpretation of geological data obtained from drill holes and other sampling techniques and feasibility studies. The Group estimates its ore reserves based on information compiled by appropriately qualified persons relating to the geological data on the size, depth and shape of the ore body, and requires complex geological judgments to interpret the data. The Group also makes estimates and assumptions regarding a number of economic and technical factors affecting ore reserves estimates, such as production rates, grades, foreign exchange rates, production and transport costs, and commodity prices.

These geological, economic and technical estimates and assumptions may change in the future in ways, which can affect the quality and quantity of the ore reserves. The Group reviews and updates estimates as required to reflect actual production, new exploration data or developments and changes in other assumptions or parameters. These estimates will change from time to time to reflect mining activities, analyses of new engineering and geological data, changes in ore reserve and mineral resource holdings, modifications of mining plans or methods, changes in nickel or gold prices or production costs, and other factors.

Changes in the ore reserves estimates may impact the carrying values of property, plant and equipment, provision for mine rehabilitation and decommissioning and depletion charges.



#### *Assessing Recoverability of Deferred Mine Exploration Costs*

The Group reviews the recoverability of deferred mine exploration costs when events or changes in circumstances indicate that the carrying amount of deferred mine exploration costs may exceed its estimated recoverable amount. The Group considers the following factors, among others, in its assessment:

- Status of each mine exploration project and plans on exploration and evaluation activities
- Validity of the licenses, permits and correspondences related to each mine exploration project
- Plans to abandon existing mine areas and plans to discontinue exploration activities
- Availability of information suggesting that the recovery of expenditure is unlikely

In 2020 and 2019, the Group recognized provision for impairment losses on deferred mine exploration costs amounting to nil and P94.93 million, respectively (see Notes 11 and 27). As at December 31, 2020 and 2019, deferred mine exploration costs amounted to P456.81 million and P449.18 million, respectively (see Note 11).

#### *Estimating Recoverability of Property, Plant and Equipment*

The Group assesses impairment on property, plant and equipment whenever events or changes in circumstances indicate that the carrying amount of the property, plant and equipment may not be recoverable.

The factors that the Group considers important which could trigger an impairment review include the following:

- Significant underperformance relative to expected historical or projected future operating results
- Significant changes in the manner of use of the acquired assets or the strategy for overall business, and
- Significant negative industry or economic trends

In determining the present value of estimated future cash flows expected to be generated from the continued use of the property, plant and equipment, the Group is required to make estimates and assumptions such as commodity prices, discount rates and foreign currency exchange rates, which can materially affect the consolidated financial statements. Commodity prices and foreign exchange rates are based on forecasts of various financial institutions while the discount rate is based on industry weighted average cost of capital.

An impairment loss would be recognized whenever evidence exists that the carrying value is not recoverable. For purposes of assessing impairment, property, plant and equipment are grouped at the lowest levels for which there are separately identifiable cash flows. An impairment loss is recognized and charged to profit or loss if the discounted expected future cash flows are less than the carrying amount. Fair value is estimated by discounting the expected future cash flows using a discount factor that reflects the market rate for a term consistent with the period of expected cash flows. The Group did not recognize any impairment loss in 2020, 2019 and 2018 on property, plant and equipment.

As at December 31, 2020 and 2019, property, plant and equipment (at cost) amounted to P942.00 million and P963.86 million, respectively (see Note 10).

#### *Estimating Allowance for Inventory Obsolescence*

The Group maintains allowance for inventory losses at a level considered adequate to reflect the excess of cost of inventories over their NRV. NRV of inventories are assessed regularly based on prevailing estimated selling prices of inventories and the corresponding cost of disposal. Decrease in the NRV of inventories resulting in an amount lower than the original acquisition cost is accounted for as an impairment loss that is recognized in profit or loss. As at December 31, 2020 and 2019, the



carrying value of inventories amounted to ₱101.14 million and ₱132.16 million, respectively (see Note 6).

*Assessing Impairment of Other Current and Noncurrent Assets*

The Group provides allowance for impairment losses on other current and noncurrent assets when these can no longer be realized. The amounts and timing of recorded expenses for any period would differ if the Group made different judgments or utilized different estimates. An increase in allowance for probable loss would increase recorded expenses and decrease other current and noncurrent assets. Impairment loss amounting to nil and ₱1.84 million was recognized in 2020 and 2019, respectively (see Note 13).

The total carrying value of other current assets and other noncurrent assets amounted to ₱805.50 million and ₱796.16 million as at December 31, 2020 and 2019, respectively (see Notes 7 and 13).

*Revaluation of Property, Plant and Equipment and Investment Properties*

The Group carries its investment properties at fair value, with changes in fair value being recognized in the consolidated statement of income. In addition, it measures the land and artworks at revalued amounts, with changes in fair value being recognized in the consolidated statements of comprehensive income. The land, artworks and investment properties were valued using the sales comparison approach. The determination of the fair values of these properties involves significant management judgment and estimations. The valuation also requires the assistance of external appraisers whose calculations also depend on certain assumptions, such as sales and listing of comparable properties registered within the vicinity and adjustments to sales price based on internal and external factors. As at December 31, 2020 and 2019, the appraised value of land and artworks, and investment properties amounted to ₱4,306.97 million and ₱4,152.15 million, respectively (see Notes 10 and 12).

*Leases - Estimating the Incremental Borrowing Rate*

The Group cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group 'would have to pay', which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when they need to be adjusted to reflect the terms and conditions of the lease (for example, when leases are not in the subsidiary's functional currency). The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

The Group's lease liabilities amounted to ₱6.15 and ₱8.06 million as at December 31, 2020 and 2019, respectively (see Note 16).

*Estimating Liability for Mine Rehabilitation*

The Group estimates the costs of mine rehabilitation based on previous experience in rehabilitating fully mined areas in sections of the mine site. These costs are adjusted for inflation factor based on the average annual inflation rate as of adoption date or re-evaluation of the asset dismantlement, removal or restoration costs. Such adjusted costs are then measured at present value using the market interest rate for a comparable instrument adjusted for the Group's credit standing. While management believes that its assumptions are reasonable and appropriate, significant differences in actual experience or significant changes in the assumptions may materially affect the Group's liability for mine rehabilitation. The change in estimate for mine rehabilitation asset included under property,



plant and equipment amounted to ₱5.35 million and ₱3.63 million for the years ended December 31, 2020 and 2019, respectively (see Note 10). Liability for mine rehabilitation amounted to ₱105.61 million and ₱91.58 million as at December 31, 2020 and 2019, respectively (see Note 17).

#### *Estimating Cost of Share-Based Payment*

The Parent Company's Nonqualified Stock Option Plan grants qualified participants the right to purchase common shares of the Parent Company at a grant price. The employee stock ownership incentive plan (ESOIP) recognizes the services received from the eligible employees and an equivalent adjustment to the equity account over the vesting period. The Parent Company measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. Estimating fair value for share-based payment transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determining the most appropriate inputs to the valuation model including the expected life of the share option, volatility and dividend yield and making assumptions about them. The assumptions and models used for estimating fair value for share-based payment transactions are disclosed in Note 20. While management believes that the estimates and assumptions used are reasonable and appropriate, significant differences in actual experience or significant changes in the estimates and assumptions may materially affect the stock compensation costs charged to operations. Cost of share-based payment amounted to ₱13.69 million and ₱21.67 million as at December 31, 2020 and 2019, respectively (see Notes 19 and 20).

#### *Estimating Pension Benefits*

The cost of defined benefit pension and other post-employment benefits as well as the present value of the pension obligation are determined using actuarial valuations. The actuarial valuation involves making various assumptions. These include the determination of the discount rates, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, the underlying assumptions and its long-term nature, defined benefit obligations are highly sensitive to changes in these assumptions. All assumptions are reviewed at the end of each reporting period. Net pension liability of the Group amounted to ₱81.83 million and ₱62.56 million as at December 31, 2020 and 2019, respectively (see Note 30).

In determining the appropriate discount rate, management considers the interest rates of government bonds that are denominated in the currency in which the benefits will be paid, with extrapolated maturities corresponding to the expected duration of the defined benefit obligation.

The mortality rate is based on publicly available mortality tables for the Philippines and is modified accordingly with estimates of mortality improvements. Future salary increases, and pension increases are based on expected future inflation rates for the Philippines.

Further details about the assumptions used are provided in Note 30.

#### *Fair Value Measurement of Financial Instruments*

When the fair values of financial assets and financial liabilities recorded in the consolidated statement of financial position cannot be measured based on quoted prices in active markets, the fair value is measured using valuation techniques including the discounted cash flow (DCF) model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions relating to these factors could affect the reported fair value of financial instruments. See Note 36 for further disclosures.



*Assessing Realizability of Deferred Tax Assets*

The Group reviews the carrying amounts of deferred tax assets at each end of the reporting period and reduces deferred tax assets to the extent that it is no longer probable that sufficient future taxable profit will be available to allow all or part of the deferred tax assets to be utilized. Management believes that there is no assurance that the Group will generate sufficient taxable profit to allow all or part of its deferred tax assets to be utilized.

The Group recognized deferred tax assets amounting to ₱115.94 million and ₱195.90 million as at December 31, 2020 and 2019, respectively (see Note 31).

The Group did not recognize deferred tax assets totaling ₱226.91 million and ₱288.79 million as at December 31, 2020 and 2019, respectively, on the remaining unused NOLCO, MCIT and deductible temporary differences (see Note 31).

**4. Cash and Cash Equivalents**

	2020	2019
Cash on hand and in banks	₱261,481	₱69,298
Short-term deposits	10,067	7,874
	<b>₱271,548</b>	<b>₱77,172</b>

The Group has United States Dollar (US\$) denominated cash in banks amounting to US\$1,280 and US\$8 as at December 31, 2020 and 2019, respectively.

Interest income from cash and cash equivalents amounted to ₱0.66 million, ₱1.55 million and ₱0.05 million in 2020, 2019 and 2018, respectively (see Note 27).

**5. Trade and Other Receivables**

	2020	2019
Trade	₱206,465	₱90,666
Nontrade	214,199	160,775
Advances to officers and employees	74,029	57,837
ESOIP (Note 28)	58,416	58,416
Loan receivable	49,763	49,763
Receivables from lessees of bunkhouses	4,754	4,988
Others	21,045	20,930
	<b>628,671</b>	<b>443,375</b>
Less allowance for ECLs	153,420	153,420
	<b>₱475,251</b>	<b>₱289,955</b>

Trade receivables and receivables from lessees of bunkhouses are noninterest-bearing and are generally collectible within a period of one year. Advances to officers and employees are noninterest-bearing and are subject to liquidation.

Nontrade receivables pertain to advances made to suppliers by the Group relating to materials and supplies necessary in the Group's operation. These are noninterest-bearing and will be realized through offsetting against future billings from suppliers or will be settled in cash.



Other receivables comprise of various receivable items from different debtors of the Group, while advances to officers and employees pertain to cash advances that are used in the operations of the Group.

Movements of allowance for ECLs are as follows:

	2020							Total
	Trade Receivables	Nontrade Receivables	Advances to officers and employees	ESOIP (Note 28)	Loans receivable	Receivables from lessees of bunkhouses	Others	
Balances at beginning of year	P27,882	P8,409	P1,830	P58,416	P49,763	P3,644	P3,476	P153,420
Provisions (Note 24)	-	-	-	-	-	-	-	-
Balances at end of year	P27,882	P8,409	P1,830	P58,416	P49,763	P3,644	P3,476	P153,420

	2019							Total
	Trade Receivables	Nontrade Receivables	Advances to officers and employees	ESOIP (Note 28)	Loans receivable	Receivables from lessees of bunkhouses	Others	
Balances at beginning of year	P13,227	P13,071	P2,884	P58,416	P49,763	P-	P5,478	P142,839
Provisions (Note 24)	14,655	-	68	-	-	3,644	1,718	20,085
Recoveries	-	(4,662)	(1,122)	-	-	-	(3,720)	(9,504)
Balances at end of year	P27,882	P8,409	P1,830	P58,416	P49,763	P3,644	P3,476	P153,420

Except for those impaired accounts, the Group assessed trade and other receivables as collectible and in good standing.

*Loan Receivable*

On March 3, 2010, MMC granted an unsecured loan facility to a third party amounting to ₱135.00 million with an interest rate of 9% per annum. Outstanding receivable from this loan, including accrued interest, amounted to ₱49.76 million, net of allowance amounting to ₱49.76 million as at December 31, 2020 and 2019. MMC no longer recognized any interest income in 2020 and 2019.

6. Inventories

	2020	2019
Beneficiated nickel ore - at cost	₱62,281	₱97,669
Materials and supplies - at cost	261,786	329,231
Gold button - at cost	8,638	7,675
Quicklime and slakelime - at cost	3,682	5,570
Subdivision lots and housing units for sale - at cost	2,284	2,284
	338,671	442,429
Less allowance for impairment loss on materials and supplies	237,531	310,272
	₱101,140	₱132,157

Movements in subdivision lots are as follows:

	2020	2019
Balances at beginning of year	₱2,284	₱4,529
Sales (recognized as cost of real estate sold; Note 23)	-	(2,245)
Balances at end of year	₱2,284	₱2,284



As at December 31, 2020 and 2019, the NRV of the Group's beneficiated nickel ore, gold button, quicklime and slakelime, and subdivision lots is higher than the related cost.

The gold button inventory represents gold and silver by-product produced by the Group in 2020 and 2019. These mineral products were immediately sold the following year. The gold button inventory includes depreciation and depletion related to the production of gold amounting to ₱0.42 million and ₱0.31 million in 2020 and 2019, respectively (see Note 26).

The amount of beneficiated nickel ore inventory recognized as expense, included in the costs of mine products sold in the consolidated statements of income, amounted to ₱220.54 million, ₱31.29 million and ₱121.25 million in 2020, 2019 and 2018, respectively.

The aggregate cost of beneficiated nickel ore inventory that increased cost of mine products sold amounted to ₱35.39 million, ₱7.82 million and ₱35.27 million in 2020, 2019 and 2018, respectively (see Note 22).

The NRV of materials and supplies amounted to ₱24.26 million and ₱18.96 million as at December 31, 2020 and 2019, respectively.

Movements of allowance for impairment loss on materials and supplies are as follows:

	2020	2019
Balances at beginning of year	₱310,272	₱311,175
Write-off	(72,741)	-
Recoveries (Note 27)	-	(903)
<b>Balances at end of year</b>	<b>₱237,531</b>	<b>₱310,272</b>

Materials and supplies amounting to ₱134.77 million and nil, which were already provided with allowance for impairment loss, were written off as the Group assessed that such can no longer be used as at December 31, 2020 and 2019, respectively.

Materials and supplies charged to current operations amounted to ₱140.53 million, ₱131.96 million and ₱143.17 million in 2020, 2019 and 2018, respectively (see Notes 22, 23 and 24). There are no purchase commitments related to inventories or inventories pledged as security for liabilities as at December 31, 2020 and 2019.

## 7. Other Current Assets

	2020	2019
Input VAT - net	₱219,928	₱88,551
CWTs	35,778	79,059
Advances to contractors	102,610	102,610
Deferred input VAT	57,811	56,487
Prepaid expenses	11,548	17,869
Others	19,017	17,538
	<b>446,692</b>	<b>362,114</b>
Less allowance for impairment losses	47,972	47,967
	<b>₱398,720</b>	<b>₱314,147</b>



In 2019 and 2018, the Group applied for refund input VAT amounting to ₱40.23 million and ₱80.30 million related to export sales in 2017 and 2016, respectively. The Group also applied for encashment of TCC amounting to ₱59.13 million granted by the BIR in 2015 and for input VAT related to export sales from April 2013 to December 2013. The BIR approved the VAT refund and TCC encashment with some disallowances on June 7, 2019.

In 2020, the Group encashed ₱34.45 million of the applied and granted VAT refunds from 2018. Disallowances of VAT refunds and TCC encashments were recognized as other expenses amounting to ₱5.20 million, ₱6.70 million and ₱11.15 million in 2020, 2019 and 2018, respectively (see Note 27).

In 2019, the Group wrote off advances to contractors amounting to ₱2.69 million as management believes these may no longer be realized. Allowance for impairment losses amounted to ₱47.97 million as at December 31, 2020 and 2019, respectively.

Others include security deposits which pertain to deposits to satisfy lease obligations of the Group. These are refundable at the end of the related lease term.

Movements in allowance for impairment loss on other current assets are as follows:

	2020	2019
Balances at beginning of year	₱47,967	₱41,947
Provision (Note 27)	5	8,714
Write-off	-	(2,694)
<b>Balances at end of year</b>	<b>₱47,972</b>	<b>₱47,967</b>

#### 8. Financial Assets at FVOCI

	2020	2019
UITF	₱12,941	₱12,724
Quoted shares	420	444
	<b>₱13,361</b>	<b>₱13,168</b>

Movements in financial assets at FVOCI in 2020 and 2019 are as follows:

	2020	2019
Balances at beginning of year	₱13,168	₱10,798
Change in fair value	193	83
Disposals	-	(3,163)
Additions	-	5,450
<b>Balances at end of year</b>	<b>₱13,361</b>	<b>₱13,168</b>

The unrealized gain representing the change in fair value of these financial assets amounting to ₱1.18 million and ₱0.97 million as at December 31, 2020 and 2019, respectively, is shown as part of the other components of equity in the consolidated statements of financial position and in the consolidated statements of changes in equity. The fluctuations in value of these investments are also reported as part of other comprehensive income in the consolidated statements of comprehensive income.



Movements in unrealized gain on financial assets at FVOCI recognized as a separate component of equity are as follows (see Note 19):

	2020	2019	2018
Balances at beginning of year	₱971	₱1,013	₱1,059
Unrealized gain on fair value change	193	83	336
Realized gain on sale of financial asset at FVOCI transferred to retained earnings	-	(125)	(382)
<b>Balances at end of year</b>	<b>₱1,164</b>	<b>₱971</b>	<b>₱1,059</b>

In 2019 and 2018, the Group sold financial assets at FVOCI with cost amounting to ₱3.04 million and ₱1.55 million, respectively. Proceeds from these disposals amounted to ₱3.16 million and ₱1.93 million, respectively, resulting in realized gain amounting to ₱0.12 million and ₱0.38 million transferred directly to retained earnings in 2019 and 2018, respectively (see Note 27).

#### 9. Asset Classified as Held for Sale

In 2018, the BOD resolved to dispose the land situated in San Diego Street, Veinte Reales, Valenzuela City and, therefore classified it from property, plant and equipment into an "Asset classified as held for sale". The Group assessed that the asset, which amounts to ₱4.13 million, met the criteria to be classified as held for sale due to the following reasons:

- The land is available for immediate sale and can be sold to the buyer in its current condition
- The actions to complete the sale were initiated and expected to be completed within one year from the date of initial classification
- A potential buyer has been identified and negotiations as at the reporting date are at an advanced stage
- The shareholders approved the plan to sell.

In 2019, due to events and conditions beyond the control of the Group and the potential buyer, the sale of the parcel of land did not materialize. Moreover, the Company no longer undertakes any operational activity in the said properties other than to hold these for capital appreciation. As such, the parcel of land has been reclassified to investment property at a fair value of ₱4.13 million as at reclassification date (see Note 12).

#### 10. Property, Plant and Equipment

##### a. Property, plant and equipment - at revalued amount

The Group's property, plant and equipment items carried at revalued amounts are as follows:

	2020	2019
Land	₱1,621,149	₱1,621,149
Artworks	52,139	52,139
	<b>₱1,673,288</b>	<b>₱1,673,288</b>

##### i. Land - at revalued amount

The Group adopted the revaluation model and engaged independent firms of appraisers to determine the fair value of its land and artworks classified under property, plant and equipment in



the consolidated statements of financial position. The appraisers determined the fair value of the Group's land based on its market value in 2019 and is categorized under level 3. The assigned values were estimated using the sales comparison approach, which considers the sales of similar or substitute properties and their related market values and establishes value estimates through processes involving comparisons.

In 2019, the Group recognized revaluation increment on land amounting to ₱451.99 million. Correspondingly, amounts charged to the consolidated statement of comprehensive income amounted to ₱316.39 million, net of deferred tax liability of ₱135.60 million in 2019.

In 2019, the Group ceased operational activities on the parcels of land located in San Marcelino, Zambales consisting of 2,768,540 square meters other than for long-term capital appreciation. This resulted to a reclassification from property, plant and equipment to investment property amounting to ₱83.06 million (see Note 12).

In the same year, parcels of land in Irisan, Baguio City with fair value of ₱37.08 million were reclassified from investment property to property, plant and equipment due to change in use from being held for long-term capital appreciation to being owner-occupied properties (see Note 12).

	2020		
	Cost	Revaluation increment	Total
Balances at beginning and end of year	₱68,398	₱1,552,751	₱1,621,149
	2019		
	Cost	Revaluation increment	Total
Balances at beginning of year	₱35,356	₱1,179,778	₱1,215,134
Change in fair value	-	451,989	451,989
Reclassification:			
From investment property (Note 12)	37,082	-	37,082
To investment property (Note 12)	(4,040)	(79,016)	(83,056)
Balances at end of year	₱68,398	₱1,552,751	₱1,621,149

ii. Artworks - at revalued amount

Artworks owned by the Group are stated at revalued amounts. Independent revaluations are performed every three to five years by an independent appraiser. The latest appraisal was performed by Heritage Arts & Antiquities, Inc., an independent appraiser for the year ended December 31, 2019, in which the fair value measurement is categorized under Level 3. The assigned value was estimated using the sales comparison approach, which considers the sales of similar or substitute properties and related market values and establishes value estimates by processes involving comparisons. In general, a property being valued is compared with sales of similar properties that have been transacted in the open market. Listings and offerings may also be considered.



Carrying values of artworks as at December 31, 2020 and 2019 at revalued amounts are summarized as follows:

	2020		
	Cost	Revaluation increment	Total
Balances at beginning and end of year	<b>₱896</b>	<b>₱51,243</b>	<b>₱52,139</b>

	2019		
	Cost	Revaluation increment	Total
Balances at beginning of year	₱896	₱20,441	₱21,337
Change in fair value	-	30,802	30,802
Balances at end of year	₱896	₱51,243	₱52,139

In 2019, the Group recognized revaluation increment on artworks amounting to ₱30.80 million. Correspondingly, amount charged to consolidated statement of comprehensive income amounted to ₱21.56 million, net of deferred tax liability of ₱9.24 million.

The artworks would have been recorded at ₱0.90 million in the consolidated statement of financial position had these been carried at cost.

The management assessed that the residual value of the artworks approximates the revalued amount as at December 31, 2020 and 2019, and therefore, no depreciation was recognized in both years.



b. Property, Plant and Equipment - at cost

	2020							
	Land improvements	Buildings	Machinery, tools and equipment	Mine and mining properties	Port facilities	CIP	Right-of-use of assets	Total
Cost:								
As at January 1	₱74,083	₱304,790	₱918,494	₱1,634,227	₱101,517	₱68,759	₱14,741	₱3,116,611
Additions	1,126	472	21,631	1,545	-	2,533	165	27,472
Disposals	-	-	(826)	-	-	-	-	(826)
Retirement	-	-	-	-	-	-	(2,613)	(2,613)
Change in estimate of the liability for mine rehabilitation (Note 17)	-	-	-	5,358	-	-	-	5,358
Ending balance	75,209	305,262	939,299	1,641,130	101,517	71,292	12,293	3,146,002
Accumulated depreciation and depletion:								
As at January 1	68,663	300,648	895,377	855,238	27,382	-	5,439	2,152,747
Depreciation and depletion (Note 26)	2,893	3,208	24,279	16,430	4,236	-	3,646	54,692
Disposals	-	-	(826)	-	-	-	-	(826)
Retirement	-	-	-	-	-	-	(2,613)	(2,613)
Ending balance	71,556	303,856	918,830	871,668	31,618	-	6,472	2,204,000
Net book values	₱3,653	₱1,406	₱20,469	₱769,462	₱69,899	₱71,292	₱5,821	₱942,002



2019

	Land improvements	Buildings	Machinery, tools and equipment	Mine and mining properties	Port facilities	CIP	Right-of-use of assets	Total
<b>Cost:</b>								
At January 1, as previously reported	₱74,083	₱309,701	₱906,159	₱1,626,907	₱101,517	₱78,164	₱-	₱3,096,531
Effect of adoption of PFRS 16 (Note 2)	-	-	-	-	-	-	14,741	14,741
As at January 1, as restated	74,083	309,701	906,159	1,626,907	101,517	78,164	14,741	3,111,272
Additions	-	-	19,572	8,447	-	-	-	28,019
Initial recognition of mine rehabilitation asset (Note 17)	-	-	-	2,498	-	-	-	2,498
Disposals	-	-	(3,400)	-	-	-	-	(3,400)
Change in estimate of the liability for mine rehabilitation (Note 17)	-	-	-	(3,625)	-	-	-	(3,625)
Retirements	-	(4,911)	(13,242)	-	-	-	-	(18,153)
Reclassification	-	-	9,405	-	-	(9,405)	-	-
Ending balance	74,083	304,790	918,494	1,634,227	101,517	68,759	14,741	3,116,611
<b>Accumulated depreciation and depletion:</b>								
As at January 1	66,789	292,777	906,159	843,449	23,146	-	-	2,132,320
Depreciation and depletion (Note 26)	1,874	12,782	2,687	11,789	4,236	-	5,439	38,807
Disposals	-	-	(227)	-	-	-	-	(227)
Retirements	-	(4,911)	(13,242)	-	-	-	-	(18,153)
Ending balance	68,663	300,648	895,377	855,238	27,382	-	5,439	2,152,747
Net book values	₱5,420	₱4,142	₱23,117	₱778,989	₱74,135	₱68,759	₱9,302	₱963,864



The Group's CIP includes the development of an enhanced mill production line in Balatoc, Benguet to increase the milling capacity of its gold operations. As of December 31, 2020, and 2019, construction of this production line is suspended.

Proceeds totaling ₱0.04 million, ₱3.17 million and ₱3.55 million in 2020, 2019 and 2018, respectively, from the disposal of property, plant and equipment items resulted in net gain of ₱0.04 million, nil, and ₱1.51 million in 2020, 2019 and 2018, respectively (see Note 27).

The Group recognized loss on retirement of property, plant and equipment amounting to ₱60.40 million in 2018 (see Note 27).

The cost of fully depreciated property, plant and equipment still being used in the Group's operations amounted to ₱994.84 million and ₱962.21 million as at December 31, 2020 and 2019, respectively.

Movements in mine and mining properties in 2020 and 2019 are as follows:

	2020			Total
	Mine and mining properties	Mine development cost	Mine rehabilitation asset	
<b>Cost:</b>				
Balances at beginning of year	₱1,513,745	₱8,447	₱112,035	₱1,634,227
Addition	-	1,545	-	1,545
Change in estimate of the liability for mine rehabilitation (Note 17)	-	-	5,358	5,358
Balances at end of year	1,513,745	9,992	117,393	1,641,130
<b>Accumulated depletion:</b>				
Balances at beginning of year	819,156	-	36,082	855,238
Depletion (Note 26)	12,631	-	3,799	16,430
Balances at end of year	831,787	-	39,881	871,668
<b>Net book values</b>	<b>₱681,958</b>	<b>₱9,992</b>	<b>₱77,512</b>	<b>₱769,462</b>
	2019			
	Mine and mining properties	Mine development cost	Mine rehabilitation asset	Total
<b>Cost:</b>				
Balances at beginning of year	₱1,513,745	₱-	₱113,162	₱1,626,907
Addition	-	8,447	-	8,447
Initial recognition of mine rehabilitation asset (Note 17)	-	-	2,498	2,498
Change in estimate of the liability for mine rehabilitation (Note 17)	-	-	(3,625)	(3,625)
Balances at end of year	1,513,745	8,447	112,035	1,634,227
<b>Accumulated depletion:</b>				
Balances at beginning of year	809,723	-	33,726	843,449
Depletion (Note 26)	9,433	-	2,356	11,789
Balances at end of year	819,156	-	36,082	855,238
<b>Net book values</b>	<b>₱694,589</b>	<b>₱8,447</b>	<b>₱75,953</b>	<b>₱778,989</b>

Additions to mine rehabilitation asset pertains to a liability for mine rehabilitation recognized by the Group in 2020 for one of its projects amounting to ₱5.36 million (see Note 17).



Movements in right-of-use of assets in 2020 and 2019 are as follows:

	2020				
	Office Space	Clinic Space	Machinery, tools and equipment	Land	Total
Cost:					
Balances at beginning of year	₱4,378	₱2,683	₱1,084	₱6,596	₱14,741
Additions	165	—	—	—	165
Retirement	(2,613)	—	—	—	(2,613)
Balances at end of year	1,930	2,683	1,084	6,596	12,293
Accumulated depreciation:					
Balances at beginning of year	2,492	1,119	1,037	791	5,439
Depreciation (Note 16)	1,010	1,411	448	777	3,646
Retirement	(2,024)	—	(589)	—	(2,613)
Balances at end of year	1,478	2,530	896	1,568	6,472
Net book values	₱452	₱153	₱188	₱5,028	₱5,821

	2019				
	Office Space	Clinic Space	Machinery, tools and equipment	Land	Total
Cost:					
Balances at beginning and end of year	₱4,378	₱2,683	₱1,084	₱6,596	₱14,741
Accumulated depreciation:					
Balances at beginning of year	—	—	—	—	—
Depreciation (Note 16)	2,492	1,119	1,037	791	5,439
Balances at end of year	2,492	1,119	1,037	791	5,439
Net book values	₱1,886	₱1,564	₱47	₱5,805	₱9,302

## 11. Deferred Mine Exploration Costs

Movements in deferred mine exploration costs are as follows:

	2020	2019
Balances at beginning of year	₱616,170	₱611,057
Additions	10,811	4,018
Translation adjustment	(3,186)	1,095
	623,795	616,170
Less allowance for impairment losses	166,989	166,989
Balances at end of year	₱456,806	₱449,181

Additions pertain to drilling, hauling, and other ongoing exploration and evaluation activities of the Group.

Translation adjustment in 2020 and 2019 pertains to the translation from USD to Philippine Peso of the Group's deferred exploration costs on mining claims in Nevada, USA held by BUSA, a foreign subsidiary.



Movements in allowance for impairment loss on deferred mine exploration costs are as follows:

	2020	2019
Balances at beginning of year	P166,989	P72,059
Provision (Note 27)	-	94,930
Balances at end of year	P166,989	P166,989

Provisions in 2019 relate to deferred mine explorations costs for which further exploration is not budgeted nor planned in the near future.

## 12. Investment Properties

	2020	2019
Balances at beginning of year	P2,478,862	P2,217,566
Revaluation (Note 27)	154,815	287,213
Reclassifications:		
From property, plant and equipment (Note 10)	-	83,056
From asset classified as held for sale (Note 9)	-	4,130
To property, plant and equipment (Note 10)	-	(37,082)
Disposals	-	(76,021)
Balances at end of year	P2,633,677	P2,478,862

At the beginning of 2019, investment properties include parcels of land located in Irisan, Baguio City with an area of 18,541 square meters, and a cost of P31.92 million. During the same year, the properties were reclassified to property, plant and equipment due to change in use of from being held for long-term capital appreciation to being an owner-occupied property. In 2019, the fair value of the properties that were reclassified amounted to P37.08 million (see Note 10).

In the same year, parcels of land in San Marcelino, Zambales with a revalued amount of P83.06 million were reclassified from property, plant and equipment to investment properties due to the change in use from being owner-occupied properties to being held for long-term capital appreciation (see Note 10). Portions of these properties amounting to P76.02 million were subsequently sold for P144.61 million, resulting in a gain of P68.59 million recognized in other income (see Note 27). Correspondingly, revaluation increment amounting to P50.39 and deferred tax liability on the revaluation increment from the portion sold amounting to P21.60 million were transferred to retained earnings.

Investment properties also include parcels of land located in Itogon, Benguet.

On March 13, 2021, the Group engaged an independent appraiser to assess the fair market value of land under investment properties as at December 31, 2020. The appraisal was performed by Cuervo Appraisers, Inc. The fair value of the investment properties was estimated using the sales comparative approach, which considers the sales of similar or substitute properties and related market values and establishes value estimates by processes involving comparisons (level 3).

The Group recognized revaluation gain amounting to P154.82 million, P287.21 million and P605.82 million in 2020, 2019 and 2018, respectively, and were included as other income (see Note 27).



In 2018, certain parcels of land totaling ₱237.08 million are used as collateral for the loan of the Parent Company. In 2019, the Parent Company settled the loan in full, which released the land as collateral to secure the said loan (see Note 14).

Direct operating expenses from these investment properties amounted to ₱0.76 million and ₱0.88 million in 2020 and 2019, respectively.

### 13. Other Noncurrent Assets

	2020	2019
Nontrade	₱362,618	₱361,341
Input VAT	137,412	228,603
Mine rehabilitation fund (MRF)	51,900	36,197
Intangible asset	250	250
Prepaid rent	170	-
Others	6,319	7,515
	<b>558,669</b>	<b>633,906</b>
Less allowance for impairment losses on other noncurrent assets	<b>151,892</b>	<b>151,892</b>
	<b>₱406,777</b>	<b>₱482,014</b>

Nontrade noncurrent assets pertain to advances and prepayments of the Group to its contractors and suppliers for exploration and other related activities and projects that are expected to be settled beyond 12 months from the end of the reporting period.

MRF pertains to accounts opened with local banks in compliance with the requirements of DAO No. 2010-21, otherwise known as The Revised Implementing Rules and Regulations of the Philippine Mining Act of 1995. The MRF shall be used for physical and social rehabilitation of areas and communities affected by the mine operations, and for research in the social, technical and preventive aspects of the mine's rehabilitation. The funds earn interest at the respective bank deposit rates. Interest income earned from MRF amounted to ₱0.16 million, ₱0.18 million and ₱0.21 million in 2020, 2019 and 2018, respectively (see Note 27).

In November 2018, the amount of ₱13.00 million was seized from the Company's fund as a result of an Order of Garnishment issued to some of the Group's MRF account. The issuance was due to a case with a private corporation for the Group's long-outstanding obligation, which resulted in a loss of ₱9.43 million in 2018 (see Note 27).

In 2019, the Group acquired the intangible asset at a cost of ₱0.11 million. This pertains to nonproprietary golf club shares that have been assessed as having an indefinite useful life as of December 31, 2019. As at December 31, 2019, the revalued amount of this intangible asset amounted to ₱0.25 million, after revaluation increment of ₱0.14 million, recognized in other comprehensive income. No impairment loss was recognized during the year for this intangible asset.

Others pertain to various assets of the Group, which are individually insignificant and are expected to be realized beyond 12 months after the reporting period.



Movements in allowance for impairment loss on other noncurrent assets are as follows:

	2020	2019
Balances at beginning of year	₱151,892	₱150,054
Provision (Note 27)	-	1,838
Balances at end of year	₱151,892	₱151,892

#### 14. Loans Payable

	2020	2019
Unsecured loans	₱270,066	₱270,062
Accrued interest and penalties	238,932	237,831
	₱508,998	₱507,893

a. Unsecured loans

In 2015, BNMI obtained an interest-bearing loan from Trans Middle East Phils. Equities, Inc. amounting to ₱250.00 million. During the same year, BNMI paid ₱65.00 million of the outstanding principal balance, after which the parties agreed that the loan becomes due and demandable. Outstanding principal amount of the loan amounted to ₱185.00 million as at December 31, 2019 and 2018.

The Parent Company has various loans, which are being renegotiated and are undergoing restructuring. Nominal interest rates vary from floating rate of 91-day Philippine PhP T-bill rate for peso loans and 3-month London Interbank Offered Rate (LIBOR) foreign loans, plus a margin of 3.5% for secured loans. Remaining balance related to these loans amounted to ₱85.06 million as at December 31, 2020 and 2019.

b. Secured loans

The Parent Company has a revolving secured promissory note from a local bank to finance its working capital requirements. In 2019, the Parent Company settled this loan in full. As such, certain parcels of land amounting to ₱237.08 million ceased being collaterals to secure the loan (Note 12).

Total proceeds from these loans amounted to nil in 2020 and 2019, and ₱10.0 million in 2018. Total principal payments for these loans amounted to ₱1.13 million, ₱22.78 million, ₱57.22 million in 2020, 2019 and 2018, respectively.

Accrued interest and penalties represent cumulative interest and default charges as at December 31, 2020 and 2019. Total interest expense related to loans payable amounted to ₱2.59 million, ₱1.21 million and ₱4.83 million in 2020, 2019 and 2018, respectively.



## 15. Trade and Other Payables

	2020	2019
Trade	P330,948	P366,658
Contract liabilities	96,342	896
Nontrade	95,660	117,753
Output VAT	26,802	39,907
Accrued expenses:		
Payroll	12,286	11,921
Taxes and licenses	9,883	9,883
Others	26,575	19,356
Excise taxes and royalties	6,214	8,892
Others	16,009	1,590
	<b>P620,719</b>	<b>P576,856</b>

Trade payables include import and local purchases of equipment, inventories and various parts and supplies used in the operations of the Group. These are noninterest-bearing and are normally settled in 60 to 90 days' terms.

Nontrade payables represent other operating expenses that are payable to various suppliers and contractors and regulatory agencies.

Contract liabilities include amounts from off-take agreements and cash advances from BNMI's customers. In 2020, the Group received additional advances amounting to \$1.99 million (P95.45 million), which will be settled through future nickel ore shipments. Meanwhile, significant terms and conditions of the related off-take agreements are in Note 37.

	2020	2019
Balances at beginning of year	P333,961	P350,196
Additions during the year	95,446	-
Effect of foreign exchange gain	(12,586)	(16,235)
Revenue recognized during the year	(10,203)	-
	<b>406,618</b>	<b>333,961</b>
Less noncurrent portion (Note 18)	<b>310,276</b>	<b>333,065</b>
Current portion	<b>P96,342</b>	<b>P896</b>

Accrued payables pertain to liabilities for professional fees, administrative expenses and payables to officers and employees for unclaimed wages, accrued vacation and sick leave credits and payroll. These are normally settled within 30 days.

Payables to officers and employees include unclaimed wages, accrued vacation and sick leave credits and accrued payroll, which are payable within 30 days.

Excise taxes and royalties pertain to taxes payable by the Group for its legal obligation arising from the production of mine products.

Others represent individually insignificant payables, operating and administrative expenses.

In 2020, 2019 and 2018, the Group recognized gain of nil, P22.46 million and nil, respectively, representing the discount provided by one of its suppliers for the settlement of its trade and other liabilities amounting to nil, P121.4 million and nil in those years (Note 27).



In 2020, AFC recognized a gain of ₱5.54 million from the settlement of its various nontrade liabilities. Total amount accrued prior to settlement and actual amount paid amounted to ₱16.87 million and ₱11.33 million, respectively (Note 27).

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## 16. Lease Commitments

### Lease Agreements

#### *Operating Leases*

The Group leases its office spaces up to June 30, 2020 and parcels of land on which its mine site offices are located for varying periods. These leases are renewable upon mutual agreement with the lessors. Total rental expense on these leases amounted to nil, ₱5.70 million and ₱12.10 million in 2020, 2019 and 2018, respectively.

Future minimum lease payments for the said operating leases are as follows:

	2020	2019
Lease payments due in:		
Less than one year	₱1,943	₱3,293
Between one and five years	3,046	3,416
More than five years	3,715	4,562
Future minimum lease payments	₱8,704	₱11,271

#### *Group as a lessee*

The Group has lease contracts for various office spaces, clinic spaces, machinery, tools and equipment, and land.

The Group also has certain leases of clinic space with lease terms of 12 months or less. The Group applies the 'short-term lease' recognition exemption for these leases. The Group's obligations under its leases are secured by the lessor's title to the leased assets.

The following are the amounts recognized in consolidated statement of income:

	2020	2019
Depreciation expense of right-of-use assets included in property, plant and equipment (Note 10)	₱3,646	₱5,439
Expenses related to short-term leases included in selling and general expenses (Note 24)	43,717	6,193
Expenses related to short-term leases included in cost of services (Note 23)	1,655	5,471
Interest expense on lease liabilities	537	822
Income from subleasing of right of use assets	-	(269)
Total amount recognized in consolidated statement of income	₱49,555	₱17,656



The rollforward analysis of lease liabilities follows:

	2020	2019
Balances at beginning of year	P8,059	P10,758
Interest expense	537	822
Additions	165	-
Payments of:		
Interest portion	(537)	(822)
Principal portion	(2,070)	(2,699)
Total amount of lease liabilities	6,154	8,059
Less noncurrent portion	4,476	5,583
Current portion	P1,678	P2,476

The Group has several lease contracts that include extension and termination options. These options are negotiated by management to provide flexibility in managing the leased-asset portfolio and align with the Group's business needs. Management exercises significant judgement in determining whether these extension and termination options are reasonably certain to be exercised.

Non-cancellable lease agreements pertain to the Parent's lease of land in Itogon, Benguet for the easement and right of way agreement over the land owned by the heirs of Coscos and Eduardo Busoy which the Parent Company needs for its existing water pipelines, and other future installation it may deem desirable for its operations. These are accounted for as operating lease.

Set out below are the undiscounted potential future rental payments relating to periods following the exercise date of extension and termination options that are not included in the lease term:

	Within five years	More than five years	Total
Extension options expected not to be exercised	P-	P1,500	P1,500

*Group as a lessor*

Rent income from these leases amounted to P0.76 million, P1.79 million and P1.93 million in 2020, 2019 and 2018, respectively (Note 21).

Future minimum rentals receivable under non-cancellable operating leases as at December 31, 2020 and 2019 are as follows:

	2020	2019
1 year	P1,746	P1,780
more than 1 year to 2 years	160	1,746
more than 2 years to 3 years	140	160
more than 3 years to 4 years	-	140



**17. Liability for Mine Rehabilitation**

Movements in this account are as follows:

	2020	2019
Balances at beginning of year	₱91,582	₱90,329
Change in estimate:		
Recognized in consolidated statement of income (Note 27)	5,290	(9,672)
Recognized as adjustment to the mine rehabilitation asset (Note 10)	5,358	(3,625)
Additions:		
Recognized in consolidated statement of income (Note 27)	-	18,373
Recognized in mine rehabilitation asset (Note 10)	-	2,498
Accretion (Note 27)	3,376	6,467
Actual rehabilitation costs	-	(12,788)
	<b>105,606</b>	<b>91,582</b>
Less noncurrent portion	<b>67,470</b>	<b>66,575</b>
Current portion	<b>₱38,136</b>	<b>₱25,007</b>

This provision is based on the Group's estimates. Assumptions based on the current economic environment have been made, which management believes are reasonable bases upon which to estimate the future liability.

The final rehabilitation costs are uncertain and cost estimates can vary in response to many factors, including estimates of the extent and costs of rehabilitation activities, technological changes, regulatory changes and changes in inflation rates (2.68% in 2020 and 2.69% in 2019) and changes in discount rates (2.32% in 2020 and 4.02% 2019). In 2020, the Group was not able to disburse the allotted portion for actual rehabilitation costs since the updated Final Mine Rehabilitation and/or Decommissioning Plan of the BAGO project was not yet approved by MGB as at December 31, 2020.

These uncertainties may result in future actual expenditure differing from the amounts currently provided. Therefore, significant estimates and assumptions are made in determining the provision for mine rehabilitation. As a result, there could be significant adjustments to the provision established that could affect future financial results.

The provision at the end of each reporting period represents management best estimate of the present value of the future rehabilitation cost required. This estimate is reviewed regularly to take into account any material changes in the assumptions. However, actual rehabilitation costs will ultimately depend upon future market prices for the necessary decommissioning works required, which will reflect market conditions at the relevant time. The timing of rehabilitation is likely to depend on when the mine ceases to produce at economically viable rates. This, in turn, will depend upon future gold and nickel prices, which are inherently uncertain.



## 18. Other Noncurrent Liabilities

	2020	2019
Contract liabilities (Note 15)	₱310,276	₱333,065
Equity of claimowners in contract operations	49,136	49,136
Deposit for future stock subscriptions	32,000	32,000
	<b>₱391,412</b>	<b>₱414,201</b>

Contract liabilities of BNMI may be settled through future nickel ore shipments to its customers. The current portion of the said advances is presented as part of trade and other payables.

### *Nickel Off-take Agreements and other advances*

- a. On April 11, 2014, BNMI entered into an off-take agreement with a Korean trading company for a total amount of US\$6.00 million in exchange for future shipments. The advances under the said off-take agreement are noninterest-bearing and will be settled through deductions from the selling price of every shipment.

As at December 31, 2020 and 2019, the remaining balance of the advances amounted to US\$4.17 million (₱200.26 million) and US\$4.28 million (₱216.72 million), respectively.

- b. On August 24, 2011, BNMI signed a tri-partite off-take agreement with the Parent Company and a Chinese trading company, for the sale of nickel ore. In accordance with the agreement, the Chinese trading company shall extend a loan of US\$6.00 million to the Parent Company. BNMI will deliver and sell 1.8 million tons of 1.8% grade nickel ore over a period of 36 months at 0.6 million tons per 12 months, to start six months after signing of the agreement. The Chinese trading company will deduct US\$3.33 per ton from the selling price of the nickel ore to be treated as repayment of the loan to the Parent Company.

As at December 31, 2020 and 2019, the remaining advances amounted to \$1.89 million (₱90.76 million) and \$1.92 million (₱97.22 million), respectively.

- c. In December 2020, BNMI has executed two (2) nickel sales contract to transpire earlier in 2021. In accordance with the agreement, BNMI shall deliver 50,000 Wet Metric Ton (WMT) of 1.3% nickel ore with corresponding price of \$46.00 and \$39.50 per WMT, respectively. Each contract is subject to price adjustment of \$0.60 and \$0.50 per WMT for every change in nickel grade and moisture content agreed per contract. The arrangement also includes an advance payment of the buyers amounting to \$1.00 million (₱48.02 million) and \$0.99 million (₱47.42 million), respectively for each contract.

Equity of claim owners in contract operations pertain to the outstanding liability of the Parent Company. Discussions on the settlement of said liability are still on-going as at December 31, 2020.

As at December 31, 2020 and 2019, deposit for future stock subscriptions received by BLI from Omega Management and Investment, Inc. amounted to ₱32.00 million. The related increase in authorized capital stock of BLI has been approved by BLI's BOD and majority of its stockholders on March 16, 2016. BLI filed the application for the increase in authorized capital stock with the Philippine SEC on November 23, 2018 and is waiting for approval as at March 18, 2021.



## 19. Equity

### Capital Stock

	2020		2019	
	No. of shares	Amount	No. of shares	Amount
<b>Authorized</b>				
Convertible Preferred				
Class A - ₱3.43 par value	19,652,912	₱67,500	19,652,912	₱67,500
Common Class A - ₱1 par value in 2019 and 2018 and ₱3 par value in 2016	430,380,000	430,874	430,380,000	430,874
Common Class B - ₱1 par value in 2019 and 2018 and ₱3 par value in 2016	286,920,000	287,135	286,920,000	287,135
	<b>736,952,912</b>	<b>785,509</b>	<b>736,952,912</b>	<b>785,509</b>
<b>Issued</b>				
Convertible Preferred Class "A"	217,061	745	217,061	745
Common Class "A"	371,220,254	371,220	371,050,755	371,050
Common Class "B"	245,250,197	245,250	245,068,497	245,068
<b>Total shares issued and subscribed</b>	<b>616,687,512</b>	<b>617,215</b>	<b>616,336,313</b>	<b>616,863</b>
<b>Treasury Shares</b>				
Convertible Preferred Class "A"	—	—	—	—
Common Class "A"	310,794	7,158	310,794	7,158
Common Class "B"	37,275	858	37,275	858
<b>Total treasury shares</b>	<b>348,069</b>	<b>8,016</b>	<b>348,069</b>	<b>8,016</b>
<b>Outstanding</b>				
Convertible Preferred Class "A"	217,061	745	217,061	745
Common Class "A"	370,909,460	364,062	370,739,961	363,892
Common Class "B"	245,212,922	244,392	245,031,222	244,210
<b>Total outstanding shares</b>	<b>616,339,443</b>	<b>₱609,199</b>	<b>615,988,244</b>	<b>₱608,847</b>

The two classes of common shares of the Group are identical in all respects, except that ownership of Common Class A is restricted to Philippine nationals.

The convertible preferred shares are limited to Philippine nationals and convertible into Common Class A shares at a conversion premium of ₱6.02 per share. Each preferred share is convertible into 9.4875 Common Class A shares. The convertible preferred shares are also entitled to have one vote for each full share of Common Class A stock into which such share of convertible preferred stock is, at any stockholders' meeting, then convertible. It does not enjoy the same dividend right as the two classes of common stock but is entitled to a fixed cumulative dividend of 8% a year if there is surplus profit and when declared by the BOD.

On July 29, 2016, the Philippine SEC approved the amendment to the Article Seventh of the Amended Articles of Incorporation and Article 1, Section 1 of the Amended By-Laws of the Parent Company, which changed the par value of its Common Class A and Common Class B shares from ₱3.00 to ₱1.00 per share and increased the number of common shares by threefold. The reduction in par value essentially resulted in a stock split.

On March 21, 2018, the BOD approved the increase in the Group's authorized capital stock from ₱717.30 million (consisting of 430,380,000 Common Class A shares and 286,920,000 Common Class B shares, both having a par value of ₱1.00 each) to ₱762.30 million (consisting of 475,380,000 Common Class A shares and 286,920,000 Common Class B shares, both having a par value of ₱1.00 each). After the amendment, the total authorized capital stock of the Parent Company has increased from ₱785.50 million to ₱830.50 million.



The application for the increase was approved by the stockholders during the annual meeting held on November 8, 2018. As at March 18, 2021, the Parent Company has not yet filed the application for the increase in authorized capital stock with the Philippine SEC.

In 2020, the Parent Company issued 158,999 Common Class A shares and 181,700 Common Class B shares as a result of employees' exercise of stock options at a total consideration of ₱634; ₱105 of which were from 55,200 Common Class B at a selling price of ₱1.91 per share and ₱529 from 158,999 Common Class A shares and 126,500 Common Class B shares at an average exercise price of ₱1.78 per share. As at December 31, 2020, total shares issued and outstanding for Common Class A and B shares are 370,909,460 and 245,212,922, respectively.

Below is the Parent Company's track record of registration of securities under the Philippine SEC:

Date of Registration (SEC Approval)	Description	Number of shares	Par value per share	Total amount (in 000's)
June 18, 1956	Capital upon registration: Common shares	18,000,000	₱1.00	₱18,000
November 25, 1960	Increase in number and par value of common shares: Common shares	20,000,000	2.00	40,000
November 9, 1964	Increase in par value of common shares: Common shares	20,000,000	3.00	60,000
October 22, 1968	Increase in number of common shares and introduction of preferred shares: Common shares Preferred shares	50,000,000 6,000,000	3.00 5.00	150,000 30,000
March 12, 1974	Split of common share into two classes and change in number and par value and addition of conversion feature to the preferred shares: Common class A Common class B Convertible preferred shares	30,000,000 20,000,000 19,652,912	3.00 3.00 3.43	90,000 60,000 67,500
July 27, 1989	Increase in number of common shares Common class A Common class B Convertible preferred shares	120,000,000 80,000,000 19,652,912	3.00 3.00 3.43	360,000 240,000 67,500
September 28, 2015	Increase in number of common shares Common class A Common class B Convertible preferred shares	143,460,000 95,640,000 19,652,912	3.00 3.00 3.43	430,874 287,135 67,500
July 29, 2016	Increase in number of common shares and reduction in par value Common class A Common class B Convertible preferred shares	430,380,000 286,920,000 19,652,912	1.00 1.00 3.43	430,874 287,135 67,500
As at December 31, 2020:	Increase in number of common shares Common class A Common class B Convertible preferred shares	430,380,000 286,920,000 19,652,912	₱1.00 1.00 3.43	₱430,874 287,135 67,500

As at December 31, 2020 and 2019, the Parent Company has 16,904 and 16,906 stockholders, respectively.



*Other Components of Equity*

	2020	2019
Revaluation increment - net of deferred tax	P1,127,236	P1,127,236
Cumulative translation adjustments of foreign subsidiaries - net of deferred tax	31,595	33,592
Cost of share-based payment (Note 20)	13,366	21,671
Remeasurement gain on retirement obligation - net of deferred tax (Note 30)	9,590	21,413
Unrealized gain on FVOCI and AFS financial assets (Note 8)	1,164	971
Unrealized gain on intangible asset (Note 13)	135	135
	<b>P1,183,086</b>	<b>P1,205,018</b>

As at December 31, 2020 and 2019, the Parent Company has 348,069 shares held in treasury amounting to P8.02 million at P23.00 per share.

Movement in cost of share-based payment follows:

	2020	2019
Balances at beginning of year	P21,671	P25,089
Stock options expired	(6,348)	(3,418)
Stock options exercised	(1,957)	-
Balances at end of year	<b>P13,366</b>	<b>P21,671</b>

Movement in capital surplus follows:

	2020	2019
Balances at beginning of year	P380,382	P376,964
Expiration of stock options	6,348	3,418
Exercise of stock options	2,239	-
Balances at end of year	<b>P388,969</b>	<b>P380,382</b>

## 20. Stock Option Plan

Under the 1975 Nonqualified Stock Option Plan (Plan), as amended, 9.90 million shares of the unissued common stock of the Parent Company have been reserved for stock options to selected managers, directors and consultants of the Parent Company. The option price is payable on exercise date and should not be less than the fair market value of the shares quoted on the date of the grant. The Plan, valid up to May 31, 1998, allows a maximum of 632,500 shares to be available to any one optionee. On May 26, 1998, the BOD and the stockholders approved the extension of the Plan until May 31, 2003, which was extended further on December 18, 2002 with the BOD and the stockholders' approval until May 31, 2008. On December 18, 2007, the BOD and the stockholders approved a further extension of the Plan until May 31, 2013.

On March 23, 2012, the BOD and the stockholders approved the proposed amendments to the existing Amended Stock Option Plan and to extend the termination date of the existing Plan for five years or until May 31, 2018.



The amendments include an increase in the maximum award per employee from 200,000 shares over the life of the plan to 500,000 shares per grant and an increase in the shares reserved for issuance under the Plan from the total of 9,906,661 shares to 22,000,000 shares.

Options granted to Filipino optionees are exercisable in the form of 60% Common Class A and 40% Common Class B shares. Options for Common Class B shares may be exercised only if Common Class A shares had been previously or simultaneously exercised so as to maintain a minimum 60:40 ratio of Common Class A to Common Class B shares.

The options under the Plan are non-transferable and are exercisable to the extent of 30% after one year from the date of the grant, 60% after two years from the date of the grant, and 100% after three years from the date of grant. No option is exercisable after 10 years from the date of grant.

Unexercised share options per grant are as follows:

	Unexercised share options as at January 1, 2020	Expired in 2020	Exercised in 2020	Unexercised share options as at December 31, 2020
Class A - May 2011 Grant	1,668,297	(646,799)	(169,499)	851,999
- September 2012 Grant	306,000	-	-	306,000
- May 2014 Grant	864,000	(216,000)	-	648,000
Class B - May 2011 Grant	1,226,745	(431,200)	(181,700)	613,845
- September 2012 Grant	204,000	-	-	204,000
- May 2014 Grant	576,000	(144,000)	-	432,000
<b>Total</b>	<b>4,845,042</b>	<b>(1,437,999)</b>	<b>(295,999)</b>	<b>3,055,844</b>

	Unexercised share options as at January 1, 2019	Expired in 2019	Unexercised share options as at December 31, 2019
Class A - May 2011 Grant	1,866,297	(198,000)	1,668,297
- September 2012 Grant	396,000	(90,000)	306,000
- May 2014 Grant	1,080,000	(216,000)	864,000
Class B - May 2011 Grant	1,358,745	(132,000)	1,226,745
- September 2012 Grant	264,000	(60,000)	204,000
- May 2014 Grant	720,000	(144,000)	576,000
<b>Total</b>	<b>5,685,042</b>	<b>(840,000)</b>	<b>4,845,042</b>

On August 31, 2016, the Parent Company's BOD approved the following amendments to the Plan due to the effect of the share split on July 29, 2016:

- change in the exercise price of outstanding options
- change in the maximum number of shares per grant from 500,000 to 1,500,000
- repricing of the unexercised share options brought about by the low turn-out in the availing of the grant due to high exercise price compared to market price. The repricing was based on the closing price on August 18, 2016 of Class A and Class B common shares amounting to ₱2.25 and ₱2.55, respectively, less 25% discount pursuant to the provisions of the amended stock option plan of the Parent Company.



The exercise prices of outstanding options consider the effect of the stock split and the change in exercise prices, are as follows:

	At grant date	After effect of stock split	As modified
Class A - May 2011 Grant	₱16.50	₱5.50	₱1.69
- September 2012 Grant	17.96	5.99	1.69
- May 2014 Grant	7.13	2.38	1.69
Class B - May 2011 Grant	17.50	5.83	1.91
- September 2012 Grant	17.63	5.88	1.91
- May 2014 Grant	D7.13	2.38	1.91

Total number of shares available for future option grants is 40,438,695 shares and 33,124,698 shares as at December 31, 2020 and 2019, respectively.

The change in exercise price of outstanding options is treated as a modification of the Plan terms, which resulted in an additional expense, measured as at the date of modification, for the increase in the total fair value of the outstanding share options. The table below shows the increase in fair value due to the change in the exercise price of each grant:

	Fair value after change in exercise price	Fair value before change in exercise price	Increase in fair value
Class A - May 2011 Grant	₱2,718	₱2,462	₱256
- September 2012 Grant	792	763	29
- May 2014 Grant	781	775	6
Class B - May 2011 Grant	2,075	1,920	155
- September 2012 Grant	604	587	17
- May 2014 Grant	593	591	2

Stock option expense relating to the Plan recognized in 2020, 2019 and 2018 amounted to nil.

A summary of the number of shares under the Plan is shown below:

	2020	2019
Outstanding at beginning of year	4,845,042	5,685,042
Expired	(1,437,999)	(840,000)
Exercised	(351,199)	-
Outstanding and exercisable at end of year	3,055,844	4,845,042

The Parent Company used the binomial options pricing model to determine the fair value of the stock options.

The following assumptions were used to determine the fair value of the stock options:

	Share price	Exercise price	Expected volatility	Option life	Expected dividends	Risk-free interest rate
May 3, 2011 Grant	16.5	16.5	91.20%	10 years	0.00%	6.46%
	17.5	17.5	155.57%	10 years	0.00%	6.46%
Sep 9, 2012 Grant	23.95	17.96	57.35%	10 years	0.00%	4.80%
	23.5	17.63	65.53%	10 years	0.00%	4.80%
May 26, 2014 Grant	9.5	7.13	77.28%	10 years	0.00%	3.90%
	9.5	7.13	84.29%	10 years	0.00%	3.90%



The expected volatility measured at the standard deviation of expected share price returns was based on the analysis of share prices for the past 365 days. The cost of share-based payment amounted to ₱13.69 million and ₱21.67 million as at December 31, 2020 and 2019, respectively (see Note 19).

On March 18, 2021, upon endorsement of the Stock Option Committee, the Board approved a new stock option grant to the Group's officer, employees and consultant and to all members of the BOD, provided they have rendered at least two years of service as of March 15, 2021. Total number of common shares available for distribution under the plan is 3,007,627 shares at an exercise price of ₱2.19 and ₱2.05 for Class "A" and Class "B" shares, respectively. The Parent Company will determine the fair value and consider the accounting impact of this new grant in 2021.

## 21. Revenue

	2020	2019	2018
Revenue from contracts with customers:			
Sale of mine products	₱1,585,826	₱747,726	₱939,131
Sale of goods and services	33,137	40,569	46,972
Trucking services	–	4,969	7,647
Port and barge management services	–	1,602	10,875
Others	–	5,407	2,151
Total revenue from contracts with customers	1,618,963	800,273	1,006,776
Rental income	762	1,794	1,928
	<b>₱1,619,725</b>	<b>₱802,067</b>	<b>₱1,008,704</b>

Sale of mine products includes sales of nickel, gold, silver and lime, which are subject to 4% excise tax based on gross revenues in 2020, 2019 and 2018.

As a requirement under DAO No. 2010-21, 'The Mining Act Implementing Rules and Regulations', BNMI pays royalty to the MGB for every shipment of nickel ore equivalent to 5% of the peso equivalent of the nickel ore shipped since the SCNP is within a Mineral Reservation.

Excise taxes and royalty fees related to the sale of mine products amounted to ₱101.03 million, ₱29.38 million and ₱45.16 million in 2020, 2019 and 2018, respectively (see Note 33).

Set out below is the disaggregation of the Group's revenue from contracts with customers in 2020, 2019 and 2018:

Segments	2020				Total
	Mining	Health Services	Logistics	Others	
Type of product:					
Gold	₱700,800	₱–	₱–	₱–	₱700,800
Nickel	818,337	–	–	–	818,337
Lime	63,160	–	–	–	63,160
Silver	3,529	–	–	–	3,529
Health services	–	33,137	–	–	33,137
Port and barge management services	–	–	–	–	–
Trucking	–	–	–	–	–
Total revenue from contracts with customers	₱1,585,826	₱ 33,137	₱–	₱–	₱1,618,963



2020					
Segments	Mining	Health Services	Logistics	Others	Total
<b>Location of customer:</b>					
Within the Philippines	P767,489	P33,137	P-	P-	P800,626
Outside the Philippines	818,337	-	-	-	818,337
<b>Total revenue from contracts with customers</b>	<b>P1,585,826</b>	<b>P33,137</b>	<b>P-</b>	<b>P-</b>	<b>P1,618,963</b>
<b>Timing of revenue recognition:</b>					
Transferred at a point in time	P-	P33,137	P-	P-	P33,137
Transferred over time	1,585,826	-	-	-	1,585,826
<b>Total revenue from contracts with customers</b>	<b>P1,585,826</b>	<b>P33,137</b>	<b>P-</b>	<b>P-</b>	<b>P1,618,963</b>
2019					
Segments	Mining	Health Services	Logistics	Others	Total
<b>Type of product:</b>					
Gold	P575,363	P-	P-	P-	P575,363
Nickel	64,649	-	-	-	64,649
Lime	106,581	-	-	-	106,581
Silver	1,133	-	-	-	1,133
Health services	-	35,964	-	-	35,964
Port and barge management services	-	-	1,602	-	1,602
Trucking	-	-	4,969	-	4,969
Sale of goods	-	-	4,605	-	4,605
Real estate sales	-	-	-	5,407	5,407
<b>Total revenue from contracts with customers</b>	<b>P747,726</b>	<b>P35,964</b>	<b>P11,176</b>	<b>P5,407</b>	<b>P800,273</b>
<b>Location of customer:</b>					
Within the Philippines	P683,077	P35,964	P11,176	P5,407	P735,624
Outside the Philippines	64,649	-	-	-	64,649
<b>Total revenue from contracts with customers</b>	<b>P747,726</b>	<b>P35,964</b>	<b>P11,176</b>	<b>P5,407</b>	<b>P800,273</b>
<b>Timing of revenue recognition:</b>					
Transferred at a point in time	P747,726	P-	P4,605	P5,407	P757,738
Transferred over time	-	35,964	6,571	-	42,535
<b>Total revenue from contracts with customers</b>	<b>P747,726</b>	<b>P35,964</b>	<b>P11,176</b>	<b>P5,407</b>	<b>P800,273</b>
2018					
Segments	Mining	Health Services	Logistics	Others	Total
<b>Type of product:</b>					
Gold	P614,775	P-	P-	P-	P614,775
Nickel	226,521	-	-	-	226,521
Lime	96,534	-	-	-	96,534
Health services	-	42,917	-	-	42,917
Port and barge management services	-	-	10,875	-	10,875
Trucking	-	-	7,647	-	7,647
Sale of goods	-	-	-	4,055	4,055
Real estate sales	-	-	-	2,151	2,151
Silver	1,301	-	-	-	1,301
<b>Total revenue from contracts with customers</b>	<b>P939,131</b>	<b>P42,917</b>	<b>P18,522</b>	<b>P6,206</b>	<b>P1,006,776</b>
<b>Location of customer:</b>					
Within the Philippines	P712,610	P42,917	P18,522	P6,206	P780,255
Outside the Philippines	226,521	-	-	-	226,521
<b>Total revenue from contracts with customers</b>	<b>P939,131</b>	<b>P42,917</b>	<b>P18,522</b>	<b>P6,206</b>	<b>P1,006,776</b>
<b>Timing of revenue recognition:</b>					
Transferred at a point in time	P939,131	P6,178	P10,875	P6,206	P962,390
Transferred over time	-	36,739	7,647	-	44,386
<b>Total revenue from contracts with customers</b>	<b>P939,131</b>	<b>P42,917</b>	<b>P18,522</b>	<b>P6,206</b>	<b>P1,006,776</b>



**22. Costs of Mine Products Sold**

	2020	2019	2018
Outside services	P227,949	P208,382	P262,493
Contractor fees	166,807	27,988	78,348
Materials and supplies (Note 6)	121,788	110,890	114,908
Personnel expenses (Note 25)	68,827	58,393	57,989
Depreciation and depletion (Note 26)	33,619	14,694	56,622
Power, rent and utilities	40,903	43,144	49,009
Repairs and maintenance	22,605	17,272	22,386
Smelting, refining and marketing	6,604	6,199	6,788
Travel and transportation	229	523	375
Taxes and licenses	26	50	41
Others	1,027	8,915	4,130
	<b>690,384</b>	<b>496,450</b>	<b>653,089</b>
Net change in beneficiated nickel ore (Note 6)	35,388	7,817	35,273
	<b>P725,772</b>	<b>P504,267</b>	<b>P688,362</b>

Outside services pertain to the amounts paid to contractors and consultants involved in the mining operations of the Group.

Other expenses consist of various direct charges to cost of mine products, which are individually insignificant.

**23. Cost of Services and Other Sales**

	2020	2019	2018
Personnel expenses (Note 25)	P14,269	P14,495	P22,093
Retainers and consultancy fees	8,031	3,697	4,852
Materials and supplies (Note 6)	7,937	10,543	16,959
Depreciation and depletion (Note 26)	3,469	9,372	7,905
Rent (Note 16)	1,655	5,471	8,863
Professional fees	1,226	1,208	1,020
Travel and transportation	502	548	787
Repairs and maintenance	152	113	236
Cost of real estate sold (Note 6)	-	2,245	980
Others	1,926	2,103	4,285
	<b>P39,167</b>	<b>P49,795</b>	<b>P67,980</b>

Rent pertains to the expenses related to short-term leases (see Note 16).

Others consist of various direct charges, which are individually insignificant.



**24. Selling and General Expenses**

	2020	2019	2018
Outside services	P101,390	P61,183	P62,440
Personnel expenses (Note 25)	95,664	101,339	100,609
Rent (Note 16)	43,717	6,193	14,298
Taxes and licenses	32,806	11,295	15,501
Community development programs	30,493	22,912	34,673
Depreciation and depletion (Note 26)	17,181	14,436	18,603
Repairs and maintenance	14,217	6,232	4,634
Representation	11,347	29,340	14,413
Materials and supplies (Note 6)	10,804	10,530	11,307
Professional fees	9,909	18,475	3,390
Communication, light and power	6,750	12,650	13,067
Wharfage fees	4,923	538	2,037
Contract labor	3,333	-	15,776
Transportation and travel	3,089	4,774	6,581
Freight and handling	1,959	2,385	15
Insurance	1,046	1,217	1,685
Provision for impairment losses on receivables (Note 5)	-	20,085	66,623
Others	19,762	16,759	21,966
	<b>P408,390</b>	<b>P340,343</b>	<b>P407,618</b>

Rent pertains to the expenses related to short-term leases (see Note 16).

Others consist of various administrative expenses, which are individually insignificant.

**25. Personnel Expenses**

	2020	2019	2018
Salaries and wages	P133,592	P129,440	P155,044
Benefits and allowances	34,989	32,214	14,513
Pension expense (Note 30)	10,179	12,573	11,134
	<b>P178,760</b>	<b>P174,227</b>	<b>P180,691</b>

Total personnel expenses were distributed as follows:

	2020	2019	2018
Cost of services and other sales (Note 23)	P14,269	P14,495	P22,093
Selling and general expenses (Note 24)	95,664	101,339	100,609
Cost of mine products sold (Note 22)	68,827	58,393	57,989
	<b>P178,760</b>	<b>P174,227</b>	<b>P180,691</b>



## 26. Depreciation and Depletion

Total depreciation and depletion are composed of the following (see Note 10):

	2020	2019	2018
Depreciation	₱38,262	₱27,018	₱67,657
Depletion	16,430	11,789	15,473
	<b>₱54,692</b>	<b>₱38,807</b>	<b>₱83,130</b>

Depreciation and depletion are broken down as follows:

	2020	2019	2018
Cost of mine products sold (Note 22)	₱33,619	₱14,694	₱56,622
Selling and general expenses (Note 24)	17,181	14,436	18,603
Cost of services and other sales (Note 23)	3,469	9,372	7,905
Gold button inventory (Note 6)	423	305	—
	<b>₱54,692</b>	<b>₱38,807</b>	<b>₱83,130</b>

## 27. Other Income - net

	2020	2019	2018
Gains (losses) on:			
Revaluation of investment properties (Note 12)	₱154,815	₱287,213	₱605,820
Legal settlement (Note 13)	(19,596)	—	(9,425)
Foreign currency exchange	13,015	11,491	(15,598)
Settlement of trade and other liabilities (Note 15)	5,535	22,459	52,985
Disallowed input VAT and TCC (Note 7)	(5,195)	(6,704)	(11,147)
Write-off of receivables	(689)	—	—
Disposal of property, plant and equipment (Note 10)	35	—	1,507
Sale of investment properties (Note 12)	—	68,592	—
Retirement of property, plant and equipment (Note 10)	—	—	(60,404)
Inventory obsolescence (Note 6)	—	—	(20,216)
Change in estimate of liability for mine rehabilitation (Note 17)	(5,290)	9,672	8,226
Accretion on the liability for mine rehabilitation (Note 17)	(3,376)	(6,467)	(4,940)
Interest income (Notes 4 and 13)	819	1,727	261
Provision for impairment on:			
Input VAT (Note 7)	(5)	(8,714)	(11,135)
Deferred mine exploration cost (Note 11)	—	(94,930)	(72,059)
Other noncurrent assets (Note 13)	—	(1,838)	(95,374)



	2020	2019	2018
Penalties	(₱239)	₱-	(₱9,179)
Noncapitalizable additions to liability for mine rehabilitation (Note 17)	-	(18,373)	-
Recovery of allowance for impairment loss (Notes 5 and 6)	-	10,407	-
Write-off of deferred mine exploration costs (Note 11)	-	-	(11,462)
Others - net	1,199	(2,462)	(10,170)
	<b>₱141,028</b>	<b>₱272,073</b>	<b>₱337,690</b>

Starting 2018, despatch or demurrage is presented as part of revenue from contracts with customers.

On August 19, 2020, the Parent Company received from the BIR the Final Decision on Disputed Assessment covering various tax assessments in relation to the Company's 2013 deficiency taxes. Immediately on August 26, 2020, the Parent Company filed a Motion for Reconsideration as a protest to the assessment. On September 10, 2020, the Parent Company received the BIR's final assessment and was ordered to settle ₱19.60 million, covering basic taxes, interest and compromise penalties amounting to ₱9.15 million, ₱10.21 million and ₱0.24 million, respectively. In 2020, the Parent Company fully settled the foregoing amounts.

Others consist of various income and expenses, which are not directly related to the operations of the Group.

## 28. ESOIP

The ESOIP, as approved by the stockholders in 1986, allows employees of the Parent Company to buy up to 6,000,000 shares of the Common Class A shares of the Parent Company at either of two prices. If the shares are acquired by the Parent Company from a seller or are treasury shares, these can be bought at acquisition cost. If the shares are sourced from the authorized but unissued shares of the Parent Company, these can be bought at the average closing price quoted in the PSE on the last day that such shares were traded prior to the start of the purchase period. Payment for the shares purchased shall be advanced by the Parent Company on behalf of the employees and repaid through salary deduction without interest. The shares acquired by employees under the ESOIP may be subjected to a holding period from the date of purchase.

In January 1990, the BOD approved the Employees Stock Purchase Plan, which allows the employees of the Parent Company (but excluding directors of the Parent Company) to buy, basically under similar terms and conditions as that of the ESOIP, 2,000,000 shares of the Common Class A shares of the Parent Company.

The balance of the employees' stock ownership pursuant to the said plan shown as part of the trade and other receivables in the consolidated statements of financial position amounted to ₱58.42 million as at December 31, 2020 and 2019 and was provided an allowance for the same amount (see Note 5).



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## 29. Related Party Disclosures

Enterprises and individuals that directly, or indirectly through one or more intermediaries, control or are controlled by, or are under common control with the Group, including holding companies, subsidiaries and fellow subsidiaries, are related parties of the Group. Associates and individuals owning, directly or indirectly, an interest in the voting power of the Group that gives them significant influence over the enterprise, key management personnel, including directors and officers of the Group and close members of the family of these individuals, and companies associated with these individuals also constitute related parties. In considering each possible related entity relationship, attention is directed to the substance of the relationship and not merely the legal form.

The Group's related party transactions which are, individually or in aggregate over a 12-month period, 10% and above of the latest audited consolidated total assets are reviewed and evaluated by the Related Party Transaction Committee and Management Committee. Afterwards, these are approved by at least two-thirds (2/3) vote of the BOD, with at least a majority of the independent directors voting to approve the material related party transaction. In case that a majority of the independent directors' vote is not secured, the material related party transaction may be ratified by the majority vote of the shareholders, or two-thirds (2/3) of the outstanding capital stock.

All intercompany transactions are eliminated at the consolidated level. Items eliminated are separately disclosed in a schedule in accordance with Philippine SEC requirements under the Revised SRC Rule 68.

### Compensation of Key Management Personnel of the Group

The Group considered all senior officers as key management personnel. Below are the details of compensation of the Group's key management personnel.

	2020	2019	2018
Short-term benefits	₱12,389	₱28,003	₱33,127
Post-employment benefits	3,479	5,438	5,132
	₱15,868	₱33,441	₱38,259

Employee benefits include net pension expense and stock compensation expense.

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## 30. Pension Benefits Plans

The existing regulatory framework, RA No. 7641, The Retirement Pay Law, requires a provision for retirement pay to qualified private sector employees in the absence of any retirement plan in the entity, provided however that the employee's retirement benefits under any collective bargaining and other agreements shall not be less than those provided under the law. The law does not require minimum funding of the plan.

The Parent Company has a funded, noncontributory pension benefit plan, while AFC has an unfunded noncontributory pension benefit plan covering substantially all of their regular employees. The benefits are based on a certain percentage of the final monthly basic salary for every year of credited service of the employees in accordance with RA 7641. The defined pension benefit obligation is determined using the projected unit credit method.



The following tables summarize the components of net pension benefit in the consolidated statements of income and fund status, and the amounts recognized in the consolidated statements of financial position.

The component of net pension expense are as follows:

	2020	2019	2018
<i>Parent Company</i>			
Current service cost	<b>₱6,905</b>	₱6,288	₱8,014
Net interest cost	<b>2,972</b>	3,850	2,406
Past service cost	-	2,129	-
	<b>9,877</b>	12,267	10,420
<i>AFC</i>			
Current service cost	<b>203</b>	177	503
Net interest cost	<b>99</b>	129	211
	<b>302</b>	306	714
<b>Net pension expense</b>	<b>₱10,179</b>	₱12,573	₱11,134

Pension liability as at December 31, 2020 and 2019 are as follows:

	2020			2019		
	Parent Company	AFC	Total	Parent Company	AFC	Total
Present value of defined benefit obligation	<b>₱84,299</b>	<b>₱3,082</b>	<b>₱87,381</b>	₱60,980	₱2,151	₱87,381
Fair value of plan assets	(5,550)	-	(5,550)	(569)	-	(5,550)
<b>Pension liability</b>	<b>₱78,749</b>	<b>₱3,082</b>	<b>₱81,831</b>	₱78,749	₱2,151	₱82,562

Reconciliation of other comprehensive income - net of tax:

	2020			2019		
	Parent Company	AFC	Total (Note 19)	Parent Company	AFC	Total (Note 19)
Balances at beginning of year	(₱20,953)	(₱460)	(₱21,413)	(₱23,723)	(₱478)	(₱24,201)
Loss on remeasurement of pension liability	<b>11,282</b>	<b>541</b>	<b>11,823</b>	2,770	18	2,788
<b>Balances at end of year</b>	<b>(₱9,671)</b>	<b>₱81</b>	<b>(₱9,590)</b>	(₱20,953)	(₱460)	(₱21,413)

Changes in the present value of defined benefits obligation are as follow:

	2020			2019		
	Parent Company	AFC	Total	Parent Company	AFC	Total
Balances at beginning of year	<b>₱60,980</b>	<b>₱2,151</b>	<b>₱63,131</b>	₱52,906	₱1,819	₱63,131
Interest cost	<b>3,000</b>	<b>99</b>	<b>3,099</b>	3,894	129	3,099
Current service cost	<b>6,905</b>	<b>203</b>	<b>7,108</b>	6,288	177	7,108
Past service cost	-	-	-	2,129	-	2,129
Actuarial losses	<b>16,071</b>	<b>772</b>	<b>16,843</b>	3,884	26	3,910
Benefits paid	(2,657)	(143)	(2,800)	(8,121)	-	(8,121)
<b>Balances at end of year</b>	<b>₱84,299</b>	<b>₱3,082</b>	<b>₱87,381</b>	₱60,980	₱2,151	₱63,131



Breakdown of actuarial gains (losses) on defined benefits obligation are as follows:

	2020			2019		
	Parent Company	AFC	Total	Parent Company	AFC	Total
Change in financial assumptions	₱8,275	₱330	₱8,605	₱10,212	₱310	₱10,522
Experience adjustments	7,796	442	8,238	(6,328)	(284)	(6,612)
	<b>₱16,071</b>	<b>₱772</b>	<b>₱16,843</b>	<b>₱16,071</b>	<b>₱26</b>	<b>₱3,910</b>

Fair value of plan assets of the Parent Company follows:

	2020	2019
Balances at beginning of year	₱569	₱598
Contribution	5,000	—
Remeasurement gain	(47)	(73)
Asset return in net interest cost	28	44
Balances at end of year	<b>₱5,550</b>	<b>₱569</b>

The plan assets of the Parent Company comprised mostly of cash in bank as at December 31, 2020 and 2019.

	2020	2019
Cash in bank	89.75%	0.07%
Investment in shares	10.25%	99.93%
	<b>100.00%</b>	<b>100.00%</b>

The Parent Company's plan assets are being managed by a trustee bank. The retirement fund includes time deposits, shares of stocks, which are traded in the PSE, and unquoted shares of stocks. The Parent Company has no transactions with its retirement fund and the retirement fund has no investments in shares of stocks of the Parent Company.

The Parent Company expects to contribute ₱20.93 million to the defined benefits retirement plan in 2021.

Shown below is the maturity analysis of the undiscounted benefit payments as at December 31, 2020:

Plan Year	Expected benefit payments	
	Parent Company	AFC
Less than 1 year	₱23,753	₱—
More than 1 year to 5 years	39,377	1,821
More than 5 years to 10 years	15,662	472
More than 10 years to 15 years	29,827	2,593
More than 15 years to 20 years	64,624	3,279
More than 20 years	486,680	4,540

The overall expected rate of return on assets is determined based on the market prices prevailing on the date applicable to the period over which the obligation is to be settled.

The average duration of the defined benefit obligations of the Parent Company and AFC is 19 years and 13 years, respectively.



The principal assumptions used in determining the pension liability of the Group's plans are shown below.

	Parent Company		AFC	
	2020	2019	2020	2019
Discount rate	3.69%	4.92%	3.21%	4.59%
Salary increase rate	5.00%	5.00%	11.00%	11.00%

The sensitivity analysis below has been determined based on reasonably possible changes of each significant assumption on the pension liability as at the end of the reporting period, assuming if all other assumptions were held constant:

<u>Parent Company</u>	Increase (decrease)	December 31, 2020
		Present value of the defined benefit obligation
Discount rates	4.69% (+1.00%)	₱77,430
	3.69% actual	84,299
	2.69% (-1.00%)	92,645
Salary increase rate	6.00% (+1.00%)	₱92,098
	5.00% actual	84,299
	4.00% (-1.00%)	77,733
		December 31, 2019
		Present value of the defined benefit obligation
Discount rates	5.92% (+1.00%)	₱56,257
	4.92% actual	60,980
	3.92% (-1.00%)	66,743
Salary increase rate	6.00% (+1.00%)	₱66,414
	5.00% actual	60,980
	4.00% (-1.00%)	56,439
		December 31, 2020
		Present value of the defined benefit obligation
<u>AFC</u>	4.29% (+1.00%)	₱2,836
	3.21% (actual)	3,082
	2.21% (-1.00%)	3,371
Salary increase rate	12% (+1.00%)	₱3,335
	11% (actual)	3,082
	10% (-1.00%)	2,860
		December 31, 2019
		Present value of the defined benefit obligation
Discount rates	5.59% (+1.00%)	₱2,017
	4.59% (actual)	2,152
	3.59% (-1.00%)	2,306
Salary increase rate	12% (+1.00%)	₱2,287
	11% (actual)	2,152
	10% (-1.00%)	2,030



### 31. Income Taxes

The provision for current and deferred tax in 2020, 2019 and 2018 include the following:

	2020	2019	2018
RCIT	₱23,147	₱1,385	₱4,623
MCIT	5,968	5,464	1,523
Provision for deferred taxes	72,768	25,743	7,255
	<b>₱101,883</b>	<b>₱32,592</b>	<b>₱13,401</b>

The components of the Group's deferred tax assets and liabilities are as follows:

	Deferred tax assets - net		Deferred tax liabilities - net	
	2020	2019	2020	2019
Deferred tax assets on:				
Allowance for inventory loss, impairment loss and others	₱4,415	₱4,415	₱75,981	₱116,412
Depletion of asset retirement obligation	2,523	2,404	-	-
Accumulated accretion on liability for mine rehabilitation	2,682	2,400	-	-
Accrued pension liability	2,423	2,376	27,770	27,103
Unrealized foreign exchange loss	148	231	-	-
Excess of payments over depreciation and interest expense	-	-	-	-
NOLCO	-	33,872	-	-
MCIT	-	6,685	-	-
	<b>₱12,191</b>	<b>₱52,383</b>	<b>₱103,751</b>	<b>₱143,515</b>
Deferred tax liabilities on:				
Unrealized foreign exchange gain	(₱3,773)	(₱2,538)	(₱1,552)	(₱1,121)
Remeasurement gain on retirement liability	(1,498)	(1,730)	(4,145)	(8,980)
Revaluation increment on land	(214)	(214)	(941,595)	(941,596)
Excess of lease payments over depreciation and interest expense	6	(169)	(50)	(55)
Cumulative translation adjustment of foreign subsidiaries	-	-	(13,541)	(14,397)
Revaluation increment on property, plant and equipment	-	-	(10,009)	(10,009)
Revaluation increment on artworks	-	-	(15,373)	(15,373)
	<b>(5,479)</b>	<b>(4,651)</b>	<b>(986,265)</b>	<b>(991,531)</b>
Net deferred tax assets (liabilities)	<b>₱6,712</b>	<b>₱47,732</b>	<b>(₱882,514)</b>	<b>(₱848,016)</b>

The Group has deductible temporary differences, unused NOLCO and MCIT, for which the deferred tax assets totaling ₱226.91 million and ₱288.79 million as at December 31, 2020 and 2019, respectively, were not recognized as management believes that it is not probable that sufficient future taxable profit will be available against which the benefit of the deferred tax assets can be utilized.



These are as follows:

	2020	2019	2018
Allowance for inventory loss, impairment loss and others	₱479,647	₱479,647	₱502,410
NOLCO	115,655	339,858	316,377
Accumulated accretion on liability for mine rehabilitation	65,236	54,170	53,259
Accumulated depletion on asset retirement obligation	24,564	20,766	18,514
MCIT	15,007	11,364	5,252
Share-based payment	13,689	21,670	25,146
Accrued expenses	8,002	8,002	8,002
Excess of depreciation and interest expense over lease payments	(463)	626	-
Unrealized foreign exchange losses	-	-	5,802
Straight-line amortization of accrued rent	-	-	499

On September 30, 2020, the BIR issued Revenue Regulations No. 25-2020 implementing Section 4(bbbb) of “Bayanihan to Recover As One Act” which states that the NOLCO incurred for taxable years 2020 and 2021 can be carried over and claimed as a deduction from gross income for the next five (5) consecutive taxable years immediately following the year of such loss.

As of December 31, 2020, the Group has incurred NOLCO before taxable year 2020 which can be claimed as deduction from the regular taxable income for the next three (3) consecutive taxable years, as follows:

Year Incurred	Availment Period	Amount	NOLCO Applied Previous Year/s	NOLCO Expired	NOLCO Applied Current year	NOLCO Unapplied
2017	2018-2020	₱147,185	₱-	(₱34,260)	(₱112,925)	₱-
2018	2019-2021	175,487	-	-	(175,487)	-
2019	2020-2022	130,093	-	-	(31,310)	98,783
		₱452,765	₱-	(₱34,260)	(₱319,722)	₱98,783

As of December 31, 2020, the Group has incurred NOLCO in taxable year 2020 which can be claimed as deduction from the regular taxable income for the next five (5) consecutive taxable years pursuant to the Bayanihan to Recover As One Act, as follows:

Year Incurred	Availment Period	Amount	NOLCO Applied Previous Year/s	NOLCO Expired	NOLCO Applied Current year	NOLCO Unapplied
2020	2021-2025	₱16,872	₱-	₱-	₱-	₱ 16,872



The Group has MCIT that can be applied against payment of regular income tax as follows:

Year Incurred	Availment Period	Amount	MCIT Applied Previous Year/s	MCIT Expired	MCIT Applied Current year	MCIT Unapplied
2017	2018-2020	₱6,675	₱-	(₱164)	(₱6,511)	₱-
2018	2019-2021	5,910	-	-	(2,347)	3,563
2019	2020-2022	5,464	-	-	-	5,464
2020	2021-2023	5,980	-	-	-	5,980
		<b>₱24,029</b>	<b>₱-</b>	<b>(₱164)</b>	<b>(₱8,858)</b>	<b>₱15,007</b>

Movements of NOLCO are as follow:

	2020	2019	2018
Balances at beginning of year	<b>₱452,765</b>	₱470,244	₱338,937
Additions	<b>16,872</b>	130,093	208,911
Expirations	<b>(34,260)</b>	(137,114)	(77,604)
Application	<b>(319,722)</b>	(10,458)	-
Balances at end of year	<b>₱115,655</b>	₱452,765	₱470,244

Movements of MCIT are as follow:

	2020	2019	2018
Balances at beginning of year	<b>₱18,049</b>	₱22,037	₱17,475
Additions	<b>5,980</b>	5,464	4,623
Expirations	<b>(164)</b>	(9,452)	(61)
Application	<b>(8,858)</b>	-	-
Balances at end of year	<b>₱15,007</b>	₱18,049	₱22,037

The Group has NOLCO and MCIT that can be claimed as deduction from future taxable income and future tax due, respectively, as follows:

Year incurred	Year of expiration	NOLCO	MCIT
2018	2021	₱-	₱3,563
2019	2022	98,783	5,464
2020	2023	-	5,980
2020	2025	16,872	-
		<b>₱115,655</b>	<b>₱15,007</b>

The reconciliation of pretax income (loss) computed at the statutory income tax rate to provision for (benefit from) income tax shown in the consolidated statements of income is as follows:

	2020	2019	2018
Tax computed at statutory rate	<b>₱144,980</b>	₱44,499	(₱39,733)
Add (deduct) effects of:			
Changes in unrecognized deferred tax assets	<b>(61,880)</b>	4,531	195,922
Nontaxable income	<b>(57,535)</b>	(99,344)	(199,891)

(forward)



	2020	2019	2018
Write-off of inventory allowance	₱40,431	₱-	₱-
Nondeductible expenses	32,645	31,813	33,546
Expiration of NOLCO	10,278	41,134	23,281
Application of MCIT	(8,858)	-	-
Expiration of MCIT	164	9,452	-
Forfeiture and expiry of stock options	1,904	1,025	354
Interest income subject to final tax	(246)	(518)	(78)
	<b>₱101,883</b>	<b>₱32,592</b>	<b>₱13,401</b>

### 32. Basic/Diluted EPS

Basic EPS is calculated by dividing the profit attributable to equity holders of the Parent Company by the weighted average number of common shares on issue during the year, excluding any ordinary shares purchased by the Parent Company and held as treasury shares.

In computing for the 2020 diluted EPS, the Parent Company considered the effect of stock options outstanding since these are dilutive. In 2019 and 2018, the diluted EPS did not consider the effect of stock options outstanding since these were anti-dilutive.

	2020	2019	2018
Net income	₱381,385	₱115,737	₱119,042
Current dividends on preference shares	(60)	(60)	(60)
Adjusted net income	<b>₱381,325</b>	<b>₱115,677</b>	<b>₱118,982</b>

Number of shares for computation of EPS as a result of stock split:

	2020	2019	2018
<b>Basic EPS</b>			
Weighted average common shares issued	616,687,512	616,119,252	616,119,252
Less: treasury shares	348,069	348,069	348,069
Weighted average common shares outstanding	<b>616,339,443</b>	<b>615,771,183</b>	<b>615,771,183</b>
<b>Diluted EPS</b>			
Weighted average common shares issued	616,687,512	616,119,252	616,119,252
Less: treasury shares	348,069	348,069	348,069
Convertible preferred shares	2,059,366	2,059,366	2,059,366
Stock options	3,055,844	-	-
Weighted average common shares outstanding	<b>621,454,653</b>	<b>617,830,549</b>	<b>617,830,549</b>
Basic EPS	<b>₱0.62</b>	<b>₱0.19</b>	<b>₱0.19</b>
Diluted EPS	<b>₱0.61</b>	<b>₱0.19</b>	<b>₱0.19</b>



### 33. Segment Information

PFRS 8, *Operating Segments*, requires operating segments to be identified on the basis of internal reports about components of the Group that are regularly reviewed by the chief operating decision maker, who is the President of the Parent Company.

For management purposes, the Group is organized into business units based on its products and services and has four reportable segments, as follows:

- The mining segment is engaged in exploration, nickel and gold mining operations.
- The health services segment is engaged in the business of offering medical and clinical diagnostic examinations and health care services on pre-employment.
- The logistics segment is engaged in logistics services to the supply-chain requirements of various industries.
- The other segments are comprised of aggregated operating segments of the Group who are engaged in research, development, real estate and water projects.

Management monitors the operating results of its business units separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on operating income or loss and is measured consistently with income or loss before income tax as reported in the consolidated financial statements.

Transfer prices between operating segments are on an arm's length basis in a manner similar to transactions with third parties. Intersegment revenues are eliminated upon consolidation and reflected in the 'eliminations' column. All other adjustments and eliminations are presented in the table below.

Segment assets include operating assets used by a segment and consist principally of operating cash, trade and other receivables, inventories and property, plant and equipment, net of allowances and provisions.

Segment liabilities include all operating liabilities and consist principally of trade and other payables, accrued expenses and bank loans. Segment assets and liabilities do not include deferred taxes.

#### Business Segments

Segment reporting is consistent in all periods presented as there are no changes in the structure of the Group's internal organization that will cause the composition of its reportable segment to change.

	2020						
	Mining	Health services	Logistics	Others	Total	Eliminations	Consolidated
<b>Revenue</b>							
External customers	₱1,585,826	₱33,137	₱-	₱762	₱1,619,725	₱-	₱1,619,725
Interest income	811	3	1	4	819	-	819
Inter-segment	-	-	65,127	-	65,127	(65,127)	-
Other income	209,555	668	5,570	1	215,794	(37,008)	178,786
	1,796,192	33,808	70,698	767	1,901,465	(102,135)	1,799,330
<b>Cost and Expenses</b>							
Interest expense	3,130	-	-	-	3,130	-	3,130
Direct costs	714,219	26,712	10,967	477	752,375	(24,524)	727,851
Selling and general expenses	403,009	7,465	12,552	9,550	432,576	(41,367)	391,209
Accretion expense	3,376	-	-	-	3,376	-	3,376
Depreciation, depletion and amortization (Note 26)	105,746	3,503	4,355	7,332	120,936	(66,667)	54,269

(forward)



2020							
	Mining	Health services	Logistics	Others	Total	Eliminations	Consolidated
Excise taxes and royalty fees (Note 21)	₱101,026	₱-	₱-	₱-	₱101,026	₱-	₱101,026
Other expenses	29,599	-	5,497	69	35,165	36	35,201
Income (loss) before tax	436,087	(3,872)	37,327	(16,661)	452,881	30,387	483,268
Provision for income tax	89,943	74	11,860	6	101,883	-	101,883
Net income (loss)	₱346,144	(₱3,946)	₱25,467	(₱16,667)	₱350,998	₱30,387	₱381,385
Operating assets	₱10,070,021	₱31,131	₱414,919	₱1,386,702	₱11,902,773	(₱4,553,726)	₱7,349,047
Operating liabilities	(₱2,642,876)	(₱75,897)	(₱365,202)	(₱861,777)	(₱3,945,752)	₱2,203,530	(₱1,742,222)
Other disclosure:							
Capital expenditure	₱34,314	₱-	₱3,229	₱-	₱37,543	₱-	₱37,543

2019							
	Mining	Health services	Logistics	Others	Total	Eliminations	Consolidated
Revenue							
External customers	₱747,726	₱35,964	₱11,176	₱7,201	₱802,067	₱-	₱802,067
Interest income	177	10	37	1,503	1,727	-	1,727
Inter-segment	-	-	8,479	-	8,479	(8,479)	-
Other income	301,535	1,752	21,876	236,178	561,341	(159,454)	401,887
	₱1,049,438	₱37,726	₱41,568	₱244,882	₱1,373,614	(₱167,933)	₱1,205,681
Cost and Expenses							
Interest expense	₱2,084	₱202	₱-	₱3	₱2,289	(₱258)	₱2,031
Direct costs	489,243	27,962	13,787	2,417	533,409	(3,413)	529,996
Selling and general expenses	272,718	16,722	21,318	23,065	333,823	(7,916)	325,907
Accretion expense	6,467	-	-	-	6,467	-	6,467
Impairment losses	100,266	1,341	-	6,915	108,482	-	108,482
Depreciation, depletion and amortization (Note 26)	118,634	10,870	4,544	8,086	142,134	(103,632)	38,502
Excise taxes and royalty fees (Note 21)	29,375	-	-	-	29,375	-	29,375
Other expenses	123,434	1	70	15,951	139,456	(16,109)	123,347
Income (loss) before tax	(92,743)	(19,372)	1,849	188,445	78,179	(36,605)	41,574
Provision for income tax	32,139	16	(467)	904	32,592	-	32,592
Net income (loss)	(₱124,882)	(₱19,388)	₱2,316	₱187,541	₱45,587	(₱36,605)	₱8,982
Operating assets	₱9,478,109	₱26,811	₱465,472	₱1,285,064	₱11,255,456	(₱4,381,648)	₱6,873,808
Operating liabilities	(₱2,463,015)	(₱68,573)	(₱440,574)	(₱576,245)	(₱3,548,407)	₱1,186,533	(₱3,548,407)
Other disclosure:							
Capital expenditure	₱21,683	₱30	₱3,400	₱6,924	₱32,037	₱-	₱32,037

2018							
	Mining	Health services	Logistics	Others	Total	Eliminations	Consolidated
Revenue							
External customers	₱939,131	₱42,917	₱18,522	₱8,134	₱1,008,704	₱-	₱1,008,704
Interest income	199	6	1	55	261	-	261
Inter-segment	-	-	27,994	-	27,994	(27,994)	-
Other income	621,904	4	1,171	3,195	626,274	(7,500)	618,774
	1,561,234	42,927	47,688	11,384	1,663,233	35,494	1,627,739
Cost and Expenses							
Interest expense	4,822	-	-	6	4,828	-	4,828
Direct costs	642,541	37,631	18,891	3,554	702,617	(10,802)	691,815
Selling and general expenses	314,709	21,990	30,672	11,058	378,429	(39,179)	339,250
Accretion expense	4,940	-	-	-	4,940	-	4,940
Impairment losses	-	11,130	-	5	11,135	-	11,135
Depreciation, depletion and amortization (Note 26)	134,674	6,688	5,893	6,168	153,423	(70,293)	83,130
Excise taxes and royalty fees (Note 21)	45,163	-	-	-	45,163	-	45,163
Other expenses	284,563	265	8,890	21,317	315,035	-	315,034
Income (loss) before tax	129,822	(34,777)	(16,658)	(30,274)	47,663	84,780	132,443
Provision for income tax	12,819	66	122	394	13,401	-	13,401
Net income (loss)	₱117,003	(₱34,843)	(₱16,780)	(₱31,118)	₱34,262	₱84,780	₱119,042
Operating assets	₱9,825,627	₱38,357	₱609,429	₱919,991	₱11,393,404	(₱4,789,754)	₱6,603,650
Operating liabilities	(₱3,168,903)	(₱145,021)	(₱574,805)	(₱465,718)	(₱4,354,447)	₱2,340,990	(₱2,013,457)
Other disclosure:							
Capital expenditure	₱2,043	₱2,355	₱-	₱4,685	₱9,083	₱-	₱9,083



Notes to operating segments:

- a. Inter-segment revenue, cost and expenses, assets and liabilities are eliminated upon consolidation and reflected in the 'eliminations' column.
- b. Capital expenditures consist of additions to property, plant and equipment and deferred mine exploration costs.
- c. Further information of the Group's revenue about products and services as well as geographical areas are presented in Note 21.
- d. Gross revenues from each of the customers from the mining segment that exceeded 10% of the Group's revenue for the years ended December 31, 2020, 2019 and 2018 are presented below:

	2020	2019	2018
Customer 1	₱700,800	₱575,363	₱614,775
Customer 2	812,952	–	171,436
	₱1,513,752	₱575,363	₱786,211

#### 34. Financial Risk Management Objectives and Policies

The Group's principal financial instruments pertain to unsecured and secured bank loans. The main purpose of these financial instruments is to fund the Group's operations. The Group has other financial instruments such as cash and cash equivalents, trade receivables, receivable from lessees of bunkhouses, loans receivable under trade and other receivables, advances under other noncurrent assets trade and accrued expenses under trade and other payables and obligations under finance lease, which arise directly from its operations. Other financial assets include FVOCI assets.

The significant risks arising from the Group's financial instruments are liquidity risk, credit risk and interest rate risk. The BOD reviews and agrees policies for managing each of these risks and these are summarized below.

##### Liquidity Risk

Liquidity risk arises from the possibility that the Group may encounter difficulties in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset.

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of bank loans and availment of suppliers' credit. The long-term relationship of the Group to its suppliers gives it the advantage to negotiate the payment terms.

As part of its liquidity risk management, the Group has access to sufficient external funding (*bank credit lines*) and loans payable maturing within 12 months can be rolled over with existing lenders. It also continuously assesses conditions in the financial markets for opportunities to avail bank loans and capital market issues. Accordingly, its loan maturity profile is regularly reviewed to ensure availability of funding through an adequate amount of credit facilities with financial institutions.

As at December 31, 2020 and 2019, cash and cash equivalents may be withdrawn anytime while quoted FVOCI may be converted to cash by selling them during the normal trading hours in any business day.



The tables below summarize the aging analysis of the Group's financial assets and the maturity profile of the Group's financial liabilities as at December 31, 2020 and 2019.

	2020				Total
	On demand	0-90 days	More than 90 days	More than one year	
<i>Financial assets</i>					
Cash and cash equivalents					
Cash on hand and in banks	₱261,481	₱-	₱-	₱-	₱261,481
Short-term deposits	51	10,016	-	-	10,067
Trade and other receivables					
Trade	-	-	178,583	-	178,583
Receivables from lessees of bunkhouses	1,110	-	-	-	1,110
Advances to contractors under "other current assets"	-	-	-	54,638	54,638
Nontrade under 'other noncurrent assets'	-	-	-	210,726	210,726
FVOCI					
UITF	-	-	-	12,941	12,941
Quoted shares	-	-	-	420	420
	₱262,642	₱10,016	₱178,583	₱278,725	₱729,966
<i>Financial liabilities</i>					
Loans payable	₱508,998	₱-	₱-	₱-	₱508,998
Trade and other payables					
Trade	-	330,948	-	-	330,948
Nontrade*	5,158	-	-	-	5,158
Accrued expenses	16,935	-	34,599	-	51,534
Lease liability	-	1,943	-	6,761	8,704
Other noncurrent liabilities					
Equity of claimowner incontract operations	-	-	-	49,136	49,136
	₱531,091	₱332,891	₱34,599	₱55,897	₱954,478
Net financial assets (liabilities)	(₱268,449)	(₱322,875)	₱143,984	₱222,828	(₱224,512)
<i>*Excluding statutory payables</i>					
	2019				Total
	On demand	0-90 days	More than 90 days	More than one year	
<i>Financial assets</i>					
Cash and cash equivalents					
Cash on hand and in banks	₱69,298	₱-	₱-	₱-	₱69,298
Short-term deposits	7,874	-	-	-	7,874
Trade and other receivables					
Trade	53,645	9,139	-	-	62,784
Receivables from lessees of bunkhouses	1,344	-	-	-	1,344
Advances to contractors under "other current assets"	-	-	63,356	-	63,356
Nontrade under "other noncurrent assets"	-	-	-	202,917	202,917
FVOCI					
UITF	-	-	-	12,724	12,724
Quoted shares	-	-	-	444	444
	₱132,161	₱9,139	₱63,356	₱216,085	₱420,741
<i>Financial liabilities</i>					
Loans payable	₱507,893	₱-	₱-	₱-	₱507,893
Trade and other payables					
Trade	292,619	-	74,039	-	366,658
Nontrade*	30,443	-	-	-	30,443
Accrued expenses	6,958	-	34,202	-	41,160
Lease liability	1,083	-	1,393	7,978	11,721
Other noncurrent liabilities					
Equity of claimowner incontract operations	-	-	-	49,136	49,136
	₱838,996	₱-	₱109,634	₱57,114	₱1,006,561
Net financial assets (liabilities)	(₱706,835)	₱9,139	(₱46,278)	₱158,971	(₱585,820)



Credit Risk

Credit risk refers to the potential loss arising from any failure by counterparties to fulfill their obligations as these falls due. It is inherent to the business that potential losses may arise due to the failure of its customers and counterparties to fulfill their obligations on maturity dates or due to adverse market conditions.

The Group trades only with recognized, creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures.

With respect to credit risk arising from other financial assets of the Group, which comprise of cash and cash equivalents, trade receivables, receivables from lessees of bunkhouses and loans receivable under trade and other receivables, advances under other noncurrent assets and FVOCI, the Group's exposure to credit risk arises from default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments.

Since the Group trades only with recognized third parties, there is no requirement for collateral. The table below shows the maximum exposure to credit risk for the components of the consolidated statements of financial position. The maximum exposure is shown at each instrument's carrying amount, before the effect of mitigation through the use of master netting and collateral agreements.

	2020	2019
Cash and cash equivalents		
Cash in banks	₱260,546	₱68,621
Short-term deposits	10,067	7,874
Trade and other receivables		
Trade	178,583	62,784
Receivables from lessees of bunkhouses	1,110	1,344
Advances to contractors under "other current assets"	54,638	63,356
Nontrade under "other noncurrent assets"	210,726	202,917
	<b>₱715,670</b>	<b>₱406,896</b>

The table below shows the credit quality by class of financial assets based on the Group's rating:

2020	Neither past due nor impaired		Past due but not impaired	Impaired	Total
	High-grade	Standard-grade			
Cash and cash equivalents					
Cash in banks	₱260,546	₱-	₱-	₱-	₱260,546
Short-term deposits	10,067	-	-	-	10,067
Trade and other receivables					
Trade	-	178,583	-	27,882	206,465
Receivables from lessees of bunkhouses	-	-	1,110	3,644	4,754
Loan receivable	-	-	-	49,763	49,763
Advances to contractors under "other current assets"	-	-	54,638	-	54,638
Nontrade under "other noncurrent assets"	-	-	210,726	151,892	362,618
<b>Total credit risk exposure</b>	<b>₱270,613</b>	<b>₱178,583</b>	<b>₱266,474</b>	<b>₱233,181</b>	<b>₱948,851</b>



2019	Neither past due nor impaired		Past due but not impaired	Impaired	Total
	High-grade	Standard- grade			
Cash and cash equivalents					
Cash in banks	₱68,621	₱-	₱-	₱-	₱68,621
Short-term deposits	7,874	-	-	-	7,874
Trade and other receivables					
Trade	-	62,784	-	27,882	90,666
Receivables from lessees of bunkhouses	-	-	1,344	3,644	4,988
Loan receivable	-	-	-	49,763	49,763
Advances to contractors under "other current assets"	-	-	63,356	2,411	65,767
Nontrade under "other noncurrent assets"	-	-	202,917	151,892	354,809
<b>Total credit risk exposure</b>	<b>₱76,495</b>	<b>₱62,784</b>	<b>₱267,617</b>	<b>₱235,592</b>	<b>₱642,488</b>

The Group has assessed the credit quality of the following financial assets:

- Cash and cash equivalents are assessed as high-grade since these are deposited in reputable banks, which have a low probability of default.
- Trade receivables, which pertain mainly to receivables from sale of nickel ore, were assessed as standard-grade. These were assessed based on past collection experience and the debtors' ability to pay.
- UITF and quoted financial assets at FVOCI were assessed as high-grade since these are instruments from companies with good financial condition and are operating in an industry, which has potential growth.
- Other financial assets such as receivables from lessees of bunkhouses, loans receivables, advances to contractors under other current assets and nontrade under other noncurrent assets were assessed as standard-grade, based on past collection experience and debtors' ability to pay.

#### *Impairment of Financial Assets*

The Group has financial assets consisting of cash and cash equivalent, trade receivables, UITF and quoted financial asset at FVOCI, receivables from lessees of bunkhouses, loan receivable, advances to contractors under "other current assets" and nontrade under "other noncurrent assets". While cash and cash equivalent are also subject to the impairment requirements of PFRS 9, the identified impairment loss were immaterial.

The Group applies the PFRS 9 simplified approach in measuring ECL which uses a lifetime expected loss allowance for all trade receivables. On the other hand, the general approach was used in measuring ECL for receivables from lessees of bunkhouses, loan receivable, advances to contractors under "other current assets" and nontrade under "other noncurrent assets". The Group provided a provision for ECLs for all financial assets amounted to ₱240.59 million and ₱235.59 million in 2020 and 2019, respectively.

#### Market Risks

##### *Interest Rate Risk*

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to interest rate risk relates primarily to the Group's long-term debt obligations with floating interest rates.

As at December 31, 2020 and 2019, the Group's exposure to the risk for changes in market interest rate relates primarily to its secured bank loans. The Group regularly monitors its interest due to exposure from interest rates movements.



The Group's secured and unsecured loans payable are both payable on demand while other loans payable are payable within 3 years. Nominal interest rates vary from floating rate of 91-day Philippine Php T-bill rate for peso loans and 3-month LIBOR foreign loans, plus a margin of 2.5% for unsecured loans and 3.5% for secured loans.

	Change in interest rates (in basis points)	Sensitivity of pretax Income
<b>2020</b>		
	+100	(P5,090)
	-100	5,090
<b>2019</b>		
		Change in interest rates (in basis points)
	+100	Sensitivity of pretax Income
	-100	(P-)
		-

*Foreign Currency Risk*

Foreign currency risk is the risk to earnings or capital arising from changes in foreign exchange rates. The Group takes on exposure to effects of fluctuations in the prevailing foreign currency exchange rates on its financial performance and cash flows. The Group has transactional currency exposures. Such exposure arises from the sale of gold and nickel ore and the purchase of certain goods and services denominated in US\$. All sales of gold and nickel ore are denominated in US\$. Dollar conversion of metal sales to Philippine peso is based on the prevailing exchange rate at the time of sale.

The Group's policy is to maintain foreign currency exposure within acceptable limits. The Group believes that its profile of foreign currency exposure on its assets and liabilities is within conservative limits for an institution engaged in the type of business in which the Group is involved. The Group did not seek to hedge the exposure on the change in foreign exchange rates between the US\$ and the Philippine peso. The Group believes that active currency hedging would not provide long-term benefits to stockholders.

The Group's foreign currency-denominated monetary assets and liabilities as at December 31, 2020 and 2019 follow:

	2020		2019	
	US\$	Peso equivalent	US\$	Peso equivalent
<u>Financial Assets</u>				
Cash in banks	\$1,280	₱61,469	\$8	₱405
Trade receivables under "trade and other receivables"	527	25,308	527	26,685
<b>Total monetary assets</b>	<b>\$1,807</b>	<b>₱86,777</b>	<b>\$535</b>	<b>₱27,090</b>

As at December 31, 2020 and 2019, the exchange rates of the Philippine peso to the US\$ based on the Bankers Association of the Philippines are ₱48.023 and ₱50.635, respectively.



The sensitivity to a reasonably possible change in the US\$ exchange rate, with all other variables held constant, of the Group's income before income tax as at December 31, 2020 and 2019 is as follows:

	Change in foreign exchange rate	Income before income tax effect
<b>2020</b>		
	Strengthens by 0.14%	₱119
	Weakens by 0.96%	(830)
	Change in foreign exchange rate	Income before income tax effect
<b>2019</b>		
	Strengthens by 1.25%	₱338
	Weakens by 2.33%	(632)

*Equity Price Risk*

Equity price risk is the risk to earnings or capital arising from changes in stock exchange indices relating to its quoted equity securities. The Group's exposure to equity price risk relates primarily to its quoted shares under financial assets at FVOCI.

The Group's policy is to maintain its risk to an acceptable level. Movement of share prices is monitored regularly to determine impact on the consolidated statement of financial position.

The table shows the sensitivity to a reasonably possible change in equity prices of quoted equity instruments as at December 31, 2020 and 2019, except equity-linked investments.

	Average change in market indices (in percentage)	Sensitivity to equity
<b>2020</b>		
	33.30%	₱144
	(33.30%)	(144)
	Average change in market indices (in percentage)	Sensitivity to equity
<b>2019</b>		
	14.49%	₱91
	(14.49%)	(91)

The equity impact is arrived using the reasonably possible change of the relevant market indices and the specific adjusted beta of each stock the Group holds. Adjusted beta is the forecasted measure of the volatility of a security or a portfolio in comparison to the market as a whole.

Capital Management

The Group maintains a capital base to cover risks inherent in the business. The primary objective of the Group's capital management is to optimize the use and earnings potential of the Group's resources, ensuring that the Group complies with externally imposed capital requirements, if any, and considering changes in economic conditions and the risk characteristics of the Group's activities.



The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may obtain additional advances from stockholders or issue new shares. No changes were made in the objectives, policies or processes in 2020, 2019 and 2018. The Group monitors capital using the parent company financial statements. As at December 31, 2020 and 2019, the Group has met its capital management objectives.

The following table summarizes the total capital considered by the Group:

	2020	2019
Capital stock	P617,215	P616,863
Capital surplus	388,646	380,382
Retained earnings	2,598,788	2,217,403
Other components of equity	1,183,409	1,205,018
Treasury shares	(8,016)	(8,016)
	<b>P4,780,042</b>	<b>P4,411,650</b>

Further, the Group monitors capital using debt to equity ratio, which is total liabilities divided by total equity. Debt to equity ratios of the Group as at December 31, 2020 and 2019 are as follows:

	2020	2019
Total liabilities (a)	P2,599,240	P2,509,890
Total equity (b)	4,780,042	4,411,650
Debt-to-equity ratio (a/b)	<b>0.54:1</b>	<b>0.57:1</b>

### 35. Changes in Liabilities arising from Financing Activities

Movements on the reconciliation of liabilities arising from financing activities are as follows:

	January 1, 2020	Cash flows	Foreign exchange movement	Additions	Reclassification	Others	December 31, 2020
Loans payable	P507,893	P-	P-	P1,105	P-	P-	P508,998
Lease liability	8,059	(2,070)	-	165	-	-	6,154
Liability for mine rehabilitation	66,575	-	-	-	(38,136)	39,031	67,470
Other noncurrent liabilities	414,201	(7,166)	(15,623)	-	-	-	391,412
	<b>P996,728</b>	<b>(P9,236)</b>	<b>P(P15,623)</b>	<b>P1,270</b>	<b>(P38,136)</b>	<b>P39,031</b>	<b>P974,034</b>

	January 1, 2019	Effect of adoption of PFRS 16	Cash flows	Foreign exchange movement	Additions	Reclassification	Others	December 31, 2019
Loans payable	P530,670	P-	(P22,777)	P-	P-	P-	P-	P507,893
Lease liability	-	10,758	(2,699)	-	-	-	-	8,059
Liability for mine rehabilitation	90,329	-	(12,788)	-	20,871	(25,007)	(6,830)	66,575
Other noncurrent liabilities	429,953	-	(3,554)	(12,198)	-	-	-	414,201
	<b>P1,050,952</b>	<b>P10,758</b>	<b>(P41,818)</b>	<b>(P12,198)</b>	<b>P20,871</b>	<b>(P25,007)</b>	<b>(P6,830)</b>	<b>P996,728</b>

Others include interest expense, accretion expense, and changes in estimate of liability for mine rehabilitation (see Notes 14, 16 and 17).



### 36. Fair Value Measurement

#### Fair Values

Fair value is defined as the amount at which a financial instrument can be exchanged in an orderly transaction between market participants at the measurement date.

Set out below is a comparison by category and class of carrying amounts and estimated fair values of the Group's significant financial assets and liabilities as at December 31, 2020 and 2019:

	Carrying amounts		Fair values	
	2020	2019	2020	2019
<b>Financial Assets:</b>				
FVOCI:				
UITF	₱12,941	₱12,724	₱12,941	₱12,724
Quoted	420	444	420	444
<b>Financial Liabilities:</b>				
Loans payable	₱508,998	₱507,893	₱508,998	₱507,893

The following methods and assumptions were used to estimate the fair value of each class of financial instruments for which it is practicable to estimate such value:

*Cash and Cash Equivalents, trade receivables and receivable from lessees of bunkhouses under Trade and Other Receivables, advances under Other Current Assets, nontrade under Other Noncurrent Assets, trade and accrued expenses under Trade and Other Payables, and equity of claimowner in contract operations under Other Noncurrent Liabilities*

The fair values of these instruments approximate their carrying amounts as of reporting date due to the short-term nature.

#### *Loan Receivable*

The fair value of loans receivable approximates the carrying amounts as of reporting date due to the short-term nature. Loans receivable are due and demandable.

#### *Financial assets measured at FVOCI*

The fair value of investments that are actively traded in organized markets is determined by reference to quoted market bid prices at the close of business on reporting date.

#### *Loans Payable*

Where the repricing of the variable-rate interest bearing loan is frequent (i.e., three-month repricing), the carrying value approximates the fair value. The fair value of other loans payable is determined by discounting the principal using the 3-month LIBOR rate of 0.58% plus credit spread of 5.42%.

#### *Lease Liabilities*

The fair value of lease liabilities approximates their carrying values, which are also the present value of these liabilities.



Fair Value Hierarchy

Set out below is the fair value hierarchy of the Group's assets measured at fair value.

	2020		
	Fair value measurement using		
	Quoted prices in active market (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Land at revalued amounts	₱-	₱-	₱1,621,149
Artworks at revalued amounts	-	-	52,139
Investment properties	-	-	2,633,677
Financial assets at FVOCI	13,361	-	-
Intangible asset under "Other noncurrent assets"	250	-	-
	<b>₱13,611</b>	<b>₱-</b>	<b>₱4,306,965</b>

	2019		
	Fair value measurement using		
	Quoted prices in active market (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Land at revalued amounts	₱-	₱-	₱1,621,149
Artworks at revalued amounts	-	-	52,139
Investment properties	-	-	2,478,862
Financial assets at FVOCI	13,168	-	-
Intangible asset under "Other noncurrent assets"	250	-	-
	<b>₱13,418</b>	<b>₱-</b>	<b>₱4,152,150</b>

Sensitivity of the fair value measurements that are categorized within Level 3

A 5% increase (decrease) in internal factors used in determining the price per square meter, such as use, size and location would decrease (increase) the fair value of land by ₱319.76 million (₱86.59 million) and ₱335.23 million (₱322.23 million) as at December 31, 2020 and 2019, respectively.

A 5% increase (decrease) in leeway discount in determining the price of each artwork would increase (decrease) the fair value of artworks by ₱1.54 million (₱1.54 million) as at December 31, 2020 and 2019, respectively.

As at December 31, 2020 and 2019, the fair value of land at revalued amounts, artworks at revalued amounts and investment property are calculated using the sales comparative approach, which resulted in measurement being classified as Level 3 in the fair value hierarchy.

As at December 31, 2020 and 2019, the Group's FVOCI and intangible asset under "other noncurrent assets" are classified under Level 1 of the fair value hierarchy since these are based on quoted market prices or binding dealer price quotations.

There are no other assets and liabilities measured at fair value using any of the valuation techniques as at December 31, 2020 and 2019. There were no transfers between levels in 2020 and 2019.



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### 37. Agreements and Contingencies

- a. The Parent Company and certain subsidiaries are contingently liable for liabilities arising from lawsuits or claims (mostly labor, civil, mines administrative and ports related cases) filed by third parties, which are either pending decision by the courts or are subject to settlement agreements. The outcome of these lawsuits or claims cannot be presently determined. In the opinion of management and its legal counsel, the eventual liability from these lawsuits or claims, if any, will not have a material effect on the consolidated financial statements.
- b. In 2011, the Parent Company signed a 20-year power supply agreement with Therma Luzon, Inc. (TLI), a wholly owned subsidiary of Aboitiz Power Corporation, to supply power to its current and future mining operations in Itogon, Benguet. The contract provides for a payment discount of 0.5% on its monthly billing if the Parent Company pays TLI on or before the 15th of the payment month.

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### 38. Subsequent Event

#### Ratification by Congress of the CREATE Bill

On February 3, 2021, the Philippine House of Representatives and the Senate have ratified the Bicameral Committee's version of the proposed "Corporate Recovery and Tax Incentives for Enterprises Act" or "CREATE", reconciling the disagreeing provisions of Senate Bill No. 1357 and House Bill No. 4157.

The ratified version of the bill will be submitted to the President for his approval and upon receipt of the bill, the President may do any of the following:

1. Sign the enrolled bill without vetoing any line or item therein;
2. Sign the enrolled bill with line or item veto which veto may be overridden by Congress; or
3. Inaction within 30 days from receipt which would result to the automatic approval of the enrolled bill as it is.

Once the ratified bill is signed into law, it is set to take effect 15 days after its complete publication in the Official Gazette or in a newspaper of general circulation.

One of the important provisions of the ratified bill is the reduction of the income tax rate from 30% to 25% effective July 1, 2020.

If enacted into law, 1% MCIT will be applied on the gross income of the Company from July 1, 2020 to December 31, 2020 from the previous rate of 2%. The impact on the Company's income tax expense is not expected to be material.

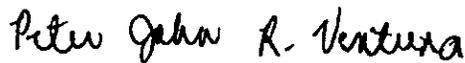


## INDEPENDENT AUDITOR'S REPORT ON SUPPLEMENTARY SCHEDULES

The Board of Directors and Stockholders  
Benguet Corporation  
7th Floor Universal Re-Building  
106 Paseo de Roxas, Makati City

We have audited in accordance with Philippine Standards on Auditing, the consolidated financial statements of Benguet Corporation and its subsidiaries as at December 31, 2020 and 2019, and for each of the three years in the period ended December 31, 2020, included in this Form 17-A and have issued our report thereon dated March 18, 2021. Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The schedules listed in the Index to the Consolidated Financial Statements and Supplementary Schedules are the responsibility of the Company's management. These schedules are presented for purposes of complying with the Revised Securities Regulation Code Rule 68, and are not part of the basic financial statements. These schedules have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, fairly state, in all material respects, the information required to be set forth therein in relation to the basic financial statements taken as a whole.

SYCIP GORRES VELAYO & CO.



Peter John R. Ventura  
Partner  
CPA Certificate No. 0113172  
SEC Accreditation No. 1735-A (Group A),  
January 15, 2019, valid until January 14, 2022  
Tax Identification No. 301-106-741  
BIR Accreditation No. 08-001998-140-2018,  
December 17, 2018, valid until December 16, 2021  
PTR No. 8534379, January 4, 2021, Makati City

March 18, 2021

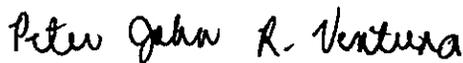


## INDEPENDENT AUDITOR'S REPORT ON COMPONENTS OF FINANCIAL SOUNDNESS INDICATORS

The Board of Directors and Stockholders  
Benguet Corporation  
7th Floor Universal Re-Building  
106 Paseo de Roxas, Makati City

We have audited in accordance with Philippine Standards on Auditing, the consolidated financial statements of Benguet Corporation and its subsidiaries (the Group) as at December 31, 2020 and 2019 and for each of the three years in the period ended December 31, 2020, and have issued our report thereon dated March 18, 2021. Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The Supplementary Schedule on Financial Soundness Indicators, including their definitions, formulas, calculation, and their appropriateness or usefulness to the intended users, are the responsibility of the Group's management. These financial soundness indicators are not measures of operating performance defined by Philippine Financial Reporting Standards (PFRSs) and may not be comparable to similarly titled measures presented by other companies. This schedule is presented for the purpose of complying with the Revised Securities Regulation Code Rule 68 issued by the Securities and Exchange Commission, and is not a required part of the basic financial statements prepared in accordance with PFRSs. The components of these financial soundness indicators have been traced to the Group's consolidated financial statements as at December 31, 2020 and 2019 and for each of the three years in the period ended December 31, 2020, and no material exceptions were noted.

SYCIP GORRES VELAYO & CO.



Peter John R. Ventura  
Partner  
CPA Certificate No. 0113172  
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March 18, 2021



**BENGUET CORPORATION AND SUBSIDIARIES**  
**INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS AND**  
**SUPPLEMENTARY SCHEDULES**  
**FOR THE YEAR ENDED DECEMBER 31, 2020**

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**SCHEDULE I**  
**RECONCILIATION OF RETAINED EARNINGS**  
**AVAILABLE FOR DIVIDEND DECLARATION**  
**As at December 31, 2020**

**BENGUET CORPORATION**  
**7th Floor Universal Re-Building, 106 Paseo de Roxas, Makati City**

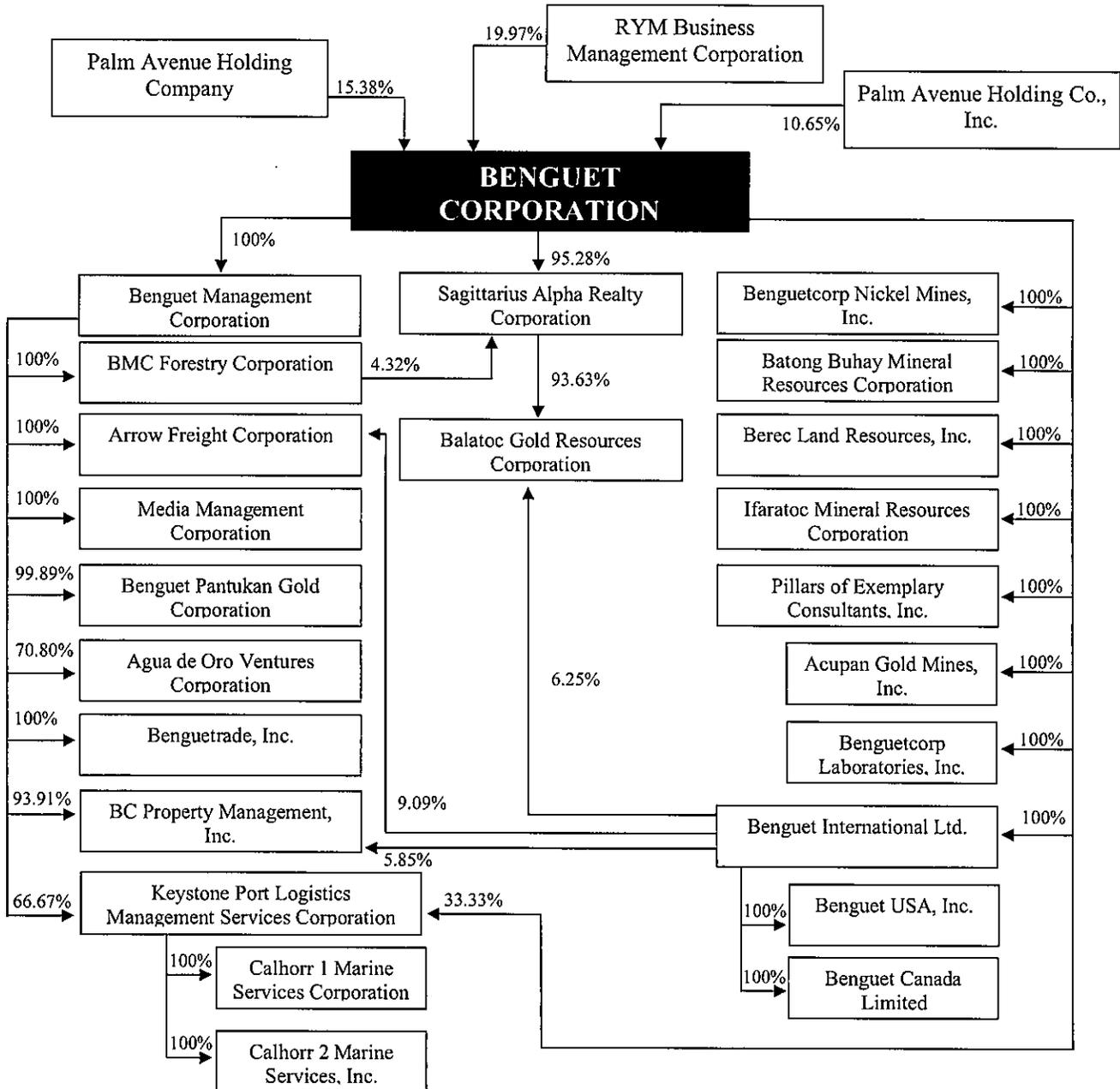
<b>Unappropriated Retained Earnings, beginning</b>	<b>₱2,345,951</b>
Effect of quasi-reorganization on revaluation increment	(1,010,848)
Accumulated fair value gains of investment properties	(851,692)
<b>Unappropriated Retained Earnings, as adjusted to available for dividend distribution, beginning</b>	<b>483,411</b>
<b>Add: Net income actually earned/ realized during the period</b>	
Net income during the period closed to Retained Earnings	176,250
Less: Non-actual/unrealized income net of tax	-
Equity in net income of associate/joint venture	-
Unrealized foreign exchange gain - net (except those attributable to Cash and Cash Equivalents)	4,958
Fair value adjustment (mark-to-market gains)	-
Fair value adjustment of Investment Property resulting to gain	191,154
Adjustment due to deviation from PFRS/GAAP - gain	-
Other unrealized gains or adjustments to the retained earnings as a result of certain transactions accounted for under the PFRSs	-
Subtotal	196,112
<b>Add: Non-actual losses</b>	
Depreciation on revaluation increment (after tax)	-
Adjustment due to deviation from PFRS/GAAP - loss	-
Loss on fair value adjustment of investment property (after tax)	-
Subtotal	-
<b>Net loss actually incurred during the period</b>	<b>(19,862)</b>
<b>Add (Less):</b>	
Dividend declarations during the period	-
Appropriations of Retained Earnings during the period	-
Reversals of appropriations	-
Effects of prior period adjustments	-
Treasury shares	(8,016)
	<b>(8,016)</b>
<b>TOTAL RETAINED EARNINGS, END AVAILABLE FOR DIVIDEND</b>	<b>₱455,533</b>

**SCHEDULE II**  
**BENGUET CORPORATION AND SUBSIDIARIES**  
**FINANCIAL RATIOS**  
**PURSUANT TO REVISED SRC RULE 68**  
**DECEMBER 31, 2020**

Ratio	Formula	2020	2019														
<b><u>Profitability Ratios:</u></b>																	
Return on assets	Net Income divided by total average assets	5.33%	1.71%														
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Net income</td> <td style="text-align: right;">₱381,385</td> </tr> <tr> <td>Divided by: Total average asset</td> <td style="text-align: right;">7,150,411</td> </tr> <tr> <td><b>Return on assets</b></td> <td style="text-align: right;"><b>5.33%</b></td> </tr> </table>	Net income	₱381,385	Divided by: Total average asset	7,150,411	<b>Return on assets</b>	<b>5.33%</b>										
Net income	₱381,385																
Divided by: Total average asset	7,150,411																
<b>Return on assets</b>	<b>5.33%</b>																
Return on equity	Net income divided by total shareholder's equity	7.98%	1.31%														
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Net income</td> <td style="text-align: right;">₱381,385</td> </tr> <tr> <td>Divided by: Total shareholder's equity</td> <td style="text-align: right;">4,780,042</td> </tr> <tr> <td><b>Return on equity</b></td> <td style="text-align: right;"><b>7.98%</b></td> </tr> </table>	Net income	₱381,385	Divided by: Total shareholder's equity	4,780,042	<b>Return on equity</b>	<b>7.98%</b>										
Net income	₱381,385																
Divided by: Total shareholder's equity	4,780,042																
<b>Return on equity</b>	<b>7.98%</b>																
Gross profit margin	Gross profit divided by total revenue	52.77%	30.92%														
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Total revenue</td> <td style="text-align: right;">₱1,619,725</td> </tr> <tr> <td>Less: Cost of mine products sold</td> <td style="text-align: right;">725,772</td> </tr> <tr> <td>Cost of services and other sales</td> <td style="text-align: right;">39,167</td> </tr> <tr> <td></td> <td style="text-align: right;">764,939</td> </tr> <tr> <td>Gross profit</td> <td style="text-align: right;">854,786</td> </tr> <tr> <td>Divided by: Total revenue</td> <td style="text-align: right;">1,619,725</td> </tr> <tr> <td><b>Gross profit margin</b></td> <td style="text-align: right;"><b>52.77%</b></td> </tr> </table>	Total revenue	₱1,619,725	Less: Cost of mine products sold	725,772	Cost of services and other sales	39,167		764,939	Gross profit	854,786	Divided by: Total revenue	1,619,725	<b>Gross profit margin</b>	<b>52.77%</b>		
Total revenue	₱1,619,725																
Less: Cost of mine products sold	725,772																
Cost of services and other sales	39,167																
	764,939																
Gross profit	854,786																
Divided by: Total revenue	1,619,725																
<b>Gross profit margin</b>	<b>52.77%</b>																
Operating profit margin	Operating income divided by total revenue	21.32%	(15.17%)														
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Total revenue</td> <td style="text-align: right;">₱1,619,725</td> </tr> <tr> <td>Less: Operating costs and expenses</td> <td style="text-align: right;">1,274,355</td> </tr> <tr> <td>Operating income</td> <td style="text-align: right;">345,370</td> </tr> <tr> <td>Divided by: Total revenue</td> <td style="text-align: right;">1,619,725</td> </tr> <tr> <td><b>Operating profit margin</b></td> <td style="text-align: right;"><b>21.32%</b></td> </tr> </table>	Total revenue	₱1,619,725	Less: Operating costs and expenses	1,274,355	Operating income	345,370	Divided by: Total revenue	1,619,725	<b>Operating profit margin</b>	<b>21.32%</b>						
Total revenue	₱1,619,725																
Less: Operating costs and expenses	1,274,355																
Operating income	345,370																
Divided by: Total revenue	1,619,725																
<b>Operating profit margin</b>	<b>21.32%</b>																
Net profit margin	Net profit divided by total revenue	23.55%	14.43%														
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Net income</td> <td style="text-align: right;">₱381,385</td> </tr> <tr> <td>Divided by: Total revenue</td> <td style="text-align: right;">1,619,725</td> </tr> <tr> <td><b>Net profit margin</b></td> <td style="text-align: right;"><b>23.55%</b></td> </tr> </table>	Net income	₱381,385	Divided by: Total revenue	1,619,725	<b>Net profit margin</b>	<b>23.55%</b>										
Net income	₱381,385																
Divided by: Total revenue	1,619,725																
<b>Net profit margin</b>	<b>23.55%</b>																
<b><u>Liquidity and Solvency Ratios:</u></b>																	
Current ratio	Total current assets divided by total current liabilities	1.06:1	0.73:1														
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Total current assets</td> <td style="text-align: right;">₱1,246,659</td> </tr> <tr> <td>Divided by: Total current liabilities</td> <td style="text-align: right;">1,171,537</td> </tr> <tr> <td><b>Current ratio</b></td> <td style="text-align: right;"><b>1.06</b></td> </tr> </table>	Total current assets	₱1,246,659	Divided by: Total current liabilities	1,171,537	<b>Current ratio</b>	<b>1.06</b>										
Total current assets	₱1,246,659																
Divided by: Total current liabilities	1,171,537																
<b>Current ratio</b>	<b>1.06</b>																

Ratio	Formula	2020	2019														
Quick ratio	Quick assets divided by total current liabilities	0.64:1	0.33:1														
	<table border="1"> <tr> <td>Total current assets</td> <td>₱1,246,659</td> </tr> <tr> <td>Less: Inventories</td> <td>101,140</td> </tr> <tr> <td>Other current assets</td> <td>398,720</td> </tr> <tr> <td></td> <td>499,860</td> </tr> <tr> <td>Quick assets</td> <td>746,799</td> </tr> <tr> <td>Divided by: Total current liabilities</td> <td>1,171,537</td> </tr> <tr> <td>Quick ratio</td> <td>0.64</td> </tr> </table>	Total current assets	₱1,246,659	Less: Inventories	101,140	Other current assets	398,720		499,860	Quick assets	746,799	Divided by: Total current liabilities	1,171,537	Quick ratio	0.64		
Total current assets	₱1,246,659																
Less: Inventories	101,140																
Other current assets	398,720																
	499,860																
Quick assets	746,799																
Divided by: Total current liabilities	1,171,537																
Quick ratio	0.64																
Solvency ratio	Total assets divided by total liabilities	2.84:1	2.76:1														
	<table border="1"> <tr> <td>Total assets</td> <td>₱7,379,282</td> </tr> <tr> <td>Divided by: Total liabilities</td> <td>2,599,240</td> </tr> <tr> <td>Solvency ratio</td> <td>2.84</td> </tr> </table>	Total assets	₱7,379,282	Divided by: Total liabilities	2,599,240	Solvency ratio	2.84										
Total assets	₱7,379,282																
Divided by: Total liabilities	2,599,240																
Solvency ratio	2.84																
<b>Financial Leverage Ratios:</b>																	
Asset to equity ratio	Total assets divided by total equity	1.54:1	1.57:1														
	<table border="1"> <tr> <td>Total assets</td> <td>₱7,379,282</td> </tr> <tr> <td>Divided by: Total equity</td> <td>4,780,042</td> </tr> <tr> <td>Asset to equity ratio</td> <td>1.54</td> </tr> </table>	Total assets	₱7,379,282	Divided by: Total equity	4,780,042	Asset to equity ratio	1.54										
Total assets	₱7,379,282																
Divided by: Total equity	4,780,042																
Asset to equity ratio	1.54																
Debt ratio	Total liabilities divided by total assets	0.35:1	0.36:1														
	<table border="1"> <tr> <td>Total liabilities</td> <td>₱2,599,240</td> </tr> <tr> <td>Divided by: Total assets</td> <td>7,379,282</td> </tr> <tr> <td>Debt ratio</td> <td>0.35</td> </tr> </table>	Total liabilities	₱2,599,240	Divided by: Total assets	7,379,282	Debt ratio	0.35										
Total liabilities	₱2,599,240																
Divided by: Total assets	7,379,282																
Debt ratio	0.35																
Debt to equity ratio	Total liabilities divided by total equity	0.54:1	0.57:1														
	<table border="1"> <tr> <td>Total liabilities</td> <td>₱2,599,240</td> </tr> <tr> <td>Divided by: Total equity</td> <td>4,780,042</td> </tr> <tr> <td>Debt to equity ratio</td> <td>0.54</td> </tr> </table>	Total liabilities	₱2,599,240	Divided by: Total equity	4,780,042	Debt to equity ratio	0.54										
Total liabilities	₱2,599,240																
Divided by: Total equity	4,780,042																
Debt to equity ratio	0.54																
Interest coverage ratio	Earnings before interest and taxes divided by total interest expense	155.40:1	74.03:1														
	<table border="1"> <tr> <td>Income before income tax and interest</td> <td>₱486,398</td> </tr> <tr> <td>Divided by: Total interest expense</td> <td>3,130</td> </tr> <tr> <td>Interest coverage ratio</td> <td>155.40</td> </tr> </table>	Income before income tax and interest	₱486,398	Divided by: Total interest expense	3,130	Interest coverage ratio	155.40										
Income before income tax and interest	₱486,398																
Divided by: Total interest expense	3,130																
Interest coverage ratio	155.40																

**SCHEDULE III**  
**BENGUET CORPORATION AND SUBSIDIARIES**  
**A MAP SHOWING THE RELATIONSHIPS OF THE**  
**COMPANIES WITHIN THE GROUP**  
**PURSUANT TO SRC RULE 68, AS AMENDED**  
**DECEMBER 31, 2020**



SCHEDULE A

**BENGUET CORPORATION AND SUBSIDIARIES**  
**FINANCIAL ASSETS**  
**DECEMBER 31, 2020**  
**(Amounts in Thousands)**

Name of issuing entity and association of each issue	Number of shares or principal amounts of bonds and notes	Amount shown in the balances sheet (figures in thousands)	Income received and accrued
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NOT APPLICABLE			
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**SCHEDULE B**

**BENGUET CORPORATION AND SUBSIDIARIES  
AMOUNTS RECEIVABLE FROM DIRECTORS, OFFICERS, EMPLOYEES, RELATED PARTIES AND PRINCIPAL STOCKHOLDERS  
(OTHER THAN RELATED PARTIES)  
DECEMBER 31, 2020  
(Amounts in Thousands)**

Name and Designation of Debtor	Balance at beginning period	Additions	Amounts collected / settlements	Amounts written off	Current	Not current	Balance at end period
Max D. Arceno <i>SVP - Accounting &amp; Treasurer</i>	₱602	P-	₱50	P-	₱552	P-	₱552
Reynaldo P. Mendoza <i>EVP - Legal</i>	1,268	3	-	-	1,271	-	1,271
Cynthia Lazaro <i>Sec. Mgr - Insurance (Treasury)</i>	548	2	-	-	550	-	550
Romy L. Tangalin <i>Legal Assistant (Legal)</i>	532	-	-	-	532	-	532
Sheena Irish Barra <i>Division Manager (Accounting)</i>	351	-	116	-	235	-	235
Camilo Bernaldo <i>Section Mgr - Gov't Liaison (Legal)</i>	94	-	48	-	46	-	46
Mancel Ulep <i>Group Asst. for SVP-Finance &amp; SVP- Nickel Op'n (Logistics)</i>	119	-	-	-	119	-	119
Edcn Barcelona <i>Section Manager-Stockholders Relation Office</i>	111	-	-	-	111	-	111
Nclisen D. Offindo <i>HR &amp; Admin. Manager</i>	61	-	17	-	44	-	44
Mary Jean Dalit <i>Accountant (Accounting)</i>	35	-	-	-	35	-	35
Pamela Gendrano <i>APP - Compliance, COMREL &amp; Environmental</i>	79	-	65	-	13	-	13
Martene Villanueva <i>Purchasing Asst (Materials)</i>	7	30	21	-	16	-	16
Lourdes O. Calub <i>Finance Manager (Finance)</i>	20	-	-	-	20	-	20
Harold Jacinto <i>Technical Assistant</i>	15	15	-	-	30	-	30
Jessa I. Repasa <i>Admin Assistant</i>	-	30	6	-	24	-	24

**SCHEDULE C**

**BENGUET CORPORATION AND SUBSIDIARIES  
AMOUNTS RECEIVABLE FROM RELATED PARTIES  
WHICH ARE ELIMINATED DURING THE  
CONSOLIDATION OF FINANCIAL STATEMENTS  
DECEMBER 31, 2020  
(Amounts in Thousands)**

Name and Designation of Debtor	Balance at Beginning period	Additions	Amounts collected/ settlements	Amounts Written off	Current	Not Current	Balance at end period
	P-	P-	(P28,377)	P-	(P612,042)	P-	(P612,042)
Benguetcorp Nickel Mines, Inc.	78,393	60	-	-	78,453	-	78,453
Balatoc Gold Resources Corporation	(44,850)	971	-	-	(43,879)	-	(43,879)
Benguetrade, Inc.	38,336	6,379	-	-	44,715	-	44,715
Benguetcorp Laboratories, Inc.	(36,219)	1,092	-	-	(35,127)	-	(35,127)
Berec Land Resources, Inc.	30,290	147	-	-	30,437	-	30,437
BC Property Management, Inc.	29,838	59	-	-	29,897	-	29,897
Ifaratoc Mineral Resources Corporation	29,599	35	-	-	29,634	-	29,634
Benguet-Pantukan Gold Corporation	(24,777)	821	-	-	(23,956)	-	(23,956)
BMC Forestry Corporation	12,183	-	-	-	12,183	-	12,183
Media Management Corporation	(4,231)	-	(2,387)	-	(6,618)	-	(6,618)
Arrow Freight Corporation	97,000	-	(31,119)	-	65,881	-	65,881
Benguet Management Corporation	11,999	178	-	-	12,177	-	12,177
Agua de Oro Ventures Corporation	16,877	1,525	-	-	18,402	-	18,402
Keystone Port Logistics Management Services Corporation	4,238	456	-	-	4,694	-	4,694
BenguetCorp International Limited	(30,083)	-	(3,752)	-	(33,835)	-	(33,835)
Sagittarius Alpha Realty Corporation	2,451	36	-	-	2,487	-	2,487
Batong Buhay Mineral Resources Corporation	(2,104)	30	-	-	(2,074)	-	(2,074)
Acupan Gold Mines, Inc.	703	36	-	-	739	-	739
Pillars of Exemplary Consultants, Inc.							

SCHEDULE D

BENGUET CORPORATION AND SUBSIDIARIES  
LONG-TERM DEBT  
DECEMBER 31, 2020  
(Amounts in Thousands)

Title of issue and type of obligation	Amount shown under the caption		Amount shown under the caption
	Amount authorized by indenture	‘Current Portion of long-term borrowings’ in related balance sheet	‘Long-term borrowings - net of current portion’ in related balance sheet
Unsecured loans, including interest	P508,998	P508,998	P-
	P508,998	P508,998	P-



SCHEDULE F

**BENGUET CORPORATION AND SUBSIDIARIES  
GUARANTEES OF SECURITIES OF OTHER ISSUERS  
DECEMBER 31, 2020**

Name of issuing entity of securities guaranteed by the Group for which this statement is filed	Title of issue of each class of securities guaranteed	Total amount guaranteed and outstanding	Amount owed by person for which statement is filed	Nature of guarantee
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NOT APPLICABLE

**SCHEDULE G**

**BENGUET CORPORATION AND SUBSIDIARIES**  
**CAPITAL STOCK**  
**DECEMBER 31, 2020**

The Parent Company's authorized share capital is ₱785.5 million divided into 737.0 million shares consisting of 19.7 million Convertible Preferred Class A shares with par value of ₱3.43 each and 430.4 million Class A common shares and 286.9 million Class B common shares with par value of ₱1.00 each. As at December 31, 2020, shares issued and outstanding totaled 616,339,443 held by 16,904 shareholders.

Title of Issue	Number of shares authorized	Number of shares issued and outstanding as shown under related financial condition caption	Number of shares reserved for option, warrants, conversions and other rights	No of shares held by:		
				Affiliates	Directors and Officers	Others
Convertible Preferred Stock Class A	19,652,912	217,061	-	-	217,061	
Common Stock Class A	430,380,000	370,909,460	-	590,093	370,319,367	
Common Stock Class B	286,920,000	245,212,922	-	251,606	244,961,316	



STATEMENT OF MANAGEMENT'S RESPONSIBILITY  
FOR FINANCIAL STATEMENTS

The management of Benguet Corporation (the "Company") is responsible for the preparation and fair presentation of the financial statements including the schedules attached therein, for the years ended December 31, 2020, 2019 and 2018, in accordance with the prescribed financial reporting framework indicated therein, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The Board of Directors is responsible for overseeing the Company's financial reporting process.

The Board of Directors reviews and approves the financial statements including the schedules attached therein, and submits the same to the stockholders.

Sycip Gorres Velayo & Co., the independent auditor appointed by the stockholders, has audited the financial statements of the Company in accordance with Philippine Standards on Auditing, and in its report to the stockholders, has expressed its opinion on the fairness of presentation upon completion of such audit.

LINA G. FERNANDEZ  
President

BERNARDO M. VILLEGAS  
Chairman of the Board

MAX D. ARCEÑO  
Senior Vice President  
Finance & Treasurer

Signed on this 7th day of April, 2021.

REPUBLIC OF THE PHILIPPINES)  
CITY OF MAKATI : S.S.

APR 07 2021

SUBSCRIBED AND SWORN to before me this \_\_\_th day of April, 2021 in Makati City, affiants exhibited to me their valid identification to with: Mr. Bernardo M. Villegas with SSS No. 03-12455042; Atty. Lina G. Fernandez with SSS No. 03-75370258; and Mr. Max D. Arceño with SSS No. 03-82056688, all issued by the Office of the Social Security System, Philippines.

Doc. No. 321  
Page No. 60  
Book No. XIII  
Series of 2021.

MA. ESMERALDA B. CUNANAN  
Notary Public  
Until December 31, 2021  
Appt. No. M-27 (2020-2021) Attorney's Roll No. 34562  
MCLE Compliance No. V1-0008196/4-23-2018  
PTR No. 8533031/1-4 2021/Makati City  
IBP Lifetime Member Roll No. 05413  
Ground Level, Deja Rosa Carpark 1  
Deja Rosa St. Legaspi Village,  
Makati City



## INDEPENDENT AUDITOR'S REPORT

The Board of Directors and Stockholders  
Benguet Corporation  
7th Floor, Universal Re-Building  
106 Paseo de Roxas, Makati City



### Report on the Audit of the Parent Company Financial Statements

#### Opinion

We have audited the parent company financial statements of Benguet Corporation (the Company), which comprise the parent company statements of financial position as at December 31, 2020 and 2019, and the parent company statements of income, parent company statements of comprehensive income, parent company statements of changes in equity and parent company statements of cash flows for the years then ended, and notes to the parent company financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying parent company financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2020 and 2019, and its financial performance and its cash flows for the years then ended in accordance with Philippine Financial Reporting Standards (PFRSs).

#### Basis for Opinion

We conducted our audits in accordance with Philippine Standards on Auditing (PSAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Parent Company Financial Statements* section of our report. We are independent of the Company in accordance with the Code of Ethics for Professional Accountants in the Philippines (Code of Ethics) together with the ethical requirements that are relevant to our audit of the parent company financial statements in the Philippines, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Responsibilities of Management and Those Charged with Governance for the Parent Company Financial Statements

Management is responsible for the preparation and fair presentation of the parent company financial statements in accordance with PFRSs, and for such internal control as management determines is necessary to enable the preparation of parent company financial statements that are free from material misstatement, whether due to fraud or error.



In preparing the parent company financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

### **Auditor's Responsibilities for the Audit of the Parent Company Financial Statements**

Our objectives are to obtain reasonable assurance about whether the parent company financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with PSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these parent company financial statements.

As part of an audit in accordance with PSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the parent company financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the parent company financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the parent company financial statements, including the disclosures, and whether the parent company financial statements represent the underlying transactions and events in a manner that achieves fair presentation.



We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

### **Report on the Supplementary Information Required Under Revenue Regulations 15-2010**

The supplementary information required under Revenue Regulations 15-2010 for purposes of filing with the Bureau of Internal Revenue is presented by the management of Benguet Corporation in a separate schedule. Revenue Regulations 15-2010 requires the information to be presented in the notes to parent company financial statements. Such information is not a required part of the basic financial statements. The information is also not required by the Revised Securities Regulation Code Rule 68. Our opinion on the parent company financial statements is not affected by the presentation of this information in a separate schedule.

The engagement partner on the audit resulting in this independent auditor's report is Peter John R. Ventura.

SYCIP GORRES VELAYO & CO.

*Peter John R. Ventura*

Peter John R. Ventura

Partner

CPA Certificate No. 0113172

SEC Accreditation No. 1735-A (Company A),  
January 15, 2019, valid until January 14, 2022

Tax Identification No. 301-106-741

BIR Accreditation No. 08-001998-140-2018,  
December 17, 2018, valid until December 16, 2021

PTR No. 8534379, January 4, 2021, Makati City



March 18, 2021



**BENGUET CORPORATION****PARENT COMPANY STATEMENTS OF FINANCIAL POSITION****(Amounts in Thousands, Except Number of Shares)**

	December 31	
	2020	2019
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash (Note 4)	₱39,589	₱58,317
Trade and other receivables (Note 5)	556,030	515,847
Inventories (Note 6)	34,418	31,452
Other current assets (Note 7)	269,401	269,447
<b>Total Current Assets</b>	<b>899,438</b>	<b>875,063</b>
<b>Noncurrent Assets</b>		
Investments in subsidiaries (Note 8)	2,076,463	2,076,463
Financial assets at fair value through other comprehensive income (FVOCI; Note 9)	316	244
Property, plant and equipment (Note 10):		
At revalued amount - land	1,457,910	1,457,910
At cost	520,487	533,036
Investment properties (Note 32)	2,617,510	2,426,356
Deferred mine exploration costs (Note 11)	383,306	373,070
Other noncurrent assets (Note 12)	27,740	14,449
<b>Total Noncurrent Assets</b>	<b>7,083,732</b>	<b>6,881,528</b>
<b>TOTAL ASSETS</b>	<b>₱7,983,170</b>	<b>₱7,756,591</b>
<b>LIABILITIES AND EQUITY</b>		
<b>Current Liabilities</b>		
Trade and other payables (Note 14)	₱890,402	₱888,368
Loans payable (Note 13)	414,980	420,212
Liability for mine rehabilitation (Note 16)	38,136	25,008
Lease liabilities - current portion (Note 32)	698	1,083
<b>Total Current Liabilities</b>	<b>1,344,216</b>	<b>1,334,671</b>
<b>Noncurrent Liabilities</b>		
Pension liability (Note 26)	78,749	60,411
Liability for mine rehabilitation - net of current portion (Note 16)	40,396	42,459
Other noncurrent liability (Note 15)	49,136	49,136
Lease liabilities - net of current portion (Note 32)	3,988	4,257
Deferred tax liabilities - net (Note 27)	811,752	776,398
<b>Total Noncurrent Liabilities</b>	<b>984,021</b>	<b>932,661</b>
<b>Total Liabilities</b>	<b>2,328,237</b>	<b>2,267,332</b>
<b>Equity</b>		
Capital stock (Note 17)	617,215	616,863
Capital surplus (Note 17)	388,969	380,382
Cost of share-based payment (Notes 17 and 18)	13,366	21,671
Unrealized loss on financial assets at FVOCI (Note 9)	(427)	(499)
Other components of equity:		
Unrealized gain on transfer of mining rights (Note 1)	1,000,000	1,000,000
Revaluation increment on land (Note 10)	1,111,953	1,111,953
Remeasurement gain on pension liability (Note 26)	9,672	20,954
Retained earnings	2,522,201	2,345,951
	5,662,949	5,497,275
Treasury shares (Note 17)	(8,016)	(8,016)
<b>Total Equity</b>	<b>5,654,933</b>	<b>5,489,259</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>₱7,983,170</b>	<b>₱7,756,591</b>

See accompanying Notes to Parent Company Financial Statements.



**BENGUET CORPORATION**  
**PARENT COMPANY STATEMENTS OF INCOME**  
(Amounts in Thousands)

	Years Ended December 31	
	2020	2019
<b>REVENUE</b> (Note 19)	<b>₱767,070</b>	<b>₱683,077</b>
<b>OPERATING COSTS AND EXPENSES</b>		
Cost of mine products sold (Note 20)	517,025	466,431
Selling, general and administrative (Note 21)	172,458	184,971
Taxes on sale of mine products (Note 19)	27,861	23,610
	<b>717,344</b>	<b>675,012</b>
<b>INTEREST EXPENSE</b> (Notes 13 and 32)	<b>2,471</b>	<b>1,698</b>
<b>OTHER INCOME</b> - net (Note 23)	<b>175,085</b>	<b>140,080</b>
<b>INCOME BEFORE INCOME TAX</b>	<b>222,340</b>	<b>146,447</b>
<b>PROVISION FOR INCOME TAX</b> (Note 27)	<b>46,090</b>	<b>4,894</b>
<b>NET INCOME</b>	<b>₱176,250</b>	<b>₱141,553</b>
<b>BASIC EARNINGS PER SHARE</b> (Note 28)	<b>₱0.29</b>	<b>₱0.23</b>
<b>DILUTED EARNINGS PER SHARE</b> (Note 28)	<b>₱0.28</b>	<b>₱0.23</b>

*See accompanying Notes to Parent Company Financial Statements.*



**BENGUET CORPORATION****PARENT COMPANY STATEMENTS OF COMPREHENSIVE INCOME**

(Amounts in Thousands)

	Years Ended December 31	
	2020	2019
<b>NET INCOME</b>	<b>₱176,250</b>	<b>₱141,553</b>
<b>OTHER COMPREHENSIVE INCOME (LOSS) - NET OF TAX</b>		
<i>Items not to be reclassified to profit or loss in subsequent periods:</i>		
Revaluation of land (Note 10)	—	251,499
Remeasurement loss on pension liability (Note 26)	(11,282)	(2,770)
Unrealized loss on financial assets at FVOCI (Note 9)	72	(88)
<b>TOTAL OTHER COMPREHENSIVE INCOME (LOSS)</b>	<b>(11,210)</b>	<b>248,641</b>
<b>TOTAL COMPREHENSIVE INCOME</b>	<b>₱165,040</b>	<b>₱390,194</b>

*See accompanying Notes to Parent Company Financial Statements.*

**BENGUET CORPORATION**

**PARENT COMPANY STATEMENTS OF CHANGES IN EQUITY**

**FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019**

**(Amounts in Thousands)**

	Capital stock (Note 17)	Capital surplus (Note 17)	Cost of share-based payment (Notes 17 and 18)	Unrealized loss on financial assets at FVOCI (Note 9)	Other components of equity					Retained earnings	Treasury stock (Note 17)	Total
					Unrealized gain from transfer of mining right (Note 1)	Revaluation increment on land (Note 10)	Remeasurement gain on pension liability (Note 26)	Total other comprehensive income	Total			
<b>Balances at January 1, 2019</b>	<b>₱616,863</b>	<b>₱376,964</b>	<b>₱25,089</b>	<b>(₱411)</b>	<b>₱1,000,000</b>	<b>₱860,454</b>	<b>₱23,724</b>	<b>₱1,883,767</b>	<b>₱2,204,398</b>	<b>(₱8,016)</b>	<b>₱5,099,065</b>	
Stock options expired (Note 17)	-	3,418	(3,418)	-	-	-	-	-	-	-	-	
Net income	-	-	-	-	-	-	-	-	141,553	-	141,553	
Other comprehensive income (loss) (Notes 9, 10 and 26)	-	-	-	(88)	-	251,499	(2,770)	248,641	-	-	248,641	
Total comprehensive income (loss)	-	-	-	(88)	-	251,499	(2,770)	248,641	141,553	-	390,194	
<b>Balances at December 31, 2019</b>	<b>616,863</b>	<b>380,382</b>	<b>21,671</b>	<b>(499)</b>	<b>1,000,000</b>	<b>1,111,953</b>	<b>20,954</b>	<b>2,132,408</b>	<b>2,345,951</b>	<b>(8,016)</b>	<b>5,489,259</b>	
Stock options expired (Note 17)	-	6,348	(6,348)	-	-	-	-	-	-	-	-	
Stock options exercised (Note 17)	352	2,239	(1,957)	-	-	-	-	-	176,250	-	634	
Net income	-	-	-	-	-	-	-	-	-	-	-	
Other comprehensive income (loss) (Notes 9 and 26)	-	-	-	72	-	-	(11,282)	(11,210)	-	-	(11,210)	
Total comprehensive income (loss)	-	-	-	72	-	-	(11,282)	(11,210)	176,250	-	165,040	
<b>Balances at December 31, 2020</b>	<b>₱617,215</b>	<b>₱388,969</b>	<b>₱13,366</b>	<b>(₱427)</b>	<b>₱1,000,000</b>	<b>₱1,111,953</b>	<b>₱9,672</b>	<b>₱2,121,198</b>	<b>₱2,522,201</b>	<b>(₱8,016)</b>	<b>₱5,654,933</b>	

See accompanying Notes to Parent Company Financial Statements.



**BENGUET CORPORATION**  
**PARENT COMPANY STATEMENTS OF CASH FLOWS**  
**(Amounts in Thousands)**

	Years Ended December 31	
	2020	2019
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Income before tax	₱222,340	₱146,447
Adjustments for:		
Revaluation gain on investment properties (Notes 23 and 32)	(191,154)	(245,872)
Depreciation and depletion (Notes 10, 20 and 21)	36,026	36,327
Movements in pension liability (Note 26)	7,220	4,146
Change in estimate on liability for mine rehabilitation (Notes 16 and 23)	5,291	(9,671)
Net foreign exchange gains (Note 23)	(4,958)	(3,723)
Accretion expense (Notes 16 and 23)	2,436	4,997
Interest expense (Notes 13 and 32)	2,471	1,698
Interest income (Notes 4, 12 and 23)	(147)	(137)
Reversal of land rental expense	(511)	-
Provision for impairment losses on deferred mine exploration costs (Notes 11 and 23)	-	94,930
Noncapitalizable asset retirement obligation (Notes 16 and 23)	-	18,373
Operating income before working capital changes	79,014	47,515
Decrease (increase) in:		
Trade and other receivables, excluding amounts owed by related parties	(1,575)	(37,502)
Inventories	(2,543)	(13,326)
Other current assets	557	11,706
Decrease in trade and other payables, excluding amounts owed to related parties	(44,174)	(86,668)
Net cash used in operations	31,279	(78,275)
Interest paid	(941)	(1,209)
Interest received	147	137
Net cash from (used in) operating activities	30,485	(79,347)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Additions to:		
Property, plant and equipment (Note 10)	(19,660)	(18,059)
Deferred mine exploration costs (Note 11)	(10,236)	(3,615)
Investment in subsidiaries (Note 8)	-	(939)
Proceeds from collection of nontrade noncurrent assets	-	208,858
Decrease (increase) in amounts owed by related parties	(38,683)	(94,254)
Increase (decrease) in other noncurrent assets	(14,118)	(5,121)
Net cash from (used in) investing activities	(82,697)	86,870
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Decrease in amounts owed to related parties	35,308	(49,343)
Proceed from exercise of stock option (Note 17)	634	
Settlement of loans (Note 13)	(1,370)	(22,776)
Payment for mine rehabilitation costs (Note 16)	-	(12,788)
Payment of principal portion of lease liabilities (Notes 32)	(1,083)	(1,240)
Net cash flows from (used in) financing activities	33,489	(86,147)
<b>NET DECREASE IN CASH</b>	<b>(18,723)</b>	<b>(78,624)</b>
<b>EFFECT OF EXCHANGE RATE CHANGES ON CASH</b>	<b>(5)</b>	<b>(16)</b>
<b>CASH AT BEGINNING OF YEAR</b>	<b>58,317</b>	<b>136,957</b>
<b>CASH AT END OF YEAR (Note 4)</b>	<b>₱39,589</b>	<b>₱58,317</b>

See accompanying Notes to Financial Statements.



# BENGUET CORPORATION

## NOTES TO PARENT COMPANY FINANCIAL STATEMENTS

(Amounts in Thousands, Except Number of Shares, Per Share Data and When Indicated)

### 1. Corporate Information, Status of Business Operations and Authorization for the Issuance of the Parent Company Financial Statements

#### Corporate Information

Benguet Corporation (the Company) was incorporated on August 12, 1903 and was listed in the Philippine Stock Exchange (PSE) on January 4, 1950.

On June 18, 1956 and June 19, 2006, the Philippine Securities and Exchange Commission (SEC) approved the extension of the Company's corporate life for another 50 years. The Company is currently engaged in gold and other metallic and nonmetallic mineral production, exploration, research and development and natural resource projects.

The Company's registered office address is 7th Floor, Universal Re-Building, 106 Paseo de Roxas, 1226 Makati City.

#### Status of Business Operations

#### Quasi-reorganization

On December 5, 2011, the Philippine SEC approved the application of the Company for quasi-reorganization to wipe out its deficit as at December 31, 2010 against its capital surplus and revaluation increment as follows:

	Prior to Quasi-reorganization	Effect of Quasi-reorganization	After Quasi-reorganization
Capital surplus	₱1,153,579	(₱1,153,579)	₱–
Revaluation increment	1,561,048	(1,010,848)	550,200
Deficit	(2,164,427)	2,164,427	–

For purposes of dividend declaration, the retained earnings of the Company shall be restricted to the extent of the deficit wiped out by the revaluation increment amounting to ₱1.01 billion until the asset to which the revaluation increment relates is disposed. In addition, the retained earnings of the Company shall be restricted further by the accumulated fair valuation gains of investment properties amounting to ₱1,042,846 and ₱851,692 as at December 31, 2020 and 2019, respectively.

On December 10, 2010, the Company and Benguetcorp Nickel Mines, Inc. (BNMI) entered into a Deed of Exchange, whereby the Company transferred its interest in the nickel laterite mine in Sta. Cruz, Zambales. The transfer covers Mineral Production Sharing Agreement (MPSA) No. 226-2005-III, mine technical data and all related environmental and other permits of the nickel laterite mine valued at a total of ₱1,000,000. BNMI issued 1.00 billion ordinary shares to the Company, with par value of ₱1.00 per share, as consideration for the transfer. The transfer of the MPSA was approved by the Mines and Geosciences Bureau (MGB) on January 16, 2012.



*Business Operations*

Significant developments in the Company's operations follow:

a. Mining Projects

*Benguet Gold Operations (BGO)*

The Company produces gold from the Benguet mines, consisting of the Acupan and Kelly underground mines which were suspended in 1992, following the 1991 earthquake, which flooded the said underground mines. In 2003, BGO resumed operations and production is partly carried out through independent mining contractors in Acupan Contract Mining Project (ACMP) which is a community-based underground mining project.

The Company is currently working on exploration and drilling programs to upgrade BGO's capacity. The exploration and geology group completed the design for the surface and underground diamond drilling program for the Phase 1 of the Greater Acupan Project.

The related feasibility study for Greater Acupan Project was approved in 2013 and the Company is still raising the necessary funds to start the execution of the project.

On March 18, 2019, TUV Rheinland, an independent evaluation and certification service body, issued to BGO the ISO 14001:2015, which is an internationally accepted certification and standard for environmental management system. The issuance of the said certification, which is valid until March 15, 2022, makes BGO fully compliant with the requirement of Department of Environment and Natural Resources (DENR) Administrative Order (DAO) No. 2015-07.

On October 28, 2016, the Parent Company received from the DENR the mine audit report dated October 21, 2016, which was conducted pursuant to DENR Memorandum Circular No. 2016-01 requiring audit of all operating mines which recommended the suspension of the Company's mining operations and required the Company to submit an explanation thereof within seven days from the date of receipt.

On November 1, 2016, the Company submitted an explanation to the DENR stating that there are no legal and factual bases to recommend the suspension of the Company's operations due to the following reasons:

- Based on the mine audit report, there are no significant findings of violations that would warrant the suspension order.
- None of the alleged violations found pose imminent danger or threat to the community that would justify the suspension of operation.
- The deficiencies cited, which are mostly permitting issues or operational concerns, can easily be remediated without need of suspending the Company's operation.

On February 14, 2017, the Company received from DENR a cancellation order dated February 8, 2017 cancelling its authority to undertake mining operations under Patent Claim (PC-ACMP-002-CAR) in Itogon, Benguet for violation of certain provisions of mining and environmental laws, rules and regulations such as the following:

- Republic Act (RA) No. 6969, otherwise known as the 'Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990'
- DAO No. 2013-22 or the 'Revised Procedures and Standards for the Management of Hazardous Wastes'
- RA No. 7942, otherwise known as 'The Philippine Mining Act of 1995'
- DAO No. 2010-21 or the 'Revised Implementing Rules and Regulations of RA No. 7942'



On February 22, 2017, the Company filed a Notice of Appeal before the Office of the President, which stayed the execution of the cancellation order. On March 22, 2017, the Company submitted to the Office of the President its Appeal Memorandum. As of March 18, 2021, the Office of the President has not yet resolved the appeal.

In November 2019, the DENR directed the regional offices of the Mines and Geosciences Bureau (MGB) and Environmental Management Bureau (EMB) to validate the environmental compliance of BGO as input to early resolution of the appeal. In January 2020, MGB submitted a favorable validation report to DENR. As of March 18, 2021, the Company is still awaiting the decision of DENR.

*Irisan Lime Project (ILP)*

The Company's ILP in Irisan, Baguio is engaged in the production and trading of quicklime. ILP produced 7,072 tons and 9,671 tons of quicklime in 2020 and 2019, respectively. On September 4, 2017, the Mineral Processing Permit (MPP) for the ILP was renewed for a period of five years or until September 3, 2022.

*Benguet Antamok Gold Operation (BAGO)*

The Company's BAGO in Itogon, Benguet has been suspended since August 1998. BAGO has an estimated resource of about 12.4 million tons, averaging 3.45 grams of gold per ton, at the end of 1999. Pursuant to DAO No. 2010-04, the Company's Application for Mineral Production Sharing Agreement (MPSA) No. 009-CAR was denied on February 8, 2011. Subsequently, the Company filed an appeal on April 15, 2011 in MGB Central Office.

In October 2016, a leak occurred in BAGO's tailings dam, which affected the Liang River. On November 23, 2016, the Company received from DENR a letter requiring the Company to show cause why its operation should not be suspended and/or mining contract be cancelled in view of the tailings spill.

On December 26, 2016, the Company argued that there was no negligence because the incident is due to force majeure and the tailings leak was immediately remediated. The Company also emphasized that it has no existing mining operations in BAGO as it has long been suspended. The BAGO open pit mine and the BAGO underground mine has not operated since 1998 and 1989, respectively. The Company contended that its infrastructure in BAGO has been under care and maintenance since then up to the present. On January 1, 2017, the case was elevated to the Pollution Adjudication Board (PAB) from the EMB out of which the Company submitted a position paper on May 8, 2017.

On May 9, 2017 a technical conference hearing was held in PAB regarding the case and as a result, the Company submitted a supplemental motion on June 9, 2017. As of March 18, 2021, the Company is still awaiting the decision of PAB.

*Masinloc Chromite Operation (MCO)*

From 1934 to 2007, the Company managed the Coto Mine under an operating agreement with its claim owner, Consolidated Mines, Inc. (CMI). With the expiration of the operating agreement last July 8, 2007, the Company has transferred back the mine to CMI. As at March 18, 2021, the Company is still engaged in discussion with CMI over the liquidation of MCO's assets (see Note 15).



b. Exploration, Research and Development Projects

*Balatoc Tailings Project (BTP)*

The Company's Board of Directors (BOD) approved an initial ₱10.00 million research and development fund for the BTP in Itogon, Benguet for the study on the feasibility of reprocessing 16.7 million tons of tailings resource with an average of 0.69 grams gold per ton and is estimated to contain 371,000 ounces of gold. A core research and development team, together with the Beijing Geological Research Institute of Mining and Metallurgy, has done the analysis toward the preparation and completion of the bankable feasibility study.

On October 21, 2009, the Company appointed ATR Kim Eng Capital Partners, Inc. as financial advisor to raise additional development capital for the BTP.

On the same date, the Company entered into a processing agreement with the Balatoc Gold Resources Corporation (BGRC), a subsidiary, to implement the BTP. The Company has completed the bankable feasibility study of the BTP and engaged external Competent Persons to prepare and review reports as required under the Philippine Mineral Reporting Code modeled after the Joint Ore Reserve Committee of Australia.

In September 2010, the Company signed a Deed of Assignment with BGRC to transfer MPP No. 13-2010-CAR covering the BTP subject to approval by the DENR. The MPP allows reprocessing of the impounded mill tailings from the Acupan mines for recovery of residual gold. In November 2011, the transfer of the MPP was approved by the DENR-MGB.

BGRC signed contracts and undertook activities for the detailed engineering of the project, rehabilitation of the tailing's ponds and reinforcement of the silt dam. BGRC continued the activities on expansion and rehabilitation of its penstocks at Tailings Pond Nos. 2 and 3 and earthmoving works on the silt dam at Gold Creek and the Ambalanga River pumping station, and the ridge enhancement works on Tailings Ponds Nos. 2 and 3. The excavated materials from its expansion and rehabilitation activities will be used for the raising of the embankment of Tailings Ponds Nos. 2 and 3 to the level in which the BTP will be able to pump the tailings to a processing plant in Balatoc.

On January 17, 2013, the Company's BOD authorized and approved the deed of exchange between the Company and BGRC covering all of the Company's rights and interest in BTP in exchange of BGRC's shares.

Following the expiration of MPP No. 13-2010-CAR, BGRC reconveyed to the Company on March 16, 2016, all rights and interest in BTP, including liabilities to third parties, so that the reprocessing of tailings can be made part of the Acupan operation once more. The reconveyance was approved by the DENR-MGB on May 31, 2016.

*Antamok Tailings Project (ATP)*

The ATP, which targeted the BAGO mill tailings pond, was conceived as a possible additional resource that could be developed similar to the Balatoc Tailings Project. The BAGO tailings pond, located a few hundred meters downstream from the BAGO open pit mine, contains some 7.64 million tons of tailings produced from the BAGO milling operations. In addition, a considerable tonnage of extraneous materials, estimated at about 1.95 million tons washed from the BAGO pit over the years from the Otek marginal grade material dump and from the numerous illegal miners' workings, found its way into the pond and is now resting on top of the tailings deposit. A preliminary sampling of these extraneous materials showed that these can be



considered for exploitation together with the original tailings in the pond. More core drilling, however, may be required to firm up the resource estimate of these impounded materials.

The Company has approved an initial ₱7.50 million research fund for the ATP for the feasibility study on the reprocessing. The Company is conducting a feasibility study on the reprocessing of tailings from the BAGO, which are impounded in the tailings pond downstream of the old BAGO mill. The initial drilling conducted to test the impounded materials indicates a grade of 4.0 grams of gold per ton.

As at December 31, 2020, the Company intends to transfer to Benguet-Pantukan Gold Corporation (BPGC), a wholly owned subsidiary of the Company through Benguet Management Corporation (BMC), the planned ATP.

#### *Surigao Coal Prospect (SCP)*

Pre-development activities for the SCP were put on hold in 2011 due to Executive Order (EO) 23, series of 2011, which declares a moratorium on the cutting and harvesting of timber in the natural and residual forests. The City Environment and Natural Resources Office of the Municipality of Lianga denied the Company's request for a tree inventory, which is preparatory to the application for a cutting permit. The decision was reversed in January 2012 after the issuance of a memorandum from the Executive Secretary, which exempted exploration and mining activities from the said EO. The Company is in the process of completing the requirements to secure permits for the development of the project. A preliminary hydrology study was done at the nearby Hubo river's water source to assess if the volume capacity of the river system can support a hydro plant, which will complement the Coal Power Plant Study. In 2012, the Company also participated in the bidding under the Philippine Energy Contracting Round four for coal to possibly secure other prospective coal areas. The result of the bidding is awaiting the decision of the Department of Energy.

As at December 31, 2020, the Company plans to transfer the SCP to Batong Buhay Mineral Resources Corporation (BBMRC) when the said prospect materializes.

#### *Ampucao Copper-Gold Prospect (Ampucao Prospect)*

The Ampucao Prospect is located inside the contract claims of Pugo Mining Company in the southern part of Benguet's Acupan gold mine. The initial exploration work conducted by the Company's geologists indicates a porphyry copper-gold mineralization hosted in diorite below the 2000 level. Two test holes have been programmed to be drilled within the area but have been put on-hold pending the resolution of the APSA, which also covers the BAGO.

#### *Pantingan Gold Prospect (PGP)*

The PGP in Balanga, Bataan consists of 1,410 hectares covered by MPSA No. 154-2000-III. The property is under an operating agreement with Option to Purchase, with Balanga Bataan Minerals Corporation, signed in March 1996. Surface mineralization consists of quartz and clay veins, ranging from 0.70 meters to 10 meters wide, with values as much as 1.0 gram of gold and 9.60 grams of silver. The Company has implemented drilling programs in the property in 2020 and will continue to do so in 2021.

Recent geological works in the Pantingan property have also led to the identification of two parcels composed of Block-1 and Block-3 area located inside the mineral tenement hosting high quality mountain rock deposits with favorable potential for rock aggregates. The potential rock formations comprise of consolidated volcanic conglomerate and massive andesite units based on their actual ground analysis. The Company implemented drillworks in the property in 2020 and will continue to do so in 2021.



*Zamboanga Gold Prospect (ZGP)*

The ZGP in R.T. Lim, Zamboanga Sibugay consists of 340.30 hectares of land area and is under an operating agreement with Orelina Mining Corporation (OMC). A drilling program to evaluate the gold potential of the main structure at depth has been put on-hold pending the resolution of the APSA No. 000015-IX of OMC. The APSA which was denied on May 12, 2010 and subject of an appeal filed on January 30, 2013, was reinstated by the DENR November 4, 2020.

*Financial and Technical Assistance Agreement (FTAA) Application*

The Company and its subsidiary, Sagittarius Alpha Realty Corporation (SARC) have two pending FTAA applications consisting of land area totaling 72,806,291 hectares. The Company's FTAA application in Ilocos Norte (denominated as AFTA-003-I) and Apayao (denominated as AFTA No. 00033-CAR) are undergoing Free, Prior and Informed consent requirement through the Regional Office of the National Commission of Indigenous Peoples. Exploration work for the two areas will be undertaken as soon as the applications have been approved by the Philippine government.

c. Water Projects

*Baguio City Bulk Water Supply Project (BCBWSP)*

On August 16, 2005, the BOD of the Baguio Water District (BWD) issued to the Company a Notice of Award covering the BCBWSP. The Company's proposal is to convert its mined-out 440 Vein Open Pit into a water reservoir with the capability of supplying, at least, 50,000 cubic meters of potable water per day to Baguio City.

On September 7, 2007, the BWD issued Board Resolution Number 30-2007, which resolved to terminate the bulk water supply contract negotiation and to scrap the project. The resolution cited grounds such as the irreconcilable differences of the parties on the contract provisions of parametric formula and rate rebasing, among others. On these issues, the BWD is concerned with the affordability and acceptability of the water tariff to the end-consumers. On the other hand, the Company raised a concern on the delay in implementation and its effect on the viability of the project as justification for the contract provisions. The Company has likewise requested the BWD to conduct a public hearing on these issues, which the BWD has deemed premature. The Company filed a request for reconsideration on September 13, 2007.

On November 29, 2007, the BWD issued a Board Resolution denying the Company's request for reconsideration. The Company then filed a case against BWD.

In 2019, pursuant to a Memorandum of Agreement with Manila Water Company, Inc. (MWCI) regarding the assignment of water rights in Laboy River in connection with MWCI's bulk water supply proposal to Baguio City, the Company has withdrawn the case for specific performance against BWD without prejudice to filing of a new case for recovery of cost and damages due to the aborted bidding award.

d. Land Development Projects

*Kelly Special Economic Zone (KSEZ)*

The Company has approved an initial budget of ₱4.90 million for the feasibility study covering the KSEZ and the potential of other real estate properties of the Company. The Company plans to transfer the said properties to BC Property Management, Inc. (BCPMI), a wholly owned subsidiary of BMC. The capital expenditures related to the implementation of the project will then be infused as equity of the Company in BCPMI. As of December 31, 2020, the said project has not yet materialized.



#### Recovery of Deferred Exploration Costs

The Company's ability to realize its deferred exploration costs with carrying value amounting to ₱383,306 and ₱373,070 as at December 31, 2020 and 2019, respectively (see Note 11), depends on the success of exploration and development work in proving the viability of its mining properties to produce minerals in commercial quantities, and the success of converting the Company's exploration permits to new mineral agreements, which cannot be determined at this time. The parent company financial statements do not include any adjustment that might result from these uncertainties.

#### Net Negative Working Capital Position of the Company

The Company's current liabilities exceeded its current assets by ₱444.78 million and ₱459.61 million as at December 31, 2020 and 2019, respectively. This condition indicates the existence of a material uncertainty which may cast significant doubt on the Company's ability to continue as a going concern for the next 12 months. Management is satisfied based on its assumptions and cash flow projection, while considering also the operations of its subsidiaries, that collectively Benguet Corporation and Subsidiaries can generate sufficient cash flows to meet its obligations as and when they fall due.

#### Authorization for the Issuance of the Parent Company Financial Statements

The accompanying parent company financial statements as at and for the years ended December 31, 2020 and 2019 were authorized for issuance by the BOD on March 18, 2021.

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## 2. Summary of Significant Accounting Policies

#### Basis of Preparation

The parent company financial statements have been prepared in accordance with the Philippine Financial Reporting Standard (PFRSs) as issued by the Financial Reporting Standards Council (FRSC). The parent company financial statements have been prepared on a historical cost basis, except for land which is measured at revalued amount, and financial assets at FVOCI and investment properties, which are measured at fair value. The parent company financial statements are presented in Philippine peso, which is the Company's functional currency. All amounts are rounded to the nearest thousands (₱000), except as otherwise indicated.

The financial statements provide comparative information in respect of the previous period.

#### Changes in Accounting Policies

The accounting policies adopted are consistent with those of the previous financial year except for the adoption of new standards effective January 1, 2020. The Company has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

Unless otherwise indicated, adoption of these new standards did not have a significant impact on the financial statements of the Company.

- Amendments to PFRS 3, *Business Combinations, Definition of a Business*
- Amendments to PFRS 7, *Financial Instruments: Disclosures* and PFRS 9, *Financial Instruments, Interest Rate Benchmark Reform*
- Amendments to PAS 1, *Presentation of Financial Statements*, and PAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors, Definition of Material*
- Conceptual Framework for Financial Reporting issued on March 29, 2018
- Amendments to PFRS 16, *COVID-19-related Rent Concessions*



#### Standards and Interpretation Issued but not yet Effective

Pronouncements issued but not yet effective are listed below. The Company intends to adopt the following pronouncements when they become effective. Adoption of these pronouncements is not expected to have a significant impact on the parent company financial statements.

##### *Effective beginning on or after January 1, 2021*

- Amendments to PFRS 9, PFRS 7, PFRS 4 and PFRS 16, *Interest Rate Benchmark Reform – Phase 2*

##### *Effective beginning on or after January 1, 2022*

- Amendments to PFRS 3, *Reference to the Conceptual Framework*
- Amendments to PAS 16, *Plant and Equipment: Proceeds before Intended Use*
- Amendments to PAS 37, *Onerous Contracts – Costs of Fulfilling a Contract*
- *Annual Improvements to PFRSs 2018-2020 Cycle*
  - Amendments to PFRS 1, *First-time Adoption of Philippine Financial Reporting Standards, Subsidiary as a first-time adopter*
  - Amendments to PFRS 9, *Financial Instruments, Fees in the '10 per cent' test for derecognition of financial liabilities*
  - Amendments to PAS 41, *Agriculture, Taxation in fair value measurements*

##### *Effective beginning on or after January 1, 2023*

- Amendments to PAS 1, *Classification of Liabilities as Current or Non-current*
- PFRS 17, *Insurance Contracts*

##### *Deferred effectivity*

- Amendments to PFRS 10, *Consolidated Financial Statements*, and PAS 28, *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*

#### Presentation of Financial Statements

The Company has elected to present all items of recognized income and expense in two statements: a parent company statements of income and a parent company statements of comprehensive income.

#### Current versus Noncurrent Classification

The Company presents assets and liabilities in statement of financial position based on current or noncurrent classification.

An asset is current when it is:

- expected to be realized or intended to be sold or consumed in the normal operating cycle
- held primarily for the purposes of trading
- expected to be realized within 12 months after the reporting period or
- cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period

All other assets are classified as noncurrent.

A liability is current when:

- it is expected to be settled in the normal operating cycle
- it is held primarily for the purpose of trading
- it is due to be settled within 12 months after the reporting period or
- there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period



The Company classifies all other liabilities as noncurrent.

#### Cash

Cash consists of cash on hand and cash in banks. Cash in banks earn interest at the respective bank deposit rates.

#### Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

#### Financial Assets

##### *Initial recognition and measurement*

Financial assets are classified, at initial recognition, and subsequently measured at amortized cost, FVOCI, and fair value through profit or loss (FVPL).

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them. With the exception of trade receivables that do not contain significant financing component or for which the Company has applied the practical expedient, the Company initially measures a financial asset at fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or which the Company has applied the practical expedient are measured at transaction price determined under PFRS 15.

In order for a financial asset to be classified and measured at amortized cost or FVOCI, it needs to give rise to cash flows that are 'solely payments of principal and interest on the principal amount outstanding' (the SPPI criterion). This assessment is referred to as the SPPI test and is performed at an instrument level. Financial assets with cash flows that are not SPPI are classified and measured at FVPL, irrespective of the business model.

The Company's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortized cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows while financial assets classified and measured at FVOCI are held within a business model with the objective of both holding to collect contractual cash flows and selling.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognized on the trade date, i.e., the date that the Company commits to purchase or sell the asset.

##### *Subsequent measurement*

The subsequent measurement of financial assets depends on their classification as follows:

- *Financial assets at amortized cost (debt instruments)*  
Financial assets at amortized cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.



The Company's financial assets at amortized cost include cash in banks, trade and other receivables (excluding nontrade receivables, advances to officers and employees and employee stock ownership incentive plan), advances to contractors under "other current assets", and nontrade receivables and refundable deposits under "other noncurrent assets".

- *Financial assets designated at FVOCI (equity instruments)*  
Upon initial recognition, the Company can elect to classify irrevocably its equity instruments as equity instruments designated at FVOCI when they meet the definition of equity under PAS 32, *Financial Instruments, Presentation* and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized as other income in profit or loss when the right of payment has been established, except when the Company benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at FVOCI are not subject to impairment assessment.

The Company elected to classify irrevocably its equity instruments under this category.

#### *Derecognition*

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e., removed from the Company's statements of financial position) when:

- The rights to receive cash flows from the asset have expired; or
- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the asset is recognized to the extent of the Company's continuing involvement in the asset. In that case, the Company also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Company could be required to repay.

#### *Impairment*

The Company recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at FVPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Company expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.



For cash, the Company applies the low credit risk simplification. The probability of default and loss given defaults are publicly available and are considered to be low credit risk investments. It is the Company's policy to measure ECLs on such instruments on a 12-month basis. However, when there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL. The Company uses publicly available ratings from (i.e. Standard and Poor's (S&P), Moody's and Fitch) to determine whether the debt instrument has significantly increased in credit risk and to estimate ECLs.

For trade receivables, the Company applies a simplified approach in calculating ECLs. Therefore, the Company does not track changes in credit risk, but instead recognized a loss allowance based on lifetime ECL at each reporting date. The Company has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

For amounts owed by related parties, other receivables, advances to contractors and deposits, the Company calculates ECLs at initial recognition by considering the consequences and probabilities of possible defaults only for the next 12 months, rather than the life of the asset. It continues to apply this method until a significant increase in credit risk has occurred, at which point the loss allowance is measured based on lifetime ECLs.

At each reporting date, the Company assesses whether there has been a significant increase in credit risk for financial assets since initial recognition by comparing the risk of default occurring over the expected life between the reporting date and the date of initial recognition. The Company considers reasonable and supportable information that is relevant and available without undue cost or effort for this purpose. This includes quantitative and qualitative information and forward-looking analysis.

Exposures that have not deteriorated significantly since origination, or where the deterioration remains within the Company's investment grade criteria are considered to have a low credit risk. The provision for credit losses for these financial assets is based on a 12-month ECL. The low credit risk exemption has been applied on debt investments that meet the investment grade criteria of the Company from the time of origination.

An exposure will migrate through the ECL stages as asset quality deteriorates. If, in a subsequent period, asset quality improves and also reverses any previously assessed significant increase in credit risk since origination, then the loss allowance measurement reverts from lifetime ECL to 12-months ECL.

The Company considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Company may also consider a financial asset to be in default when internal or external information indicates that the Company is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Company. A financial asset is written off when there no reasonable expectation of recovering the contractual cash flows.

### Financial Liabilities

#### *Initial recognition and measurement*

Financial liabilities are classified, at initial recognition, as financial liabilities at FVPL, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.



### *Subsequent measurement*

The measurement of financial liabilities depends on their classification as follows;

- *Payables*

These pertain to financial liabilities that are not held for trading or not designated as at FVPL upon the inception of the liability. These include liabilities arising from operations (e.g., accounts payable, accrued liabilities). Payables are recognized initially at fair value and are subsequently carried at amortized cost, taking into account the impact of applying the EIR method of amortization (or accretion) for any related premium, discount and any directly attributable transaction costs.

This category generally applies to the Company's trade and other payables (excluding payables to officers and employees and to government agencies), lease liabilities and other noncurrent liability.

- *Loans and borrowings*

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included as finance costs under the "Interest expense" in the parent company statements of income.

This category generally applies to the Company's loans payable.

### *Derecognition*

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the parent company statements of income.

### Offsetting of Financial Instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to set off the recognized amounts and there is intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously. The Company assesses that it has a currently enforceable right of offset if the right is not contingent on a future event and is legally enforceable in the normal course of business, event of default, and event of insolvency or bankruptcy of the Company and all of the counterparties.

### Fair Value Measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability



The principal or the most advantageous market must be accessible to the Company. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use. The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognized in the financial statements at fair value on a recurring basis, the Company determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Company has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy, as explained above.

#### Inventories

Inventories are valued at the lower of cost or net realizable value (NRV). Costs incurred in bringing each product to its present location and condition are accounted for as follows:

Materials and supplies	-	at purchase price less purchase discount, returns and rebates on a first-in, first-out method
Quicklime and slaked lime	-	at cost on a moving average production method
Gold buttons	-	at cost on a moving average production method

NRV for materials and supplies represents the current replacement cost. NRV of gold buttons is the estimated selling price in the ordinary course of business less estimated costs of completion and the estimated costs necessary to make the sale.

#### Other Current Assets

Other current assets include input value-added tax (VAT), excess creditable withholding taxes (CWTs), advances to contractors and prepaid expenses, which the Company expects to realize or consume within twelve (12) months after the end of the reporting period. Other current assets are all stated at the estimated NRV.



#### *Prepaid expenses*

Prepaid expenses pertain to various prepayments consumable within one year from the end of the reporting period. This account comprises of advance payments for insurance, and other services. These are apportioned over the period covered by the payment and charged to the appropriate accounts in the parent company statements of income when incurred.

#### *VAT*

Revenues, expenses, and assets are recognized net of the amount of VAT, if applicable.

When VAT from sales of goods and/or services (output VAT) exceeds VAT passed on from purchases of goods or services (input VAT), the excess is recognized as payable in the statement of financial position. When VAT passed on from purchases of goods or services (input VAT) exceeds VAT from sales of goods and/or services (output VAT), the excess is recognized as an asset in the statement of financial position to the extent of the recoverable amount.

#### *CWTs*

CWTs are amounts withheld from income of the Company subject to expanded withholding taxes. CWTs can be utilized as payments for income taxes provided that these are properly supported by certificates of creditable tax withheld at source subject to the rules of Philippine income taxation.

#### Investments in Subsidiaries

A subsidiary is an entity over which the Company has control. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Company controls an investee if, and only if, the Company has all of the following:

- power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- exposure, or rights, to variable returns from its involvement with the investee; and
- the ability to use its power over the investee to affect its returns.

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption and when the Company has less than a majority of the voting or similar rights of an investee, the Company considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- the contractual arrangement with the other vote holders of the investee,
- rights arising from other contractual arrangements, or
- the Company's voting rights and potential voting rights.

The Company re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control.

The investment in subsidiaries is carried in the parent company statement of financial position at cost less any impairment in value. Dividends received are recognized as income.

#### Property, Plant and Equipment

Property, plant and equipment, except land, are stated at cost, excluding the costs of day-to-day servicing, less accumulated depreciation, depletion and amortization and accumulated impairment in value. Such cost includes the cost of replacing part of such property, plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met.



When significant parts of property, plant and equipment are to be replaced at intervals, the Company recognizes such parts as individual assets with specific useful lives and depreciates them accordingly. Likewise, when a major inspection is performed, its cost is recognized in the carrying amount of the property, plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognized in the parent company statements of income as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

Construction in progress (CIP) is stated at cost. This includes costs of construction and other direct costs related to the asset being constructed. CIP is not depreciated until such time that the relevant asset is completed, transferred to the appropriate account and put into operational use.

Land is carried at revalued amount less any impairment in value. Valuations are performed with sufficient frequency to ensure that the carrying amount of a revalued asset does not differ materially from its fair value.

The increment from valuation of land, net of deferred tax liability, resulting from the revaluation of land is credited to revaluation increment on land under the other components of equity caption included in the equity section in the statement of financial position. However, to the extent that it reverses a revaluation deficit of the same asset previously recognized in the parent company statements of income, the increase is recognized in parent company statements of income. A revaluation deficit is recognized in the parent company statements of income, except to the extent that it offsets an existing surplus on the same asset recognized in the revaluation increment. Upon derecognition of the revalued property, the relevant portion of the revaluation increment realized in respect of previous valuations is released from the revaluation increment directly to retained earnings.

Depreciation and amortization are computed on a straight-line basis over the estimated useful lives of the assets as follows:

<u>Category</u>	<u>Number of years</u>
Land improvements	10-25
Buildings	10-20
Machinery, tools and equipment	2-15

Depreciation of an item of property, plant and equipment begins when it becomes available for use, i.e., when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. Depreciation, depletion and amortization ceases at the earlier of the date that the item is classified as held for sale (or included in a disposal Company that is classified as held for sale) in accordance with PFRS 5 and the date the asset is derecognized.

The useful lives and depreciation methods are reviewed periodically to ensure that the periods and methods of depreciation are consistent with the expected pattern of economic benefits from items of property, plant and equipment.

Effective January 1, 2019, it is the Company's policy to classify right-of-use assets as part of property and equipment. Prior to that date, all of the Company's leases are accounted for as operating leases in accordance with PAS 17, hence, not recorded on the statement of financial position. The Company recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are initially measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The initial cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, lease payments made at or before the



commencement date less any lease incentives received and estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

Unless the Company is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognized right-of-use assets are depreciated on a straight-line basis over the shorter of their estimated useful life and lease term, as follows:

<u>Right-of-use asset</u>	<u>Number of years</u>
Land	15-25
Office space	8
Machinery, tools and equipment	2

Right-of-use assets are subject to impairment.

An item of property, plant and equipment and any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the parent company statements of income in the year the asset is derecognized.

Fully depreciated assets are retained in the accounts until these are no longer in use. No further depreciation is charged to current operation for these items.

#### *Mine and Mining Properties*

Capitalized expenditure is assessed for impairment and is transferred from deferred exploration costs to mine development costs when it has been established that a mineral deposit is commercially mineable, development sanctioned, and a decision has been made to formulate a mining plan (which occurs upon completion of a positive economic analysis of the mineral deposit).

After transfer of the deferred exploration costs, all subsequent expenditure on the construction, installation or completion of infrastructure facilities is capitalized in mine development costs. Development expenditure is net of proceeds from the sale of ore extracted during the development phase to the extent that it is considered integral to the development of the mine. Any costs incurred in testing the assets to determine if they are functioning as intended, are capitalized, net of any proceeds received from selling any product produced while testing. If these proceeds exceed the cost of testing, any excess is recognized in the parent company statement of income.

No depletion is charged during the mine exploration or development phases.

When the Company has already achieved commercial levels of production, mine development costs are moved to mine and mining properties. Commercial production is deemed to have commenced when management determines that the completion of operational commissioning of major mine and plant components is completed, operating results are being achieved consistently for a period of time and that there are indicators that these operating results will be continued.

The carrying value of mine and mining properties represents total expenditures incurred to date on the area of interest, less accumulated depletion and any impairment.



When a mine construction project moves into the production phase, the capitalization of certain mine construction costs ceases, and costs are either regarded as part of the cost of inventory or expensed, except for costs which qualify for capitalization relating to mining asset additions, improvements or new developments, underground mine development or mineable reserve development.

Mine and mining properties are subject to depletion, which is computed using the units-of production method based on the economically recoverable reserves. Mine and mining properties include the initial estimate of provision for mine rehabilitation and decommissioning, for which the Company is constructively liable.

#### Investment Properties

Investment properties consist of assets that are held for rentals or for capital appreciation or both.

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at fair value, which reflects market conditions at the reporting date. Gains or losses arising from changes in the fair values of investment properties are recognized in the parent company statements of income in the year in which they arise, including the corresponding tax effect. Fair values are determined based on the revaluation performed by an accredited external independent appraiser.

Investment properties are derecognized either when they have been disposed of, or when they are permanently withdrawn from use and no future economic benefit is expected from their disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized in the parent company statements of income in the period of derecognition.

Transfers are made to or from investment properties only when there is a change in use. For a transfer from investment property to owner-occupied property, the deemed cost for subsequent accounting is the fair value at the date of change in use. If owner-occupied property becomes an investment property, the Company accounts for such property in accordance with PAS 16, *Property, Plant and Equipment* up to the date of change in use.

#### Deferred Mine Exploration Costs

Exploration and evaluation activity involve the search for mineral resources, the determination of technical feasibility and the assessment of commercial viability of an identified resource.

Exploration and evaluation activity include:

- Researching and analyzing historical exploration data
- Gathering exploration data through geophysical studies
- Exploratory drilling and sampling
- Determining and examining the volume and grade of the resource
- Surveying transportation and infrastructure requirements
- Conducting market and finance studies

License costs paid in connection with a right to explore in an existing exploration area are capitalized and amortized over the term of the permit.

Once the legal right to explore has been acquired, exploration and evaluation expenditure is charged to profit or loss as incurred, unless the Company concludes that a future economic benefit is more likely than not to be realized. These costs include directly attributable employee remuneration, materials and fuel used, surveying costs, drilling costs and payments made to contractors.



In evaluating whether the expenditures meet the criteria to be capitalized, several different sources of information are used. The information that is used to determine the probability of future benefits depends on the extent of exploration and evaluation that has been performed.

Expenditure on exploration and evaluation is accounted for in accordance with the area of interest method. Exploration and evaluation expenditure is capitalized provided the rights to tenure of the area of interest is current and either: the exploration and evaluation activities are expected to be recouped through successful development and exploitation of the area of interest or, alternatively, by its sale; or exploration and evaluation activities in the area of interest have not, at the reporting date, reached a stage that permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, and active and significant operations in, or relating to, the area of interest are continuing.

When the technical feasibility and commercial viability of extracting a mineral resource have been demonstrated, then, any fulfillment exploration and evaluation expenditure is reclassified as mine properties and mine development costs included as part of property, plant and equipment. Prior to reclassification, exploration and evaluation expenditure is assessed for impairment.

When a project is abandoned, the related deferred mine exploration costs are written off. Exploration areas are considered permanently abandoned if the related permits of the exploration have expired and/or there are no definite plans for further exploration and/or development.

#### Other Noncurrent Assets

Other noncurrent assets, which include nontrade receivables, prepaid expenses, refundable deposits and various restricted bank deposits for the settlement of environmental obligations, are presented at the estimated NRV. These are classified as noncurrent since the Company expects to utilize the assets beyond twelve (12) months from the end of the reporting period.

#### Impairment of Nonfinancial Assets

The Company assesses, at the end of each reporting period, whether there is an indication that an asset may be impaired. If any such indication exists, or when annual impairment testing for an asset is required, the Company makes an estimate of the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Company bases its impairment calculation on most recent budgets and forecast calculations, which are prepared separately for each of the Company's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years.



Impairment losses of continuing operations, including impairment on inventories, are recognized in the parent company statements of income in expense categories consistent with the function of the impaired asset, except for properties previously revalued with the revaluation taken to OCI. For such properties, the impairment is recognized in OCI up to the amount of any previous revaluation.

For the other assets, an assessment is made at each end of the reporting period to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, the Company estimates the asset's or CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, depletion or amortization, had no impairment loss been recognized for that asset in prior years. Such reversal is recognized in the parent company statements of income unless the asset is carried at revalued amount, in which case, the reversal is treated as a revaluation increase.

#### *Deferred Mine Exploration Costs*

The Company assesses whether facts and circumstances suggest that the carrying amount of deferred mine exploration costs may exceed its recoverable amount. Below are some of the facts and circumstances, which the Company considers in determining whether there is impairment on deferred mine exploration costs:

- the period for which the Company has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed
- substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned
- exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the entity has decided to discontinue such activities in the specific area, and
- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the deferred mine exploration costs is unlikely to be recovered in full of successful development or by sale

Full provision is made for the impairment unless it is probable that such costs are expected to be recouped through successful exploration and development of the area of interest, or alternatively, by its sale. If the project does not prove to be viable or is abandoned, all revocable cost associated with the project and the related impairment provisions are written off.

Recovery of impairment losses recognized in prior years is recorded if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. The recovery is recorded in the parent company statements of income.

#### Provisions

##### *General*

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as interest expense in the parent company statements of income.



When the Company expects some or all of the provision to be reimbursed, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the parent company statements of income, net of any reimbursement.

*Liability for Mine Rehabilitation*

Mine rehabilitation costs will be incurred by the Company either while operating, or at the end of the operating life of, the Company's facilities and mine properties. The Company assesses its mine rehabilitation provision at each reporting date. The Company recognizes a rehabilitation provision where it has a legal and constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount of obligation can be made. The nature of these restoration activities includes: dismantling and removing structures; rehabilitating mines and tailings dams; dismantling operating facilities; closing plant and waste sites; and restoring, reclaiming and re-vegetating affected areas.

The obligation generally arises when the asset is installed or the ground/environment is disturbed at the mining operation's location. When the liability is initially recognized, the present value of the estimated costs is capitalized by increasing the carrying amount of the related mining assets to the extent that it was incurred as a result of the development or construction of the mine. Any rehabilitation obligations that arise through the production of inventory are recognized as part of the related inventory item. Additional disturbances that arise due to further development or construction at the mine are recognized as additions or charges to the corresponding assets and rehabilitation liability when these occur. Costs related to restoration of site damage (subsequent to start of commercial production) that is created on an ongoing basis during production are provided for at their net present values and recognized in profit or loss as extraction progresses.

Changes in the estimated timing of rehabilitation or changes to the estimated future costs are dealt with prospectively by recognizing an adjustment to the rehabilitation liability and a corresponding adjustment to the asset to which it relates, if the initial estimate was originally recognized as part of an asset measured in accordance with PAS 16.

Any reduction in the rehabilitation liability and, therefore, any deduction from the asset to which it relates, may not exceed the carrying amount of that asset. If it does, any excess over the carrying value is taken immediately to the parent company statements of income.

If the change in estimate results in an increase in the rehabilitation liability and, therefore, an addition to the carrying value of the asset, the Company considers whether this is an indication of impairment of the asset as a whole, and if so, tests for impairment. If, for mature mines, the estimate for the revised mine assets net of rehabilitation provisions exceeds the recoverable value, that portion of the increase is charged directly to expense.

Over time, the discounted liability is increased for the change in present value based on the discount rates that reflect current market assessments and the risks specific to the liability. The periodic unwinding of the discount is recognized in the parent company statements of income as part of interest expense.

For closed sites, changes to estimated costs are recognized immediately in the parent company statements of income.

Rehabilitation trust funds committed for use in satisfying environmental obligations are included in other noncurrent assets in the parent company statements of financial position.



#### Capital Stock and Capital Surplus

Capital stock is measured at par value for all shares issued and is measured at par value for all shares issued and outstanding. When the Company issues more than one class of stock, a separate account is maintained for each class of stock and number of shares issued and outstanding.

When the shares are sold at premium, the difference between the proceeds and the par value is credited to capital surplus. When shares are issued for a consideration other than cash, the proceeds are measured by the fair value of the consideration received. In case the shares are issued to extinguish or settle the liability of the Company, the shares shall be measured either at the fair value of the shares issued or fair value of the liability settled, whichever is more reliably determinable.

#### Other Components of Equity

The 'Other components of equity' caption in the parent company statements of financial position consists of:

- Revaluation increment on land
- Remeasurement gain on pension liability
- Unrealized loss on financial assets at FVOCI
- Unrealized gain on transfer of mining rights

#### Retained Earnings

Retained earnings represent the cumulative balance of periodic net income or loss, dividend contributions, prior period adjustments, effect of changes in accounting policies and other capital adjustments.

Unappropriated retained earnings represent that portion which is free and can be declared as dividends to stockholders. Appropriated retained earnings represent that portion, which has been restricted and, therefore, not available for dividend declaration.

#### Treasury Shares

Own equity instruments that are reacquired (treasury shares) are recognized at cost and deducted from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments. Any difference between the carrying amount and the consideration, if reissued, is recognized in capital surplus under the equity section of the parent company statement of financial position.

#### Revenue Recognition

The Company is in the business of sale of gold ore and lime. Revenue from contracts with customers is recognized when control of the goods is transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods. The Company has generally concluded that it is the principal in its revenue arrangements, because it typically controls the goods before transferring them to the customer.

#### *Sale of Mine Products*

Revenue from sale of mine products is recognized at the point in time when the control of the asset is transferred to the customer which is normally at the time of shipment, and the selling prices are known or can be reasonably estimated. Revenue from sale of gold is measured at the prevailing international gold buying price and prevailing Philippine peso to United States dollar buying rate set by the BSP Treasury department on a daily basis and is recognized based on the initial weight and assay tests, which represent the best estimate. Subsequent adjustments to revenue due to quantity and/or quality changes are recognized upon determination of the final weight and assay tests.



#### *BSP Refining Charges*

BSP refining charges are deducted from revenue to arrive at revenue from contracts with customers since these are necessary expenses by BSP in determining the final gold content.

#### *Other Income*

Other income not directly related to the Company's normal operations is recognized when the earnings process is virtually complete. These are classified under other income - net in the parent company statements of income.

#### Cost and Expense Recognition

Costs and expenses are decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants. Costs and expenses are generally recognized when these arise following the accrual basis of accounting.

#### *Cost of Mine Products Sold*

Cost of mine products sold is incurred in the normal course of business and is recognized when incurred. It comprises mainly of outside services, materials and supplies, depreciation, depletion and amortization, personnel expenses, power and utilities and others, which are recognized as expenses in the period when the mine products are delivered.

#### *Selling, General and Administrative*

Selling and general expenses pertain to costs associated in the marketing and general administration of the day-to-day operations of the Company. These are generally recognized when incurred.

#### *Excise Taxes*

Excise taxes pertain to the taxes paid or accrued by the Company arising from the production of gold and nickel ore. These taxes and royalties are recognized once revenue from the sale of the related mine product is recognized.

#### Leases

##### The Company as a Lessee

At the commencement date of the lease, the Company recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Company and payments of penalties for terminating a lease, if the lease term reflects the Company exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognized as expense in the period on which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Company uses the incremental borrowing rate (IBR) at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments or a change in the assessment to purchase the underlying asset.



*Short-term leases and leases of low-value assets*

The Company applies the short-term lease recognition exemption to its short-term leases of clinic spaces (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

The Company as a Lessor

Leases where the Company does not transfer substantially all the risks and rewards of ownership of the assets are classified as operating leases. Initial direct costs incurred in negotiating operating leases are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as the rental income. Contingent rents are recognized as revenue in the period in which they are earned.

Pension and Other Post-Employment Benefits

The Company has separate, noncontributory, defined benefit pension plans, covering all permanent, regular and full-time employees. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method.

The net defined benefit liability or asset is the aggregate of the present value of the defined benefit obligation at the end of the reporting period reduced by the fair value of plan assets, adjusted for any effect of limiting a net defined benefit asset to the asset ceiling. The asset ceiling is the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

Remeasurements, comprising of actuarial gains or losses, the effect of the ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in the net interest on the net defined benefit liability), are recognized immediately in the statements of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which these occur. Remeasurements are not reclassified to parent company statements of income in subsequent periods.

Past services costs are recognized in the parent company statements of income on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Company recognizes related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Company recognizes the following changes in the net defined benefit obligation under costs of mine products sold, costs of services and selling and general expenses in the parent company statements of income:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements
- Net interest expense or income

Plan assets are assets that are held by a long-term employee benefit fund or qualifying insurance policies. Plan assets are not available to the creditors of the Company, nor can they be paid directly to the Company. Fair value of plan assets is based on market price information. When no market price is available, the fair value of plan assets is estimated by discounting expected future cash flows using a discount rate that reflects both the risk associated with the plan assets and the maturity or expected disposal date of those assets (or, if they have no maturity, the expected period until the settlement of the related obligations). If the fair value of the plan assets is higher than the present value of the defined benefit obligation, the measurement of the resulting defined benefit asset is



limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

#### Share-based Payment Transactions

Employees (including senior executives) of the Company receive remuneration in the form of share-based payment transactions, whereby employees render services as consideration for equity instruments (equity-settled transactions).

The cost of equity-settled transactions is determined by the fair value at the date when the grant is made using an appropriate valuation model.

That cost is recognized, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, in employee benefits expense. The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Company's best estimate of the number of equity instruments that will ultimately vest. The expense or credit in the parent company statements of income for a period represents the movement in cumulative expense recognized as at the beginning and end of that period and is recognized in employee benefits.

No expense is recognized for awards that do not ultimately vest, except for equity settled transactions for which vesting is conditional upon a market or non-vesting condition. These are treated as vesting irrespective of whether or not the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Where the terms of an equity-settled award are modified, the minimum expense recognized is the expense computed based on the grant date fair value of the unmodified award, provided the original terms of the award are met. An additional expense, measured as at the date of modification, is recognized for any modification that increases the total fair value of the share-based payment transaction, or is otherwise beneficial to the employee. Where an award is cancelled by the Company or by the counterparty, any remaining element of the fair value of the award is expensed immediately through the parent company statements of income.

When the terms of an equity-settled award are cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognized for the award is recognized immediately. However, if a new award is substituted for the cancelled award and designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

Where an equity-settled award expires or is cancelled, its cost is transferred to additional paid-in capital.

Forfeitures revise the expense to reflect the best available estimate of the number of equity instruments expected to vest.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of diluted earnings per share.

#### Foreign Currencies

The Company's financial statements are presented in Philippine peso. The Company determines the functional currency and items included in the financial statements are measured using that functional currency.



### *Transactions and Balances*

Transactions in foreign currencies are initially recorded by the Company using the functional currency exchange rate at the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date.

Differences arising on settlement or translation of monetary items are recognized in the parent company statements of income with the exception of monetary items that are designated as part of the hedge of the Company's net investment of foreign operation. These are recognized in OCI until the net investment is disposed of, at which time, the cumulative amount is reclassified to the parent company statements of income. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in OCI.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognized in OCI or parent company statements of income are also recognized in OCI or parent company statements of income, respectively).

### Income Taxes

#### *Current Tax*

Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the tax authority. The income tax rates and income tax laws used to compute the amount are those that have been enacted or substantively enacted at the end of the reporting period.

Current income tax relating to items recognized directly in equity is recognized in equity and not in the parent company statements of income. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

#### *Deferred Tax*

Deferred tax is provided using the liability method on temporary differences at the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognized for all taxable temporary differences.

Deferred tax assets are recognized for all deductible temporary differences, carry-forward of unused tax credits from excess of minimum corporate income tax (MCIT) over regular corporate income tax (RCIT) and unused net operating loss carry-over (NOLCO), to the extent that it is probable that sufficient future taxable profit will be available against which the deductible temporary differences, excess MCIT and unused NOLCO can be utilized.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient future taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are reassessed at the end of each reporting period and are recognized to the extent that it has become probable that sufficient future taxable profit will allow the deferred tax asset to be recovered.



Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized, or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the end of the reporting period.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognized in correlation to the underlying transactions either in other comprehensive income or directly in equity.

Deferred tax assets and liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

#### Earnings Per Share (EPS)

Basic EPS is calculated by dividing net income for the year attributable to ordinary equity holders of the Company by the weighted average number of ordinary shares outstanding, adjusted for any stock dividends declared during the year.

Diluted EPS amount is calculated by dividing the net profit attributable to ordinary equity holders of the Company (after deducting interest on the convertible cumulative preference shares) by the weighted average number of ordinary shares outstanding, adjusted for any stock dividends declared during the year plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares into ordinary shares.

If the number of ordinary or potential ordinary shares outstanding increases as a result of a capitalization, bonus issue or share split, or decreases as a result of a reverse share split, the calculation of basic and diluted earnings per share for all periods presented shall be adjusted retrospectively. If these changes occur after the reporting period but before the financial statements are authorized for issue, the per share calculations for those and any prior period financial statements presented shall be based on the new number of shares. The fact that per share calculations reflect such changes in the number of shares shall be disclosed. In addition, basic and diluted earnings per share of all periods presented shall be adjusted for the effects of errors and adjustments resulting from changes in accounting policies accounted for retrospectively.

#### OCI

OCI comprises items of income and expense (including items previously presented under the parent company statements of changes in equity) that are not recognized in the parent company statements of income.

#### Contingencies

Contingent liabilities are not recognized in the financial statements. These are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are not recognized in the financial statements but are disclosed in the notes to parent company financial statements when an inflow of economic benefits is probable.

#### Events After the Reporting Period

Events after the end of the reporting period up to the auditor's report that provide additional information about the Company's position at the reporting period (adjusting events) are reflected in the financial statements. Events after the end of the reporting period up to the auditor's report that are not adjusting events are disclosed in the notes to financial statements when material.



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### 3. Summary of Significant Accounting Judgments, Estimates and Assumptions

The preparation of the parent company financial statements in accordance with PFRSs requires the Company to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, income and expenses and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these judgements, estimates and assumptions could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Judgments, estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results could differ from such estimates.

Other disclosures relating to the Company's exposure to risks and uncertainties include financial risk management and policies, and sensitivity analyses disclosures are provided in Note 29.

#### Judgments

In the process of applying the Company's accounting policies, management has made the judgment below, apart from those involving estimations, that have the most significant effect on the amounts recognized in the parent company financial statements.

#### *Assessing Provisions and Contingencies*

The Company is currently involved in various legal proceedings. The estimate of the probable costs for the resolution of these claims has been developed in consultation with outside counsel handling the Company's defense in these matters and is based upon an analysis of potential results. The Company currently assessed that these proceedings will not have a material adverse effect on its financial position. It is possible, however, that future results of operations could be materially affected by changes in the estimates or in the effectiveness of the strategies relating to these proceedings (see Note 33).

#### *Distinction between Investment Property and Owner-Occupied Property*

The Company determines whether a property qualifies as investment property. In making its judgment, the Company considers whether the property is not occupied substantially for use by, or in operations of the Company, not for sale in the ordinary course of business, but is held primarily to earn rental income or capital appreciation. Owner-occupied properties generate cash flows that are attributable not only to the property but also to the other assets used in the production or supply

#### Estimates and Assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets within the next financial year, are discussed below. The Company based its assumptions and estimates on parameters available when the parent company financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Company. Such changes are reflected in the assumptions when these occur.

#### *Provision for expected credit losses on trade and other receivables*

The Company uses the simplified approach and general approach model in the assessment of the ECL for its trade and other receivables, respectively. An assessment of the ECL relating to these financial assets is undertaken upon initial recognition and each financial year and involves exercise of significant judgment. Key areas of judgment include defining default, determining assumptions to be



used such as timing and amounts of expected net recoveries from defaulted accounts, determining debtor's capacity to pay, and incorporating forward looking information.

Provision for ECLs recognized in 2020 and 2019 amounted to nil and ₱190, respectively. In 2020 and 2019, gain on reversal of allowance for ECL was also recognized amounting to nil and ₱1,181, respectively (see Notes 5 and 23). The carrying amount of trade and other receivables amounted to ₱556,030 and ₱515,847, net of allowance for ECL of ₱171,383, as at December 31, 2020 and 2019, respectively (see Note 5).

#### *Assessing Impairment of Other Current Assets and Other Noncurrent Assets*

The Company provides allowance for impairment losses on other current assets and other noncurrent assets when these can no longer be realized. The amounts and timing of recorded expenses for any period would differ if the Company made different judgments or utilized different estimates. An increase in allowance for probable loss would increase recorded expenses and decrease other current and noncurrent assets.

Provision for impairment losses on other current assets recognized in 2020 and 2019 amounted to nil and ₱2,411, respectively (see Note 7). The Company did not recognize any provision for impairment losses on other noncurrent assets in 2020 and 2019 (see Notes 12 and 23).

The total carrying value of other current assets and other noncurrent assets totaled to ₱297,141 and ₱283,896 as at December 31, 2020 and 2019, respectively (see Notes 7 and 12).

#### *Estimating Impairment of Investments in Subsidiaries*

PFRS requires that an impairment review be performed when certain impairment indicators are present. Determining the fair value of investment in subsidiary, which requires the determination of future cash flows expected to be generated from the holding and ultimate disposition of such asset, requires the Company to make estimates and assumptions that can materially affect its financial statements. Future events could cause the Company to conclude that the investment is impaired. Any resulting impairment loss could have a material adverse impact on the parent company statements of financial position and parent company statements of comprehensive income.

The Company recognized provision for impairment losses on investments in subsidiaries amounting to nil in 2020 and 2019 (see Note 8). The carrying amount of investments in subsidiaries amounted to ₱2,076,463 as at December 31, 2020 and 2019 (see Note 8).

#### *Estimating Ore Reserves*

Ore reserves estimates are, to a large extent, based on the interpretation of geological data obtained from drill holes and other sampling techniques and feasibility studies. The Company estimates its ore reserves based on information compiled by appropriately qualified persons relating to the geological data on the size, depth and shape of the ore body, and requires complex geological judgments to interpret the data. The Company also makes estimates and assumptions regarding a number of economic and technical factors affecting ore reserves estimates, such as production rates, grades, foreign exchange rates, production and transport costs, and commodity prices.

These geological, economic and technical estimates and assumptions may change in the future in ways, which can affect the quality and quantity of the ore reserves. The Company reviews and updates estimates as required, but at least annually, to reflect actual production, new exploration data or developments and changes in other assumptions or parameters. These estimates will change from time to time to reflect mining activities, analyses of new engineering and geological data, changes in ore reserve and mineral resource holdings, modifications of mining plans or methods, changes gold prices or production costs, and other factors.



Changes in the ore reserves estimates may impact the carrying values of property, plant and equipment, provision for mine rehabilitation and decommissioning, recognition of deferred tax assets and depreciation and depletion charges.

*Assessing Recoverability of Deferred Mine Exploration Costs*

The Company reviews the recoverability of deferred mine exploration costs when events or changes in circumstances indicate that the carrying amount of deferred mine exploration costs may exceed its estimated recoverable amount. The Company considers the following factors, among others, in its assessment:

- Status of each mine exploration project and plans on exploration and evaluation activities
- Validity of the licenses, permits and correspondences related to each mine exploration project
- Plans to abandon existing mine areas and plans to discontinue exploration activities
- Availability of information suggesting that the recovery of expenditure is unlikely

The Company recognized provision for impairment losses on deferred mine exploration costs amounting to nil and ₱94,930 in 2020 and 2019, respectively (see Notes 11 and 23). As at December 31, 2020 and 2019, deferred mine exploration costs amounted to ₱383,306 and ₱373,070, respectively (see Note 11).

*Estimating Recoverability of Property, Plant and Equipment*

The Company assesses impairment on property, plant and equipment whenever events or changes in circumstances indicate that the carrying amount of the property, plant and equipment may not be recoverable. The factors that the Company considers important which could trigger an impairment review include the following:

- Significant underperformance relative to expected historical or projected future operating results
- Significant changes in the manner of use of the acquired assets or the strategy for overall business, and
- Significant negative industry or economic trends

In determining the present value of estimated future cash flows expected to be generated from the continued use of the property, plant and equipment, the Company is required to make estimates and assumptions such as commodity prices, discount rates and foreign currency exchange rates, which can materially affect the financial statements. Commodity prices and foreign exchange rates are based on forecasts of various financial institutions while the discount rate is based on industry weighted average cost of capital.

An impairment loss would be recognized whenever evidence exists that the carrying value is not recoverable. For purposes of assessing impairment, property, plant and equipment are grouped at the lowest levels for which there are separately identifiable cash flows. An impairment loss is recognized and charged to earnings if the discounted expected future cash flows are less than the carrying amount. Fair value is estimated by discounting the expected future cash flows using a discount factor that reflects the market rate for a term consistent with the period of expected cash flows. No allowance for impairment losses on property, plant and equipment was recognized in 2020 and 2019.

As at December 31, 2020 and 2019, property, plant and equipment at cost amounted to ₱520,487 and ₱533,036, respectively (see Note 10).

*Revaluation of Property, Plant and Equipment and Investment Properties*

The Company carries its investment properties at fair value, with changes in fair value being recognized in the parent company statements of income. In addition, it measures its land under property, plant and equipment at revalued amounts, with changes in fair value being recognized in the



parent company statements of comprehensive income. The land and investment properties were valued using the sales comparison approach. The Company engaged an independent appraiser firm, which holds a recognized and relevant professional qualification and has recent experience in the location of the properties being valued to assess fair values.

As at December 31, 2020 and 2019, the fair value of the Company's land under property, plant and equipment, and investment properties amounted to ₱4,075,420 and ₱3,884,266, respectively (see Notes 10 and 32).

*Leases - Estimating the incremental borrowing rate*

The Company cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Company would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Company 'would have to pay', which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when they need to be adjusted to reflect the terms and conditions of the lease (for example, when leases are not in the subsidiary's functional currency). The Company estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

The Company's lease liabilities amounted to ₱4,686 and ₱5,340 as at December 31, 2020 and 2019, respectively (see Note 32).

*Estimating Liability for Mine Rehabilitation*

The Company estimates the costs of mine rehabilitation based on previous experience in rehabilitating fully mined areas in sections of the mine site. These costs are adjusted for inflation factor based on the average annual inflation rate as of adoption date or re-evaluation of the asset dismantlement, removal or restoration costs. Such adjusted costs are then measured at present value using the market interest rate for a comparable instrument adjusted for the Company's credit standing. While management believes that its assumptions are reasonable and appropriate, significant differences in actual experience or significant changes in the assumptions may materially affect the Company's liability for mine rehabilitation. Liability for mine rehabilitation amounted to ₱78,532 and ₱67,467 as at December 31, 2020 and 2019, respectively (see Note 16).

*Estimating Pension Benefits*

The cost of defined benefit pension plans and other post-employment medical benefits as well as the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rates, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, the underlying assumptions and its long-term nature, defined benefit obligations are highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date. Net pension liability amounted to ₱78,749 and ₱60,411 as at December 31, 2020 and 2019, respectively (see Note 26).

In determining the appropriate discount rate, management considers the interest rates of government bonds that are denominated in the currency in which the benefits will be paid, with extrapolated maturities corresponding to the expected duration of the defined benefit obligation.

The mortality rate is based on publicly available mortality tables for the specific country and is modified accordingly with estimates of mortality improvements. Future salary increases and pension increases are based on expected future inflation rates for the specific country.



Further details about the assumptions used are provided in Note 26.

*Assessing Realizability of Deferred Tax Assets*

The Company reviews the carrying amounts of the deferred tax assets at each end of the reporting date and reduces deferred tax assets to the extent that it is probable that sufficient future taxable profits will be available against which these can be utilized. Management believes that there is no assurance that the Company will generate sufficient taxable profit to allow all or part of its deferred tax assets to be utilized.

The Company recognized deferred tax assets amounting to ₱103,752 and ₱143,516 as at December 31, 2020 and 2019, respectively (see Note 27).

The Company did not recognize deferred tax assets on the remaining unused NOLCO, MCIT and deductible temporary differences amounting to ₱506,049 and ₱560,613 as at December 31, 2020 and 2019, respectively (see Note 27).

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4. **Cash**

	<b>2020</b>	2019
Cash on hand	<b>₱465</b>	₱415
Cash in banks	<b>39,124</b>	57,902
	<b>₱39,589</b>	₱58,317

Interest income pertaining to cash in banks totaled to ₱140 and ₱135 in 2020 and 2019, respectively (see Note 23).

Cash in banks denominated in United States Dollar (US\$) as at December 31, 2020 and 2019, amounted to \$2 and \$3, respectively.

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5. **Trade and Other Receivables**

	<b>2020</b>	2019
Trade		
Receivable from third parties	<b>₱26,830</b>	₱24,800
Receivable from related parties (Note 24)	<b>3,945</b>	3,945
Nontrade	<b>250,111</b>	355,620
Amounts owed by related parties (Note 24)	<b>340,589</b>	210,884
Employee stock ownership incentive plan (ESOIP; Note 25)	<b>58,416</b>	58,416
Advances to officers and employees	<b>39,678</b>	26,037
Receivables from lessees of bunkhouses	<b>4,754</b>	4,988
Others	<b>3,090</b>	2,540
	<b>727,413</b>	687,230
Less allowance for ECL	<b>171,383</b>	171,383
	<b>₱556,030</b>	₱515,847

Trade receivables and receivables from lessees of bunkhouses are noninterest-bearing and are generally collectible within a period of one year. Advances to officers and employees pertain to cash advances used in the operations which are generally subject to liquidation.



Nontrade receivables pertain to advances made to suppliers by the Company relating to materials and supplies necessary in the Company's operation. These are noninterest-bearing and will be realized through offsetting against future billings from suppliers.

Other receivables comprise mainly of receivables that are considered to be individually insignificant.

Movements of allowance for ECL on trade and other receivables are as follows:

	2020				Total
	Trade receivables	Amounts owed by related parties (Note 24)	Receivables from lessees of bunkhouses	ESOIP (Note 25)	
<b>Balances at the beginning of year and end of year</b>	<b>₱1,821</b>	<b>₱111,146</b>	<b>₱-</b>	<b>₱58,416</b>	<b>₱171,383</b>

	2019				Total
	Trade receivables	Amounts owed by related parties (Note 24)	Receivables from lessees of bunkhouses	ESOIP (Note 25)	
Balances at the beginning of year	₱1,631	₱112,327	₱-	₱58,416	₱172,374
Provision for ECL (Note 23)	190	-	-	-	190
Recoveries (Note 23)	-	(1,181)	-	-	(1,181)
<b>Balances at the end of year</b>	<b>₱1,821</b>	<b>₱111,146</b>	<b>₱-</b>	<b>₱58,416</b>	<b>₱171,383</b>

Except for those impaired accounts, the Company assessed trade and other receivables as collectible and in good standing.

## 6. Inventories

	2020	2019
Materials and supplies - at cost	<b>₱198,457</b>	₱328,477
Gold button - at cost	<b>7,781</b>	7,675
Quicklime and slaked lime - at cost	<b>3,682</b>	5,570
	<b>209,920</b>	341,722
Less allowance for impairment losses	<b>175,502</b>	310,270
	<b>₱34,418</b>	₱31,452

The gold button inventory represents gold and silver by-product produced by the Company in 2020 and 2019. These mineral products were immediately sold the following year. The gold buttons include depreciation and depletion related to the production of gold amounting to ₱423 and ₱305 in 2020 and 2019, respectively (see Note 10).

Movements of allowance for impairment losses on inventories are as follows:

	2020	2019
Balance at beginning of the year	<b>₱310,270</b>	₱311,174
Write-off	<b>(134,768)</b>	-
Reversal (Note 23)	-	(904)
<b>Balance at end of the year</b>	<b>₱175,502</b>	₱310,270

Materials and supplies charged to current operations amounted to ₱125,944 and ₱115,049 and in 2020 and 2019, respectively (see Notes 20 and 21).



The Company has no inventories pledged as security for liabilities nor any purchase commitments related to inventories as at December 31, 2020 and 2019.

## 7. Other Current Assets

	2020	2019
Input VAT - net	<b>₱117,193</b>	₱115,718
Advances to contractors	<b>102,609</b>	102,609
CWTs	<b>79,730</b>	81,957
Prepaid expenses	<b>22</b>	478
Others	<b>9,100</b>	7,938
	<b>308,654</b>	308,700
Less allowance for impairment losses	<b>39,253</b>	39,253
	<b>₱269,401</b>	₱269,447

In 2019, the Company reclassified nontrade advances to contractors from other noncurrent assets to other current assets amounting to ₱65,767 (see Note 12).

Movement of allowance for impairment losses on advances to contractors follows:

	2020	2019
Balance at beginning of the year	<b>₱39,253</b>	₱36,842
Provision (Note 23)	-	2,411
Balance at end of the year	<b>₱39,253</b>	₱39,253

## 8. Investments in Subsidiaries

The details of investments in subsidiaries as at December 31, 2020 and 2019 follow:

	2020	2019
Acquisition cost of investments:		
BNMI	<b>₱1,250,000</b>	₱1,250,000
BMC	<b>600,000</b>	600,000
Benguetcorp International Ltd. (BIL)	<b>115,565</b>	115,565
Benguetcorp Laboratories, Inc. (BLI)	<b>56,889</b>	56,889
Berec Land Resources, Inc. (BLRI)	<b>39,463</b>	39,463
SARC	<b>7,046</b>	7,046
BBMRC	<b>2,500</b>	2,500
Ifaratoc Mineral Resources Corporation (IMRC)	<b>2,500</b>	2,500
KPLMSC	<b>2,500</b>	2,500
Acupan Gold Mines, Inc. (AGMI)	<b>2,500</b>	2,500
Pillars of Exemplary Consultants, Inc. (PECI)	<b>1,130</b>	1,130
	<b>2,080,093</b>	2,080,093
Less allowance for impairment losses	<b>3,630</b>	3,630
	<b>₱2,076,463</b>	₱2,076,463



BMC was organized primarily to invest in projects and enterprises that diversify, stabilize and strengthen the investment portfolio of the Benguet Company of Companies. As at December 31, 2020 and 2019, BIL, BBMRC, AGMI, which were established to operate mining prospects, are still pre-operating.

BNMI commenced its mining operations in 2010. In the last quarter of 2012, KPLMSC started its commercial operations by providing logistics services to BNMI while BLI started its operations by offering health care services. The other subsidiaries were incorporated to provide support services to the Company.

The Company subscribed to additional stocks of BLI amounting to nil and ₱939 in 2020 and 2019, respectively.

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## 9. Financial Assets at FVOCI

Movements in financial assets at FVOCI are as follows:

	2020	2019
Balance at beginning of year	₱244	₱332
Unrealized valuation loss	72	(88)
Balance at end of year	₱316	₱244

Movements in the unrealized loss on financial assets at FVOCI are as follows:

	2020	2019
Balance at beginning of year	(₱499)	(₱411)
Unrealized valuation gain (loss)	72	(88)
Balance at end of year	(₱427)	(₱499)

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## 10. Property, Plant and Equipment

### a. Land - at revalued amount

Revalued amount of land as at December 31, 2020 and 2019 amounted to ₱1,457,910. The valuation was performed by an independent firm of appraisers, Cuervo Appraisers, Inc.

The revaluation increment, recognized as a separate component of equity, amounts to ₱1,111,953 as at December 31, 2020 and 2019, and is not available for distribution to stockholders until the related assets are sold.

In 2020, the Company engaged Cuervo Appraisers Inc., an independent firm of appraisers, to determine the fair value of the land as at December 31, 2019. The fair value was estimated using the sales comparison approach, which considers the sales of similar or substitute properties and the related market values and establishes value estimates by processes involving comparisons (level 3). In general, a property being valued is compared with sales of similar properties that have been transacted in the open market. Listings and offerings may also be considered. Management believes that the market value of the land, as determined by the independent firm of appraisers, approximates the asset's fair value as at December 31, 2020 and 2019.



Movements in the revaluation increment on land shown as part of other components of equity follow:

Balance before the quasi-reorganization	₱1,561,048
Effect of the quasi-reorganization in 2011 (Note 1)	(1,010,848)
Balance after the quasi-reorganization	550,200
Revaluation increment in:	
2011	148,638
2013	85,900
2018	75,716
2019	251,499
<b>Ending balance as at December 31, 2019 and 2020</b>	<b>1,111,953</b>

b. Property, Plant and Equipment - at cost

	2020						Total
	Land improvements	Buildings	Machinery, tools and equipment	Mine and mining Properties	CIP	Right-of-use assets	
<b>Cost:</b>							
As at January 1, as previously reported	₱77,313	₱273,165	₱690,375	₱1,155,363	₱28,754	₱7,322	₱2,232,292
Additions	1,128	472	15,486	1,547	1,929	-	20,562
Initial recognition of mine rehabilitation asset (Note 16)	-	-	-	-	-	-	-
Change in estimate of the liability for mine rehabilitation (Note 16)	-	-	-	3,338	-	-	3,338
<b>Balances at end of year</b>	<b>78,441</b>	<b>273,637</b>	<b>705,861</b>	<b>1,160,248</b>	<b>30,683</b>	<b>7,322</b>	<b>2,256,192</b>
<b>Accumulated depreciation and depletion:</b>							
As at January 1	67,683	266,774	657,081	706,168	-	1,550	1,699,256
Depreciation and depletion (Notes 6, 20 and 21)	1,997	2,544	14,633	16,034	-	1,241	36,449
<b>Balances at end of year</b>	<b>69,680</b>	<b>269,318</b>	<b>671,714</b>	<b>722,202</b>	<b>-</b>	<b>2,791</b>	<b>1,735,705</b>
<b>Net book values</b>	<b>₱8,761</b>	<b>₱4,319</b>	<b>₱34,147</b>	<b>₱438,046</b>	<b>₱30,683</b>	<b>₱4,531</b>	<b>₱520,487</b>

	2019						Total
	Land improvements	Buildings	Machinery, tools and equipment	Mine and mining Properties	CIP	Right-of-use assets	
<b>Cost:</b>							
As at January 1, as previously reported	₱77,313	₱273,165	₱680,763	₱1,149,704	₱28,754	₱-	₱2,209,699
Effect of adoption of PFRS 16	-	-	-	-	-	7,322	7,322
As at January 1, at restated	77,313	273,165	680,763	1,149,704	28,754	7,322	2,217,021
Additions	-	-	9,612	8,447	-	-	18,059
Initial recognition of mine rehabilitation asset (Note 16)	-	-	-	2,498	-	-	2,498
Change in estimate of the liability for mine rehabilitation (Note 16)	-	-	-	(5,286)	-	-	(5,286)
<b>Balances at end of year</b>	<b>77,313</b>	<b>273,165</b>	<b>690,375</b>	<b>1,155,363</b>	<b>28,754</b>	<b>7,322</b>	<b>2,232,292</b>
<b>Accumulated depreciation and depletion:</b>							
As at January 1	65,912	263,303	639,030	694,379	-	-	1,662,624
Depreciation and depletion (Notes 6, 20 and 21)	1,771	3,471	18,051	11,789	-	1,550	36,632
<b>Balances at end of year</b>	<b>67,683</b>	<b>266,774</b>	<b>657,081</b>	<b>706,168</b>	<b>-</b>	<b>1,550</b>	<b>1,699,256</b>
<b>Net book values</b>	<b>₱9,630</b>	<b>₱6,391</b>	<b>₱33,294</b>	<b>₱449,195</b>	<b>₱28,754</b>	<b>₱5,772</b>	<b>₱533,036</b>

The Company's CIP pertains to the development of a continuous mill production line in Balatoc, Benguet to increase the milling capacity of its gold operations. As of December 31, 2020, and 2019, construction of this production line is suspended.

The cost of fully depreciated property and equipment still being used in the Company's operations amounted to ₱653,473 as at December 31, 2020 and 2019.



Components of mine and mining properties are as follows:

	2020			
	Mine and mining properties	Mine development cost	Mine rehabilitation asset	Total
Cost:				
Balances at beginning of year	₱1,050,030	₱8,447	₱96,886	₱1,155,363
Additions	-	1,547	-	1,547
Additions from set up of liability for mine rehabilitation (Note 16)	-	-	-	-
Change in estimate (Note 16)	-	-	3,338	3,338
Balances at end of year	1,050,030	9,994	100,224	1,160,248
Accumulated depletion:				
Balances at beginning of year	678,202	-	27,966	706,168
Depletion	12,236	-	3,798	16,034
Balances at end of year	690,438	-	31,764	722,202
Net book values	₱359,592	₱9,994	₱68,460	₱438,046

	2019			
	Mine and mining properties	Mine development cost	Mine rehabilitation asset	Total
Cost:				
Balances at beginning of year	₱1,050,030	₱-	₱99,674	₱1,149,704
Additions	-	8,447	-	8,447
Additions from set up of liability for mine rehabilitation (Note 16)	-	-	2,498	2,498
Change in estimate (Note 16)	-	-	(5,286)	(5,286)
Balances at end of year	1,050,030	8,447	96,886	1,155,363
Accumulated depletion:				
Balances at beginning of year	668,769	-	25,610	694,379
Depletion	9,433	-	2,356	11,789
Balances at end of year	678,202	-	27,966	706,168
Net book values	₱371,828	₱8,447	₱68,920	₱449,195

In 2019, the Company recognized a mine rehabilitation asset and its corresponding liability for mine rehabilitation amounting to ₱2,498 pertaining to its lime processing plant in Irisan, Baguio City (see Note 16). The Company also recognized additional mine development costs for the development of its Acupan mines amounting to ₱8,447.

Components of right-of-use-assets are as follows:

	2020			Total
	Office Space	Machinery, tools and equipment	Land	
Cost:				
Balances at beginning of year	₱882	₱1,084	₱5,357	₱7,322
Additions	-	-	-	-
Balances at end of year	882	1,083	5,357	7,322
Accumulated depreciation:				
Balances at beginning of year	588	448	514	1,550
Depreciation (Note 32)	294	448	499	1,241
Balances at end of year	882	896	1013	2,791
Net book values	₱-	₱187	₱4,344	₱4,531



	2019			
	Office Space	Machinery, tools and equipment	Land	Total
Cost:				
Balances at beginning of year	P-	P-	P-	P-
Effect of adoption of PFRS 16	882	1,083	5,357	7,322
Balances at end of year	882	1,083	5,357	7,322
Accumulated depreciation:				
Depreciation (Note 32)	588	448	514	1,550
Balances at end of year	588	448	514	1,550
Net book values	<b>P294</b>	<b>P635</b>	<b>P4,843</b>	<b>P5,772</b>

Depreciation and depletion charges were distributed as follows:

	2020	2019
Cost of mine products sold (Note 20)	<b>P28,912</b>	P28,786
Selling, general and administrative expenses (Note 21)	<b>7,114</b>	7,541
Depreciation expense included in gold buttons inventory (Note 6)	<b>423</b>	305
	<b>P36,449</b>	P36,632

## 11. Deferred Mine Exploration Costs

Movements in deferred mine exploration costs are as follows:

	2020	2019
Balances at beginning of year	<b>P540,054</b>	P536,439
Additions	<b>10,236</b>	3,615
	<b>550,290</b>	540,054
Less allowance for impairment losses	<b>166,984</b>	166,984
Balances at end of year	<b>P383,306</b>	P373,070

Additions pertain to drilling, hauling and other ongoing exploration and evaluation activities of the Company.

Movements of allowance for impairment losses on deferred mine exploration costs are as follows:

	2020	2019
Balance at beginning of the year	<b>P166,984</b>	P72,054
Provision (Note 23)	-	94,930
Balance at end of the year	<b>P166,984</b>	P166,984

In 2019, the Company recognized provision for impairment losses amounting to P94,930, as management has identified events and circumstances that would indicate that its deferred mine exploration costs may no longer be recovered and the related projects may no longer be feasible.



## 12. Other Noncurrent Assets

	2020	2019
Nontrade	<b>₱153,762</b>	₱152,483
Mine rehabilitation funds (MRFs)	<b>20,155</b>	7,377
Refundable deposits	<b>5,545</b>	5,545
Prepaid expenses and other deposits	<b>170</b>	936
	<b>179,632</b>	166,341
Less allowance for impairment losses	<b>151,892</b>	151,892
	<b>₱27,740</b>	₱14,449

Nontrade noncurrent assets pertain to advances and prepayments of the Company to its contractors and suppliers for exploration and other related activities and projects.

In 2019, the Company reclassified nontrade advances from other noncurrent assets to other current assets amounting to ₱65,767 (see Note 7).

MRFs pertain to accounts opened with a local bank in compliance with the requirements of DAO No. 2010-21, otherwise known as 'The Revised Implementing Rules and Regulations of the Philippine Mining Act of 1995'. The MRFs shall be used for physical and social rehabilitation of areas and communities affected by the mine operations, and for research in the social, technical and preventive aspects of the mine's rehabilitation. Interest income pertaining to MRF amounted to ₱7 and ₱2 in 2020 and 2019, respectively (see Note 23).

Refundable deposits pertain to amounts deposited with the Company's power providers and are refundable upon termination of the related service agreements.

## 13. Loans Payable

	2020	2019
Accrued interest and penalties	<b>₱238,931</b>	₱237,831
Unsecured bank loans	<b>85,063</b>	85,063
Others	<b>90,986</b>	97,318
	<b>₱414,980</b>	₱420,212

### a. Unsecured loans

The Company has various loans, which are being renegotiated and are undergoing restructuring. Nominal interest rates vary from floating rate of 91-day Philippine PhP T-bill rate for peso loans and 3-month London Interbank Offered Rate (LIBOR) foreign loans, plus a margin of 3.5% for secured loans.

### b. Others

#### *Nickel Off-take Agreement*

On August 24, 2011, BNMI and the Company signed a tri-partite off-take agreement for the sale of nickel ore with a Chinese trading company. In accordance with the agreement, the Chinese trading company shall extend a loan of US\$6,000,000 to the Company and that BNMI will deliver and sell 1,800,000 tons of 1.8% grade nickel ore over a period of 36 months at 600,000 tons per 12 months, to start six months after signing of the agreement. The Chinese trading



company will deduct US\$3.33 per ton from the selling price of the nickel ore to be treated as partial repayment of the loan to the Company.

As at December 31, 2020 and 2019, the remaining advances amounted to \$1,895 (₱91,000) and \$1,922 (₱97,320), respectively.

Accrued interest and penalties represent cumulative interest and default charges as at December 31, 2020 and 2019.

Interest expense from these loans amounted to ₱2,042 and ₱1,209 in 2020 and 2019, respectively. Total principal payments for these loans amounted to ₱1,370 and ₱22,776 in 2020 and 2019, respectively.

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#### 14. Trade and Other Payables

	2020	2019
Trade		
Payable to third parties	₱47,015	₱53,790
Payable to related parties (Note 24)	51,124	50,793
Amounts owed to related parties (Note 24)	711,506	682,793
Nontrade	48,598	44,207
Accrued expenses	6,367	25,056
Payables to officers and employees	12,280	11,921
Others	13,512	19,808
	<b>₱890,402</b>	<b>₱888,368</b>

Trade, accrued expenses, and other payables are noninterest-bearing and are normally settled in 60 to 90 days terms. These pertain mainly to operating expenses, which are payable to various suppliers and contractors, accrual of professional fees, amounts accruing to various government agencies and other expenses of the Company.

Payables to officers and employees include unclaimed wages, accrued vacation and sick leave credits and accrued payroll, which are payable within 30 days.

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#### 15. Other Noncurrent Liability

Other noncurrent liability pertains to the Company's outstanding liability to CMI, for which discussions are still on-going. The said liability amounted to ₱49,136 as at December 31, 2020 and 2019 (see Note 1).



## 16. Liability for Mine Rehabilitation

	2020	2019
Balances at beginning of year	₱67,467	₱69,344
Additions:		
Recognized in profit or loss (Note 23)	–	18,373
Recognized in mine rehabilitation asset (Note 10)	–	2,498
Effect of change in estimate:		
Recognized in profit or loss (Note 23)	5,291	(9,671)
Recognized as adjustment to the mine rehabilitation asset (Note 10)	3,338	(5,286)
Accretion (Note 23)	2,436	4,997
Actual rehabilitation costs	–	(12,788)
	<b>78,532</b>	67,467
Less noncurrent portion	<b>40,396</b>	42,459
Current portion	<b>₱38,136</b>	₱25,008

As at December 31, 2020, the revised Final Mine Rehabilitation and/or Decommissioning Plan of the BAGO project is still pending approval by the MGB. Consequently, fund amounting to ₱25.01 million for the proposed rehabilitation programs and activities was not utilized in 2020. As management expects these projects to be approved in 2021, the current portion of liability for mine rehabilitation was increased to P38.14 million as at December 31, 2020.

This provision is based on the Company's internal estimates. Assumptions, based on the current economic environment, have been made which management believes are a reasonable basis upon which to estimate the future liability.

The final rehabilitation costs are uncertain, and cost estimates can vary in response to many factors, including estimates of the extent and costs of rehabilitation activities, technological changes, regulatory changes, changes in inflation rates (2.68% in 2020 and 2.69% in 2019) and changes in discount rates (2.32% for 2020 and 4.02% for 2019).

These uncertainties may result in future actual expenditure differing from the amounts currently provided. Therefore, significant estimates and assumptions are made in determining the provision for mine rehabilitation. As a result, there could be significant adjustments to the provision established that could affect future financial results.

The provision at the end of each reporting period represents management's best estimate of the present value of the rehabilitation cost required. These estimates are reviewed regularly to take into account any material changes in the assumptions. This, in turn, will depend upon future ore prices, which are inherently uncertain.



## 17. Capital Stock

Capital stock as at December 31, 2020 and 2019 follows:

	2020		2019	
	No. of shares	Amount	No. of shares	Amount
<b>Authorized</b>				
Convertible Preferred				
Class A - ₱3.43 par value	19,652,912	₱67,500	19,652,912	₱67,500
Common Class A - ₱1 par value	430,380,000	430,380	430,380,000	430,380
Common Class B - ₱1 par value	286,920,000	286,920	286,920,000	286,920
	<b>736,952,912</b>	<b>784,800</b>	736,952,912	784,800
<b>Issued</b>				
Convertible Preferred Class "A"	217,061	745	217,061	745
Common Class "A"	371,220,254	371,220	371,050,755	371,050
Common Class "B"	245,250,197	245,250	245,068,497	245,068
Total shares issued and subscribed	<b>616,687,512</b>	<b>617,215</b>	616,336,313	616,863
<b>Treasury Shares</b>				
Convertible Preferred Class "A"	-	-	-	-
Common Class "A"	310,794	7,158	310,794	7,158
Common Class "B"	37,275	858	37,275	858
Total treasury shares	<b>348,069</b>	<b>8,016</b>	348,069	8,016
<b>Outstanding</b>				
Convertible Preferred Class "A"	217,061	₱745	217,061	₱745
Common Class "A"	370,909,460	364,062	370,739,961	363,892
Common Class "B"	245,212,922	244,392	245,031,222	244,210
Total outstanding shares	<b>616,339,443</b>	<b>₱609,199</b>	615,988,244	₱608,847

The two classes of common shares of the Company are identical in all respects, except that ownership of Common Class A shares is restricted to Philippine nationals.

The convertible preferred shares are limited to Philippine nationals and convertible into Common Class A shares at a conversion premium of ₱6.02 a share. Each preferred share is convertible into 9.4875 Common Class A shares. A convertible preferred share is also entitled to have one vote for each full share of Common Class A stock into which such convertible preferred share is, at any stockholders' meeting, then convertible. It does not enjoy the same dividend right as the two classes of common stock but is entitled to a fixed cumulative dividend of 8% a year, if there is surplus profit and when declared by the BOD.

On July 29, 2016, the Philippine SEC approved the amendments to Article Seventh of the Amended Articles of Incorporation and Article 1, Section 1 of the Amended By-Laws of the Company, which changed the par value of its Common Class A and Common Class B Shares from ₱3.00 to ₱1.00 per share and increased the number of common shares by threefold. The reduction in par value essentially resulted in a stock split.

On March 21, 2018, the BOD approved the increase in the Company's authorized capital stock from ₱717,300 (consisting of 430,380,000 Common Class A shares and 286,920,000 Common Class B shares, both having par value of ₱1 each) to ₱762,300 (consisting of 475,380,000 Common Class A shares and 286,920,000 Common Class B shares, both having par value of ₱1 each). After the amendment, the total authorized capital stock of the Company has increased from ₱785,509 to ₱830,509. The application for the increase was approved by the stockholders during the annual meeting held last November 8, 2018. As at March 18, 2021, the Company has not yet filed its application for the increase in authorized capital stock with the Philippine SEC.



In 2020, the Parent Company issued 158,999 Common Class A shares and 181,700 Common Class B shares as a result of employees' exercise of stock options at a total consideration of ₱634; ₱105 of which were from 55,200 Common Class B at a selling price of ₱1.91 per share and ₱529 from 158,999 Common Class A shares and 126,500 Common Class B shares at an average exercise price of ₱1.78 per share. As at December 31, 2020, total shares issued and outstanding for Common Class A and B shares are 370,909,460 and 45,212,922, respectively.

Below is the Company's track record of registration of securities under the Philippine SEC:

Date of Registration (SEC Approval)	Description	Number of shares	Par value per share	Total amount (in 000's)
June 18, 1956	Capital upon registration: Common shares	18,000,000	₱1.00	₱18,000
November 25, 1960	Increase in number and par value of common shares: Common shares	20,000,000	2.00	40,000
November 9, 1964	Increase in par value of common shares: Common shares	20,000,000	3.00	60,000
October 22, 1968	Increase in number of common shares and introduction of preferred shares: Common shares Preferred shares	50,000,000 6,000,000	3.00 5.00	150,000 30,000
March 12, 1974	Split of common share into two classes and change in number and par value and addition of conversion feature to the preferred shares: Common class A Common class B Convertible preferred shares	30,000,000 20,000,000 19,652,912	3.00 3.00 ₱3.43	90,000 60,000 ₱67,500
July 27, 1989	Increase in number of common shares Common class A Common class B Convertible preferred shares	120,000,000 80,000,000 19,652,912	3.00 3.00 3.43	360,000 240,000 67,500
September 28, 2015	Increase in number of common shares Common class A Common class B Convertible preferred shares	143,460,000 95,640,000 19,652,912	3.00 3.00 3.43	430,874 287,135 67,500
July 29, 2016	Increase in number of common shares and reduction in par value Common class A Common class B Convertible preferred shares	430,380,000 286,920,000 19,652,912	1.00 1.00 3.43	430,874 287,135 67,500
<b>As at December 31, 2020</b>	<b>Increase in number of common shares and reduction in par value</b> <b>Common class A</b> <b>Common class B</b> <b>Convertible preferred shares</b>	<b>430,380,000</b> <b>286,920,000</b> <b>19,652,912</b>	<b>₱1.00</b> <b>1.00</b> <b>3.43</b>	<b>₱430,874</b> <b>286,135</b> <b>67,500</b>

As at December 31, 2020 and 2019, the Company has 16,904 and 16,906 stockholders, respectively.

Movements in cost of share-based payment are as follows:

	2020	2019
Balances at beginning of year	₱21,671	₱25,089
Stock options expired	(6,348)	(3,418)
Stock options exercised	(1,957)	—
Balances at end of year	₱13,366	₱21,671



Movements in capital surplus are as follows:

	2020	2019
Balances at beginning of year	₱380,382	₱376,964
Expiration of stock options	6,348	3,418
Exercise of stock options	2,239	-
Balances at end of year	₱388,969	₱380,382

## 18. Stock Option Plan

Under the 1975 Nonqualified Stock Option Plan (Plan), as amended, 9.9 million shares of the unissued common shares of the Company have been reserved for stock options to selected managers, directors and consultants of the Company. The option price is payable on the exercise date and should not be less than the fair market value of the shares quoted on the date of the grant. The Plan, valid up to May 31, 1998, allows a maximum of 632,500 shares to be available to any one optionee. On May 26, 1998, the BOD and the stockholders approved the extension of the Plan until May 31, 2003, which was extended further on December 18, 2002 with the BOD and the stockholders' approval until May 31, 2008. On December 18, 2007, the BOD and the stockholders approved a further extension of the Plan until May 31, 2013.

On March 23, 2012, the BOD and the stockholders approved the proposed amendments to the existing Amended Stock Option Plan and to extend the termination date of the existing Plan for five years or until May 31, 2018.

The amendments include an increase in the maximum award per employee from 200,000 shares over the life of the plan to 500,000 shares per grant and an increase in the shares reserved for issuance under the Plan from the total of 9,906,661 to 22,000,000 shares.

Options granted to Filipino optionees are exercisable in the form of 60% Common Class A and 40% Common Class B shares. Options for Common Class B shares may be exercised only if Common Class A shares had been previously or simultaneously exercised so as to maintain a minimum 60:40 ratio of Common Class A to Common Class B shares.

The options under the Plan are non-transferable and are exercisable to the extent of 30% after one year from the date of the grant, 60% after two years from the date of the grant, and 100% after three years from the date of grant. No option is exercisable after 10 years from the date of grant.

Unexercised share options per grant are as follows:

	Unexercised share options as at January 1, 2020	Expired in 2020	Exercised in 2020	Unexercised share options as at December 31, 2020
Class A - May 2011 Grant	1,668,297	(646,799)	(169,499)	851,999
- September 2012 Grant	306,000	-	-	306,000
- May 2014 Grant	864,000	(216,000)	-	648,000
Class B - May 2011 Grant	1,226,745	(431,200)	(181,700)	613,845
- September 2012 Grant	204,000	-	-	204,000
- May 2014 Grant	576,000	(144,000)	-	432,000
Total	4,845,042	(1,437,999)	(351,199)	3,055,844



	Unexercised share options as at January 1, 2019	Expired in 2019	Unexercised share options as at December 31, 2019
Class A - May 2011 Grant	1,866,297	(198,000)	1,668,297
- September 2012 Grant	396,000	(90,000)	306,000
- May 2014 Grant	1,080,000	(216,000)	864,000
Class B - May 2011 Grant	1,358,745	(132,000)	1,226,745
- September 2012 Grant	264,000	(60,000)	204,000
- May 2014 Grant	720,000	(144,000)	576,000
<b>Total</b>	<b>5,685,042</b>	<b>(840,000)</b>	<b>4,845,042</b>

The exercise prices of outstanding options are as follows:

	At grant date	After effect of stock split	As modified
Class A - May 2011 Grant	₱16.50	₱5.50	₱1.69
- September 2012 Grant	17.96	5.99	1.69
- May 2014 Grant	7.13	2.38	1.69
Class B - May 2011 Grant	17.50	5.83	1.91
- September 2012 Grant	17.63	5.88	1.91
- May 2014 Grant	7.13	2.38	1.91

Average exercise price per share in 2020 and 2019 amounted to ₱1.78. Total number of shares available for future option grants is 40,438,695 shares and 33,124,698 shares as at December 31, 2020 and 2019, respectively.

No stock option expense relating to the Plan was recognized in 2020 and 2019.

A summary of the number of shares under the Plan is shown below:

	2020	2019
Outstanding at beginning of year	<b>4,845,042</b>	5,685,042
Expiration	<b>(1,437,999)</b>	(840,000)
Exercised during the year	<b>(351,199)</b>	
<b>Outstanding and exercisable at end of year</b>	<b>3,055,844</b>	4,845,042

The Company used the binomial options pricing model to determine the fair value of the stock options at grant date.

The following assumptions were used to determine the fair value of the stock options at grant date:

	Share price	Exercise price	Expected volatility	Option life	Expected Dividends	Risk-free Interest rate
May 3, 2011 Grant	16.5	16.5	91.20%	10 years	0.00%	6.46%
	17.5	17.5	155.57%	10 years	0.00%	6.46%
Sep 9, 2012 Grant	23.95	17.96	57.35%	10 years	0.00%	4.80%
	23.5	17.63	65.53%	10 years	0.00%	4.80%
May 26, 2014 Grant	9.5	7.13	77.28%	10 years	0.00%	3.90%
	9.5	7.13	84.29%	10 years	0.00%	3.90%

The expected volatility measured at the standard deviation of expected share price returns was based on the analysis of share prices for the past 365 days. The cost of share-based payment amounted to ₱13,689 and ₱21,671 as at December 31, 2020 and 2019, respectively (see Note 17).



On March 18, 2021, upon endorsement of the Stock Option Committee, the Board approved a new stock option grant to the Group's officer, employees and consultant and to all members of the BOD, provided they have rendered at least two years of service as of March 15, 2021. Total number of common shares available for distribution under the plan is 3,007,627 shares at an exercise price of ₱2.19 and ₱2.05 for Class "A" and Class "B" shares, respectively. The Company will determine the fair value and consider the accounting impact of this new grant in 2021.

## 19. Revenue

Revenue of the Company pertains to sale of gold to the Bangko Sentral ng Pilipinas (BSP), which is subject to 4% excise tax based on gross revenues, and sale of silver and lime to outside customers.

	2020	2019
Revenue from contracts with customers		
Sale of gold	₱700,381	₱575,363
Sale of lime	63,160	106,581
Sale of silver	3,529	1,133
	<b>₱767,070</b>	<b>₱683,077</b>

Set out below is the disaggregation of the Company's revenue from contracts with customers in 2020 and 2019:

	2020	2019
Type of product:		
Gold	₱700,381	₱575,363
Lime	63,160	106,581
Silver	3,529	1,133
Total revenue from contracts with customers	<b>₱767,070</b>	<b>₱683,077</b>
Type of customer:		
Government	₱700,381	₱575,363
Private corporations	66,689	107,714
Total revenue from contracts with customers	<b>₱767,070</b>	<b>₱683,077</b>

In 2020 and 2019, the Company recognized excise taxes on sale of mine products amounting to ₱27,861 and ₱23,610, respectively.

## 20. Cost of Mine Products Sold

	2020	2019
Outside services	₱243,830	₱210,314
Materials and supplies (Note 6)	120,964	110,194
Personnel expenses (Note 22)	52,510	42,616
Power and utilities	40,509	42,967
Depreciation and depletion (Note 10)	28,912	28,786
Repairs and maintenance	22,605	17,272
Smelting, refining and marketing	6,604	6,199
Freight and handling	249	481
Taxes and licenses	19	47
Others	823	7,555
	<b>₱517,025</b>	<b>₱466,431</b>



Outside services pertain to amounts paid to contractors and consultants involved in the mining operations of the Company.

Other expenses include postage, insurance and maintenance expenses, which are individually insignificant.

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## 21. Selling, General and Administrative Expenses

	2020	2019
Personnel expenses (Note 22)	₱73,490	₱87,820
Outside services	20,091	23,416
Security expenses	15,747	17,348
Taxes, fees and licenses	14,983	4,274
Depreciation and depletion (Note 10)	7,114	7,541
Environmental protection and enhancement program expense	6,816	4,981
Social development and management program	5,880	5,528
Materials and supplies (Note 6)	4,980	4,855
Legal and audit expense	3,895	1,547
Power consumption	3,879	5,432
Rent and utilities	3,320	2,608
Subscription and membership	3,100	1,964
Repairs and maintenance	2,313	3,824
Freight and handling	1,921	2,354
Travel and transportation	1,784	2,930
Insurance expense	961	965
Others	2,184	7,584
	<b>₱172,458</b>	<b>₱184,971</b>

In 2020 and 2019, rent and utilities include expenses relating to short-term leases amounting to ₱690 and ₱337 (see Note 32).

On August 19, 2020, the Company received from the BIR the Final Decision on Disputed Assessment covering various tax assessments in relation to the Company's 2013 deficiency taxes. Immediately on August 26, 2020, the company filed a Motion for Reconsideration as a protest to the assessment. On September 10, 2020, the Company received the BIR's final assessment and was ordered to settle a total of ₱19.60 million, covering basic taxes, interest and compromise penalties amounting to ₱9.15 million, ₱10.21 million and ₱0.24 million, respectively. In 2020, the Company fully settled the foregoing amounts.

In 2020, the Company was assessed by the BIR of tax delinquency due to non-remittance of taxes withheld on income payments to suppliers from 1988 to 1991 amounting to ₱4.95 million and ₱4.95 million, respectively. These were settled by the Company in 2020 for a total amount of ₱9.90 million.

Others consist of various incidental expenses which are individually insignificant.



## 22. Personnel Expenses

	2020	2019
Salaries and wages	₱99,380	₱97,926
Benefits and allowances	16,743	20,243
Net pension expense (Note 26)	9,877	12,267
	<b>₱126,000</b>	<b>₱130,436</b>

The above amounts were distributed as follows:

	2020	2019
Selling, general and administrative expenses (Note 21)	₱73,490	₱87,820
Cost of mine products sold (Note 20)	52,510	42,616
	<b>₱126,000</b>	<b>₱130,436</b>

## 23. Other Income - net

	2020	2019
Revaluation gain on investment properties (Note 32)	₱191,154	₱245,872
Legal settlements	(19,596)	-
Change in estimate of liability for mine rehabilitation (Note 16)	(5,291)	9,671
Foreign currency exchange gain - net	4,958	3,723
Accretion expense (Note 16)	(2,436)	(4,997)
Interest income (Notes 4 and 12)	147	137
Provision for impairment losses on deferred mine exploration costs (Note 11)	-	(94,930)
Noncapitalizable asset retirement obligation (Note 16)	-	(18,373)
Provision for impairment losses on other current assets (Note 7)	-	(2,411)
Gain on reversal of allowance for ECL on trade and other receivables (Note 5)	-	1,181
Gain on reversal of allowance for impairment losses on inventories (Note 6)	-	904
Provision for ECL on trade and other receivables (Note 5)	-	(190)
Others - net	6,149	(507)
	<b>₱175,085</b>	<b>₱140,080</b>

Others include contractor identification processing, permits for peddlers, various miscellaneous income and incidental expenses that are individually insignificant.



## 24. Related Party Disclosures

Enterprises and individuals that directly, or indirectly through one or more intermediaries, control or are controlled by, or are under common control with the Company, including holding companies, subsidiaries and fellow subsidiaries, are related parties of the Company. Associates and individuals owning, directly or indirectly, an interest in the voting power of the Company that gives them significant influence over the enterprise, key management personnel, including directors and officers of the Company and close members of the family of these individuals, and companies associated with these individuals also constitute related parties. In considering each possible related entity relationship, attention is directed to the substance of the relationship and not merely the legal form.

In the normal course of business, the Company has dealings with its related parties as follows:

- a. On August 8, 2011, the Company was appointed as the exclusive marketing agent of BNMI for a marketing fee. This was terminated effective December 31, 2017. Outstanding trade receivable from this transaction amounted to ₱3,945 as at December 31, 2020 and 2019 (see Note 5).
- b. In 2011, Arrow Freight Corporation (AFC), a wholly owned subsidiary of BMC, started providing trucking services to the Company for the delivery of equipment to various sites. Total amount charged to the Company in 2020 and 2019 amounted to ₱2,560 and ₱2,353, respectively.
- c. The Company provides and receives unsecured noninterest bearing cash advances to and from its subsidiaries for working capital requirements, which are settled in cash.

Outstanding payables from these transactions in the normal course of business are as follows:

Category	Year	Amount/ Volume	Outstanding balance	Terms	Conditions
<i>Trade payables to related parties</i>					
<i>(Note 14)</i>					
BTI	2020	₱-	₱48,564	Payable on demand; noninterest-bearing	Unsecured; no guarantees; no impairment
	2019	₱-	₱48,564		
AFC	2020	331	2,560	Payable on demand; noninterest-bearing	Unsecured; no guarantees; no impairment
	2019	702	2,229		
BLRI	2020	-	-	Payable on demand; noninterest-bearing	Unsecured; no guarantees; no impairment
	2019	8,444	-		
<b>Total</b>	2020	<b>₱331</b>	<b>₱51,124</b>		
	2019	<b>₱9,146</b>	<b>₱50,793</b>		



The parent company statements of financial position include the following amounts resulting from transactions with related parties, aside from those arising from the Company's normal course of business:

Category	Year	Amount/ volume	Outstanding balance	Terms	Conditions
<i>Amounts owed by related parties (Note 5)</i>					
BGRC	2020	<b>₱52</b>	<b>₱78,445</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	₱1,309	₱78,393		
BMC	2020	<b>26,856</b>	<b>70,143</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	96,999	96,999		
BLI	2020	<b>5,543</b>	<b>43,878</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	7,473	38,335		
BCPMI	2020	<b>147</b>	<b>30,437</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	150	30,290		
IMRC	2020	<b>82</b>	<b>29,920</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	63	29,838		
BPGC	2020	41	<b>29,640</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	44	29,599		
KPLMSC	2020	<b>1,968</b>	<b>18,845</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	–	16,877		
Agua De Oro Ventures Corporation	2020	<b>361</b>	<b>12,359</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	349	11,998		
Media Management Corporation	2020	<b>1</b>	<b>12,182</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	10,000	12,183		
BTI	2020	<b>949</b>	<b>4,664</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	412	3,715		
BIL	2020	<b>226</b>	<b>4,465</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	447	4,239		
BBMRC	2020	<b>41</b>	<b>2,492</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	43	2,451		
AFC	2020	<b>2,371</b>	<b>2,371</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	831	–		
PECI	2020	<b>45</b>	<b>748</b>	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	41	703		
	2020	<b>38,683</b>	<b>340,589</b>		
	2019	118,161	355,620		
Less allowance for impairment losses	2020	–	<b>111,146</b>		
	2019	(1,181)	111,146		
<b>Total</b>	2020	<b>₱38,635</b>	<b>₱229,395</b>		
	2019	₱119,342	₱244,474		



The Company recognized gain on reversal of allowance for ECL amounting to nil and ₱1,181 in 2020 and 2019, respectively (see Notes 5 and 23). In 2020 and 2019, the Company recognized allowance for ECL amounting to ₱111,146, covering amounts which management believes may no longer be recovered (see Notes 5 and 23).

Category	Year	Amount/ volume	Outstanding balance	Terms	Conditions
<i>Amounts owed to related parties (Note 14)</i>					
BNMI	2020	₱27,460	₱615,070	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	₱46,872	₱587,610		
BLRI	2020	1,090	35,128	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	8,205	36,218		
SARC	2020	3,760	33,843	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	21,563	30,083		
BMC Forestry Corporation (BFC)	2020	625	25,402	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	1,623	24,777		
AGMI	2020	41	2,063	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	43	2,104		
AFC	2020	2,001	–	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	2,001	2,001		
BMC	2020	–	–	Payable on demand; noninterest-bearing	Unsecured no guarantees; no impairment
	2019	23,428	–		
<b>Total</b>	2020	<b>₱34,977</b>	<b>₱711,506</b>		
	2019	<b>₱56,879</b>	<b>₱682,793</b>		

#### Compensation of Key Management Personnel

The Company considered all senior officers as key management personnel. Below are the details of the compensation of the Company's key management personnel.

	2020	2019
Short-term benefits	₱12,389	₱28,003
Post-employment benefits	3,479	5,438
	<b>₱15,868</b>	<b>₱33,441</b>

The Company's related party transactions which are, individually or in aggregate over a 12-month period, 10% and above of the latest audited consolidated total assets are reviewed and evaluated by the Related Party Transaction Committee and Management Committee. Afterwards, these are approved by at least two-thirds (2/3) vote of the BOD, with at least a majority of the independent directors voting to approve the material related party transaction. In case that a majority of the independent directors' vote is not secured, the material related party transaction may be ratified by the majority vote of the shareholders, or two-thirds (2/3) of the outstanding capital stock.



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## 25. ESOIP

The ESOIP, as approved by the stockholders in 1986, allows employees of the Company to buy up to 6,000,000 shares of the Common Class A shares of the Company at either of two prices. If the shares are acquired by the Company from a seller or are treasury shares, these can be bought at acquisition cost. If the shares are sourced from the authorized but unissued shares of the Company, these can be bought at the average closing price quoted in the PSE on the last day that such shares were traded prior to the start of the purchase period. Payment for the shares purchased shall be advanced by the Company on behalf of the employees and repaid through salary deduction without interest. The shares acquired by employees under the ESOIP may be subjected to a holding period from the date of purchase.

In January 1990, the BOD approved the Employees Stock Purchase Plan, which allows the employees of the Company (but excluding directors of the Company) to buy, basically under similar terms and conditions as that of the ESOIP, 2,000,000 shares of the Common Class A shares of the Company.

The balance of the employees' stock ownership pursuant to the said plans shown as part of the trade and other receivables in the parent company statements of financial position amounted to ₱58,416 as at December 31, 2020 and 2019 and was provided an allowance for the same amount (see Note 5).

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## 26. Pension Benefits Plan

The Company maintains a qualified, noncontributory pension plan covering substantially all of its regular employees.

The following tables summarize the components of net pension expense in the parent company statements of income and fund status, and the amounts recognized in the parent company statements of financial position.

### Net pension expense

	<b>2020</b>	2019
Current service cost	<b>₱6,905</b>	₱6,288
Net interest cost	<b>2,972</b>	3,850
Past service cost (due to retrenchment)	–	2,129
<b>Net pension expense (Note 22)</b>	<b>₱9,877</b>	₱12,267

### Pension liability as at December 31, 2020 and 2019

	<b>2020</b>	2019
Present value of obligation	<b>₱84,299</b>	₱60,980
Fair value of plan assets	<b>(5,550)</b>	(569)
<b>Pension liability</b>	<b>₱78,749</b>	₱60,411



Reconciliation of other comprehensive income

	2020	2019
Balances at beginning of year	₱20,954	₱23,724
Loss on remeasurement of pension liability	(16,117)	(3,957)
Tax effect	4,835	1,187
Remeasurement loss on pension liability - net of tax	(11,282)	(2,770)
Balances at end of year	₱9,672	₱20,954

Changes in the present value of defined benefit obligation

	2020	2019
Balances at beginning of year	₱60,980	₱52,906
Current service cost	6,905	6,288
Interest cost	3,000	3,894
Remeasurement losses	16,071	3,884
Past service cost	-	2,129
Benefits paid	(2,657)	(8,121)
Balances at end of year	₱84,299	₱60,980

Breakdown of remeasurement loss (gain) on defined benefit obligation

	2020	2019
Change in financial assumptions	₱8,275	₱10,212
Experience adjustments	7,796	(6,328)
Remeasurement gain	₱16,071	₱3,884

Changes in the fair value of plan assets

	2020	2019
Balances at beginning of year	₱569	₱598
Asset return in net interest cost	28	44
Contribution	5,000	-
Remeasurement loss	(47)	(73)
Balances at end of year	₱5,550	₱569

The major categories of the Company's plan assets as a percentage of the fair value of total plan assets are as follows:

	2020	2019
Cash and time deposit	89.75%	0.07%
Investment in shares	10.25%	99.93%
	100.00%	100.00%

The Company's plan assets are being managed by a trustee bank. The retirement fund includes time deposits, shares of stocks, which are traded in the PSE, and unquoted shares of stocks. The Company has no transactions with its retirement fund. The retirement fund has no investments in shares of stocks of the Company.



In 2020 and 2019, the Company directly paid ₱2,657 and ₱8,121, respectively, to the beneficiaries of the pension benefits plan, resulting in a net movement in pension liability of ₱7,220 and ₱4,146 in those years.

The Company contributed ₱5.00 million to the defined benefits retirement plan in 2020.

Shown below is the maturity analysis of the undiscounted benefit payments as at December 31, 2020:

Plan year	Expected benefit payments
Less than 1 year	₱23,753
More than 1 year to 5 years	39,377
More than 5 years to 10 years	15,662
More than 10 years to 15 years	29,827
More than 15 years to 20 years	64,624
More than 20 years	486,680

The average duration of the pension liability is 19 years.

The principal assumptions used in determining the pension benefits obligation of the Company's plan is shown below.

	2020	2019
Discount rate	<b>3.69%</b>	4.92%
Salary increase rate	<b>5.00%</b>	5.00%

The sensitivity analysis below has been determined based on reasonably possible changes of each significant assumption on the pension liability as at the end of the reporting period, assuming if all other assumptions were held constant:

	December 31, 2020	
	Increase (decrease)	Present value of the defined benefit obligation
<b>Discount rates</b>	<b>4.69% (+1.00%)</b>	<b>₱77,429</b>
	<b>3.69% actual</b>	<b>84,299</b>
	<b>2.69% (-1.00%)</b>	<b>92,645</b>
<b>Salary increase rate</b>	<b>6.00% (+1.00%)</b>	<b>₱92,098</b>
	<b>5.00% actual</b>	<b>84,299</b>
	<b>4.00% (-1.00%)</b>	<b>77,733</b>
	December 31, 2019	
	Increase (decrease)	Present value of the defined benefit obligation
Discount rates	5.92% (+1.00%)	₱56,257
	4.92% actual	60,980
	3.92% (-1.00%)	66,743
Salary increase rate	6.00% (+1.00%)	₱66,414
	5.00% actual	60,980
	4.00% (-1.00%)	56,439

The Company's weighted average duration of the defined benefit obligation is 19 years as at December 31, 2020. The Company's computation is based on per employee considering other contingencies to normal retirement and weighted by the benefit due.



## 27. Income Taxes

The provision for (benefit from) current and deferred tax in 2020 and 2019 follows:

	2020	2019
MCIT	<b>₱5,900</b>	₱5,036
Provision for (benefit from) deferred taxes	<b>40,190</b>	(142)
	<b>₱46,090</b>	₱4,894

The Company did not recognize deferred tax assets relating to the following temporary differences because management believes that it is more likely than not that the carry-forward benefits will not be realized in the near future:

	2020	2019
Allowance for impairment losses on deferred mine exploration costs	<b>₱166,984</b>	₱166,984
Allowance for impairment losses on other noncurrent assets	<b>151,892</b>	151,892
Provision for mine rehabilitation	<b>41,901</b>	33,271
NOLCO	<b>35,211</b>	102,643
Accumulated depletion on asset retirement obligation	<b>24,564</b>	20,766
Accumulated accretion on liability for mine rehabilitation	<b>23,335</b>	20,899
Allowance for impairment losses on inventories	<b>19,313</b>	19,313
MCIT	<b>14,767</b>	8,867
Share-based payment	<b>13,688</b>	21,670
Accrued expenses	<b>8,002</b>	8,002
Allowance for impairment losses on investments in subsidiaries	<b>3,630</b>	3,630
Allowance for impairment on other current assets	<b>2,411</b>	2,411
Straight-line amortization of accrued rent	<b>351</b>	265

The components of the Company's net deferred tax liabilities are as follows:

	2020	2019
Deferred tax liabilities:		
Revaluation increment on land in OCI	<b>₱909,772</b>	₱909,772
Remeasurement gain on pension liability in OCI	<b>4,145</b>	8,980
Unrealized foreign exchange gain	<b>1,553</b>	1,122
Effect of PFRS 16	<b>34</b>	40
	<b>915,504</b>	919,914
Deferred tax assets:		
Allowance for impairment losses on:		
Inventories	<b>46,857</b>	87,288
Trade and other receivables	<b>18,072</b>	18,072
Other current assets	<b>11,054</b>	11,053
Pension liability	<b>27,769</b>	27,103
	<b>103,752</b>	143,516
Deferred tax liabilities - net	<b>₱811,752</b>	₱776,398



The deferred taxes presented above are from the following temporary differences:

	2020	2019
Deferred tax liabilities:		
Revaluation increment on land in OCI	<b>₱3,032,573</b>	₱3,032,573
Remeasurement gain on pension liability in OCI	<b>13,817</b>	29,933
Unrealized foreign exchange gain	<b>5,177</b>	3,740
Effect of PFRS 16	<b>113</b>	133
	<b>3,051,680</b>	3,066,379
Deferred tax assets:		
Allowance for impairment losses on:		
Inventories	<b>156,190</b>	290,960
Trade and other receivables	<b>60,240</b>	60,240
Other current assets	<b>36,847</b>	36,843
Pension liability	<b>92,566</b>	90,343
	<b>345,843</b>	478,386
Net deferred tax liabilities	<b>₱2,705,837</b>	₱2,587,993

The reconciliation of income tax computed at the statutory tax rates to provision for income tax as shown in the parent company statements of income is summarized as follows:

	2020	2019
Tax at statutory rate	<b>₱66,702</b>	₱43,934
Add (deduct) tax effects of:		
Nontaxable income	<b>(57,347)</b>	(74,116)
Write-off of inventory allowance	<b>38,968</b>	-
Changes in unrecognized deferred tax assets	<b>(10,776)</b>	33,074
Nondeductible expenses	<b>6,192</b>	1,000
Expired stock options	<b>1,904</b>	-
Exercised stock options	<b>491</b>	1,043
Interest income subject to final tax	<b>(44)</b>	(41)
Provision for income tax	<b>₱46,090</b>	₱4,894

On September 30, 2020, the BIR issued Revenue Regulations (RR) No. 25-2020 implementing Section 4(bbbb) of “Bayanihan to Recover As One Act” which states that the NOLCO incurred for taxable years 2020 and 2021 can be carried over and claimed as a deduction from gross income for the next five (5) consecutive taxable years immediately following the year of such loss.

As of December 31, 2020, the Company has incurred NOLCO before taxable year 2020 which can be claimed as deduction from the regular taxable income for the next three (3) consecutive taxable years, as follows:

Year Incurred	Availment Period	Amount	NOLCO Applied Previous Year/s	NOLCO Expired	NOLCO Applied Current Year	NOLCO Unapplied
2018	2019-2021	₱99,718	₱-	₱-	(₱67,432)	₱32,286
2019	2020-2022	2,925	-	-	-	2,925
		<b>₱102,643</b>	<b>₱-</b>	<b>₱-</b>	<b>(₱67,432)</b>	<b>₱35,211</b>



Year Incurred	Availment Period	Amount	NOLCO Applied Previous Year/s	NOLCO Expired	NOLCO Applied Current Year	NOLCO Unapplied
2020	2021-2025	₱-	₱-	₱-	₱-	₱-

The Company has MCIT that can be applied against payment of regular income tax as follows:

Year Incurred	Availment Period	Amount	MCIT Applied Previous Year/s	MCIT Expired	MCIT Applied Current year	MCIT Unapplied
2017	2018-2020	₱-	₱-	₱-	₱-	₱-
2018	2019-2021	3,831	-	-	-	3,831
2019	2020-2022	5,036	-	-	-	5,036
2020	2021-2023	5,900	-	-	-	5,900
		<b>₱14,767</b>	<b>₱-</b>	<b>₱-</b>	<b>₱-</b>	<b>₱14,767</b>

The movements in NOLCO and excess MCIT in 2020 and 2019 are, as follows:

	NOLCO		MCIT	
	2020	2019	2020	2019
Balances at beginning of year	<b>₱102,643</b>	₱99,718	<b>₱8,867</b>	₱3,831
Additions	-	2,925	<b>5,900</b>	5,036
Applications	<b>(67,432)</b>	-	-	-
Balances at end of year	<b>₱35,211</b>	₱102,643	<b>₱14,767</b>	₱8,867

The Company did not avail of the optional standard deduction in 2020 and 2019.

## 28. EPS

Basic EPS is calculated by dividing the net profit by the weighted average number of common shares on issue during the year, excluding any ordinary shares purchased by the Company and held as treasury shares.

In computing for the 2020 diluted EPS, the Company considered the effect of stock options outstanding since these are dilutive. In 2019, the diluted EPS did not consider the effect of stock options outstanding since these were anti-dilutive.

	2020	2019
Net income	<b>₱176,250</b>	₱141,553
Current dividends on preference shares	<b>(60)</b>	(60)
Adjusted net income	<b>₱176,190</b>	₱141,493



Number of shares for computation of EPS:

	2020	2019
<b>Basic EPS</b>		
Weighted average common shares issued	616,687,512	616,119,252
Less treasury shares	348,069	348,069
<b>Weighted average common shares outstanding</b>	<b>616,339,443</b>	<b>615,771,183</b>
<b>Diluted EPS</b>		
Weighted average common shares issued	616,687,512	616,119,252
Less treasury shares	348,069	348,069
	616,339,443	615,771,183
Convertible preferred shares	2,059,366	2,059,366
Stock options	3,055,844	-
<b>Weighted average common shares outstanding</b>	<b>621,454,653</b>	<b>617,830,549</b>
<b>Basic EPS</b>	<b>₱0.29</b>	<b>₱0.23</b>
<b>Diluted EPS</b>	<b>₱0.28</b>	<b>₱0.23</b>

## 29. Financial Risk Management Objectives and Policies

The Company's principal financial instruments pertain to unsecured and secured bank loans. The main purpose of these financial instruments is to raise funds for the Company's operations.

The Company has various financial instruments such as cash in banks, trade and other receivables, trade and other payables (excluding government payables) and other noncurrent liability in contract operations, which arise directly from its operations. Other financial assets include financial assets at FVOCI.

The risks arising from the Company's financial instruments are liquidity risk, credit risk, foreign currency risk, interest rate risk and equity price risk. The BOD reviews and agrees policies for managing each of these risks and these are summarized below.

### Liquidity Risk

Liquidity risk arises from the possibility that the Company may encounter difficulties in raising funds to meet commitments from financial instruments. The Company's objective is to maintain a balance between continuity of funding in order to continuously operate and support its exploration activities.

The Company considers its available funds and its liquidity in managing its immediate financial requirements.

As at December 31, 2020 and 2019, cash in banks may be withdrawn anytime while financial assets at FVOCI may be converted to cash by selling them during the normal trading hours in any business day.



The table below summarizes the aging analysis and maturity profile of the Company's financial assets and financial liabilities, respectively, as at December 31, 2020 and 2019:

	2020			Total
	On demand	Within 90 days	Over 90 days	
<i>Financial assets</i>				
Cash on hand and in banks	₱39,589	₱-	₱-	₱39,589
Trade and other receivables:				
Trade	3,945	25,009	-	28,954
Amounts owed by related parties	229,443	-	-	229,443
Receivables from lessees of bunkhouses	4,754	-	-	4,754
Others	-	3,090	-	3,090
Advances to contractors under "other current assets"	-	-	63,356	63,356
Financial asset at FVOCI	-	-	316	316
Other noncurrent assets:				
Nontrade	-	-	1,870	1,870
Refundable deposits	-	-	5,545	5,545
	₱277,731	₱28,099	₱71,087	₱376,917
<i>Financial liabilities</i>				
Loans payable	₱323,994	₱-	₱90,986	₱414,980
Trade and other payables:				
Trade	51,124	47,015	-	98,139
Amounts owed to related parties	711,506	-	-	711,506
Accrued expenses*	-	6,367	-	6,367
Payables to officers and employees	-	12,280	-	12,280
Other payables	-	13,512	-	13,512
Lease liability	-	856	5,670	6,526
Other noncurrent liability	-	-	49,136	49,136
	₱1,086,624	₱80,030	₱145,792	₱1,310,606
Net financial liabilities	(₱809,841,841)	(₱51,931)	(₱74,705)	(₱934,637)
	2019			Total
	On demand	Within 90 days	Over 90 days	
<i>Financial assets</i>				
Cash on hand and in banks	₱58,317	₱-	₱-	₱58,317
Trade and other receivables:				
Trade	3,945	22,979	-	26,924
Amounts owed by related parties	244,474	-	-	244,474
Receivables from lessees of bunkhouses	4,988	-	-	4,988
Others	-	2,540	-	2,540
Advances to contractors under "other current assets"	-	-	63,356	63,356
Financial asset at FVOCI	-	-	244	244
Other noncurrent assets:				
Nontrade	-	-	591	591
Refundable deposits	-	-	5,545	5,545
	₱311,724	₱25,519	₱69,736	₱406,979
<i>Financial liabilities</i>				
Loans payable	₱322,894	₱-	₱97,318	₱420,212
Trade and other payables:				
Trade	50,793	53,790	-	104,583
Amounts owed to related parties	682,793	-	-	682,793
Accrued expenses*	-	25,056	-	25,056
Payables to officers and employees	-	11,921	-	11,921
Other payables	-	19,808	-	19,808
Lease liability	-	1,083	4,258	5,341
Other noncurrent liability	-	-	49,136	49,136
	₱1,056,480	₱111,658	₱150,712	₱1,318,850
Net financial liabilities	₱744,756	₱86,139	₱80,976	₱911,871

\*excluding payables to the government



### Credit Risk

Credit risk refers to the potential loss arising from any failure by counterparties to fulfill their obligations, as and when these falls due. It is inherent to the business as potential losses may arise due to the failure of its customers and counterparties to fulfill their obligations on maturity dates or due to adverse market conditions.

The Company trades only with recognized, creditworthy third parties. It is the Company's policy that all customers who wish to trade on credit terms are subject to credit verification procedures.

With respect to credit risk arising from financial assets of the Company, the Company's exposure to credit risk arises from default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments.

Since the Company trades only with recognized third parties, there is no requirement for collateral.

The table below shows the maximum exposure to credit risk of the components of the parent company statements of financial position. The maximum exposure is shown at each instrument's carrying amount, before the effect of mitigation through the use of master netting and collateral agreements.

	2020	2019
Cash in banks	<b>₱39,124</b>	₱57,902
Trade and other receivables		
Trade	<b>28,954</b>	26,924
Amounts owed by related parties	<b>229,443</b>	244,474
Receivables from lessees of bunkhouses	<b>4,754</b>	4,988
Others	<b>3,090</b>	2,540
Advances to contractors under "other current assets"	<b>63,356</b>	63,356
Financial assets at FVOCI	<b>316</b>	244
Other noncurrent assets		
Nontrade	<b>1,870</b>	591
Refundable deposits	<b>5,545</b>	5,545
	<b>₱376,452</b>	₱406,564

The table below shows the credit quality by class of financial assets based on the Company's rating:

	2020				
	Neither past due nor impaired		Past due but not impaired	Impaired	Total
	High-grade	Standard-grade			
Cash in banks	<b>₱39,124</b>	<b>₱-</b>	<b>₱-</b>	<b>₱-</b>	<b>₱39,124</b>
Trade and other receivables:					
Trade	-	28,954	-	1,821	30,775
Amounts owed by related parties	-	229,443	-	111,146	340,589
Receivables from lessees of bunkhouses	-	-	4,754	-	4,754
Others	-	3,090	-	-	3,090
Advances to contractors under "other current assets"	-	63,356	-	2,411	65,767
Financial assets at FVOCI	316	-	-	-	316
Other noncurrent assets:					
Nontrade	-	1,870	-	151,892	153,762
Refundable deposits	-	5,545	-	-	5,545
Total credit risk exposure	<b>₱39,440</b>	<b>₱332,258</b>	<b>₱4,754</b>	<b>₱267,270</b>	<b>₱643,992</b>



	2019				
	Neither past due nor impaired		Past due but not impaired	Impaired	Total
	High-grade	Standard-grade			
Cash in banks	₱57,902	₱-	₱-	₱-	₱57,902
Trade and other receivables:					
Trade	-	26,924	-	1,821	28,745
Amounts owed by related parties	-	244,474	-	111,146	355,620
Receivables from lessees of bunkhouses	-	-	4,988	-	4,988
Others	-	2,540	-	-	2,540
Advances to contractors under “other current assets”	-	63,356	-	2,411	65,767
Financial assets at FVOCI	244	-	-	-	244
Other noncurrent assets:					
Nontrade	-	591	-	151,892	152,483
Refundable deposits	-	5,545	-	-	5,545
<b>Total credit risk exposure</b>	<b>₱58,146</b>	<b>₱343,430</b>	<b>₱4,988</b>	<b>₱267,270</b>	<b>₱673,834</b>

The Company has assessed the credit quality of the above financial assets as follows:

- Cash in banks are assessed as high-grade since these are deposited in reputable banks, which have a low probability of insolvency.
- Trade receivables, which pertain mainly to receivables from sale of lime, and other receivables, were assessed as standard-grade. These were assessed based on past collection experience and the debtors’ ability to pay the receivables.
- Financial assets at FVOCI were assessed as high-grade since these are instruments from companies with good financial capacity and with good financial conditions and operates in an industry, which has potential growth.
- Other financial assets which include amounts owed by related parties, receivables from lessees of bunkhouses, advances to contractors under “other current assets”, and nontrade under “other noncurrent assets” were assessed as standard grade, based on past collection experience and debtors’ ability to pay.
- Refundable deposits amounts were assessed as standard grade based on the discounted expected cash flows using effective interest rate.

#### *Impairment of Financial Assets*

The Company has financial assets consisting of cash in banks, trade receivables, amount owed by related parties, receivables from lessees of bunkhouses, advances to contractors under ‘other current assets’, nontrade under ‘other noncurrent assets’ and refundable deposits. While cash in banks are also subject to the impairment requirements of PFRS 9, the identified impairment loss were immaterial.

The Company applies the PFRS 9 simplified approach in measuring ECL which uses a lifetime expected loss allowance for all trade receivables. On the other hand, the general approach was used in measuring ECL for amount owed by related parties, receivables from lessees of bunkhouses, advances to contractors under ‘other current assets’, nontrade under ‘other noncurrent assets’ and refundable deposits. The Company provided a provision for ECLs for all financial assets amounting to ₱267,270 in 2020 and 2019, respectively.

#### Market Risks

##### *Interest Rate Risk*

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company’s exposure to interest rate risk relates primarily to the Company’s long-term debt obligations with floating interest rates.



As at December 31, 2020 and 2019, the Company's exposure to the risk for changes in market interest rate relates primarily to its secured bank loans with floating interest rates. The Company regularly monitors its interest due to exposure from interest rates movements.

The Company's secured bank loans are payable on demand. Nominal interest rates vary from floating rate of 91-day Philippine Treasury Bill (PhP T-bill) rate for peso loans and 3-month LIBOR foreign loans, plus a margin of 3.5%.

The following tables set forth, for the year indicated, the impact in changes on interest rate on the parent company statements of income:

<u>2020</u>	<u>Change in interest rates (in basis points)</u>	<u>Sensitivity of pretax income</u>
	+100	₱-
	-100	-
<u>2019</u>	<u>Change in interest rates (in basis points)</u>	<u>Sensitivity of pretax income</u>
	+100	₱-
	-100	-

There is no other impact on the Company's equity other than those already affecting the profit or loss. Based on the historical movement of the interest rates, management believes that the reasonably possible change for the next quarter would result in an increase (decrease) of 100 basis points for USD LIBOR and 100 basis points for PhP T-bill.

#### *Foreign Currency Risk*

Foreign currency risk is the risk to earnings or capital arising from changes in foreign exchange rates. The Company takes on exposure to effects of fluctuations in the prevailing foreign currency exchange rates on its financial performance and cash flows. The Company has transactional currency exposures. Such exposure arises from the sale of gold.

All sales of gold are denominated in US\$. Dollar conversion of metal sales to Philippine peso is based on the prevailing exchange rate at the time of sale.

The Company's policy is to maintain foreign currency exposure within acceptable limits. The Company believes that its profile of foreign currency exposure on its assets and liabilities is within conservative limits for an institution engaged in the type of business in which the Company is involved.

The Company did not seek to hedge the exposure on the change in foreign exchange rates between the US\$ and the Philippine peso. The Company does not generally believe that active currency hedging would provide long-term benefits to stockholders.

The Company's foreign-currency-denominated monetary assets and liabilities as at December 31, 2020 and 2019 follow:

	<u>2020</u>		<u>2019</u>	
	<u>US\$</u>	<u>Peso equivalent</u>	<u>US\$</u>	<u>Peso equivalent</u>
<u>Asset</u>				
Cash in banks	US\$2	₱96	US\$3	₱152
<u>Liability</u>				
Other loans	1,895	91,000	1,922	97,320
<u>Net liability position</u>	<u>US\$1,893</u>	<u>₱90,904</u>	<u>US\$1,919</u>	<u>₱97,168</u>



As at December 31, 2020 and 2019, the exchange rates of the Philippine peso to the US\$ based on Philippine Dealing System exchange rates at closing date are ₱48.023 and ₱50.635, respectively.

The sensitivity to a reasonably possible change in the US\$ exchange rate, with all other variables held constant, of the Company's income before income tax as at December 31, 2020 and 2019 is as follows:

	Peso	Sensitivity of pretax income
<b>2020</b>	<b>Strengthens by 0.41</b> <b>Weakens by 0.11</b>	<b>₱774</b> <b>(208)</b>
2019	Strengthens by 0.63 Weakens by 0.61	₱1,203 (1,164)

#### *Equity Price Risk*

Equity price risk is the risk that the fair values of equities decrease as a result of changes in the levels of equity indices and the value of the listed shares. The non-trading equity price risk exposure arises from the Company's quoted equity investments at FVOCI.

The Company's policy is to maintain the risk to an acceptable level. Movement of share price is monitored regularly to determine impact on the company statement of financial position.

Since the amount of financial assets subject to equity price risk is immaterial relative to the Company financial statements taken as a whole, management opted not to disclose equity price risk sensitivity analysis for 2020 and 2019.

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### 30. Capital Management

The Company maintains a capital base to cover risks inherent in the business. The primary objective of the Company's capital management is to ensure that the Company has available funds in order to continuously operate and support its exploration activities.

The Company manages its capital structure and makes adjustments, in light of changes in economic conditions. To maintain or adjust the capital structure, the Company may obtain additional advances from stockholders or issue new shares.

No changes were made in the objectives, policies or processes in 2020 and 2019.

The following table summarizes the total capital considered by the Company:

	2020	2019
Capital stock	₱617,215	₱616,863
Capital surplus	388,646	380,382
Cost of share-based payment	13,689	21,671
Unrealized loss on financial assets at FVOCI	(427)	(499)
Other components of equity	2,121,625	2,132,907
Retained earnings	2,522,201	2,345,951
Treasury shares	(8,016)	(8,016)
	<b>₱5,654,933</b>	<b>₱5,489,259</b>



Further, the Company monitors capital using debt to equity ratio, which is the total liabilities divided by total equity. Debt to equity ratio of the Company as at December 31, 2020 and 2019 follows:

	2020	2019
Total liabilities (a)	<b>₱2,327,596</b>	₱2,267,332
Total equity (b)	<b>5,654,933</b>	5,489,259
Debt-to-equity ratio (a/b)	<b>0.41:1</b>	0.41:1

### 31. Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair values are obtained from quoted market prices, discounted cash flow models and option pricing models, as appropriate.

Set out below is a comparison by category and class of carrying amounts and estimated fair values of the Company's significant financial assets and liabilities as at December 31, 2020 and 2019:

	Carrying amounts		Fair values	
	2020	2019	2020	2019
<b>Financial Assets:</b>				
Cash in banks	<b>₱39,124</b>	₱57,902	<b>₱39,124</b>	₱57,902
Trade and other receivables				
Trade receivables	<b>28,954</b>	26,924	<b>28,954</b>	26,924
Amounts owed by related parties	<b>230,137</b>	244,474	<b>230,137</b>	244,474
Receivables from lessees of bunkhouses	<b>4,754</b>	4,988	<b>4,754</b>	4,988
Others	<b>3,090</b>	2,540	<b>3,090</b>	2,540
Financial assets at FVOCI	<b>316</b>	244	<b>316</b>	244
Advances to contractors under "other current assets"	<b>63,356</b>	63,356	<b>65,767</b>	65,767
<b>Other noncurrent assets:</b>				
Nontrade	<b>1,821</b>	591	<b>1,821</b>	591
Refundable deposits	<b>5,545</b>	5,545	<b>5,545</b>	5,545
<b>Financial Liabilities:</b>				
Trade payables	<b>₱98,139</b>	₱104,583	<b>₱79,358</b>	₱53,790
Accrued expenses*	<b>6,367</b>	25,056	<b>6,367</b>	25,056
Loans payable	<b>414,980</b>	420,212	<b>414,980</b>	420,212
Amounts owed to related parties	<b>710,865</b>	682,793	<b>710,865</b>	682,793
Payables to officers and employees	<b>12,280</b>	11,921	<b>12,280</b>	11,921
Lease liability	<b>4,686</b>	5,341	<b>4,686</b>	5,341
Other payables	<b>13,512</b>	19,808	<b>13,513</b>	19,808
Other noncurrent liability	<b>49,136</b>	49,136	<b>49,136</b>	49,136

\*excluding payables to the government



The following methods and assumptions were used to estimate the fair value of each class of financial instruments for which it is practicable to estimate such value:

*Cash in banks, trade receivables, receivables from lessees of bunkhouses, and amounts owed by/to related parties and other receivables under Trade and Other Receivables, advances to contractors under Other Current Assets, trade, accrued expenses, and payables to officers and employees under Trade and Other Payables*

The fair values of these instruments approximate their carrying amounts as of the reporting date due to their short-term nature.

*Financial assets at FVOCI*

The fair value of investments that are actively traded in organized markets is determined by reference to quoted market bid prices at the close of business on the reporting date. As at December 31, 2020 and 2019, the Company has quoted financial assets at FVOCI amounting to ₱316 and ₱244, respectively, carried at fair value in the Company's statement of financial position. The quoted financial assets at FVOCI are classified under level 1 of the fair value hierarchy since these are based on quoted market prices or binding dealer price quotations.

*Land at revalued amount and investment property*

The fair value of land at revalued amounts and investment property is calculated using the sales comparative approach, which results in measurements being classified as level 3 in the fair value hierarchy.

*Nontrade and Refundable deposits under Other Noncurrent Assets and Other Noncurrent Liability*

The fair values of these instruments were determined by discounting the expected cash flows using effective interest rate.

*Loans payable*

Where the repricing of the variable-rate interest-bearing loan is frequent (i.e., three-month repricing), the carrying value approximates the fair value. Otherwise, the fair value is determined by discounting the principal plus the known interest payment using current market rates.

Fair Value Hierarchy

Set out below is the fair value hierarchy of the Company's assets measured at fair value.

	2020		
	Fair value measurement using		
	Quoted prices in active market (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)
<b>Land at revalued amounts</b>	₱–	₱–	₱1,457,910
<b>Investment properties</b>	–	–	2,617,510
<b>Financial assets at FVOCI</b>	316	–	–
	<b>₱316</b>	<b>₱–</b>	<b>₱4,075,420</b>



	2019		
	Fair value measurement using		
	Quoted prices in active market (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Land at revalued amounts	₱-	₱-	₱1,457,910
Investment properties	-	-	2,426,356
Financial assets at FVOCI	244	-	-
	₱244	₱-	₱3,884,266

**Sensitivity of the fair value measurements that are categorized within Level 3**

A 5% increase (decrease) in internal factors used in determining the price per square meter, such as use, size and location would decrease (increase) the fair value of land by ₱319.76 million (₱86.59 million) and ₱335.23 million (₱322.23 million) as at December 31, 2020 and 2019, respectively.

As at December 31, 2020 and 2019, the fair value of land at revalued amounts, and investment property are calculated using the sales comparative approach, which resulted in measurement being classified as Level 3 in the fair value hierarchy.

Significant unobservable inputs used include value adjustments due to location, size, neighborhood data, and bargaining allowance. Each of these factors includes an adjustment ranging from 10% to 20% of the asking prices per square meter of comparable lots used which range from ₱1,000 to ₱2,000 per square meter. Significant increases (decreases) in each estimated value adjustment would result in a significantly higher (lower) fair value on a linear basis.

As at December 31, 2020 and 2019, the Company's financial assets at FVOCI is classified under Level 1 of the fair value hierarchy since these are based on quoted market prices or binding dealer price quotations.

There are no other assets and liabilities measured at fair value using any of the valuation techniques as at December 31, 2020 and 2019. There were no transfers between levels in 2020 and 2019.

## 32. Leases and Investment Properties

### Lease Agreements

*(The Company as a lessee)*

The Company has lease contracts for various office spaces, machinery, tools and equipment, and land, which generally have lease terms, as follows:

Lease	Lease terms
Land	15 to 25 years
Office spaces	8 years
Machinery, tools and equipment	2 years

The Company also has certain leases of land and machinery, tools and equipment with lease terms of 12 months or less. The Company applies the 'short-term lease' recognition exemption for these leases. The Company's obligations under its leases are secured by the lessor's title to the leased assets.



The following are the amounts recognized in the parent company statements of income:

	2020	2019
Depreciation expense of right-of-use assets included in property and equipment (Note 10)	<b>₱1,241</b>	₱1,550
Interest expense on lease liabilities	<b>429</b>	489
Expenses relating to short-term leases included in selling, general and administrative costs (Note 21)	<b>690</b>	337
Income from subleasing right-of-use assets	<b>(1,613)</b>	(269)
<b>Total amount recognized in parent company statements of income</b>	<b>₱747</b>	<b>₱2,107</b>

The carrying amount of PFRS 16 lease liabilities as at December 31, 2020 and 2019 are as follows:

	2020	2019
Beginning balances	<b>₱5,340</b>	₱-
Effects of adoption of PFRS 16	-	6,091
Beginning balance, as restated	<b>₱5,340</b>	₱6,091
Additions	-	-
Interest for the period	<b>429</b>	489
Lease payments	<b>(1,083)</b>	(1,240)
	<b>4,686</b>	5,340
Less: lease liabilities - current portion	<b>698</b>	1,083
<b>Lease liabilities - net of current portion</b>	<b>₱3,988</b>	<b>₱4,257</b>

The lease liabilities were measured at the present value of the remaining lease payments discounted at the Company's incremental borrowing rates as at January 1, 2020. The weighted average incremental borrowing rates applied to the lease liabilities on January 1, 2020 was 9.39%.

Shown below is the maturity analysis of lease liabilities pertaining to contractual undiscounted cash flows:

	2020	2019
1 year	<b>₱856</b>	₱1,083
more than 1 years to 2 years	<b>699</b>	856
more than 2 years to 3 years	<b>718</b>	699
more than 3 years to 4 years	<b>738</b>	718
more than 5 years	<b>3,515</b>	4,262

#### Investment Properties

	2020	2019
Balances at beginning of year	<b>₱2,426,356</b>	₱2,180,484
Revaluation (Note 23)	<b>191,154</b>	245,872
<b>Balances at end of year</b>	<b>₱2,617,510</b>	<b>₱2,426,356</b>



On March 13, 2021, the Group engaged an independent appraiser to assess the fair market value of land under investment properties as at December 31, 2020. The appraisal was performed by Cuervo Appraisers, Inc. The fair value of the investment properties was estimated using the sales comparative approach, which considers the sales of similar or substitute properties and related market values and establishes value estimates by processes involving comparisons (level 3).

The Company recognized revaluation gain amounting to ₱191,154 and ₱245,872 in 2020 and 2019, respectively (see Note 23).

### 33. Agreements and Contingencies

- a. The Company is contingently liable on lawsuits or claims filed by third parties, which are either pending decision by the courts or are subject to settlement agreements. The outcome of these lawsuits or claims cannot be presently determined. In the opinion of management and its legal counsel, the eventual liability from these lawsuits or claims, if any, will not have a material effect on the Company's financial statements.
- b. In 2011, the Company signed a 20-year power supply agreement with Therma Luzon, Inc., a wholly owned subsidiary of Aboitiz Power Corporation, to supply reliable power to its current and future mining operations in Itogon, Benguet.

### 34. Changes in Liabilities Arising from Financing Activities

Movements on the reconciliation of liabilities arising from financing activities are as follows:

	January 1, 2020	Cash flows	Foreign exchange movement	Noncash additions	Others	December 31, 2020
Loans payable	₱420,212	(₱1,370)	(₱4,963)	₱-	₱1,101	₱414,980
Liability for mine rehabilitation	67,467	-	-	8,629	2,436	78,532
Amounts owed by related parties	733,586	28,403	-	-	-	761,989
Lease liabilities	5,340	(1,083)	-	-	429	4,686
	<b>₱1,226,605</b>	<b>₱25,950</b>	<b>(₱4,963)</b>	<b>₱8,629</b>	<b>₱3,966</b>	<b>₱1,260,187</b>

	January 1, 2019	Effect of adoption of PFRS 16	Cash flows	Foreign exchange movement	Noncash additions	Others	December 31, 2019
Loans payable	₱446,727	₱-	(₱22,776)	(₱3,739)	₱-	₱-	₱420,212
Liability for mine rehabilitation	69,344	-	(12,788)	-	5,914	4,997	67,467
Amounts owed by related parties	782,929	-	(49,343)	-	-	-	733,586
Lease liabilities	-	6,091	(1,240)	-	-	489	5,340
	<b>₱1,299,000</b>	<b>₱6,091</b>	<b>(₱86,147)</b>	<b>(₱3,739)</b>	<b>₱5,914</b>	<b>₱5,486</b>	<b>₱1,226,605</b>

Noncash additions include change in estimates and increase in liability for mine rehabilitation other than accretion expense.

Others pertain to the interest expense related to the loans payable and lease liabilities, and accretion expense related to the liability for mine rehabilitation which are recognized in the parent company statements of income.



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### 35. Operating Segments

In accordance with PFRS 8, *Operating Segments*, management opted to present segment information as part of its disclosures in the consolidated financial statements.

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### 36. Subsequent Event

#### Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act

On February 3, 2021, the Philippine House of Representatives and the Senate have ratified the Bicameral Committee's version of the proposed "Corporate Recovery and Tax Incentives for Enterprises Act" or "CREATE", reconciling the disagreeing provisions of Senate Bill No. 1357 and House Bill No. 4157.

The ratified version of the bill was submitted to the President on February 25, 2021 for his approval and upon receipt of the bill, the President may do any of the following:

1. Sign the enrolled bill without vetoing any line or item therein;
2. Sign the enrolled bill with line or item veto which veto may be overridden by Congress; or
3. Inaction within 30 days from receipt which would result to the automatic approval of the enrolled bill as it is.

Once the ratified bill is signed into law, it is set to take effect 15 days after its complete publication in the Official Gazette or in a newspaper of general circulation.

The following are the key changes to the Philippine tax law pursuant to the CREATE Act which have an impact on the Company:

- Effective July 1, 2020, RCIT rate is reduced from 30% to 25% for domestic corporations. For domestic corporations with net taxable income not exceeding ₱5 million and with total assets not exceeding ₱100 million (excluding land on which the business entity's office, plant and equipment are situated) during the taxable year, the RCIT rate is reduced to 20%.
- MCIT rate reduced from 2% to 1% of gross income effective July 1, 2020 to June 30, 2023.

Applying the provisions of the CREATE Act, the Company would have been subjected to lower MCIT rate of 1% effective July 1, 2020. The impact on the Company's income tax expense is not expected to be material.



**INDEPENDENT AUDITOR'S REPORT  
ON THE SCHEDULE OF RECONCILIATION  
OF RETAINED EARNINGS AVAILABLE  
FOR DIVIDEND DECLARATION**

The Stockholders and the Board of Directors  
Benguet Corporation  
7th Floor Universal Re-Building  
106 Paseo de Roxas, Makati City

We have audited, in accordance with Philippine Standards on Auditing, the financial statements of Benguet Corporation as at December 31, 2020 and 2019, and have issued our report thereon dated March 18, 2021. Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying Schedule of Reconciliation of Retained Earnings Available for Dividend Declaration is the responsibility of the Company's management. This schedule is presented for purposes of complying with the Revised Securities Regulation Code Rule 68, and is not part of the basic financial statements. This has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, fairly state, in all material respects, the information required to be set forth therein in relation to the basic financial statements taken as a whole.

SYCIP GORRES VELAYO & CO.



Peter John R. Ventura

Partner

CPA Certificate No. 0113172

SEC Accreditation No. 1735-A (Group A),

January 15, 2019, valid until January 14, 2022

Tax Identification No. 301-106-741

BIR Accreditation No. 08-001998-140-2018,

December 17, 2018, valid until December 16, 2021

PTR No. 8534379, January 4, 2021, Makati City

March 18, 2021



**RECONCILIATION OF RETAINED EARNINGS  
AVAILABLE FOR DIVIDEND DECLARATION**

**As at December 31, 2020**

**BENGUET CORPORATION**

**7th Floor Universal Re-Building, 106 Paseo de Roxas, Makati City**

<b>Unappropriated Retained Earnings, beginning</b>	<b>₱2,345,951</b>
Effect of quasi-reorganization on revaluation increment	(1,010,848)
Accumulated fair value gains of investment properties	(851,692)
<b>Unappropriated Retained Earnings, as adjusted to available for dividend distribution, beginning</b>	<b>483,411</b>
<b>Add: Net income actually earned/ realized during the period</b>	
Net income during the period closed to Retained Earnings	176,250
Less: Non-actual/unrealized income net of tax	-
Equity in net income of associate/joint venture	-
Unrealized foreign exchange gain - net (except those attributable to Cash and Cash Equivalents)	4,958
Fair value adjustment (mark-to-market gains)	-
Fair value adjustment of Investment Property resulting to gain	191,154
Adjustment due to deviation from PFRS/GAAP - gain	-
Other unrealized gains or adjustments to the retained earnings as a result of certain transactions accounted for under the PFRSs	-
Subtotal	196,112
Add: Non-actual losses	
Depreciation on revaluation increment (after tax)	-
Adjustment due to deviation from PFRS/GAAP - loss	-
Loss on fair value adjustment of investment property (after tax)	-
Subtotal	-
<b>Net loss actually incurred during the period</b>	<b>(19,862)</b>
<b>Add (Less):</b>	
Dividend declarations during the period	-
Appropriations of Retained Earnings during the period	-
Reversals of appropriations	-
Effects of prior period adjustments	-
Treasury shares	(8,016)
	<b>(8,016)</b>
<b>TOTAL RETAINED EARNINGS, END AVAILABLE FOR DIVIDEND</b>	<b>₱455,533</b>



**BenguetCorp**

# **SUSTAINABILITY REPORT**

**2020**

# Annex A: Reporting Template

(For additional guidance on how to answer the Topics, organizations may refer to Annex B: Topic Guide)

## Contextual Information

Company Details	
Name of Organization	Benguet Corporation
Location of Headquarters	7F Universal RE Building, 106 Paseo de Roxas, 1226 Makati City Philippines
Location of Operations	Itogon, Benguet Province for mining of gold and silver Irisan, Baguio City for operation / processing of lime products
Report Boundary: Legal entities (e.g. subsidiaries) included in this report*	Benguet Gold Operations (BGO) Corporate Headquarters (CHQ) Irisan Lime Project (ILP)
Business Model, including Primary Activities, Brands, Products, and Services	Natural resources company engaged in, but not limited to the following: <ol style="list-style-type: none"> <li>1. mineral exploration;</li> <li>2. mine development;</li> <li>3. mineral resources extraction;</li> <li>4. gold processing;</li> <li>5. production of quicklime and hydrated lime; and</li> <li>6. restoration / rehabilitation of mined-out areas.</li> </ol>
Markets Served	Processed gold is sold to Bangko Sentral ng Pilipinas (BSP); Lime products market are mining and allied companies and farmers within Benguet and other neighboring Provinces.
Scale of the Organization	<ol style="list-style-type: none"> <li>1. Total average number of employees for 2020 is 411 employees which includes Central Headquarters (CHQ), Benguet Gold Operation (BGO) and Irisan Lime Project (ILP).</li> <li>2. Total number of operations:           <ul style="list-style-type: none"> <li>➤ One (1) – Mining and milling operations for gold and silver</li> <li>➤ One (1) – 3 Kilns alternately operating for lime production.</li> </ul> </li> <li>3. Net Sales (private sector) – 0.00           <ul style="list-style-type: none"> <li>➤ Total Capitalization – Php 8.0B</li> <li>➤ Debt – Php 2.3B</li> <li>➤ Equity – Php 5.7B</li> </ul> </li> <li>4. Quantity of products –           <ul style="list-style-type: none"> <li>➤ Gold – 7,978.86 ounces</li> <li>➤ Silver – 4,297.28 ounces</li> <li>➤ Lime – 7,071.96 Metric Tons</li> </ul> </li> </ol>
Reporting Period	FY 2020
Highest Ranking Person responsible for this report	Atty. Lina G. Fernandez – President

*\*If you are a holding company, you could have an option whether to report on the holding company only or include the subsidiaries. However, please consider the principle of materiality when defining your report boundary.*

*Note: All supporting documents must be made available as attachment to the report and must have assigned link to refer to.*

## Materiality Process

### **Explain how you applied the materiality principle (or the materiality process) in identifying your material topics.<sup>1</sup>**

The world saw the spread of the corona virus disease-19 (COVID-19) at the start of year 2020 and causing an unprecedented impact on people's health and economy around the world. It is expected that most countries will experience recession even beyond 2020. The crisis highlights the need for urgent action to cushion the effect of pandemic to people's health and economic consequences, protect vulnerable populations, and set stage for lasting recovery. It is very urgent to improve and open economic activity to arrest the downward turn of the national economy.

It is of these facts that Benguet Corporation continues to manage its operation under the following principles and commitment:

- a. Profit and growth oriented;
- b. Responsible operation and care for the environment;
- c. Commitment to improve quality of life of our employees, the communities and all stakeholders; and
- d. Compliance to existing laws, rules and other obligations

*The Board has a clearly defined and updated vision, mission and core values. Please refer to BC website under tab "About Us" <http://benquetcorp.com/home/about-us/>.*

*Please refer also to the Board Charter p.8 which states that one of the general responsibilities of the Board is to determine the Company's purpose, its vision, mission and strategies to carry out its objectives.*

*<http://benquetcorp.com/wp-content/uploads/2020/07/P1-Board-Charter.pdf>*

#### **Economic Material Factors**

Our Economic Material Factors are based on the value our operations contribute to the local, and national governments, host, and neighboring mining communities, and the environment at large. Our operations have also created derived demand resulting in the establishment of micro, small, and medium enterprises in our mining area. Through our operations, the quality of life of our shareholders, employees and other stakeholders have improved, local economies grew vigorously, and the environment is protected.

#### **Environmental Material Factors**

Benguet Corporation is committed to the protection and enhancement of the environment by ensuring that its mining operations are in full compliance with mining and environmental laws, rules, and regulations. It ensures close collaboration and coordination with the Department of Environment and Natural Resources (DENR), the Mines and Geo-sciences Bureau (MGB), and the Environmental Management Bureau (EMB), the government agencies that monitor the compliance. Sustainability is core to BC's corporate strategy and sits at the heart of everything that it does.

<sup>1</sup> See [GRI 102-46](#) (2016) for more guidance.

Our operation aims to be environmentally responsible, respecting human rights and supporting the communities in which we operate. It is the leading value which enables our people to understand our common purpose, our values, how we measure success and the basis for our decision-making. It is about managing our risks, reducing our adverse environmental, social, economic and cultural impacts, and supporting and sustaining the communities and environments in which we operate.

The Environmental Material Factors have been considered essential in keeping our operations successful. As a mining company, we are committed partners of the government in the conscientious development of the country's natural resources. This agreement comes with a huge responsibility not just to harness but most specifically to protect, nurture, restore and enhance the environment. Nature, and the resources within are the main enabler of our business, and as such, considerable care is our priority. Mitigating any possible adverse effects of our operations to the environment is part of our day-to-day function. The Company's mining activity is guided by the provisions of the Philippine Laws, but not limited to the following:

1. Department Administrative Order No. 2010-21 (Implementing Rules and Regulations of R.A. 7942 – The Philippine Mining Act of 1995)
2. Department Administrative Order No. 2005-10 (IRR of R.A. 9275 – Philippine Clean Water Act);
3. Department Administrative Order No. 2000-98 (Mine Safety and Health Standard);
4. Department Administrative Order No. 2000-81 (IRR of R.A. 8749 – Philippine Clean Air Act);
5. R.A. 8371 – Indigenous Peoples Rights Act;
6. DENR Administrative Order NO. 2001-34 (IRR of R.A. No. 9003 – Ecological Solid Waste Management Act),
7. Department Administrative Order No. 28 (IRR of R.A. 6969 – Toxic Substances and Hazardous and Nuclear Wastes Control Act); and
8. DENR Administrative Order No. 2003-30 (Revised Procedural Manual of P.D. 1586 – Environmental Impact Statement System).

We constantly monitor the land, air, and water quality, the siltation levels in bodies of water, as well as the forest cover / density in the affected areas within our operations and its surrounding environs. We adhere to the strict parameters laid out by the government in ensuring that we protect the ecosystem, promote biodiversity, and enhance the environment.

### **Social Material Factors**

For the year 2020, Benguet Corporation puts health and safety as top priority before anything and believes that sustainability includes playing an appropriate role in addressing global issues such as climate change, supporting and respecting human rights and advocating for social change such as by supporting the rights of Indigenous Peoples. As a century-old corporation, BC has witnessed and navigated through countless crises together with our employees, suppliers, and local communities, by putting people first.

As a responsible business entity, our **Vision, Mission, Goals, Safety and Environmental Policies** are centered on achieving productivity and advocating for safety and health of our employees, assisting the people within our host and neighboring communities and the continuous

enhancement of our environment. We share the stewardship of our country's natural resources. As we operate within the indigenous communities, we support local cultures, respect human rights as we help drive economic development in the area.

As a responsible corporate partner of society, the Company has a social obligation not only to preserve, protect and enhance the physical and ecological environment but also to improve the quality of life of the people in the communities surrounding the operation.

Aside from the Company's commitment to be socially responsible and environmentally conscious, it also aims to achieve competitiveness and excellence as a natural resource development Company through enhanced productivity and through improvement of the quality of life of its employees, their families, and the host communities. At the heart of Benguet Corporation's philosophy are the people (employees and other stakeholders) promoting not only their interests and maintaining good community relationships but as well enable them to be empowered for the stewardship of the environment and natural resources surrounding them.

As a continuing commitment and manifestation of the Company's compliance to the implementation of its Social Development and Management Programs, Benguet Corporation has extended the various needs of its host and neighboring communities in all its areas of operations by way of its sensitivity to delivering its services in the following areas of concern:

1. On Human Resource Development and Institutional Building,
2. On Enterprise Development and Networking,
3. On Assistance to Infrastructure Development and Support Services,
4. On Access to Education and Educational Support Programs,
5. On Access to Health Services, Health Facilities and Health Professionals
6. On Protection and Respect to Socio-Cultural Values, and
7. On the Development of Mining Technology

This is our fundamental way to operationalize our social license.

## ECONOMIC

### Economic Performance

#### Direct Economic Value Generated and Distributed

Disclosure	Amount	Units
Direct economic value generated (revenue)	767.1 M	PhP
Direct economic value distributed:		
a. Operating costs	156.2 M	PhP
b. Employee wages and benefits	126.0 M	PhP
c. Payments to suppliers, other operating costs	453.9 M	PhP
d. Dividends given to stockholders and interest payments to loan providers	2.5 M	PhP
e. Taxes given to government	48.8 M	PhP
f. Investments to community (e.g. donations, CSR)	5.9 M	PhP

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p>The mining and milling operations of Benguet Corporation provide employment opportunities to people across several regions in the country, majority of which are from the communities where we do our business. Our gold mining operation employs the underground mining method or tunneling while the lime operation purchases the raw limestone material from suppliers engaged in land development surrounding Baguio City and Benguet</p>	<p>Employees of the Company and mining contractors.</p> <p>People in the host and neighboring communities.</p> <p>Local and national government – revenue / tax collection.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>The Company ensures that all regulatory requirements are complied with, work programs are implemented according to approved plans, commitments to stakeholders are delivered, taxes are paid, employees' statutory benefits are given i.e., payment of salaries and wages of employees are on schedule and health and safety of employees are taken care of.</p>

<p>Province as feed material to the kiln plant. The Company is operating in partnership with Mines and Geosciences Bureau (MGB) accredited mining contractors that employ miners from the indigenous peoples of the Cordillera Region. Over 2,000 people in the workforce were employed by the Company and service contractor combined. Irisan Lime Project have engaged the services of a Cooperative whose members are composed of the indigenous people and members of the community in Brgy. Irisan, Baguio City and former company employees to operate its kiln plant.</p> <p>We also provide business opportunities to our various suppliers and service providers that support the day-to-day operation of the company.</p> <p>Gold is our main product with silver as by-product. We process the gold bearing mineral ore in our refinery to produce gold which are purchased by the Bangko Sentral ng Pilipinas (BSP) as additional reserve for the country. The Company supplied lime products to the mining companies and farmers in Benguet Province.</p> <p><b>Benefits derived from the operation by employees and our host and neighboring communities:</b></p> <ul style="list-style-type: none"> <li>• Economic growth in the host and neighboring communities;</li> <li>• Increased family income of employees and community residents;</li> <li>• Improved medical services through the SDMP;</li> </ul>	<p>Service providers and suppliers.</p> <p>Business establishments in the community.</p> <p>National government – additional gold reserve and contributes to national revenue.</p> <p>MSMEs – our gold operations have been instrumental in creating derived demand for inputs to our suppliers and stakeholders (i.e., raw materials, housing, construction)</p> <p>The effect of the COVID-19 pandemic has affected first and foremost the employees and their families, their financial condition, the education of their dependents, the mining community whose members are mostly indigenous peoples of the Cordillera as well as the Barangays hosting the mining operation of BC-BGO and the Irisan Lime Kiln Project.</p>	<p>Measures are in place to prevent or mitigate, if not totally eliminate the negative impacts of the operation.</p> <p>The Irisan Lime Project (ILP) of Benguet Corporation has been granted a 5-year Mineral Processing Permit (MPP) by the Mines and Geosciences Bureau (MGB) valid until September 2022. Under its new Environmental Compliance Certificate (ECC), it has been allowed to increase volume of production from 9,500 tons per year to 19,420 tons per year. The upgraded ECC have increased the mine life of the operation of up to 5 years.</p> <p>The following strategies were adopted as a result of the reduced manpower of the mining contractors due to covid-19 pandemic.</p> <ol style="list-style-type: none"> <li>1. The company increased production goal of BC-owned mining operation during the 4<sup>th</sup> quarter of the year and reduced the production capacity of the mining contractors.</li> <li>2. Close coordination with the local government executives on the management and implementation of safety and health protocols inside the mining operations.</li> </ol>
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<ul style="list-style-type: none"> <li>• Educational opportunities – deserving students from the host and neighboring communities are enrolled under the scholarship program of the Company;</li> <li>• For the local government units - Increased tax revenue collection;</li> <li>• Increased budget for local government infrastructure projects and sustained delivery of basic services to the communities;</li> <li>• Budgetary allocations for the protection and enhancement of the environment and social development are assured;</li> <li>• Subsidized electricity and water are provided free to employees and other stakeholders in the communities.</li> </ul> <p><b>Negative impacts of the mining operation include the following:</b></p> <ul style="list-style-type: none"> <li>• <u>Depleting / dwindling mineral resources</u> - Minerals, like gold, are a non-renewable resource.</li> <li>• Intrusion of <u>small-scale miners'</u> operation in BC claims that depletes resources and reduce company revenues, thus, the lower tax collection by the local government.</li> <li>• <u>The underground mining method may have negative environmental effect unless properly remediated.</u></li> <li>• <u>Timber resources for underground mine support.</u> Scarcity of timber for mine support due to nationwide logging ban.</li> </ul>		
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<p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i> The Year 2020 was a challenging year in the business community and to the whole world. The outbreak of Covid-19 that was first detected in China and its spread worldwide has affected the global economic condition. The Philippine economy is not spared from the effects of the pandemic.</p> <p>Through proper management and implementation of the health protocols in the mining area and the setting of targets to improve the sustainability performance and favorable price of metal in the world market, the mining operation of BC-BGO was not hardly affected by the pandemic. Despite the reduced employees of the mining contractors, the economic performance of 2020 has improved vs. 2019 operation. Production targets through proper planning, goal setting and competency of Site Management contributed to the good economic performance of the operation.</p> <p>On the other hand, the kiln operation of ILP was reduced to 50% from previous year due to the effect of the pandemic which limits the mobility of people and products. The sale of agricultural lime products was also affected by the travel restrictions of the farmers.</p>		
<p><b>What are the Risk/s Identified?</b></p>	<p><b>Which stakeholders are affected?</b></p>	<p><b>Management Approach</b></p>

Identify risk/s related to material topic of the organization.	(e.g., employees, community, suppliers, government, vulnerable groups)	What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?
<p>Fluctuating gold price in the world market. The decline in metal prices will also affect financial condition, future operations, and Company's return on investment (ROI). The following factors continuously affect and drive the operations:</p>	<p>Company – production target not attained.</p>	<p>To monitor production performance, BC-BGO site managers regularly conduct operations meetings where weekly production activities vs. target are discussed and solutions are provided to issues and concerns that affect the production. At the corporate head office, the officers are given weekly updates on the operations accomplishment and bi-monthly meetings are conducted to discuss matters arising from previous operations report and introduce interventions when necessary. Weekly and monthly mine productions and mill recovery are being regularly monitored. Compliance to regulatory obligations is likewise discussed during these meetings.</p>
<ul style="list-style-type: none"> <li>a. Appreciation of the Philippine Peso versus US dollar;</li> <li>b. Ore grades; and</li> <li>c. Mineable ore reserves.</li> </ul>	<p>Employees of the Company and mining contractors.</p>	<p>Quarterly and annual reports submitted to the regulatory agencies and monitored on a regular basis. Production records, employment levels, amount of local and national taxes paid, as well as compliance progress are reported.</p>
<p>The current political instability and the everchanging policies toward mining. The mining industry is greatly affected as investors tend to shy away from mining investments.</p>	<p>People in the host and neighboring communities.</p>	
<p>The illegal exploitation of mineral resources by the unregulated small- scale miners' operators surrounding the mining properties of the Company entails significant business risks and leads to environment degradation or mining accidents.</p>	<p>Local and national government – reduced revenue / tax collection.</p>	<p>To ensure proper compliance, the Company puts a great amount of effort and invests substantial amount of its resources into environmental protection and rehabilitation in its areas of operations. As proof of its commitment to responsible and sustainable mineral resource development, the Company implements best practices and has adopted an <b>environmental policy statement</b> which is consistent with <b>ISO:14001-2015 Certification on Environmental Management System (EMS)</b>. The ISO certification makes the Company's operations fully compliant with the requirement of DENR DAO No. 2015-07.</p>
<p>Insufficient compliance or failure to follow environmental laws could affect the Company's mining activities. It may delay mining operations or could result in suspension of operation and/or imposition of substantial fines and penalties. While the Company believes that it is in substantial compliance with all environmental regulations, changes in mining policies and regulations, over which the Company has no control, may impede the</p>	<p>Service providers and suppliers.</p>	
<p>The illegal exploitation of mineral resources by the unregulated small- scale miners' operators surrounding the mining properties of the Company entails significant business risks and leads to environment degradation or mining accidents.</p>	<p>Business establishments in the community.</p>	

<p>Company's current and future business activities and may negatively impact the profitability of operation.</p> <p>Peace and Order - Intrusion of illegal small-scale miners into the working area of mining contractors may invite troubles underground.</p> <p>Attendance - Indigenous Peoples working under mining contractors follow different work schedules from the company which sometimes cause disruption in the production.</p> <p>Uncontrolled entry of hazardous substance/explosives inside camp for illegal miner's use.</p> <p>Additionally, due to the pandemic, the risks identified are:</p> <ol style="list-style-type: none"> <li>1. Fear of employees getting infected with the virus,</li> <li>2. Limited delivery of supplies and materials due to travel restrictions,</li> <li>3. Continuing illegal exploitation of mineral resources by the unregulated small-scale miners' operators surrounding the mining properties of the company, and</li> <li>4. High grading of ore by employees of mining contractors and illegal small-scale miners due to shortage and limited presence of security personnel in the underground mining operation.</li> </ol>		<p>The Company maintains strong relationships with the IPs, and LGUs through its <b>SDMP</b>, and multi-sectoral monitoring/consultation meetings.</p> <p>The Company continues to have effective lines of communication with the regulatory agencies (i.e., DENR, MGB, EMB, etc.). The Company provides full cooperation to regulators with regard to compliance with governmental requirements in ensuring mine safety and environment protection.</p> <p>The following are programs being implemented by management to prevent the spread of the virus inside the mining camp:</p> <ol style="list-style-type: none"> <li>a. Management representatives closely monitor (i.e., health declaration forms, temperature check, etc.) the health conditions of the employees and dependents, including workforce and families of the mining contractors that are residing inside the camp.</li> <li>b. Close coordination with the corporate headquarters and the municipal IATF for assistance if virus was detected inside the camp.</li> </ol> <p>The following are programs being implemented to prevent illegal exploitation of mineral resources:</p> <ol style="list-style-type: none"> <li>a. Site managers closely monitor the production performance and issue guidance / instructions to department heads to improve on their mining activities and gold recovery at the mill operation.</li> <li>b. Increase security surveillance and visibility of security personnel at the mill area to prevent or minimize high grading of</li> </ol>
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		gold ore in BGO and in the Company's lime operation in Irian Lime Project.
<b>What are the Opportunity/ies Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization?</i></p> <p>The increased productivity by the BC-owned mining group and the improved price of gold in the world market, have resulted in the increased sales and revenue of Benguet Corporation (BGO).</p>	<p><i>(e.g. employees, community, suppliers, government, vulnerable groups)</i></p> <p>BC-BGO and ILP Employees.</p> <p>National economy due to the increase in sales of gold.</p> <p>Host and neighboring communities – for the continuity in the implementation of SDMP</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>The economic material topic is managed through strict observance of corporate governance mechanism and employee's dedication to meet production targets, financial objectives and shareholder expectations that were derived from well-disciplined workforce of the organization.</p> <p>Strengthened mining strategy with the advanced development that preceded the geology and exploration activity in the identification of high-grade ore mineable areas.</p> <p>Additional manpower that provided support in mining and milling operation.</p>

### Climate-related risks and opportunities<sup>2</sup>

<b>Governance</b>	<b>Strategy</b>	<b>Risk Management</b>	<b>Metrics and Targets</b>
<i>Disclose the organization's governance around climate-related risks and opportunities.</i>	<i>Disclose the actual and potential impacts<sup>3</sup> of climate-related risks and opportunities on the organization's businesses,</i>	<i>Disclose how the organization identifies, assesses, and manages climate-related risks.</i>	<i>Disclose the metrics and targets used to assess and manage relevant climate-related risks</i>

<sup>2</sup> Adopted from the Recommendations of the Task Force on Climate-Related Financial Disclosures. The TCFD Recommendations apply to non-financial companies and financial-sector organizations, including banks, insurance companies, asset managers and asset owners.

<sup>3</sup> For this disclosure, impact refers to the impact of climate-related issues on the company.

<p>The Management Committee composed of the Chairman of the Board, the Chief Executive Officer and the Compliance Officer oversees the Company's sustainability initiatives. They work together in ensuring that the Company achieve its sustainability commitments.</p> <p>The climate-related risks and opportunities are considered in developing the sustainability strategy and commitments.</p> <p>Global warming is distinct. The climate change covers a wide range of different circumstances, such as the increasing number of natural calamities caused by abnormal weather conditions, depletion of water resources, food scarcity, flooding, typhoons, earthquakes, etc. Under each condition, the impacts to the environment are pronounced.</p> <p>The Board, the Risk and Audit Committee and senior management are regularly provided with insights on trends and exposure to climate-related risks and measures to address identified risk hazards.</p> <p>BGO and ILP operations are in collaboration with the host and</p>	<p><b><i>strategy, and financial planning where such information is material.</i></b></p> <p>For the year 2020, the Company has contributed and became part of the solution to climate change. There was a reduction of GHG emission for Scope 1 by 25%. However, there is a slight increase of GHG for Scope 2 of 3%. The slight increase in Scope 2 was due to the increase in the utilization of air compressor machines powered by electricity in the underground operation. Increased utilization of air compressors is necessary to increase air circulation in the underground mine tunnels / working areas.</p>	<p>BC-BGO is ISO 14001-2015 Certified operation. All identified and assessed climate related risks and its corresponding mitigating measures have been incorporated and addressed in the Environmental Management System Manual, in addition to the Environmental Protection and Enhancement Program which are continuously being monitored by the regulatory agencies.</p>	<p><b><i>and opportunities where such information is material.</i></b></p> <p>The Company continuously looks at ways in contributing to community and ecosystem resiliency.</p> <p>With the approved Annual Environmental Protection and Enhancement Program (AEPEP), the Company laid out its annual targets and milestones to continuously address and mitigate the identified climate related risks which are stated in its Corporate Governance Manual.</p>
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<p>neighboring villages to actively participate in the CO<sup>2</sup> sequestration by planting more trees in their surroundings. In 2020, the company has maintained its reforestation program and planted 10.0 hectares of open brushlands inside its mineral claims and 0.3711 hectare within Irisan industrial area in addition to the 771 hectares of previously planted areas that are being maintained and protected.</p> <p><i>Please refer to Manual on Corporate Governance.</i>  <a href="http://benquetcorp.com/corporate-governance/manual-on-corporate-governance/">http://benquetcorp.com/corporate-governance/manual-on-corporate-governance/</a>.</p>			
<b>Recommended Disclosures</b>			
<p><i>a) Describe the board’s oversight of climate-related risks and opportunities.</i></p> <p>The material governance that is routinely discussed during the meeting of the Board’s Risk Oversight Committee (BROC) is climate change. Monitoring the implementation of all action plans to address identified climate related risks and performance against commitments are among the major concerns of the BROC.</p>	<p><i>a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.</i></p> <p>Among the identified risks and opportunities related to climate change are the following:</p> <ol style="list-style-type: none"> <li>1. <b>Risks</b> - <ol style="list-style-type: none"> <li>a. Deforestation</li> <li>b. Landslide</li> <li>c. Forest fire / bush fire</li> <li>d. Underground water depletion</li> </ol> </li> </ol>	<p><i>a) Describe the organization’s processes for identifying and assessing climate-related risks.</i></p> <p>Risks identification attributed to climate change is supported by the following approach:</p> <ol style="list-style-type: none"> <li>1. The involvement of the Site Manager in the assessment and evaluation of the potential risks in all aspects of the operation.</li> </ol>	<p><i>a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.</i></p> <p>There is open line communication between the members of the Board, the Committees, and the Company Executives down to the Site Management.</p>

<p>The Board has the overall function or control of all related activities on climate risks and opportunities and ensuring that budgets for the implementation of environmental programs are funded and implemented according to approved plans.</p>	<p>e. Air pollution</p> <p><b>2. Opportunities –</b></p> <p>a. Employment through reforestation activities</p> <p>b. Watershed enhancement</p> <p>c. Water spring and water impounding development</p> <p>d. Cleaner air</p>	<p>2. Develop response (including required budget) to ease the effect of the identified risks and report to the Board Risk Oversight Committee for approval.</p> <p>3. The Site Management shall implement the approved mitigation plans and submit accomplishment report to the BROC for information.</p> <p>4. BROC will monitor the effectiveness of the mitigation measures to abate risk.</p> <p>5. Report to regulatory agencies where appropriate.</p> <p><i>Please refer to Board Risk Oversight Committee Charter link <a href="http://benquetcorp.com/wp-content/uploads/2020/06/C.-Board-Risk-Oversight-Comm-Charter.pdf">http://benquetcorp.com/wp-content/uploads/2020/06/C.-Board-Risk-Oversight-Comm-Charter.pdf</a></i></p>	<p>Programs on climate-related risks are considered among top priorities of management, particularly, water management, pollution control and increase reforestation activities to enhance the surrounding ecosystem.</p> <p><b>A. On water quality –</b></p> <p>BC-BGO assesses and manages the quality of water through its EMS Internal Auditors following provision of DAO 2005-10 (Implementing Rules and Regulations of RA 9275, otherwise known as The Philippine Clean Water Act) and the Water Quality Guidelines and effluent standard.</p> <p>With the strict management and proper implementation of mitigation measures to abate effluent discharges into the river system, the operation does not exceed the allowable effluent limit prescribed under DAO 2005-10 and will continue to attain positive performance.</p> <p><b>B. On Air Quality –</b></p> <p>The operation of BC-BGO does not require fossil fuel such as</p>
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			<p>coal for power generation as it sources its electricity from the generated hydropower plant of Thermal Luzon Inc., a subsidiary of Aboitiz Power Corporation in Benguet.</p> <p>Based on the 2019 air quality monitoring conducted by the Internal Audit Team and concurred by the external monitoring body, the air quality gathered from the established air monitoring stations of the mine indicates that measurements of identified air pollutants are within the DENR standard limit under R.A. 8749 and its IRR DAO #2000-81.</p> <p>The Company shall continue to comply with the prescribed air quality standard set by the government.</p>
<p><b><i>b) Describe management’s role in assessing and managing climate-related risks and opportunities.</i></b></p> <p>Managing the climate change is a shared responsibility among key managers/front liners in the mining operation and executives of Benguet Corporation. Collaboration among Department heads has proven to be effective in assessing and determining risks and opportunities attributable to climate-related risks.</p>	<p><b><i>b) Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy and financial planning.</i></b></p> <p>Mining operation is an extractive process which is always associated with environmental risk. Benguet Corporation’s operation in Itogon is the subject of rigorous evaluation and monitoring by</p>	<p><b><i>b) Describe the organization’s processes for managing climate-related risks</i></b></p> <p>BC recognizes the role in collaborating with others to achieve progress in managing the challenges of climate change. Experts from the private sector, government agencies, the academe and non-government organizations</p>	<p><b><i>b) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</i></b></p> <p>The implementation of the approved 2020 Environmental Protection and Enhancement Program (EPEP) of BGO and ILP includes the annual targets and corresponding budget per</p>

	<p>regulatory agencies on its compliance to environmental laws and regulations to reduce or eliminate pollution.</p> <p>The Company stands in solidarity with the government to arrest the deteriorating climate pattern through wise utilization of natural resources and lowering CO<sup>2</sup> emission that affects the ozone layer. The Company's reforestation programs (Mining Forest Program and the National Greening Program of the government) are its positive contribution to the worsening climate change.</p> <p>Underground mining requires sufficient ventilation to provide air for the miners. The warm temperature in the tunnels is affecting the production of mineral ore. With this scenario in the underground, management decided to utilize larger air compressor machines to cool the temperature inside the tunnels and improved ventilation.</p>	<p>were consulted on various aspects to prevent and minimize the effects of climate change. The company implements programs that are consistent with its goals and targets.</p> <p>Budget for the full implementation of the reforestation program on denuded slopes of the mountain and rehabilitation of eroded areas are funded.</p> <p>Water pollution control measures are strictly monitored to prevent scape of processed water from leaks that may contaminate the water bodies.</p> <p>The company seeks opportunities to work with partners to utilize technologies that will include carbon capture, and the natural climate solutions of reforestation and afforestation. We will continue to seek opportunities to collaborate with value chain partners, investors, researchers and government</p>	<p>activity. The total expenditures for the implementation of the 2020 EPEP is P7,726,387 representing 77% accomplishment vs. budget. Non-attainment of goal is caused by health restrictions imposed on villages due to the COVID-19 pandemic.</p> <p>For the year 2020, the total area reforested in BGO is 10.0 hectares planted with 12,142 assorted seedlings (forest species and fruit trees) with total survival rate of 76%. On the other hand, Irisan Lime Project (ILP) planted a total of 1,985 seedlings over an area of 3,711 sq.m. with 837 seedlings surviving for a period of 8 years.</p>
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		agencies to work towards reducing the negative effect of climate change.	
	<p>c) <i>Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios including a 2°C or lower scenario.</i></p> <p>BC's environmental enhancement program, particularly, on reforestation and forest protection is aimed at reducing CO<sup>2</sup> in the atmosphere.</p> <p>In addition to the establishment of forest plantations, additional projects implemented to attain the different climate related scenarios are as follows:</p> <ul style="list-style-type: none"> <li>• Increased preventive maintenance schedule of anti-pollution devices such as scrubbers to arrest air pollutants from gold smelting processes.</li> <li>• Dust emission were reduced with dust suppressor system using air and water to act as suppressors for spraying along roads inside industrial area.</li> <li>• Regular preventive maintenance program is being</li> </ul>	<p>c) <i>Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.</i></p> <p>The Board Risk Oversight Committee is tasked to make sure that the Company's environmental programs and compliances are integrated into the over-all mine development program and implemented in accordance with the approved program by the Department of Environment and Natural Resources through the Mines and Geosciences Bureau and Environmental Management Bureau.</p> <p>With this, it is clearly defined following the principle that risk management is management's responsibility. Clear roles are defined aligned to the sustainability strategy and commitments of Benguet Corporation.</p>	

	<p>conducted on vehicles and equipment to ensure smoke emissions are within the DENR prescribed standards.</p> <ul style="list-style-type: none"> <li>All environmental safeguards are put in place to mitigate and reduce emission of CO<sup>2</sup>.</li> </ul>		
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## Procurement Practices

### Proportion of spending on local suppliers

Disclosure	Quantity		Units
	BGO	ILP	
Percentage of procurement budget used for significant locations of operations that is spent on local suppliers	72.81% (P 112,332,499)	79.19% (P31,093,399)	%

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p>Sustainable procurement of essential commodities / supplies and materials needed by the operation is attained by working closely with our key partners/suppliers along our value chain. BC's procurement practices are always in accord with the Procurement Policy of the company.</p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>Employees in-charge of procurement Suppliers/manufacturers of product and services providers</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>BC believes that the success of the operation can be achieved through respect and transparent dealings between the management and the various agencies and entities that provide the goods and services to the Company. It manages supplier relationships through its values and compliance with applicable regulatory frameworks. To ensure sustainability in our supply chain, a risk-based approach in assessing</p>

<p>Sustainability activities in our value chain were categorized as follows:</p> <ul style="list-style-type: none"> <li>a. Responsible sourcing from local or foreign source of needed logistics for the operation.</li> <li>b. Quality control of products and services to meet the expectations of the operation.</li> <li>c. Timeliness – availability of the products and services.</li> </ul> <p>The 2020 operation of BGO has incurred total purchases of materials and supplies from local suppliers amounting to P 112,332,499 vs budget of P 154,287,184.</p> <p>The Irian Lime Project spent a total of P 39,013,399 on local purchases of materials and supplies vs. budget of P 49,268,083.</p>		<p>suppliers is in place. Suppliers must comply with the standard requirements, such as ISO certified or government standard compliances.</p>
<p><b>What are the Risk/s Identified?</b></p>	<p><b>Which stakeholders are affected?</b></p>	<p><b>Management Approach</b></p>

<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Sub-standard quality of supplies and materials or products that may affect or slowdown the operation and reduce gold production.</p> <p>Some local suppliers do not have access to or limited funds to expand thereby affecting the availability of local materials and supplies.</p> <p>Sourcing of imported materials are expensive and may delay the delivery of needed supplies that will affect the production.</p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>Shareholders – lesser revenue due to lower production</p> <p>Employees of contractors and suppliers – productivity is affected.</p> <p>Operations – they must work around the limitations of local suppliers sometimes sacrificing the timeliness in the process that may result to higher production cost.</p> <p>Suppliers – loss of trust and confidence</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>To ensure sustainability in supply chain, a risk-based approach is being taken in assessing suppliers. We engage them through a commercial framework that is aligned with BC’s Purchasing Policy.</p> <p>Long-term planning on mining development and programs to advance the forecasting of needed materials and supplies to ensure availability when needed by the operation.</p> <p>The company has prioritized suppliers with ISO 14001-2015 Certification.</p>
<p><b>What are the Opportunity/ies Identified?</b></p>	<p><b>Which stakeholders are affected?</b></p>	<p><b>Management Approach</b></p>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Partnering with local suppliers gives BC better credit lines, more responsive lead times, and customization options (smaller minimum order requirement).</p> <p>Through its mining operation, the Company is opening doors and providing business opportunities to suppliers and service providers, (local and foreign suppliers, and community residents).</p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>Suppliers – local suppliers can sustain and grow their operations because of the mining operation of BGO and ILP.</p> <p>MSMEs – as mining operations expand, intermediate industries are given opportunity to address the needs in each part of value chain.</p> <p>Employees – direct collaboration in dealing with local suppliers</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Continue to develop good relationship with suppliers and service providers.</p> <p>Continue to work with local suppliers that provide quality services and products with lower cost.</p>

### Training on Anti-corruption Policies and Procedures

Disclosure	Quantity	Units / %
Percentage of employees to whom the organization's anti-corruption policies and procedures have been communicated to	411	100%
Percentage of business partners to whom the organization's anti-corruption policies and procedures have been communicated to	0	%
Percentage of directors and management that have received anti-corruption training	11	100%
Percentage of employees that have received anti-corruption training	411	100%

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>Trainings were suspended during the year 2020 due to the covid-19 pandemic health protocols.</p> <p>Prior to the pandemic, Directors, managers and employees were oriented and are knowledgeable of the Anti-fraud, Corruption and Whistle Blowing Policy of the Company. BC practices zero tolerance to corruption in the conduct of its business. Some potential sources of corruption are as follows:</p> <p>1. Employees maybe involved in bribery and corruption on permit and license acquisition and during land acquisitions/negotiation.</p>	<p><i>(e.g. employees, community, suppliers, government, vulnerable groups)</i></p> <p>Suppliers – all suppliers must go through the same screening. This ensures the company gets what it pays for and supplier delivers what it promises.</p> <p>Employees – must be the vanguards of integrity especially when representing the company to external parties.</p> <p>Community – those who support corruption by supporting peers engaged in unlawful conduct deprive honest businesses the chance of flourishing their trade and contributing back to the community.</p> <p>Management – should always advocate a culture of excellence and integrity. They set the values of the company and must promote the example in anti-corruption.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Board sets the tone and makes a stand against corrupt practices by adopting an Anti-fraud, Corruption and Whistleblowing Policy and in its Code of Employee and Business Conduct.</p> <p><i>Pls refer to the following links:</i></p> <p><i>Code of Employee Conduct and Discipline</i></p> <p><a href="http://benquetcorp.com/wp-content/uploads/2018/05/ECD%20with%20ee%20acknowledgement.pdf">http://benquetcorp.com/wp-content/uploads/2018/05/ECD%20with%20ee%20acknowledgement.pdf</a></p>

<p>2. As there are numerous purchasing transactions, employees may be offered bribes/ incentives on these engagements.</p> <p>3. Giving or asking special favor to/from mining contractors or Service Contractors or other stakeholders in exchange for personal gain such as but not limited to relaxing company policies and procedures.</p>	<p>Government regulatory agencies – officials must practice global policies on anti-corruption in the conduct of government and private business transactions.</p>	<p><a href="http://benquetcorp.com/wp-content/uploads/2020/06/E.-Code-of-Conduct-of-Business-and-Ethics.pdf">Code of Business Conduct and Ethics</a> <a href="http://benquetcorp.com/wp-content/uploads/2020/06/E.-Code-of-Conduct-of-Business-and-Ethics.pdf">http://benquetcorp.com/wp-content/uploads/2020/06/E.-Code-of-Conduct-of-Business-and-Ethics.pdf</a></p> <p><a href="http://benquetcorp.com/wp-content/uploads/2020/06/anti-fraud-corruption-whistleblowing-policy.pdf">Anti-fraud, Corruption and Whistleblowing Policy</a> <a href="http://benquetcorp.com/wp-content/uploads/2020/06/anti-fraud-corruption-whistleblowing-policy.pdf">http://benquetcorp.com/wp-content/uploads/2020/06/anti-fraud-corruption-whistleblowing-policy.pdf</a></p>
<b>What are the Risk/s Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p>1. Delay in the acquisition of permits and licenses.</p> <p>2. Engagement in corrupt practices may result in:</p> <ul style="list-style-type: none"> <li>- Cancellation or suspension of permit/licenses/contract agreements or other kinds of penalty</li> <li>- Court case</li> <li>- Business losses</li> </ul> <p>3. Exposure to higher or additional operational costs</p>	<p>Mining contractors – reduced amount of share in volume and value</p> <p>LGU – less tax collection</p> <p>Employees – suspension and withholding of salaries and benefits, dismissal from employment.</p> <p>Host community –stoppage of the implementation of social development programs.</p>	<p>Prompt submission of documents and compliances with government requirements to avoid delay in the processing of permits and licenses.</p> <p>Maintain good relationship and close communication with concerned regulatory agencies.</p> <p>Company has clear and stringent Fraud and Corruption policies and procedures in curbing and penalizing employee involvement in offering, paying and receiving of bribes/unlawful benefits.</p> <p>The Company disseminated the anti-corruption policies and programs to employees throughout the organization via emails and employees signed acknowledgement.</p> <p><a href="#">Pls refer to link Code of Employee Conduct and Discipline,</a></p>

		<a href="http://benquetcorp.com/wp-content/uploads/2018/05/ECD%20with%20Oee%20acknowledgement.pdf">link #41 &amp; 47 Page 8 http://benquetcorp.com/wp-content/uploads/2018/05/ECD%20with%20Oee%20acknowledgement.pdf</a>
<b>What are the Opportunity/ies Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p>With the existence of written policies and communication to all concerned and its vigorous implementation, possible involvement in corruption and bribery will be minimized if not eliminated.</p> <p>Harmonious relationship with the regulatory agencies, community and other stakeholders.</p> <p>Continuous mining operation is assured, and the integrity and reputation of the Company are maintained with the absence of corruption and bribery in the organization.</p>	<p>Host community – increase in public investment and support to the organization.</p> <p>National government agencies and local government units – strengthens the position of regulatory system and guarantee a degree of fairness.</p> <p>Suppliers / contractors / service providers – leads to a secure and long-term business relationship.</p> <p>Employees – job satisfaction and security and increase in employee morale and shared values.</p>	<p>Closer relationship with all the stakeholders in the mining circle and government agencies.</p> <p>Strict observance on the schedule for the submission of regulatory reports and compliances.</p>

Incidents of Corruption

Disclosure	Quantity	Units
Number of incidents in which directors were removed or disciplined for corruption	0	#
Number of incidents in which employees were dismissed or disciplined for corruption	0	#
Number of incidents when contracts with business partners were terminated due to incidents of corruption	0	#

<b>What is the impact and where does it occur? What is the organization's involvement in the impact?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
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<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>The company did not experience and has no recorded incidents of corruption in 2020. The company's Code of Business Conduct and anti-corruption standard clearly prohibit bribery and corruption in all business dealings.</p> <p>The incidents of corruption normally occur in dealing with contractors, suppliers, government agencies, private individuals / community leaders/elders. Corruption happens in the government offices on the issuance of permits/licenses despite complete submission of lists of requirements.</p> <p>Community residents take advantage of the company's limited resources in guarding the mining claims and facilities resulting in expensive reacquisition of its properties.</p> <p>Other sources of corruption are as follows:</p> <ul style="list-style-type: none"> <li>• The provision of gifts, travel and hospitality (including government officials) above certain thresholds;</li> <li>• The offering of commercial sponsorships;</li> <li>• The offering of community donations or projects outside of the Social Development and Management Program (SDMP) and Corporate Social Responsibility programs;</li> <li>• Acquisitions and divestments</li> </ul>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>With strict observance of the company's anti-corruption policy, there are no stakeholders that were involved in corruption during the period under report.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>All employees are aware of the Anti-Fraud, Corruption and Whistleblowing Policy and Employee Code of Business Conduct.</p> <p><i>Pls refer to the following links:</i></p> <p><i>Code of Employee Conduct and Discipline, link #41 &amp; 47 Page 8</i>  <a href="http://benquetcorp.com/wp-content/uploads/2018/05/ECD%20with%20ee%20acknowledgement.pdf">http://benquetcorp.com/wp-content/uploads/2018/05/ECD%20with%20ee%20acknowledgement.pdf</a></p> <p><i>Anti-fraud, Corruption and Whistle-blowing Policy</i>  <a href="http://benquetcorp.com/wp-content/uploads/2020/06/anti-fraud-corruption-whistleblowing-policy.pdf">http://benquetcorp.com/wp-content/uploads/2020/06/anti-fraud-corruption-whistleblowing-policy.pdf</a></p>
<p><b>What are the Risk/s Identified?</b></p>	<p><b>Which stakeholders are affected?</b></p>	<p><b>Management Approach</b></p>

<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Risks related to the corruption incidence can be attributed to the following:</p> <ul style="list-style-type: none"> <li>• Delayed mining and milling operation,</li> <li>• Production target and revenue not attained.</li> <li>• Issuance of fine and possible suspension of operation on prolonged delay of the approval of permits.</li> </ul>	<p>Corruption may affect the following:</p> <p>Mining contractors – reduced amount of share in volume and value.</p> <p>LGU – lesser tax collection</p> <p>Employees – Suspension or termination of employment</p> <p>Host community - community development projects might be suspended/stopped.</p>	<p>Directors, managers, and employees must always be reminded of the “Anti-fraud, Corruption and Whistleblowing Policy” of the company to avoid involvement/committing corruption and bribery.</p> <p>In the event that an employee or officer of the company violate the anti-corruption policy, there will be stringent enforcement of disciplinary actions based on existing Employee Code of Conduct.</p>
<p><b>What are the Opportunity/ies Identified?</b></p>	<p><b>Which stakeholders are affected?</b></p>	<p><b>Management Approach</b></p>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Avoiding corruption will lead to operating the gold mine with integrity and self-esteem.</p>	<p>BC and ILP employees and dependents</p>	<p>Observance and practice of Anti-fraud, Corruption and Whistle-blowing Policy and Code of Business Conduct</p>

## ENVIRONMENT

### Resource Management

Energy consumption within the organization:

Disclosure	Quantity			Units
	BGO	ILP	Total	
Energy consumption (kerosene)	1,873	0	1,873	GJ
Energy consumption (diesel)	4,128	202	4,330	GJ
Energy consumption (bunker fuel)	0	42,127	42,127	GJ
Energy consumption (electricity)	5,708,808	211,830	5,920,638	kWh

Reduction of energy consumption

Disclosure	Quantity			Units
	BGO	ILP	Total	
Energy reduction (kerosene)	105	0	105	GJ
Energy reduction (diesel)	571	6.17	577	GJ
Energy reduction (bunker fuel)	0	7,873	7,873	GJ
Energy reduction (electricity)	0	42,925	42,925	kWh
Energy reduction (gasoline)	7	0	7	GJ

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>Operations – power cost is a significant cost driver in gold operations.</p> <p>Small-scale miners - There are illegal electrical connections by small scale miners</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Safeguards in the following measures in order to be sustainable:</p>

<p>As the operation continues to advance the underground mining development to increase production target in 2020, BC-BGO is optimistic that energy consumption will likely increase. The increased utilization of electricity will impact on the GHG emission (Scope 2).</p> <p>The operation consumed more electricity to run the air compressors to increase air circulation in the underground working areas. This strategy was considered by management in the 4<sup>th</sup> quarter of 2020. This resulted in the increase of GHG emission (Scope 2) by 3% vs 2019. Increased utilization of water pumps and illegal powerline connections by small-scale miners also contributed to the increase in power consumption.</p> <p>On the other hand, GHG emission (Scope 1) was reduced by 25.37% due to less operation of diesel powered LHD locomotives in hauling the ore of mining contractors from the underground to the designated unloading station at the mill area.</p> <p>The Irisan Lime kiln operation reduced its bunker fuel consumption by 50% due to the reduced operation of kiln from 2 units in previous year to 1 unit during the pandemic.</p> <p>The Company continuously observe the energy conservation guidelines.</p> <p><i>Please refer to the following:</i></p> <p><i>Appendix "A"—EMS Document # EMSG06 (EMS Guidelines on Power Conservation)</i></p>	<p>for the milling of mineral ore. This power pilferage also shared in the increased power consumption of BGO-'s operation.</p> <p>Employees – home activities of employee dependents are affected by the energy conservation measures being implemented.</p>	<ul style="list-style-type: none"> <li>• Conduct regular energy level monitoring/reports.</li> <li>• Submission of regulatory reports on energy consumption to Mines and Geosciences Bureau and Environmental Management Bureau.</li> <li>• Maintain BC Program on energy conservation.</li> <li>• Disconnection of Illegally connected power lines by small scale miners.</li> <li>• BC-BGO has been re-certified ISO 14001:2015 (by TUV-Rheinland) as proof of commitment to make operations aligned with international environmental and safety standards that includes energy conservation.</li> </ul>
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What are the Risk/s Identified?	Which stakeholders are affected?	Management Approach
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Therma Luzon Inc. is always at the advantage during negotiation of power rate adjustment as there are no other competing sources of dedicated power supply in the Region.</p> <p>The fluctuating world market price of diesel and bunker fuel and the fixed rate of electricity from the power supplier affects the overall operating cost and the profitability of the operation.</p>	<p>BC Operation and Therma Luzon Inc.</p>	<p>BGO follows a strict set of environmental standards in the conduct of its operation to monitor the power consumption and utilization. To be sustainable, there is a need to strictly implement the following:</p> <ul style="list-style-type: none"> <li>• Energy level monitoring;</li> <li>• Submission of regulatory reports on energy consumption</li> <li>• Conduct regular Preventive Maintenance Schedule on equipment and vehicles; and</li> <li>• Conduct regular monitoring of small-scale miners' operation in the area and implement immediate disconnection of illegally connected power lines.</li> </ul>
What are the Opportunity/ies Identified?	Which stakeholders are affected?	Management Approach
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Cost savings initiatives are being implemented across the value chain to become a least cost producer as well as achieve greener, cleaner operations.</p> <p>Benguet Corporation is exploring alternative source of energy and the proposal to build a Waste-to-Energy (WtE) facility in Itogon, Benguet is an opportunity to reduce the power cost.</p> <p>This alternative energy source will lessen impact to the environment and additional revenue for the Company.</p>	<p>Community – the WtE facility will address the perennial issue of garbage problem in Benguet Province and the City of Baguio.</p> <p>LGU - This project proposes a more sustainable solution in managing municipal waste as feed material to the proposed WtE project.</p>	<ul style="list-style-type: none"> <li>• Continuously monitor its power consumption and check areas that can be subjected to power adjustments.</li> <li>• The company has moved to reduce power consumption in its industrial areas by shifting to energy-efficient motors and lighting fixtures for cost reduction program.</li> <li>• Support the proposed Waste-to-Energy project by providing a suitable area. The patented mined-out area of Benguet Corporation in Antamok is being considered for the project that can be incorporated as a major component in the Final Mine Rehabilitation and</li> </ul>

		Decommissioning Program (FMRDP) of the Antamok mined-out area.
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Water consumption within the organization

Disclosure	Quantity			Units
	BGO	Irisan	Total	
Water withdrawal				
Industrial	98,663	684	99,347	Cubic meters
Domestic	6,501	290	6,791	
Water consumption				
Industrial	98,663	684	99,347	Cubic meters
Domestic	6,501	290	6,791	
Water recycled and reused	0	0	0	Cubic meters

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>Water is an essential input to the mining operations of BC-BGO. The Company monitors the impact of the operation to the adjacent river systems and downstream communities to ensure that these are maintained at minimum levels for equal access of water source by various stakeholders.</p> <p>The Company sourced its industrial water from its old underground mine tunnel located at L-2000, Acupan,</p>	<p><i>(e.g. employees, community, suppliers, government, vulnerable groups)</i></p> <p>The affected stakeholders are as follows:</p> <ul style="list-style-type: none"> <li>• Company – has 24/7 access to water supply from its underground mine tunnels for industrial use.</li> <li>• BC-BGO employees, contractors/service providers – have access to safe potable water within the mine site.</li> <li>• Host, and neighboring communities – have free access to water sources</li> </ul>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Access to water is a basic human right as it is a shared resource of high economic, environmental, and social value. Considering that its operation is dependent from the free-flowing water from the Company's underground mine tunnel and in order for the continuous water recharging of the aquifer, it develop a strategy through an intensified watershed development and management by</p>

<p>Virac, Itogon, Benguet with water rights Permit No. 16154 issued by the National Water Resources Board (NWRB).</p> <p>The potable water is sourced from a natural spring owned and maintained by a private individual for his water delivery business. The Company engaged the service of the owner to supply and deliver potable water for employees' consumption at a fixed rate per drum.</p> <p>Domestic water for ILP operation is supplied by the Baguio Water District (BWD) while the industrial water is supplied by a private individual who sourced the water from the natural spring permitted by the government for his water delivery business.</p>	<p>present in the area since the Company source and utilize its water internally.</p>	<p>implementing reforestation program on denuded and sparsely vegetated areas within and outside the Company's mining claims. This activity is included in the Annual Environmental Protection and Enhancement Program.</p> <p><i>Please refer to Appendix "B" – Certificate of Approval of Annual Environmental Protection and Enhancement Program (AEPEP)</i></p>
<b>What are the Risk/s Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>The water quality for domestic use may be compromised if good housekeeping is not properly observed by the miners working underground.</p> <p>With the increase in population and business establishment in the area, it is expected that water demand will double.</p> <p>It is anticipated that water from some of the springs will dry up during summer that will cause high domestic water competition in price and volume.</p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>BC-BGO employees, contractors /service providers, community residents</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>The company will continue to support a range of projects that offer sustainability co-benefits, including support for local communities and biodiversity conservation and watershed rehabilitation.</p> <p>The Company's Mining Forest Program is a shared responsibility with the community while</p>

		the government monitors implementation of the program. The Company continues to engage with its host and neighboring communities for an uninterrupted partnership in the protection of the reforested areas to increase water yield of the aquifer.
<b>What are the Opportunity/ies Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Through efficient milling operation, water consumed in 2020 was reduced to 98,663.04 m<sup>3</sup> as against 123,458.6 m<sup>3</sup> in 2019.</p> <p>The intensified watershed development in the area will provide additional livelihood opportunities to the IPs through contract reforestation, seedling propagation, plantation maintenance and forest protection activities.</p> <p>There is abundant volume of domestic water from the Company's underground source that has the potential for business development to supply bulk water needs of the surrounding communities.</p>	BC-BGO employees, contractors/service providers, community residents	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Engagement with the stakeholders by providing livelihood opportunities, like seedling propagation, tree planting contracts and maintenance of previously established reforestation areas, will improve the relationships between Company and the community and to empower the community from forest rehabilitation.</p> <p>The enhanced forest cover of the mining claim through intensified tree planting activities will increase the water yield of the springs in the area.</p> <p>The Company may consider developing the water source from the Company's Acupan underground as a potential business</p>

		opportunity to supply bulk water for Itogon and Baguio City.
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Materials used by the organization

Disclosure	Quantity			Units
	BGO	ILP	Total	
Materials used by weight or volume				
<ul style="list-style-type: none"> <li>Renewable (identify) – lumber, paper, sawdust, flour</li> </ul>	262,278	0	262,278	kg/liters
<ul style="list-style-type: none"> <li>Non-renewable - lubricants, motor oils, bunker fuel oil, diesel oil, kerosene, dynamite explosive, sodium cyanide, nitric acid, ammonium nitrate, sodium hypochlorite, hydrochloric acid, activated carbon, lime and sulfuric acid, caustic soda, hydrochloric acid, nitric acid, etc.</li> </ul>	832,208	1,153,510	1,985,719	kg/liters
Percentage of recycled input materials used to manufacture the organization’s primary products and services.	0.24	0		%
Note: Only sawdust was used for firing carbon ash while papers are recycled for printing internal reports and memos.	642 (sawdust & paper)			Kgms.

What is the impact and where does it occur? What is the organization’s involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>The underground mining operation is utilizing mine timbers as support in the tunnels. All mine timbers delivered by the</p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>BGO mine and mill employees, community, suppliers and Irisan Lime Project employees and its surrounding residential areas.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>BC-BGO is committed to continue to explore other alternative materials as substitute for</p>

<p>Company supplier are covered with certificate of lumber origin issued by DENR to make sure these are sourced legally.</p> <p>Wood wastes and other renewable materials are recycled for other beneficial use.</p> <p>Explosives are used in the underground to open new areas for mining development. The permit for the explosives is issued by the Firearms and Explosives Unit of the Philippine National Police in Camp Crame.</p> <p>The operation utilized more volume of renewable materials compared with 2019 (262,278 kg. vs 174,041.72 in 2019) and reduced the volume of non-renewable materials (chemicals) by 2% (832,208.19 vs. 853,056.64 in 2019).</p> <p>The Irisan Lime Project only operated one (1) kiln as compared to 2 kilns in 2019. These brought down the quantity of non-renewable materials (bunker fuel) to only 1,985,718.597 kgs. vs 2019 of 2,221,263.87 kgs. The pandemic affected the full operation of the lime kiln.</p>		<p>mine timber for underground support without sacrificing safety of mine workers. This is part of the Company's sustainability commitment to minimize use of timber resources.</p> <p>Forest plantation will be part of the Company's sustainable commitment for environmental enhancement in its area of operation. It encourages supplier of mine timber to participate in the reforestation program of the company and the government.</p> <p>In compliance with BC-BGO's commitment and its concurrence to the standards set in its ISO 14001:2015 certification, the company strictly adheres to the standards set by the regulatory agencies (DENR-EMB) on proper recording and labelling of renewable and non-renewable materials in accordance with R.A. 9003 (Ecological Solid Waste Management Act) provisions.</p>
<b>What are the Risk/s Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Identified risks are as follows:</p> <ul style="list-style-type: none"> <li>Timber resource – depletion or shortage of wood resources (lumber, paper, sawdust).</li> </ul>	<p>Underground employees/miners/blasters</p> <p>Employees at the motor pool area, mine and mill mechanical shops.</p> <p>Communities adjacent to the operation</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p>

<ul style="list-style-type: none"> <li>• Environmental risks – non-renewable materials will contribute to air and water pollution and health hazards if not properly handled and disposed.</li> <li>• The safety and health of employees directly and regularly exposed to non-renewable materials are at risks.</li> <li>• Utilizing large quantities of non-renewable inputs drive the cost of production, pushing margins in an already highly commoditized market.</li> <li>• Accidents due to fly rocks, loss of hearing (noise pollution) and air pollution for dust due to blasting is a potential risk if not managed properly.</li> </ul> <p><i>Please refer to the following:</i></p> <p><i>Appendix “C” – (DRCS - 09) Summary of Risks and Opportunities</i></p> <p><i>Appendix “D” – EMS Document # EMSG-03 (EMS Guidelines on Diesel, Oil and Grease Hauling, Transport and Storage)</i></p> <p><i>Appendix “E” – EMS Document # EMSG - 12 (EMS Guidelines on Contaminated Water)</i></p>		<p>Management will focus on the following approach to minimize risk:</p> <ul style="list-style-type: none"> <li>• Monitor implementation of ISO 14001:2015 objectives, targets and performance vs. audit reports</li> <li>• Implement hazardous materials storage, handling, waste/tailings management monitoring and health, safety and wellbeing for greater protection of workers.</li> <li>• Continue regular quality monitoring test and submission of reports to regulatory agency for validation of result following DENR Standards.</li> <li>• Monitor the strict implementation of Annual Environmental Protection and Enhancement Program.</li> <li>• Provide complete Personal Protective Equipment (PPE) to employees.</li> <li>• Conduct regular safety lectures, meetings and pep talks before deployment in assigned working area to remind workers of safety protocols in the underground mining activities and proper handling of chemicals at the mill.</li> </ul>
<p><b>What are the Opportunity/ies Identified?</b></p>	<p><b>Which stakeholders are affected?</b></p>	<p><b>Management Approach</b></p> <p><i>What policies, commitments, goals and targets, responsibilities, resources,</i></p>

		<i>grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i>
<p><b>Identify the opportunity/ies related to material topic of the organization.</b></p> <p>The following opportunities that were identified in relation to the utilization of renewable and non-renewable resources are:</p> <ul style="list-style-type: none"> <li>➤ Sawdust are being recycled for firing carbon ash while used papers are recycled for printing internal reports and memos.</li> <li>➤ Continuous improvement in mining technologies and innovations and how it can benefit from renewable sources of energy are being encouraged throughout the stages of operation.</li> <li>➤ BGO’s logistics and support services, on the other hand, utilize renewable materials such as wood and used packing materials (carton or a box container made of cardboard).</li> <li>➤ Better planning and forecasting of usage of non-renewable materials in relation to programmed procurement systems can lead to cost efficiencies of the operation.</li> </ul> <p>In 2020, BC-BGO, is successful as it purposively reduced the usage of its non-renewable materials by 2.44% as part of its sustainable efforts.</p>	<p>Residents in the surrounding communities stand to benefit from cleaner air and water.</p> <ul style="list-style-type: none"> <li>• Employees – exposure to lesser quantities of non-renewable materials will be healthier and safer</li> <li>• Operations – cost efficiencies will deliver better profit margin without incremental damage to the environment.</li> </ul>	<p>Safety lectures and work briefings before deployment to assigned working areas.</p> <p>Continue monitor the usage of non-renewable materials to attain reduction year over year without sacrificing production.</p> <p>Implement materials storage, handling, management, monitoring, and disposal of hazwaste/tailings. Continue regular submission of reports to the regulatory body on the use of regulated chemicals</p>

Ecosystems and biodiversity (whether in upland/watershed or coastal/marine)

Disclosure	Quantity	Units
Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	(identify all sites) Crosby Park – 11	Has.
Habitats protected or restored	<ul style="list-style-type: none"> <li>➤ Crosby Park – 11</li> <li>➤ Calhorr, Virac Plantation – 5</li> <li>➤ Poded, Ucab Plantation – 5</li> <li>➤ Irisan industrial/residential Area – 0.37</li> </ul>	Has.
IUCN <sup>4</sup> Red List species and national conservation list species with habitats in areas affected by operations.  Note: No list of thriving IUCN species in the project impact area because the mining claim is populated of build-up communities and small-scale miners abound.	(list) 0	Has.

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>For the year 2020, the company continuously maintained and protected the established Crosby Forest Park (man-made forest as support to watershed development of the Company) inside its mining property</p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>Employees and families – benefit from using the Crosby Park.</p> <p>Contractors and laborers of the reforestation project.</p> <p>Community residents – inhaling pollution-free and fresh air.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Continue to undertake care and maintenance of the forest park – included in the Environmental Work Program of BC-BGO</p>

<sup>4</sup> International Union for Conservation of Nature

<p>with a total area of about 11.0 hectares. Enrichment planting is a continuing activity being conducted on areas with sparsely growing trees to provide more greens in its surroundings. The tree density is estimated at 352.55 trees per hectare. Family of employees and visitors from other areas are visiting the Park, enjoying the scenery, and do camping.</p> <p>In addition to the Forest Park, the company also implemented reforestation program within and around its mining claims in compliance with its environmental enhancement program. For the year under report, a total of 10 hectares was planted with various fruit-bearing crops and forest tree species.</p> <p>Overall, the total plantation area that BGO have maintained over the period of 15-years, consist of 781.00 hectares. Likewise, Irian Lime Project have continuously maintained a total of 3,711 sq. m. of plantation area with 837 surviving seedlings as against 1,985 planted trees (42% survival rate).</p>		<p>The company hired a caretaker from the community to protect and maintain the established forest park.</p> <p>Conduct regular foot patrol by BC's Claims Management to avert illegal activities in the area.</p> <p>Intensified reforestation and forest protection program as included activity in the AEPEP.</p>
<b>What are the Risk/s Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Illegal cutting of trees and squatting.</p> <p>Illegal cattle grazing.</p> <p>Forest / bush fire</p>	<p>Employees and nearby residents</p>	<p>Intensified forest protection activities in the area.</p> <p>Conducted regular foot patrol by BC's Claims Management team to avert illegal activities in the area, particularly by squatters/SSM.</p>
<b>What are the Opportunity/ies Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>

<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>The established Crosby Park serves as eco-tourism area as well as biodiversity enhancement and conservation. Likewise, reforested areas inside and outside of the Company's mining claims serves as watershed area of the Company, the communities within the surroundings and restoration of open and abandoned areas.</p> <p>The reforestation activities provide employment opportunities to interested families or community associations through seedling production, plantation establishment and forest protection.</p>	<p>Employees and the host and neighboring communities.</p>	<p>Continue to maintain the park through enrichment planting and forest protection activities by involving the residents in the area.</p> <p>Continue to partner with the residents near the reforestation areas on the protection of the established plantation and prevention of illegal activities like tree cutting and small-scale mining.</p>
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## Environmental Impact Management

### Air Emissions

#### GHG

Disclosure	Quantity			Units
	BGO	ILP	Total	
Direct (Scope 1) GHG Emissions	325	3,408	3,733	Tonnes CO <sub>2</sub> e
Energy indirect (Scope 2) GHG Emissions	1,616	60	1,676	Tonnes CO <sub>2</sub> e
Emissions of ozone-depleting substances (ODS)	0	0	0	Tonnes

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p>Scope 2 GHG emission increased to 1,676 tonnes CO<sub>2</sub>e in 2020 against 1,627 tonnes CO<sub>2</sub>e in 2019 which is equivalent to 3% increase of greenhouse gas (GHG)</p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups).</i></p> <p>Employees and their families</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p>

<p>emission. The increased consumption of electricity (GHG Emission – Scope 2) was due to the increased utilization of larger air compressor machines for improved air circulation in the underground working areas and increased mechanical availability of water pump motors. In addition, power pilferage by small-scale miners to operate the ball mills also increased the electricity consumption of the Company.</p> <p>On the other hand, GHG emission (Scope 1) was reduced by 25.37% due to less operation of diesel powered LHD locomotives in hauling the ore of mining contractors from the underground to the designated unloading station at the mill area. The workers of mining contractors were affected by the travel restrictions imposed by the IATF that reduced miner’s attendance and production.</p> <p>The Irisan Lime kiln operation reduced its bunker fuel consumption by 50% due to the reduced operation of kiln from 2 units in previous year to 1 unit during the pandemic.</p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>The company employees are the foundation of the business and BC management considers the wellbeing and safety of its people as the primordial concern of the company. When the COVID-19 disease was first detected in the last quarter of 2019 and has spread during the early part of 2020, the company’s Health and Safety Committee have formulated health protocols for</p>	<p>Community / IP’s Suppliers</p>	<p>Identify other sources / areas to reduce GHG emissions and establish measures to minimize emissions.</p> <p>Horsepower of air conditioning units should be evaluated to reduce the cooling capacity per floor area of the office.</p>
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<p>strict observance and compliance within the working areas. Improved ventilation inside the tunnels is one of the major concerns that was considered for immediate implementation. This resulted in the increased consumption of electricity. Likewise, maximum utilization of battery run locomotives increased charging time of batteries that have also increased the electric power consumed during the pandemic.</p>		
<b>What are the Risk/s Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Risk identified are as follows:</p> <ol style="list-style-type: none"> <li>1. Breakdown of the air compressor machine/equipment may result to suspension or slowdown of underground mining operation.</li> <li>2. Poor ventilation may slowdown performance of miners and reduces the production.</li> <li>3. Poor ventilation will result to carbon monoxide poisoning coming out from the diesel-run locomotive that will affect health and safety of underground miners.</li> </ol>	<p>Employees - Health of employees is affected that will result to reduced workforce.</p> <p>Company - reduced ore tonnage</p>	<p>Implement regular preventive maintenance program of the machines and equipment.</p> <p>Record the running hours of equipment for monitoring purposes and schedule of preventive maintenance.</p> <p>There should always be available spare parts in the warehouse in case of mechanical breakdown of the equipment.</p>
<b>What are the Opportunity/ies Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Emission of carbon monoxide from the diesel-run LHD locomotives (Scope 1 – GHG) was minimized due to the utilization of battery powered locomotives that hauled the ore produced by BGO miners. Reduced ore</p>	<p>Employees of the company and mining contractors.</p> <p>Residents residing in camp.</p>	<p>Stronger, effective, and efficient coordination among heads of the operation and company executives gives a good account in addressing challenges in the operation.</p>

<p>production by mining contractors also contributed to the reduction of diesel-run locomotives in hauling the ore.</p> <p>The use of battery-run locomotives and minimized use of diesel-run LHD locomotives have improved the air quality within the industrial area.</p> <p>Gold production in 2020 improved vs 2019 because of the operation strategy that was implemented during the 4<sup>th</sup> quarter of 2020.</p>		<p>Regular preventive maintenance program of all equipment and machineries to minimize downtime and increase operating efficiency.</p> <p>Maintain records of running time of machineries and equipment to check wear and tear of parts.</p>
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Air pollutants

Disclosure	Quantity		Unit
	BGO	ILP	
NO <sub>x</sub> Stack emission Ambient	372 13	83	mg/Nm <sup>3</sup>
SO <sub>x</sub> Stack emission Ambient	1 11	45	mg/Nm <sup>3</sup>
Persistent organic pollutants (POPs) e.g. PCB's, PFOs; Biphenols; Pthalates: Atrazine (herbicide)	0	0	kg
Volatile organic compounds (VOCs) Propane, butane	0	0	kg
Hazardous air pollutants (HAPs) (Lead)	0	0	kg
Particulate matter (PM)	8	5	mg/Nm <sup>3</sup>

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i>	<i>(e.g. employees, community, suppliers,</i>	<i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms,</i>

<i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship).</i>	<i>government, vulnerable groups)</i>	<i>and/or projects, programs, and initiatives do you have to manage the material topic?</i>
<p>Benguet Corporation recognizes the impact of mining operations to the environment particularly the air quality in the operation if not managed properly. The identified major source of air pollution are as follows:</p> <ol style="list-style-type: none"> <li>1. Generation of dust during blasting for mining development;</li> <li>2. Air pollution at the mill operation during gold smelting where chemicals are added to separate gold from other impurities; and</li> <li>3. ILP operation – Kiln plant operation and generation of dust along access road.</li> </ol> <p>Poor air quality will impact on the health of the employees and the community residents living near the mining operation.</p> <p>During the period under report, the ambient air quality sampling and source emission monitoring within the established sampling sites at BGO was conducted in February 2020 by the Greentek Environmental Engineering Services.</p> <p><i>Note:</i> The air quality performance during the period under report is within the National Standard on air pollutants as shown in the Disclosure Table on Air Pollutants and the monitoring report by Greentek Environmental Engineering Services.</p> <p><i>Please refer also to Appendix “F” - Report Certification of Greentek Environmental Engineering Services on Source Emission Test Result</i></p> <p><i>and</i></p>	<p>Employees/workers, community.</p>	<p>The implementation of the following procedures/mechanisms are being monitored:</p> <ul style="list-style-type: none"> <li>• Conduct regular air quality monitoring by EMB accredited third-party environmental engineering services.</li> <li>• Reduced dust pollution through a dust suppressor system using air and water to act as suppressors.</li> <li>• Regular system maintenance of underground ventilation machines and blowers to ensure suppression of dust during blasting activity. Provide respirators in the different underground working areas for ready use by employees when needed.</li> <li>• Follow protocols on proper management, storage, use and handling of chemicals and reagents.</li> <li>• In ILP, semi-annual test conducted by the EMB accredited party, BERKMAN SYSTEMS, INC. to monitor the volume of the pollutants in the Plant site is within the DENR Standards</li> </ul>

What are the Risk/s Identified?	Which stakeholders are affected?	Management Approach
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>The exceedance of pollutants in the atmosphere will cause health hazards to employees and residents of communities living nearby that may lead to filing of complaint to concerned government regulatory agencies against the operation of BGO and ILP's operations.</p> <p>Health hazards and suspension or stoppage of operation due to excessive dust and acid fumes if pollutants exceed DENR allowable standards.</p>	<p>Employees/workers, adjacent communities</p>	<p>Following management approach are being monitored:</p> <ul style="list-style-type: none"> <li>➤ Conduct regular monitoring to determine the air quality within the industrial and residential areas.</li> <li>➤ Follow protocols on proper management, storage, use and handling of chemicals and reagents.</li> <li>➤ Enhance the mitigating measures of air pollution employed or to introduce better air pollution mitigating measures</li> </ul>
What are the Opportunity/ies Identified?	Which stakeholders are affected?	Management Approach
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Employees gained environmental awareness and the Company commits to sustain good air quality in its surrounding environs.</p> <p>With the availability of various anti-pollution devices and advance technologies, employees were trained on the proper operation, handling and maintenance of anti-pollution devices/equipment to mitigate air pollution and avoid violation of the provision of R.A. 8749 (Philippine Clean Air Act and its IRR: DAO No. 2000-81).</p> <p>Employees were trained on proper handling and use of chemicals and reagents to avoid exposure/accidents at the workplace.</p>	<p>Employees/workers, community</p>	<p>Continue training employees and workers on environmental laws and Company policies.</p> <p>Follow protocols on proper management, storage, use and handling of chemicals and reagents.</p> <p>Maintain the established guidelines on air pollution control/mitigating measures and conduct regular PMS of vehicles and equipment.</p>

The Company is compliant with RA 8749 and ECC conditionalities following the strict implementation of pollution prevention measures. The results of air emission tests are within the DENR allowable standards.		
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## Solid and Hazardous Wastes

### Solid Waste

Disclosure	Quantity			Units
	BGO	ILP	Total	
Total solid waste generated	299,091	1,390	300,481	kg
Reusable (Sawdust, Paper)	664	0	664	kg
Recyclable (used sacks, cartons, pet bottles, cans)	9,578	150	9,728	kg
Composted	8,349	0	8,349	kg
Incinerated	0	0	0	kg
Residuals/Landfilled	280,500	1,240	281,740	kg

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p>The volume of solid waste collected and delivered to the landfill facility increased vs 2019 due to the intensified information campaign on the provision of R.A. 9003 or the Ecological Solid Waste Management Act (ESWMA) and regular collection of garbage in camp is maintained. Residents in camp and concession stores are the major source of residual wastes. Increased awareness on the provision of ESWMA is now the culture that was developed among the residents.</p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>Employees of Benguet Corporation and workers of solid waste/residual waste hauling contractor.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Strict compliance of the provision of R.A. 9003 (Ecological Solid Waste Management Act) and its IRR – DAO No. 2001-34</p>

<p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>The following practices are being implemented:</p> <ul style="list-style-type: none"> <li>• Proper waste management is part of the Company's good housekeeping practices.</li> <li>• Scraps are collected and hauled to a designated depository area or scrap yard every first and last hour of each shift.</li> <li>• The Company practices segregation at source and encourages the recycling of materials which are sorted and sold to DENR accredited solid wastes and recycling contractor thus resulting in the reduction of solid wastes generated.</li> <li>• Generated solid waste/residual waste are disposed by a contractor in a sanitary landfill located outside of the Region, hence, it has no impact to the mining operation.</li> <li>• The Company established a Material Recovery Facility (MRF) to store recyclable wastes. A separate waste bins for the biodegradable waste materials are in-place to convert into other uses (fertilizer, etc.).</li> </ul>	<p>Owners of concession stores.</p>	<p>Practice strictly the waste segregation at source. Mine Environment Protection and Enhancement Officer (MEPEO), in collaboration with the Camp Administration personnel shall continue regular monitoring of Company policy on waste labelling and disposal.</p> <p>Remind hauling contractor to provide enough PPEs to their workers and regularly check hauling permits and health of workers.</p> <p>Proper sorting of wastes and proper disposal of waste materials in each labelled garbage bin is being practiced in the offices and residential areas.</p>
<p><b>What are the Risk/s Identified?</b></p>	<p><b>Which stakeholders are affected?</b></p>	<p><b>Management Approach</b></p>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Failure to collect and dispose solid wastes on time by commissioned hauler will result in the accumulation of solid wastes and may generate unsanitary and foul odor which may affect health of workers and the adjacent communities.</p> <p>Complaints by employees and residents for uncollected garbage in violation of the provisions of R.A. 9003 will be subject to sanctions by regulatory agencies.</p>	<p>Workers of solid waste/residual waste hauling contractor</p> <p>Employees of the Company</p> <p>Community</p>	<p>Strengthen information campaign on the provision of R.A. 9003 to all residents in camp.</p> <p>Reprimand hauler if provisions on the contract are not being followed. Stipulation in the contract includes among others, the issuance of complete PPEs to workers.</p> <p>Availability of hauling permits.</p>

Health and safety risk to workers of hauling contractor.  There is possibility of water pollution if wastes are not properly managed and collected.		
<b>What are the Opportunity/ies Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Additional income for residents for the sale of recyclable materials (plastic bottles, scrap materials, cartons, etc.).</p> <p>Highly sustained clean environment translates to environmental compliance by the company.</p> <p>The Company is compliant to the provision of RA 9003.</p>	<p>Company</p> <p>Hauling contractor</p> <p>Employees</p>	<p>Continue to maintain beneficial relationship with the hauling contractor to avoid violations of environmental laws and regulations.</p> <ul style="list-style-type: none"> <li>• The Company will look for a bigger space to relocate the existing Material Recovery Facility (MRF) to accommodate the following MRF structures: <ul style="list-style-type: none"> <li>a. Segregation Building;</li> <li>b. Solid Wastes Building for recyclable wastes, biodegradable and non-biodegradable and residual wastes;</li> <li>c. Hazardous Wastes Building;</li> <li>d. Composting Areas;</li> <li>e. Receiving Area.</li> </ul> </li> </ul>

Hazardous Waste

Disclosure	Quantity			Units
	BGO	ILP	Total	
Total weight of hazardous waste generated:				

Type of waste generated –	43,128		43,128	MT
<ul style="list-style-type: none"> <li>• Mill tailings</li> <li>• Other hazardous waste (lead compounds, busted fluorescent lamps, non-halogenated organic chemicals, clinical waste)</li> </ul>	4,988	71	5,059	Kg
Total weight of hazardous waste transported	4,771		4,771	kg

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p>Mill tailings is the product from milling the gold bearing mineral ore to produce said precious metal. The tailings are impounded in the ECC approved Tailings Storage Facility (TSF) that serves as treatment facility.</p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>The impounded tailings contain chemicals like cyanide. If the treatment facility is not properly managed and maintained, soil and water contamination may develop.</p> <p>Other hazardous wastes (acids, alkali and organic waste from assay laboratory; organic solvent wastes such as used oil, grease, etc.; hospital wastes like hypodermic needles and other hospital wastes) are properly labelled and stored in a hazardous waste storage area before hauling for disposal by an Environmental Management Bureau (EMB) accredited hauler of hazardous waste.</p> <p>Based on records, there is a total of 217 kgs. of remaining hazardous waste generated in 2020 that will be hauled/transported on April</p>	<p><i>(e.g., employees, community, suppliers, government, vulnerable groups)</i></p> <p>Employees of BC-BGO, BC-CHQ and ILP</p> <p>Employees of mining contractors and hauler</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>A DENR-EMB accredited third-party service provider was engaged to dispose the hazardous waste outside the Company facilities. Proper labelling is done prior to hauling. This is part of sustainability compliance to ensure proper management and disposal of hazardous wastes at the site and comply with regulatory requirements.</p> <p>The Company has obtained/secured from DENR-EMB the Treatment Storage and Disposal Registration (TSDR) for Tailings Storage Facility per RA 6969 regulation.</p> <p><i>Please refer to Appendix "H" – Copy of Treatment Storage and Disposal Registration</i></p>

2021 outside of the Company facility by a DENR-EMB accredited third-party service provider engaged for this purpose.		
<b>What are the Risk/s Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Potential environmental risk like water contamination of the Ambalanga river may happen if the Company does not strongly follow proper waste management protocols at the industrial area.</p> <p>Siltation along the river system due to deposition of non-toxic tailings or sediments caused by accidental tailings leaks is potential environmental risks. Health hazard if not properly managed.</p> <p>Violation of R.A. 9275 provisions (Philippine Clean Water Act of 2004) and its IRR, DAO 2005-10, will cause suspension of the operation or cancellation of the Environmental Compliance Certificate (ECC).</p>	<p>Employees of BC-BGO, BC-CHQ and ILP</p> <p>Employees of mining contractors</p>	<p>The Company is guided by its strong commitment to abide by its Environmental Policy and compliance to Environmental Management System and government environmental laws, rules and regulations.</p> <p>Continuous monitoring of the anti-pollution structures, regular repair and maintenance of penstocks and spillways and strengthen tailings dam embankment (engineering intervention).</p> <p>The Company posted security personnel at the TSF area to secure the facility from intentional damage to the structure by outsiders.</p> <p><i>Please refer to Appendix "I" – EMSG-07-A (EMS Guidelines on Hazardous Waste Management – Used Oil, Oil and Grease Contaminated Items)</i></p>
<b>What are the Opportunity/ies Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>The Company demonstrate corporate responsibility by adhering to established protocol on waste management and environmental quality monitoring (R.A. 9003 and R.A. 9275), EMS Guidelines on</p>	<p>BC-BGO/ACMP, BC-CHQ and ILP employees</p> <p>Employees of mining contractors</p> <p>Suppliers</p>	<p>Management awareness and compliance to the Code of Business Conduct and Ethics which provide among others, adherence to the provisions of environmental laws, rules and regulations for the operation's key to sustainability.</p>

Hazardous Waste Management (Appendix “I”), and Environmental Compliance Certificate provisions.	Community.	<a href="http://benguetcorp.com/wp-content/uploads/2020/06/E.-Code-of-Conduct-of-Business-and-Ethics.pdf">Please refer to Code of Business Conducts and Ethics link: http://benguetcorp.com/wp-content/uploads/2020/06/E.-Code-of-Conduct-of-Business-and-Ethics.pdf</a>
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Effluents

Disclosure	Quantity	Units
Total volume of water discharges Effluent discharge from the mill  Note: *Total volume of treated water discharged in the form of wastewater from the tailings storage treatment facility includes effluent from the mill and run-off water that discharges into the filter drain where measurement is recorded. ** Total effluent discharge produced by mill operation.	*286,598 **89,340	Cubic meters
Percent of wastewater recycled.  Note: We do not recycle wastewater from the operation as wastewater contains acid mine tailings.	0	%

What is the impact and where does it occur? What is the organization’s involvement in the impact?	Which stakeholders are affected?	Management Approach
<i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i>  Water contamination from hazardous substances will likely affect the water quality of the river system along Ambalanga and Batuang rivers. This event will impact the downstream	<i>(e.g. employees, community, suppliers, government, vulnerable groups)</i>  The Company; Employees; Community	<i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i>

<p>community and the aquatic resources along the water ways of the river tributaries.</p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>The effluent discharge from the Tailing’s Storage Facility, serving as the water treatment facility and the filter drain, will contaminate the quality of water of the Ambalanga river if not managed and maintained properly.</p> <p>Water discharge in 2020 increased by 5% vs. 2019 as a result of increased production during the 4<sup>th</sup> quarter of 2020.</p>		<p>The following are measures that were implemented to mitigate the impacts:</p> <ol style="list-style-type: none"> <li>The company treated the wastewater through detoxification with sodium hypochlorite;</li> <li>Conducted water sampling at the established sampling stations downstream to monitor the quality of water;</li> <li>Built underground drainage system and canals to drain run-off water;</li> <li>Constructed oil water separator and conducted regular clean-up of canals/drains and check-up of discharge valves, pipes and connections.</li> </ol> <p>The company adheres to the provisions of R.A. 9275 (Philippine Clean Water Act) and conditions set forth in the Environmental Compliance Certificate (ECC).</p> <p><i>Please refer to Appendix “J” – Photocopy of Environmental Compliance Certificate</i></p>
<b>What are the Risk/s Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Risks identified are as follows:</p>	<p>The Company; Employees;</p>	<p>Observe proper maintenance of the Tailings Storage Facilities and other appurtenant structures and</p>

<ul style="list-style-type: none"> <li>• Complaints from the farmers/residents downstream of the Tailing's Storage Facility (TSF);</li> <li>• Deprived farmers/residents of the downstream community of their livelihood;</li> <li>• Fish kill;</li> <li>• Water contamination will result to suspension of operation, and</li> <li>• Suspension of permit/ECC, and/or imposed monetary penalties.</li> </ul>	Community	<p>implement mitigating measures to prevent accidental wastewater discharge/leaks.</p> <p>Assessment of improvement downstream - keep database of all improvements for future reference.</p> <p>Strict compliance with the provisions of environmental laws &amp; policies and the ECC.</p>
<b>What are the Opportunity/ies Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Awareness of the importance of responsibility &amp; accountability in Environmental Management.</p> <p>Application of new technologies to process wastewater to eliminate or reduce toxicity before discharge.</p>	<p>Mines Environmental Protection and Enhancement Officer;</p> <p>Pollution Control Officer.</p>	<p>Top management demonstrates leadership and commitment with respect to the Environmental Management System (EMS) of the Company by ensuring:</p> <ul style="list-style-type: none"> <li>• that the environmental policy and objectives are compatible with the strategic direction of the Company;</li> <li>• the integration of the Environmental Management System into the organization's business processes through identification of risks/impacts and addressing corresponding risks and opportunities;</li> <li>• the availability of resources needed for the implementation</li> </ul>

		<p>for Environmental Management System;</p> <ul style="list-style-type: none"> <li>• that communication takes place among all interested parties on the importance of effective Environmental Management and in conformity to Environmental Management System requirements through meetings and consultations;</li> <li>• that the Environmental Management System achieves its intended output(s), specifically those required in the ECC, AEPEP, ASDMP and EPRMP;</li> <li>• promotion of continual improvement of environmental management through the system of internal audits and reporting/analyzing incidents and applying corrective actions to prevent recurrence;</li> <li>• that support in terms of resources is available to demonstrate relevant management roles and leadership in environmental management areas;</li> <li>• adequate trainings to the Mines Environmental Protection and Enhancement Officer (MEPEO), Community Relations Officer (CRO), Pollution Control Officer</li> </ul>
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		(PCO), Environmental Management Representative (EMR) and members of the EMS Audit Team.
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## Environmental compliance

### Non-compliance with Environmental Laws and Regulations

Disclosure	Quantity	Units
Total amount of monetary fines for non-compliance with environmental laws and/or regulations	0	PhP
No fines or penalty for violations committed against any provisions of environmental laws, permits and licenses that have been assessed or determined with finality during the period under report (2020).		
No. of non-monetary sanctions for non-compliance with environmental laws and/or regulations	0	#
No. of cases resolved through dispute resolution mechanism	0	#

What is the impact and where does it occur? What is the organization's involvement in the impact?	Which stakeholders are affected?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>The operation of Benguet Corporation, as partner of the government in environmental protection, abides by all provisions of mining and environmental laws and regulations. All regulatory requirements are complied, submitted and approved by concerned government agencies. Environmental and social programs are being</p>	<p><i>(e.g. employees, community, suppliers, government, vulnerable groups)</i></p> <p>The Company employees, service contractors, suppliers, investors, community, local and national government, other stakeholders.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>The Company will keep up its good record by continuously conforming with the conditions of all its permits and licenses and to pursue its obligation as a responsible mining</p>

<p>implemented, compliance is being monitored and certificates of compliance were issued by the respective government agencies.</p>		<p>company. Environmental safeguards are in place to mitigate or eliminate risks.</p> <p>BGO formulated its environmental policy striving for excellence in mineral resources development.</p>
<b>What are the Risk/s Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Failure of the Company to submit compliance reports on time and delay in or non-implementation of the work program stated in the approved Annual Environmental Protection and Enhancement Program (AEPEP), Annual Social Development and Management Program (ASDMP) and Annual Safety and Health Program (ASHP) may lead to issuance of penalties.</p> <p>Non-compliance to the relevant environmental laws, rules and regulations have its respective penalties.</p>	<p>Benguet Corporation, employees, service contractors, suppliers, investors, community, local and national government, other stakeholders</p>	<p>Continuous implementation of rehabilitation work program to eliminate risks during rainy season.</p> <p>Preventive maintenance of Tailings Storage Facilities and all pollution control structures to eliminate environmental risks.</p> <p>Monitoring the effectiveness of the established environmental mitigating / management measures. The Company's Multipartite Monitoring Team in each operation will also assess and validate the company's compliance with the relevant environmental standards.</p> <p>Timely submission of accomplishment reports in accordance with the guidelines on submission of compliance reports and other obligations to the government.</p> <p><i>Please refer to link - <a href="http://benguetcorp.com/wp-">http://benguetcorp.com/wp-</a></i></p>

		<a href="content/uploads/2020/06/O.-BC-Internal-Audit-Charter.pdf">content/uploads/2020/06/O.-BC-Internal-Audit-Charter.pdf</a> <i>BenguetCorp's Internal Audit Charter – Defining the Scope of Work of the Internal Audit Office (IAO) – Item II, #7-9, p.1 and Detailing Responsibility of IAO – Item V, # 4-6 p. 2 of the Charter.</i>
<b>What are the Opportunity/ies Identified?</b>	<b>Which stakeholders are affected?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>There are no violations of any government laws, rules and regulation resulting in smooth operation.</p> <p>Improved production due to continuous mining and milling operation.</p> <p>Proactive attitude by the Company in addressing unfavorable situations caused by operational failure or infirmities.</p>	Management, employees, mining contractors, stakeholders	<p>Re-assess and evaluate physical conditions of all pollution control structures and further intensify regular monitoring of all facilities to ensure safe operation and compliance with environmental policies and programs of the operation.</p> <p>Conduct regular Information, Education and Communication (IEC) to all stakeholders on the different aspects of mining operation and environmental policies.</p> <p>The Environmental Protection and Enhancement Program (EPEP) is proof of the Company's commitment to protect the environment and to observe Responsible Mining that would maintain productive use of land and water resources for future generations.</p> <p>As a socially and environmentally conscious Filipino Company striving for</p>

		<p>excellence in mineral resource development, BC is committed to continuously improve its operations to minimize adverse environmental impact by complying with all applicable policies, laws, rules and regulations while at the same time promoting environmental awareness among its workers at all levels.</p> <p><i>Please refer to Appendix “K” – Summary of Regulatory Compliance</i></p>
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## SOCIAL

### Employee Management

### Employee Hiring and Benefits

### Employee Data

Disclosure	Quantity		Units
	BGO & ILP	CHQ	
Total number of employees <sup>5</sup>	368	43	Headcount
a. Number of female employees	39	19	Headcount
b. Number of male employees	329	24	Headcount

<sup>5</sup> Employees are individuals who are in an employment relationship with the organization, according to national law or its application ([GRI Standards 2016 Glossary](#))

Attrition rate <sup>6</sup>	11		Percent Rate
Ratio of lowest paid employee against minimum wage (P332 lowest rate / regional min. wage of P320)	1:1.04 CAR 1:1 NCR		RATIO

### **Employee Benefits**

<b>List of Benefits</b>	<b>Y/N</b>	<b>% of female employees who availed for the year</b>	<b>% of male employees who availed for the year</b>
SSS	Y	100%	100%
PhilHealth	Y	100%	100%
Pag-ibig	Y	100%	100%
Parental leaves			
Maternity	Y	0.47%	0
Paternity			.24%
Solo Parent		0	
Vacation leaves	Y	100%	100%
Sick leaves	Y	100%	100%
Medical benefits (aside from PhilHealth))	Y	10.46%	80%
Retirement fund (aside from SSS)	Y	2.43%	0.24%
Tuition Fee Refund	Y	2.43%	3.89%
Company stock options	Y	0	0
(Others)			
Insurance (Group life; Accident)	Y	100%	100%
Birthday Leave	Y	100%	100%
Maternity/Paternity Leave	Y	47%	0.24%
Mine workers onsite:			
Housing (bunkhouse/cottages)	Y	4.62%	35.70%
Subsidized water	Y		
Subsidized electricity	Y	4.62%	35.70%
Free meals	Y	3.40%	36.70%

<sup>6</sup> Attrition are = (no. of new hires – no. of turnover)/(average of total no. of employees of previous year and total no. of employees of current year)

What is the impact and where does it occur? What is the organization's involvement in the impact?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>2020 has been a challenging year not only in the mining industry but all in the business sectors. With the COVID 19 virus health issues, BC was not spared of the effect of the pandemic.</p> <p>The government-imposed protocols affected the mobility of employees, service contractors, suppliers and other stakeholders, thus, the normal operations were disrupted, with high employee absenteeism rate opportunity loss and incurred additional costs for the pandemic-related expenses.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>As a responsible mining company, BC ensured that the health, safety and well-being of its employees are prioritized and given timely attention during the crisis. Strict enforcement of the proactive measures was implemented in compliance or based on the national and local Inter Agency Task Force (IATF) mandates and guidelines.</p> <ol style="list-style-type: none"> <li>1. Employee salaries and benefits were paid on a timely manner including 13<sup>th</sup> month pay.</li> <li>2. Internal Policies and Guidelines were issued for employees' reference;</li> <li>3. Workplace Safety and Health protocols were put in place as follows: <ul style="list-style-type: none"> <li><b>a. Personal Protective Equipment (PPE)</b> The Company provided all the necessary PPEs for all its employees to lessen or eliminate the risks of contracting COVID-19. Not only that it will protect the employee wearing the PPE, but it will also greatly help in preventing the transmission of virus. The following are the Personal Protective Equipment (PPE) given to the employees: <ul style="list-style-type: none"> <li>a. Face masks;</li> <li>b. Face shields;</li> <li>c. Bunny suits; &amp;</li> <li>d. Gloves</li> </ul> </li> <li><b>b. Physical Distancing</b></li> </ul> </li> </ol>

According to the World Health Organization (WHO), keeping a distance of at least one (1) meter from each other breaks the chain of transmission of COVID-19. Distancing markers are placed all over the mine site in adherence to this protocol.

**c. Disinfection**

The Company & its service contractor's employees come & go from various places. Also, the mine site is frequented by visitors to transact businesses with the Company. This highly increases the transmission of the virus through contact thereby leaving traces thereof. Regular disinfection is being done by the Company's Emergency Response Team (ERT) to address this problem.

**c.1 Disinfecting/Washing Resources**

This includes the following:

- a. Alcohol;
- b. Handwashing stations;
- c. Tire baths; &
- d. Foot baths.

**d. Visual Cues**

Given that this current pandemic gave way to new behavioral guidelines, everybody needs to be reminded from time to time through visual cues via the use of signages which are installed in various places within the mine site.

**e. Accommodation & Transportation**

Provision of shuttle services with applied distancing protocols to transport employees to and from work. For employees residing outside the mine site, the Company provides accommodations & subsidized meals. To wit, this further improved the implementation of physical distancing protocols within transport services.

**f. Mandatory advocacy awareness raising programs.**

The Company's Safety Department conducts broadcasting & safety meetings to remind everybody of the importance of adhering to all COVID-19 protocols.

**g. Detection**

All points of entry are provided with thermal scanners. Employees are initially checked for their respective body temperatures and if  $T > 37.5$  degrees Celsius, the employee shall be denied entry and be referred to the Clinic for further evaluation.

**h. Isolation**

All employees that exhibit flu-like symptoms are strictly ordered to undergo self-quarantine for at least five days (5) or until swab test result is obtained. For extreme cases, the Company is maintaining three (3) temporary quarantine facilities wherein employees, who were found out to be positive with COVID-19, are isolated, in case government quarantine facilities are not available. They are provided with accommodation, meals & medicine including vitamins and are constantly being monitored by the Medical Team in coordination with the Municipal Health Office (MHO).

**i. Contact Tracing/Triage**

A visitor's information sheet is placed at the entrance of each office for easy contact-tracing of close contacts in cases of probable infection within the mine site. Contact tracing will be done by the Company's established Contact Tracing Team under the BC COVID-19 Task Force.

**j. COVID-19 Testing**

In coordination with the Provincial, Municipal, & Barangay Government units, the Company undertook free swab testing services to its employees, service contractors, & their dependents for the detection of COVID-19 infection.

	<p><b>k. Other actions</b></p> <ul style="list-style-type: none"> <li>➤ Minimizing face-to face interactions.</li> </ul> <p>The Human Resources &amp; Finance Departments sent an advisory memo to their clients, which includes suppliers, applicants, separated employees, to transact business via email, social media, or mobile phones to minimize face-to-face transactions.</p> <ul style="list-style-type: none"> <li>➤ Office Ergonomics</li> </ul> <p>Segmentation of workstations have been applied in order to lessen contact within all Departments along with distancing protocols applied to people who transact with the Company.</p> <p><i>Please refer to Appendix “L”- Memos on health protocols that were implemented in compliance with government directives/orders.</i></p>
<p><b>What are the Risk/s Identified?</b></p>	<p><b>Management Approach</b></p>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>A. Operational Risks on people or human resources as follows:</p> <ol style="list-style-type: none"> <li>1. Spread of the deadly virus in the workplace caused by the following: <ul style="list-style-type: none"> <li>➤ Presence of vulnerable BC and service contractor employees such as persons above 60 years old and/or with underlying health conditions.</li> <li>➤ Frequent travel of employees who are residing outside the mine site.</li> <li>➤ Uncontrolled entry of visitors, suppliers and other outsiders within the industrial areas.</li> <li>➤ Non-enforcement of or non-compliance with health protocols and guidelines</li> </ul> </li> <li>2. Loss of employees’ income due to frequent and changing government and local mandates on community quarantine.</li> </ol>	<p>To minimize the identified risks, BC continuously:</p> <ul style="list-style-type: none"> <li>• Aims to strengthen robust succession and contingency planning for business continuity;</li> <li>• Aims to accommodate in camp all employees holding critical positions;</li> <li>• Provides shuttle service to employees residing outside the mine site;</li> <li>• Enforces safety and health protocols to visiting guests, suppliers and other outsiders.</li> </ul> <p>To mitigate the financial impact to affected employees during the pandemic, the Company adopted the following:</p> <ul style="list-style-type: none"> <li>• Absences are charged to unused vacation or sick leaves;</li> <li>• Cash advances were offered to be payable on installment basis;</li> <li>• Food packs given to affected employees;</li> </ul>

<p>B. Financial Risk due to the following:</p> <ul style="list-style-type: none"> <li>➤ Low attendance of BC and Service Contractor employees</li> <li>➤ Delayed or non-availability of the critical supplies</li> <li>➤ Frequent community or granular lockdowns</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance in availing/claiming of benefits claims from concerned government agencies;</li> <li>• BC miners were utilized for continued mining operation in place of reduced miners of contractors;</li> <li>• Source out available supplies in the same industry or local suppliers; and</li> <li>• Housed employees in camp.</li> </ul> <p>In collaboration with the municipal and barangay LGU, the company constructed a temporary isolation and quarantine facility to confine employees that manifest symptoms of infection of the corona virus.</p>
<p><b>What are the Opportunity/ies Identified?</b></p>	<p><b>Management Approach</b></p>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>The pandemic or the health issues gave the opportunity for:</p> <ol style="list-style-type: none"> <li>1. The Company to review and revisit contingency plans and programs to mitigate the effect of the pandemic or any business uncertainties.</li> <li>2. Each and every individual in the workplace to be health and hygiene conscious.</li> <li>3. Employees to appreciate the importance of self-discipline in the workplace and outside work.</li> <li>4. The Company to strengthen its work policies and procedures to beat the deadly virus or any exigencies.</li> </ol>	<p>BC Site Management team conducted internal risk assessment and action plans to mitigate the risks at hand.</p> <p>Workplace Guidelines, memoranda, policies, and procedures were crafted based on the national and local Inter-Agency Task Force guidelines and pronouncements.</p> <p>The above are frequently reviewed by the Internal Task Force formed by Site Management. Stricter enforcement of the rules based on existing Code of Conduct and Discipline for employees and Company Rules and Regulations for Service Contractors.</p> <p><i>Please refer to Appendix "M"- Guidelines on Coronavirus Prevention and Control.</i></p> <p><i>Please refer to Appendix "N"- BC COVID-19 Internal Taskforce</i></p>

**Employee Training and Development**

Disclosure	Quantity	Units
Total training hours provided to employees	4,844	hours
a. Female employees	633	hours
b. Male employees	4,211	hours
Average training hours provided to employees	75	hours

a. Female employees	23	hours
b. Male employees	114	hours

What is the impact and where does it occur? What is the organization's involvement in the impact?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>Training and Development of employees during the pandemic was very challenging due to the community quarantine guidelines, social and physical distancing, limited face to face learning and other limitations brought about by the deadly virus.</p> <p>Training Consultancy Firms and organizations were equally affected by the pandemic, thus, availability of their services and costs were also affected.</p>	<p>Even during the height of the pandemic, the Company continually shown its commitment to hone and develop the employees' competencies. Newly hired employees have undergone on-the-job training by their supervisors. Other employees attended online orientation and trainings. Safety and health orientations were conducted on a regular basis.</p>
What are the Risk/s Identified?	Management Approach
<p><i>Identify risk/s related to material topic of the organization.</i></p> <ul style="list-style-type: none"> <li>• High-Cost publicly offered training programs due to the effect of the pandemic.</li> <li>• Limited or scarcity of Training providers due to mode of conducting the program.</li> <li>• Production loss if employees are not properly trained due to high rate of accidents/incidents, low productivity, absenteeism, etc.</li> <li>• Slow mobility of Training Consultants to conduct in-house trainings</li> </ul>	<p>The following Company initiatives are being undertaken:</p> <ol style="list-style-type: none"> <li>1. Prioritize conduct of skills acquisition/enhancement trainings and orientations to new employees or newly transferred employees.</li> <li>2. Source out training programs being conducted by Government Agencies (e.g., BIR on Tax matters, DENR-EMB on pollution control, environmental management trainings and other relevant trainings conducted through online or virtual means.)</li> </ol>

	<p>3. Strengthen succession planning in every department.</p> <p>4. Continued conduct of training needs assessment to identify gaps between the requirement of the job versus employee's actual performance.</p>
<b>What are the Opportunity/ies Identified?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>The identified opportunities are as follows:</p> <ol style="list-style-type: none"> <li>1. Professional development and skills acquisition/ enhancement training will still continue as it boost employees' morale, job satisfaction and security.</li> <li>2. Competent employees have the knowledge to make the best economic use of materials and equipment. There will be less wastage, less accidents/incidents; reduced damaged to equipment.</li> <li>3. Opportunity to handle higher or greater responsibilities due to enhanced performance as training amplifies skills and helps the employee gain new skills and improve leadership.</li> <li>4. Training increases retention and reduce attrition. Valuable employees are kept in the organization.</li> </ol>	<p>Re-visit training policies and approaches based on the health and safety guidelines on the new normal.</p> <p>Build and maintain linkages and networking with other mining and related industries to be updated on labor market trends through acceptable means such as emails, social media, etc. There are constant changes in the industry, hence, it is important for employees to be updated with the latest trends.</p> <p>Provide avenues to enhance/practice technical knowledge/skills on the use of different platforms as a means in conducting trainings/webinars/meetings.</p>

### Labor-Management Relations

<b>Disclosure</b>	<b>Quantity</b>	<b>Units</b>
% of employees covered with Collective Bargaining Agreements	The employees of the Company are not member of any labor union; hence, they are not covered by any Collective Bargaining Agreement.	0%
Number of consultations conducted with employees concerning employee-related policies	As the employees are not organized, labor related policies are reviewed and issued/discussed to employees by the Policies and Procedures Committee through the Human Resources Department.	100%

<b>What is the impact and where does it occur? What is the organization's involvement in the impact?</b>	<b>Management Approach</b>
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>BC is not an organized or unionized company, as such there is no Collective Bargaining Agreement between the Management and Employees.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Endeavor to maintain status as a non-unionized organization by keeping an open communication with employees at all levels. Employee grievances are addressed by immediate supervisors and elevated to higher Management body if not solved at their levels.</p>
<b>What are the Risk/s Identified?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Employees affiliation to aggressive militant trade unions or organization may disrupt the harmonious relationship among employees and management and may lead to labor unrest.</p>	<p>Identify strategies to maintain employee engagement, cooperation, and satisfaction.</p>
<b>What are the Opportunity/ies Identified?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Management and employees to maintain harmonious relationship and industrial peace in the workplace.</p>	<p>Management ensures that good leadership is maintained, there is competitive compensation package and established employee engagement strategies.</p>

### Diversity and Equal Opportunity

<b>Disclosure</b>	<b>Quantity</b>	<b>Units</b>
% of female workers in the workforce	58	15%
% of male workers in the workforce	353	85%
Number of employees from indigenous communities and/or vulnerable sector*	Elderly - 15	4%
	Solo Parent - 4	1%
	Indigenous Peoples - 195	48%

	Approximate 90% of workforce of the mining contractors belong to ICC/IP.	
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*\*Vulnerable sector includes, elderly, persons with disabilities, vulnerable women, refugees, migrants, internally displaced persons, people living with HIV and other diseases, solo parents, and the poor or the base of the pyramid (BOP; Class D and E).*

### Workforce Distribution by Region

Region	No. of Employees
National Capital Region (NCR)	24
Region 1	116
Region 2	7
Region 3	47
Region 4A	6
Region 4B	1
Region 5	3
Region 7	8
Region 11	4
Cordillera Administrative Region (CAR)	195

What is the impact and where does it occur? What is the organization's involvement in the impact?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>As an offshoot of the health crisis, border limitations and frequent community lockdown were the frequent business disruptions during the year. Number of</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>1. BC Hiring Policy has been consistently used as reference and guidance of all Department Heads.</p>

employees including those belonging to the vulnerable group living outside the mine site were not able to report for work.	2. Employees being trained for succession, were utilized, and assumed the responsibilities during the absence of their superiors during lockdowns and community quarantine.
<b>What are the Risk/s Identified?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <ul style="list-style-type: none"> <li>Elderly employees or persons with disabilities and underlying conditions, though willing and mentally able, were included in the vulnerable group of people to contract the virus, thus, were not allowed to work during the height of the pandemic.</li> </ul>	<ul style="list-style-type: none"> <li>➤ For elderly employees, Managements ensures that a training plan for successors is in place and monitored.</li> <li>➤ Persons with disabilities and underlying conditions are closely monitored by the Company's medical team.</li> </ul>
<b>What are the Opportunity/ies Identified?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>For the year 2020, the Company appreciated and recognized the importance of hiring from the local and adjacent communities. During the pandemic, most of the Managers and skilled workers were inside the camp, thus, there was no drastic disruption of the operations. Having the community as our direct business partners augmented the operations during the pandemic.</p> <p>Maintaining its skilled pool – geologists, engineers, metallurgists who have knowledge of the Company's critical information, have kept the operations sustainable. The new generation of skilled employees are benefitting from the institutional knowledge being passed to them.</p>	<p>Senior managers are advised to train young generation of employees / subordinates as their understudy. Employment policy gives priority to IP's and local residents of the communities where the business operates and who possess the required qualification/skills.</p> <p>The Company continues to offer Scholarship Program for qualified and deserving indigent community members.</p>

## **Workplace Conditions, Labor Standards, and Human Rights**

### **Occupational Health and Safety**

<b>Disclosure</b>	<b>Quantity</b>	<b>Units</b>
Safe Man-Hours	1,557,857	Man-hours
No. of work-related injuries	19	#

No. of work-related fatalities	0	#
No. of work-related ill-health	0	#
No. of safety drills	<p>Conducted 4 safety drills as follows:</p> <ol style="list-style-type: none"> <li>1. 1 Fire rescue drill and 1 fire evacuation Drill</li> <li>2. 1 Earthquake and evacuation &amp; 1 earthquake rescue drill</li> </ol> <p>All drills were conducted in-house</p>	1 hr each drill

What is the impact and where does it occur? What is the organization's involvement in the impact?	Management Approach
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p>The health and safety of employees in the mining and milling operations impact the performance of the Company. Miners and other skilled workers are exposed to strenuous activities such as mucking, rock drilling, lifting, moving equipment and other hazardous working conditions. Performing these activities requires miners to be physically fit, alert, well-trained on safety and aware of various underground hazards and how to mitigate them in order to perform their jobs safely.</p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>Our highest priority is the safety aspect of the operations, including our workforce and the communities in which we operate. The Company is directly involved in the promotion of health and safety of company employees and mining contractors. Manhours lost due to accidents will have a negative impact on the production safety and record performance of the operation.</p> <p>Emergency clinic is available at the mine site for emergencies and consultation.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>The Safety and Health Department ensures the implementation of the following:</p> <ul style="list-style-type: none"> <li>➤ Safety orientation for newly hired BC and Service Contractor employees (mandated 8-hr Safety and Health Seminar for Workers pursuant to RA no. 11058).</li> <li>➤ Monthly Safety meetings with employees and service contractors.</li> <li>➤ Inclusion of safety and health topics on departmental pep talks.</li> <li>➤ Annual Physical examination of employees</li> <li>➤ Certification of the First Aider &amp; Safety Officer</li> <li>➤ Participation in all Fire and Earthquake Drill being conducted by the Company in coordination with the local NDRRMC, BFP and other relevant agencies.</li> </ul>

	<ul style="list-style-type: none"> <li>➤ Provision of emergency kit to CHQ employees</li> <li>➤ Compliance to DAO 2000-98 (Mines Safety and Health Standard)</li> </ul> <p>Reiteration of “No PPE-No Work Policy” to preclude any untoward incident thru:</p> <ul style="list-style-type: none"> <li>a. Achieving a Zero (0) work related incident record;</li> <li>b. Reporting of any unsafe working condition;</li> <li>c. Apprehending workers not using/wearing proper PPEs issued by the Company and subjecting them proper counseling and penalty.</li> </ul> <p>The Company shall continue to implement its safety obligation and responsibility as stated in its Health and Safety Program and shall endeavor to respond to any type of emergencies within the workplace, its host and neighboring communities.</p> <p><b>1.Occupational Health –</b></p> <ul style="list-style-type: none"> <li>➤ Promotion and maintenance of the right degree of physical, mental and social well-being of the workers in all occupation;</li> <li>➤ Prevention of work-related illness;</li> <li>➤ Protection of workers on their employment from risks usually arising from factors adverse to health;</li> <li>➤ Placing and maintaining occupational environment for the workers in accordance with their physiological and psychological ability;</li> <li>➤ Adaptability of the worker to his/her job.</li> </ul> <p><b>2.Mental Health –</b></p> <ul style="list-style-type: none"> <li>➤ Provide recreational and social facility and programs;</li> </ul>
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	<ul style="list-style-type: none"> <li>➤ Provide research and training to build up competence with sound mind and body.</li> </ul> <p>3. Occupational Exposure –</p> <ul style="list-style-type: none"> <li>➤ Control of work environment hazard, physical and biological agents.</li> </ul>
<b>What are the Risk/s Identified?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Most of our employees belong to the “High Risk” age bracket who are vulnerable especially during the pandemic. The age of employees ranges from 22 yrs. old being the youngest to 65 years old for regular employees and 74 years old for consultants.</p>	<p>Continuously implement Health and Wellbeing Program.</p> <p>Health Awareness Program with the focus on Disease Prevention and Healthy Lifestyle</p> <p>Continuous training for the Emergency Response Team in handling situations during emergency and disasters.</p> <p>Company provides equipment needed in emergency and rescue operations.</p>
<b>What are the Opportunity/ies Identified?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Less incidents of work-related injuries and illnesses resulted to higher production.</p> <p>Reduced absenteeism among employees if they are safety and health conscious.</p> <p>Potential recognition/citation for Best Health and Safety Practices in the industry. For this reporting period, BC-BGO received several citations and commendations from Barangay LGU’s of Itogon and the City of Baguio in recognition of the Company’s contribution to safety activities. The Irisan Lime Project (ILP) was chosen as Runner-up of the Mineral Processing-Calcining Plant Category by the DENR-Mines and Geosciences Bureau and the Philippine</p>	<p>Over-all, the management approach is on the strict observance and compliance to Occupational Health and Safety Policy of the DENR Department Administrative Order (DAO) No. 2000-98 and the continuous support of the Company’s Safety and Health Program submitted and approved by the Mines and Geosciences Bureau.</p> <p>Emergency preparedness in response to the implementation of COVID-19 health protocols.</p> <p><i>Please refer to Appendix “O” – Photocopy of Certificate of Approval of 2020 Safety and Health Program.</i></p>

Mine Safety and Environment Association in the pursuit of excellence in safety and health management.	
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**Labor Laws and Human Rights**

Disclosure	Quantity	Units
No. of legal actions or employee grievances involving forced or child labor	Zero	# of employees

Do you have policies that explicitly disallows violations of labor laws and human rights (e.g. harassment, bullying) in the workplace?

**Policy on Labor Laws and Human Rights**

Topic	Y/N	If Yes, cite reference in the company policy
Forced labor	Y	Policy contains provisions of RA 10364 – An Act to Institute Policies to Eliminate Trafficking in Persons specially Women and Children, Establishing the Necessary Institutional Mechanism for the Protection and Support of Trafficked Persons, Providing Penalty for Its Violation and for other Purposes.
Child labor	Y	Policy contains provisions of RA 7610
Human Rights	Y	Policy on Sexual Harassment – (see link - <a href="http://benguetcorp.com/wp-content/uploads/2020/07/Sexual-Harassment-Policy.pdf">benguetcorp.com/wp-content/uploads/2020/07/Sexual-Harassment-Policy.pdf</a> ) Employees Code of Conduct – (see link <a href="#">Code of Business Conduct and Ethics – Benguet Corporation</a> )

What is the impact and where does it occur? What is the organization’s involvement in the impact?	Management Approach
As a Company, Benguet Corporation does not tolerate forced or child labor and human right violations. It ensures that the Philippine law on such is strictly implemented across the organization.	As evidenced in the manpower profile, no employee in the roster is below 18 years of age.  No incident of human right violation has been filed by any employee as of to date.
What are the Risk/s Identified?	Management Approach

Contractors and suppliers may engage in forced labor or employment of minors or below 18 years of age.	Provision in the contracts that Contractors and suppliers must comply with the Company policies and procedures applicable to them as well as with applicable Philippine laws
<b>What are the Opportunity/ies Identified?</b>	<b>Management Approach</b>
With the formulated policies on forced and child labor and human rights violation, Management and employees are properly guided.	Employees are oriented on the Code of Discipline before start of employment and regular update is done as necessary.

### **Supply Chain Management**

Do you have a supplier accreditation policy? If yes, please attach the policy or link to the policy.

Do you consider the following sustainability topics when accrediting suppliers?

<b>Topic</b>	<b>Y/N</b>	<b>If Yes, cite reference in the supplier policy</b>
Environmental performance	Yes	Certified ISO 14001-2015
Forced labor	No	-
Child labor	No	-
Human rights	No	-
Bribery and corruption	No	-

<b>What is the impact and where does it occur? What is the organization's involvement in the impact?</b>	<b>Management Approach</b>
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>The Company sources its equipment and supplies locally and abroad.</p> <p>The impact may occur to the following factors to increase productivity:</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>We believe that success of the operation can be achieved through respect and transparent dealings</p>

<ol style="list-style-type: none"> <li>1. quality of the materials and supplies;</li> <li>2. cost element;</li> <li>3. availability of the product and services; and</li> <li>4. environmental quality – to reduce land, water and air pollution.</li> </ol> <p>Various stakeholders/agencies involved in the supply chain are manufacturers of chemicals (cyanide, sulfuric acid), equipment, lubricants, fuel/oil, electricity or power, banks, transportation, trucking, Bureau of Customs (if imported materials – but very seldom) and permitting agencies involved (Philippine National Police – explosives, Environmental Management Bureau - toxic chemicals like cyanide, etc., Mines and Geosciences Bureau – ore transport permit), among others.</p>	<p>between the management of Benguet Corporation and the various agencies and entities that provide/supply the goods and services. We manage supplier relationships through our values and in compliance with applicable regulatory frameworks. There are three considerations in the procurement of materials and supplies as follows:</p> <ul style="list-style-type: none"> <li>➤ Responsible sourcing;</li> <li>➤ Process stewardship; and</li> <li>➤ Product stewardship.</li> </ul> <p>Considering the availability, quality and competitiveness of price, as much as possible, the company will source the material requirements of the operation locally or from the host communities, province/region before foreign suppliers are considered.</p> <p>We ensure that our suppliers and service providers have aligned core values, standards on health, safety, human rights, anti-corruption and environmental protection. For major suppliers, the Company requires ISO Certification, as a qualification.</p>
<p><b>What are the Risk/s Identified?</b></p>	<p><b>Management Approach</b></p>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>Suspension, closure or stoppage of operation due to violation of laws and policies.</p> <p>High operating cost</p> <p>Delay in production</p>	<p>The selection of local suppliers is in accordance with the processes embodied in the Company’s Purchasing Manual. Only those that comply with the Purchasing Manual are engaged or accepted to supply the requirement of the operation.</p>
<p><b>What are the Opportunity/ies Identified?</b></p>	<p><b>Management Approach</b></p>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p>	<p>The Company always adheres to BC Purchasing Manual.</p>

<p>Opportunity for local suppliers to engage business with BC.</p> <p>BC-BGO gives opportunity to local business / suppliers in supplying the mining and milling operation's requirement. This partnership enables the company and the local supplier of products and services to develop harmonious working relationship and improve the economic condition of the local business community. Partnering with local suppliers also provides the company with better credit lines and credit terms, more responsive lead times and customization options.</p> <p>Tax revenue collection by the LGU also contributes to the sustained growth of the local business communities that may improve the delivery of basic services to their constituents like health care assistance to senior citizens and indigent members of the community.</p>	
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**Relationship with Community**

**Significant Impacts on Local Communities**

<b>Operations with significant (positive or negative) impacts on local communities (exclude CSR projects; this has to be business operations)</b>	<b>Location</b>	<b>Vulnerable groups (if applicable)*</b>	<b>Does the particular operation have impacts on indigenous people (Y/N)?</b>	<b>Collective or individual rights that have been identified that or particular concern for the community</b>	<b>Mitigating measures (if negative) or enhancement measures (if positive)</b>
As a continuing commitment and manifestation of the Company's compliance to the implementation of its Social Development and Management Programs, the operation of BGO has extended various needs of	Itogon, Benguet & Baguio City	IPs, women, migrant groups, elderly, youth	Y	Right to livelihood; Right to education; Right to shelter; Right to health;	Continue to respect and honor the rights of the IPs to alleviate poverty and improve the quality of life around the mining area. Share the wealth to the vulnerable members of the community to live a better life. The mining operation offers other mining related projects that generate

<p>its host and neighboring communities by way of its sensitivity to deliver the services by providing funds required for the successful project development. The total expenditures for the implementation of approved community projects for the year 2020 is <b>P 9,229,860.85 (91% vs. budget)</b>. Portion of the required funds for the COVID-19 expenses are included in the total expenditures of SDMP.</p> <p>Expenses for the implementation of various programs and projects for the sustainable protection and enhancement of the environment amounted to <b>P 8,456,587 (77% vs. budget)</b>.</p>				<p>Water resource and Infrastructure development;</p>	<p>employment opportunities for the local communities.</p> <p>Assists the national government in addressing development constraints with infrastructure and other projects through various means including the pro-active promotion of responsible mining with the Department of Environment and Natural Resources (DENR), Department of Interior and Local Government (DILG) support Projects, Department of Agriculture (DA) Projects. Additionally, there are a number of bi-lateral and multi-lateral projects operating in the infrastructure, water resource, rural development and governance areas. However, there are still shortfall and required assistance to improve LGU capacity.</p> <p>The Itogon Municipality and Barangays Virac and Poblacion LGUs rely heavily on Internal Revenue Allotment as their main source of income. Slow economic development reinforces the low-income generations of the LGUs. One possible outcome of these fiscal limitations on the LGUs will be increased pressure to review financial revenues, revenue sources, collection rates and the operational efficiency of LGUs. With the approval and proper implementation of the Social Development and Management Program (SDMP) and the Environmental Protection and Enhancement Program (EPEP) of BC-</p>
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					<p>BGO and ILP operations, these constraints were addressed and reinforced the LGU's development projects in the host and neighboring areas.</p> <p><i>Refer to Appendix "P" – Photocopy of Certificate of Approval of Annual Social Development and Management Program (ASDMP);</i></p> <p><i>Refer to Appendix "Q" – Photocopy of Certificate of Approval of Annual Environmental Protection and Enhancement Program 2020 (AEPEP)</i></p>
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*\*Vulnerable sector includes children and youth, elderly, persons with disabilities, vulnerable women, refugees, migrants, internally displaced persons, people living with HIV and other diseases, solo parents, and the poor or the base of the pyramid (BOP; Class D and E)*

For operations that are affecting IPs, indicate the total number of Free and Prior Informed Consent (FPIC) undergoing consultations and Certification Preconditions (CPs) secured and still operational and provide a copy or link to the certificates if available:

<b>Certificates</b>	<b>Quantity</b>	<b>Units</b>
FPIC – CP secured – The mining claim is mostly titled/patented, and the company has been mostly operating in the area for over 100 years. The land patent and the mining operation exists long before the enactment of the Indigenous Peoples Rights Act (R.A. 8371).	The Company's mineral claim where it conducts mining operation is Patented / Titled property of Benguet Corporation. In recognition of the rights of the IPs to be informed, management undertake consultations with them in cases of implementing new projects related to mining activities in its area of operation.	The FPIC process is not required as the Company's mining operation was already existing in the area prior to the enactment of R.A. 8371, aside from the mining claim being patented or titled.

<b>What are the Risk/s Identified?</b>	<b>Management Approach</b>
<i>Identify risk/s related to material topic of the organization.</i> The potential risk can be attributed for non-compliance to provisions of environmental laws and standards as per R.A. 9275	The company strictly complied with the established Environmental Management System (EMS). With the recertification of ISO 14001-2015, all programs / projects and activities were implemented and monitored.

<p>(Clean Water Act), R.A. 8749 (Clean Air Act), R.A. 9003 (Ecological Solid Waste Management Act) and Indigenous Peoples Rights Act (R.A. 8371). Violations on the provisions of the abovementioned laws will result to penalties and risk to health and safety of nearby communities, majority of whom are indigenous peoples.</p>	<p>Though Benguet Corporation is the owner of the mining claim, it recognizes the rights of the IPs in sustainable development. Commensurate with the aim of improving their standard of living by providing livelihoods in a culturally appropriate manner, we continuously practice the following, as provided for in:</p> <p><b><u>IFC Performance Standard #7: Indigenous Peoples</u></b></p> <p>The standard sets out to:</p> <ul style="list-style-type: none"> <li>• Ensure that the Company respects the culture and rights of local people;</li> <li>• Minimize impacts on local communities and their way of life; and</li> <li>• Establish mechanisms for local community engagement and good faith negotiation on issues of grievance.</li> </ul> <p><b><u>IFC Performance Standard #8: Cultural Heritage</u></b></p> <ul style="list-style-type: none"> <li>- Aims to protect culture heritage and ensure that its use (where appropriate) is equitably shared.</li> </ul>
<p><b>What are the Opportunity/ies Identified?</b></p>	<p><b>Management Approach</b></p>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Compliance to regulations will result to greater confidence of stakeholders and investors on the ability of the company to fulfill its commitment as a responsible miner.</p>	<p>Though Benguet Corporation is the owner of the mining claim, it recognizes the rights of the IPs in their role in sustainable development. Their participation commensurate with the aim of improving their standard of living and livelihoods in a culturally appropriate manner as provided for in R.A. 8371 – Indigenous Peoples Rights Act.</p>

**Customer Management**

**Customer Satisfaction**

Disclosure	Score	Did a third party conduct the customer satisfaction study (Y/N)?
Customer satisfaction	100%	N
<p><b>What is the impact and where does it occur? What is the organization’s involvement in the impact?</b></p>	<p><b>Management Approach</b></p>	

<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>The Bangko Sentral ng Pilipinas (BSP) purchases all gold production. The world market dictates the price of gold.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Continue to engage the Bangko Sentral ng Pilipinas as the buyer of our product and abide by its rules and regulations.</p>
<b>What are the Risk/s Identified?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p><i>No identified risks as of this reporting.</i></p>	Maintain good relationship with the BSP.
<b>What are the Opportunity/ies Identified?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Selling BC's gold production to BSP will contribute to the Philippine economy as opposed to selling the product to foreign buyers.</p> <p>Maintain or improve the purity of gold sold to BSP.</p>	<p>Continue selling gold produced to Bangko Sentral ng Pilipinas (BSP) and silver to local market.</p> <p>Maintain improvement and provide better service to BSP.</p>

## **Health and Safety**

<b>Disclosure</b>	<b>Quantity</b>	<b>Units</b>
No. of substantiated complaints on product or service health and safety*	No health and safety issue received from the regulatory bodies during the period covered by the report (CY 2020).	#
No. of complaints addressed	No complaints from the regulatory bodies to address since there are no health and safety issue	#

	received during the period covered by the report (CY 2020).	
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*\*Substantiated complaints include complaints from customers that went through the organization’s formal communication channels and grievance mechanisms as well as complaints that were lodged to and acted upon by government agencies.*

<b>What is the impact and where does it occur? What is the organization’s involvement in the impact?</b>	<b>Management Approach</b>
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>Safety of employee during transport and delivery of gold to BSP in Baguio City</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>No fixed schedule of transporting the commodity. Security alert must be imposed.</p>
<b>What are the Risk/s Identified?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p> <p>There is potential possibility of hold-up and kidnap for ransom during delivery of gold to BSP in Baguio City.</p>	<p>Maintain confidentiality of information on gold production and details.</p> <p>No fixed schedule of transporting the commodity. Security alert must be imposed.</p> <p>Impose rotation of security escort during transport and delivery of product to Baguio City.</p>
<b>What are the Opportunity/ies Identified?</b>	<b>Management Approach</b>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Accessibility of market – location of BSP is in Baguio City which is about 15 kms. away from the mine site.</p>	<p>Improve intelligence network and regular coordination with Itogon PNP.</p>

## **Marketing and labelling**

<b>Disclosure</b>	<b>Quantity</b>	<b>Units</b>
<i>No. of substantiated complaints on marketing and labelling*</i> No complaints received in 2020 from our only customer which is the BSP on quality of our products.	0	#
No. of complaints addressed.  No complaints received/addressed in 2020 from our only customer which is the BSP.	0	#

*\*Substantiated complaints include complaints from customers that went through the organization's formal communication channels and grievance mechanisms as well as complaints that were lodged to and acted upon by government agencies.*

<b>What is the impact and where does it occur? What is the organization's involvement in the impact?</b>	<b>Management Approach</b>
<p><i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i></p> <p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>There was no determined impact because there are no complaints received/addressed in 2020 from BC's only customer, BSP. Likewise, no complaint was received from ILP clients.</p>	<p><i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>For the year under report, the Company has not received any complaints from BC's customer, BSP, regarding marketing and labelling of our gold product. Likewise, no complaint was received from ILP clients. If ever complaints arise in the future, the Company will handle/resolve the issues in accordance with Company's policies and procedures.</p>
<b>What are the Risk/s Identified?</b>	<b>Management Approach</b>
<p><i>Identify risk/s related to material topic of the organization.</i></p>	<p>For the year under report, the Company has not received any complaints from BC's customer, BSP, regarding marketing and labelling of our product.</p>

There were no determined risks because we deliver our product in accordance with the established guidelines of BSP.	Likewise, no complaint was received from ILP clients. If ever complaints arise in the future, the Company will handle/resolve the issues in accordance with Company's policies and procedures.
<b>What are the Opportunity/ies Identified?</b>	<b>Management Approach</b>
<i>Identify the opportunity/ies related to material topic of the organization.</i> Increased gold sales will increase BSP's gold reserve.	Benguet Corporation will continue to maintain or improve further on gold production and purity.

### **Customer privacy**

<b>Disclosure</b>	<b>Quantity</b>	<b>Units</b>
<i>No. of substantiated complaints on customer privacy*</i>	0	#
<i>No. of complaints addressed</i>	0	#
<i>No. of customers, users and account holders whose information is used for secondary purposes</i>	Limited only to authorized Company engagement.	#

*\*Substantiated complaints include complaints from customers that went through the organization's formal communication channels and grievance mechanisms as well as complaints that were lodged to and acted upon by government agencies.*

<b>What is the impact and where does it occur? What is the organization's involvement in the impact?</b>	<b>Management Approach</b>
<i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i>  <i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i>  The gold products are only being sold to the Bangko Sentral ng Pilipinas. Benguet Corporation cater to a government institution as	<i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or projects, programs, and initiatives do you have to manage the material topic?</i>  BenguetCorp has the Data Privacy Policy in accordance w/ the Data Privacy Act of 2012 (DPA) in place which assures the confidentiality of customers information. Moreover, the Company adopts control measures to prevent the occurrence of data breach incidents.

customer. Thus, the company strive for confidentiality and accountability in all its public disclosures.	Appointment of Data Privacy Officer (DPO) for Baguio Operation.  Proactively manage risk to ensure the company protects data privacy at the start and throughout the lifecycle of any transaction.
<b>What are the Risk/s Identified?</b>	<b>Management Approach</b>
<i>Identify risk/s related to material topic of the organization.</i>  Loss of customer trust due to breach of privacy.  Unauthorized use of data gathered that resulted in financial injury to both the company and the customer.	Security of the data collected from the Bangko Sentral ng Pilipinas is undertaken by controlling who could access such information after it's been gathered.  Direct and upfront communication with the customers about the information gathered and plans for using it.
<b>What are the Opportunity/ies Identified?</b>	<b>Management Approach</b>
<i>Identify the opportunity/ies related to material topic of the organization.</i>  Build strong relationship with the customer.	Give customer an online form or email address for communicating their privacy problems or concerns. Management undertakes to respond to these messages. Such two-way communication can help build trust and loyalty -- and help avoid potential privacy breach.

### Data Security

Disclosure	Quantity	Units
No. of data breaches, including leaks, thefts and losses of data There were no reported data privacy incidents, notifiable data breaches relating to cyber security, data governance or failure in the internal controls for the reporting period.	0	# of data breaches

<b>What is the impact and where does it occur? What is the organization's involvement in the impact?</b>	<b>Management Approach</b>
<i>Identify the impact and where it occurs (i.e., primary business operations and/or supply chain)</i>	<i>What policies, commitments, goals and targets, responsibilities, resources, grievance mechanisms, and/or</i>

<p><i>Indicate involvement in the impact (i.e., caused by the organization or linked to impacts through its business relationship)</i></p> <p>Though there were no incidents of data breaches, BC ensures the security of personal data, and protects employee’s privacy by creating, collecting, managing, storing, retrieving and disposing of data in accordance with the BC Policy Code of Conduct and Data Privacy Act.</p> <p>The Company has implemented and continuously improved its internal control to minimize the risk of data breaches.</p>	<p><i>projects, programs, and initiatives do you have to manage the material topic?</i></p> <p>Benguet Corp has the Data Privacy policy in place. The penalty for the violation of privacy rights resulting in data breaches, were also incorporated in the Employees’ Code of Conduct. DPA Seminar was also conducted to create awareness among BC employees. Moreover, the Company adopts control measures to prevent the occurrence of data breach incidents</p>
<p><b>What are the Risk/s Identified?</b></p>	<p><b>Management Approach</b></p>
<p>The accelerating threat of cyber-attack and technical challenges.</p> <p>Unstructured data and bulk of information processed over the period of the company’s existence is difficult to manage for data protection officer and compliance teams.</p> <p>Due to the geographical location of the central office and mine sites, the monitoring and managing the security of data would entail potential risks.</p>	<p>Training for IT personnel to effectively handle the cyber-attack threat and malware.</p> <p>Organizations must strive to achieve continuous compliance; risks continuously monitored and stakeholders continuously informed.</p> <p>Appointment of Data Privacy Officer (DPO) for Baguio Operation</p> <p><i>Please refer to link on Data Privacy Policy - <a href="http://benguetcorp.com/wp-content/uploads/2018/05/P7-Data-Privacy-Policy.pdf">http://benguetcorp.com/wp-content/uploads/2018/05/P7-Data-Privacy-Policy.pdf</a></i></p>
<p><b>What are the Opportunity/ies Identified?</b></p>	<p><b>Management Approach</b></p>
<p><i>Identify the opportunity/ies related to material topic of the organization.</i></p> <p>Integration of File Service Data into Other Systems.</p>	<p>Secure ISO Certification on Quality Management Systems</p>

## UN SUSTAINABLE DEVELOPMENT GOALS

### Product or Service Contribution to UN SDGs

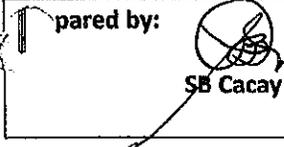
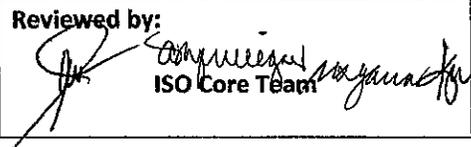
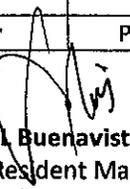
Key products and services and its contribution to sustainable development.

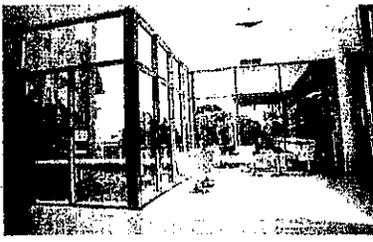
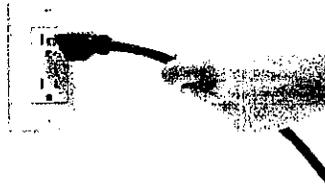
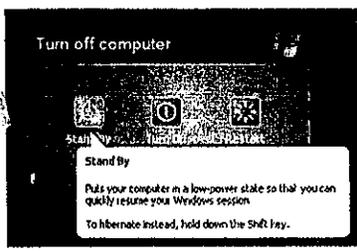
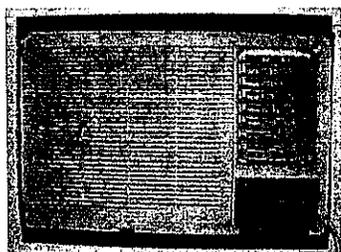
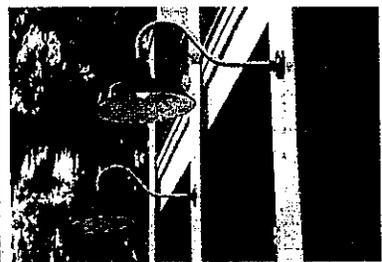
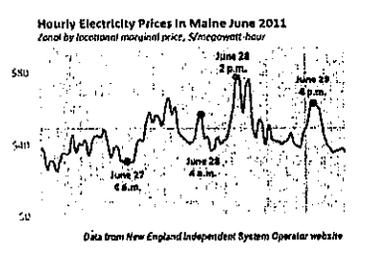
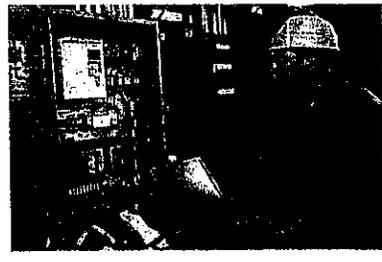
Key Products and Services	Societal Value / Contribution to UN SDGs	Potential Negative Impact of Contribution	Management Approach to Negative Impact
<p>Gold and silver production – (BGO)</p> <p>Slake lime and quick lime – (ILP)</p>	<ol style="list-style-type: none"> <li>1. Contributed to the local and national economy.</li> <li>2. Contributed to the Bangko Sentral ng Pilipinas gold reserve for economic development of the country.</li> <li>3. Prevention of spread of COVID-19 to the community where we operate and to the partners of the mining operation.</li> <li>4. Contribute to poverty alleviation by the provision of employment and other economic activities in the areas where the Company operates.</li> </ol>	<p>We are into mining and processing of gold and lime. Water pollution is the major concern in the mining operation. Gold processing requires a containment facility to impound the mill tailings. The raising of the dam crest of the tailing’s storage facility is one of the major infrastructures that needs to be addressed to prevent negative impact to the environment (water pollution). Without the increased capacity of the impoundment facility for the mill tailings, the processing of gold will stop and will affect the income of the Company and the employees that are depending on the operation of BC.</p> <p>Air pollution – the generated dust and fumes from vehicles and smelting plant that may contain high concentration of NO<sup>x</sup> and SO<sup>x</sup> is harmful to the health of employees and residents within the industrial area and the surrounding community.</p>	<p>BC shall endeavor to increase production while reducing the use of materials and processes using land, water and air contaminants.</p> <p>With the dam raising issues, the management shall exert effort to negotiate with the hostile residents in the area to give consent on the raising of the TSF dam crest to contain mill tailings in order to continue the mining and milling operation.</p> <p>On the potential water pollution, regular monitoring of the drain tunnels and other appurtenant structures of the tailing’s storage facility must be implemented. In the event of leakage, the milling operation must stop and immediate repair of the source of leaks must be conducted.</p> <p>The spread of the deadly virus could be prevented through the strict implementation of the identified safety and health protocols. Procurement of PPEs</p>

		<p>Additional expenditures on the prevention and health protocol requirements of COVID-19 as well as construction and maintenance of isolation facilities affected the revenue as well as increase in solid waste generation (face mask and face shields).</p> <p>Potential water contamination and water pollution.</p> <p>Land degradation – uncontrolled and unregulated activity of small-scale miners will contribute to instability of the ground slope resulting in landslides.</p> <p>Influx of IPs from other Regions</p>	<p>should consider the less hazardous materials.</p> <p>The LGU, DENR and MGB as the regulatory agencies must act fast for the resolution and regulation of small-scale mining activities in the area to minimize or control landslides.</p>
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**LIST OF APPENDICES:**

<b>APPENDIX NO.</b>	<b>TITLE</b>
A	Environmental Management System Document No. EMSG-06 (Guidelines on Power Consumption)
B	Certificate of Approval of 2020 Environmental Protection and Enhancement Program
C	DRCS-09 (Summary of Risks and Opportunities)
D	Environmental Management System Document No. EMSG-03 (Guidelines on Diesel, Oil and Grease Handling, Transport and Storage)
E	Environmental Management System Document No. EMSG-12 (Guidelines on Contaminated Water)
F	Certification of Greentek Environmental Engineering Services on Emission Test Result
G	Ambient Air Quality and Noise Monitoring Report of Greentek Environmental Engineering Services
H	Treatment Storage and Disposal Registration
I	Environmental Management System Document No. EMSG-07-A (Guidelines on Hazardous Waste Management – Used Oil, Oil and Grease, Contaminated Items)
J	Photocopy of Environmental Compliance Certificate
K	Summary of Regulatory Compliance
L	Memos on Health Protocols
M	Guidelines on Workplace Prevention and Control of COVID-19
N	BC COVID-19 Internal Taskforce
O	Certificate of Approval of 2020 Safety and Health Program
P	Certificate of Approval of 2020 Social Development and Management Program (ASDMP)
Q	Certificate of Approval of Annual Environmental Protection and Enhancement Program 2020 (AEPEP)

Document Title	EMS GUIDELINES				
Process	Power Conservation				
Document Code	EMSG-06	Revision No.	00	Effective Date	September 15, 2015
				Page Number	Page 1 of 1
Prepared by:	 <b>SB Cacay</b>			Reviewed by:	 <b>ISO Core Team</b>
				Approved by:	 <b>Al Buenavista</b> AVP/Resident Manager

	Use natural light whenever possible 	INDOORS/OFFICE	Turn off lights, machinery, computers, & appliances whenever possible 	INDOORS/OFFICE	Unplug electrical appliances and chargers when not in use 
	Avoid leaving computers on standby when leaving the office for the day 	INDOORS/OFFICE	Use air-conditioning only when necessary 	INDOORS/OFFICE	Shutdown all computers at break, when leaving the office for the day 
INDUSTRIAL AREA	Make sure to turn off outside/outpost lamps first thing in the morning 	INDUSTRIAL AREA	Operate big tanks on hours with lower power rates 	INDUSTRIAL AREA	Proper maintenance of equipment to maximize power-efficiency 

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Republic of the Philippines  
 Department of Environment and Natural Resources  
**MINES AND GEOSCIENCES BUREAU**

**Cordillera Administrative Region**

80 Diego Silang St., Baguio City 2600

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**ANNUAL ENVIRONMENTAL PROTECTION AND ENHANCEMENT  
 PROGRAM (AEPEP)**

**CERTIFICATE OF APPROVAL**  
**No. 2020-04-CAR**

The Mines and Geosciences Bureau - Cordillera Administrative Region (MGB-CAR) as Chair of the Mine Rehabilitation Fund Committee for Benguet Corporation – Acupan Contract Mining Project (MRFC-BC-ACMP) that evaluated and approved the company's 2020 Annual Environmental Protection and Enhancement Program (AEPEP), hereby grants this Certificate of Approval of said AEPEP to **BENGUET CORPOPATION – ACUPAN CONTRACT MINING PROJECT** for its mining project located at Barangays Virac, Poblacion and Ampucao, Itogon, Benguet under its Patented Mining Claim No. 002, after complying substantially with the requirements as mandated under DENR Administrative Order (D.A.O.) No. 2010-21.

This Certificate is being issued subject to the pertinent provisions of the above-mentioned D.A.O. and to the following conditions:

1. This Certificate is valid only for the Programs/Projects/Activities (P/P/As) stipulated in the submitted 2020 AEPEP with a total budget of P10,045,638.78 reviewed and approved by the MRFC-BC-ACMP;
2. The Company shall submit a *quarterly accomplishment report within 30 calendar days after the end of each quarter and annual accomplishment report within 30 calendar days after the end of each calendar year* to MGB RO; and
3. Additional conditions may be imposed to effectively and efficiently implement the approved AEPEP should the results of monitoring by the Multipartite Monitoring Team (MMT) for BC-ACMP warrant them.

Non-compliance with the above conditions shall be sufficient ground for the cancellation, revocation or termination of this Certificate or suffer the penalty prescribed in the Penal Provisions of Republic Act No. 7942, the Philippine Mining Act of 1995.

Given this 19th day of December 2019 at MGB-CAR, Baguio City, Philippines.

*M. Apil*  
**FAY W. APIL**

OIC, Regional Director  
 MGB – Cordillera Administrative Region



Department of Environment and Natural Resources  
 Mines and Geosciences Bureau  
 Cordillera Administrative Region  
 Baguio City

031020-CAR-32255



Certificate of Approval

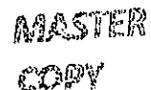
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<b>Document Title</b>	<b>SUMMARY OF RISKS AND OPPORTUNITIES</b>			 BenguetCorp
<b>Document Code</b>	DRCS-09			
<b>Revision No.</b>	04	<b>Effective Date</b>	January 16, 2021	<b>Page Number</b> Page 2 of 23

	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Erroneous assay data and values may lead to inaccurate plans and decisions some of which may have environmental impact (i.e. production of more waste rock materials leading to unnecessary landfill materials and river sedimentation)</p> <p>B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. <i>Strictly implement Standard Operating Procedures of the department.</i></p> <p>B. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i></p>
<b>Camp Administration</b>	<ol style="list-style-type: none"> <li>Solid waste may pollute soil and water</li> <li>Toxic waste may contaminate soil and water</li> <li>Occurrence of fire</li> <li>Occurrence of grass fire</li> </ol>	<ol style="list-style-type: none"> <li>EMSG-09 (Solid Waste Management)</li> <li>EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>Emergency procedure for fire</li> <li>Fire extinguisher available</li> <li>Establishment of fire lines</li> <li>Clearing of dried shrubs especially during dry season</li> <li>IEC on Fire Prevention not only during fire prevention month</li> </ul> </li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Camp Administration Department could fail to implement the company's environmental policies and rules to camp and staff houses (especially when considerable amount of waste comes from residential camps around the mine site)</p> <p>B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. <i>Ensure that Camp rules and regulations on waste segregation are implemented.</i></p> <p>B. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i></p>
<b>Claims Protection</b>	<ol style="list-style-type: none"> <li>Solid waste may pollute soil and water</li> <li>Toxic waste may contaminate soil and water</li> <li>Occurrence of fire</li> </ol>	<ol style="list-style-type: none"> <li>EMSG-09 (Solid Waste Management)</li> <li>EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>Emergency procedure for fire</li> <li>Fire extinguisher available</li> </ul> </li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Government regulated small scale mining operation and activities within the company's claims</p>	<p>A. <i>Members of the company's Task Force shall continually conduct plugging of illegal portals and demolition of shanties.</i></p>
<b>Community Relations</b>	<ol style="list-style-type: none"> <li>Toxic waste may contaminate soil and water</li> <li>Solid waste may pollute soil and water</li> </ol>	<ol style="list-style-type: none"> <li>EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>EMSG-09 (Solid Waste Management)</li> </ol>



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	3. Occurrence of fire	3. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>Emergency procedure for fire</li> <li>Fire extinguisher available</li> </ul>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. If the relationship between the community and the company is severed the company will have a hard time implementing environmental policies that would also benefit the community (also the information regarding environmental risks and threats will not be reported to the company). The company is poised to face opposition on the hosts and affected communities as well as LGUs if they fail to comply with or implement what is stipulated in the Company's SDMP programs</p> <p>B. Failure to comply with the SDMP Programs may compromise the company operations and lead to penalties, and cancellation of permits and/or ECC.</p> <p>C. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. Maintain symbiotic relationship through implementation of SDMP commitments and other Corporate Social Responsibilities.</p> <p>B. Closely monitor timely implementation of SDMP.</p> <p>C. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>
<b>Construction and Civil Works</b>	<ol style="list-style-type: none"> <li>Oil/chemical spill or leak can cause soil and water contamination</li> <li>Occurrence of fire</li> <li>Excessive fumes, dust and smoke will degrade air quality</li> <li>Toxic waste may contaminate soil and water</li> <li>Solid waste may pollute soil and water</li> <li>Contaminated water may be discharged into the river</li> </ol>	<ol style="list-style-type: none"> <li>DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>Emergency procedure for oil spill</li> <li>Spill kit and MSDS available (for oil spill)</li> <li>Emergency procedure for fire</li> <li>Fire extinguisher available</li> </ul> </li> <li>Regular maintenance of service vehicles</li> <li>(EMSG-04 Dust Control) <ul style="list-style-type: none"> <li>Using fire truck to spray water on the road</li> <li>Regular monitoring of ambient air quality</li> </ul> </li> <li>EMSG-07-L (Hazardous Waste Other Chemical Containers)</li> <li>EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>EMSG-09 (Solid Waste Management)</li> <li>EMSG-12 (Contaminated Water)</li> <li>EMSG-05 (Gas Cylinders and Tanks)</li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. If infrastructures are of sub-standard quality (or not planned efficiently/effectively), catastrophic environmental hazards could occur (tails dam breach, fire, warehouse/storage spills etc.)</p>	<p>A. Engage third party consultant to conduct assessment of projects before implementation.</p>



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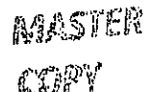


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	4. Solid waste could pollute soil and water	8. PCB Management Plan (EMSG-07-J Hazardous Waste PCB) 9. EMSG-07-L (Hazardous Waste Other Chemical Containers) 10. EMSG-07-N (Hazardous Waste Ink Cartridges) 11. EMSG-09 (Solid Waste Management)
	<b>RISKS</b> A. Improper utilization, management and monitoring of electrical energy often leads to excessive and wasteful use of energy (that leads to production of unnecessary pollutants and has high risk of environment-related incidents) B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements	A. <i>Strictly implement Energy Conservation programs.</i>  B. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i>
<b>Finance</b>	1. Toxic waste may contaminate soil and water 2. Solid waste may pollute soil and water 3. Occurrence of fire	1. EMSG-07-N (Hazardous Waste Ink Cartridges) 2. EMSG-09 (Solid Waste Management) 3. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul>
	<b>RISKS</b> A. Mismanagement of accounting and financial matters would lead to inefficient/ineffective (if not totally failed) environmental programs and solutions. Inaccurate or misleading financial reports could affect the Company or Management decisions and may lead to improper use of the Company's financial resources B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.	A. <i>Conduct regular internal and external financial audit and ensure adherence to Standard Operating Procedures.</i>  B. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i>
<b>Geology and Exploration</b>	1. Drill mud solution tank spill 2. Drill machine leaks during operation/repair 3. Occurrence of fire  4. Solid waste may pollute soil and water	1. Maintenance of drill rig/water pump 2. Dug-out catchment pit under solution tank 3. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>• Emergency procedure for oil spill</li> <li>• Spill kit available (for oil spill)</li> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> 4. EMSG-09 (Solid Waste Management)



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	5. Toxic waste contaminating water/soil	5. EMSG-02 (Contaminated Containers) 6. EMSG-12 (Contaminated Water) 7. EMSG-07-B (Hazardous Waste Aerosol Cans) 8. EMSG-07-L (Hazardous Waste Other Chemical Containers) 9. EMSG-07-N (Ink Cartridges) 10. EMSG-05 (Gas Cylinders)
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. If interpretation of geologic data is incorrect, there is a risk of mining unprofitable areas (which leads to unnecessary underground blasting, land clearing, tree-cutting and land-form modification)</p> <p>B. Failure to implement the company's Grade Control Protocols as well as geological activities (mapping and sampling) to BC and ACMP could result to deliveries of lower grade ore or waste materials to mill.</p> <p>C. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements</p>	<p>A. <i>Strict implementation of Standard Operating Procedures.</i></p> <p>B. <i>Strict implementation of Standard Operating Procedures on Sampling.</i></p> <p>C. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i></p>
<b>Human Resources</b>	1. Toxic waste may contaminate soil and water 2. Solid waste may pollute soil and water 3. Occurrence of fire	1. EMSG-07-N (Hazardous Waste Ink Cartridges) 2. EMSG-09 (Solid Waste Management) 3. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Hiring of underqualified or untrained employees will increase the likelihood of environmental and safety accidents</p> <p>B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p> <p>C. <i>Employees who do not possess the necessary skills, permits or certifications may pose penalties from regulatory agencies</i></p>	<p>A. <i>Implement personnel hiring policies and conduct training before dispatch.</i></p> <p>B. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i></p> <p>C. <i>Implement personnel hiring policies.</i></p>
<b>Internal Audit</b>	1. Toxic waste may contaminate soil and water 2. Solid waste may pollute soil and water 3. Occurrence of fire	1. EMSG-07-N (Hazardous Waste Ink Cartridges) 2. EMSG-09 (Solid Waste Management) 3. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> </ul>



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		<ul style="list-style-type: none"> <li>• Fire extinguisher available</li> </ul> 4. DRCS-36 (Document Update Procedure)
	<b>RISKS</b>	
	A. Inability of the auditor to close potential nonconformities B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.	A. Conduct evaluation of compliance and findings. B. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.
<b>Legal</b>	1. Toxic waste may contaminate soil and water 2. Solid waste may pollute soil and water 3. Occurrence of fire	1. EMSG-07-N (Hazardous Waste Ink Cartridges) 2. EMSG-09 (Solid Waste Management) 3. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul>
	<b>RISKS</b>	
	A. Some legal issues could hinder or even prevent the implementation of the company's environmental programs and other statute/regulations that may compromise the Company's operations B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.	A. Ensure compliance to governmental obligations and strictly implement Standard Operating Procedures B. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.
<b>Medical / Clinic</b>	1. Toxic waste may contaminate soil and water 2. Solid waste may pollute soil and water 3. Occurrence of fire	1. EMSG-07-K (Hazardous Waste Medical Waste) 2. EMSG-07-L (Hazardous Waste Other Chemical Containers) 3. EMSG-07-N (Hazardous Waste Ink Cartridges) 4. EMSG-09 (Solid Waste Management) 5. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> 6. EMSG-05 (Gas Cylinders and Tanks)
	<b>RISKS</b>	
	A. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.	A. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.
<b>MEPEO</b>	1. Mill tailings could leak from pipe breach 2. Tailings stored in the TSF could spill in case of dam failure of overflow	1. EMSG-07-C (Hazardous Waste Mill Tailings) <ul style="list-style-type: none"> <li>• Installation of stopper boards</li> </ul>



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	<p>3. Chemicals used in the nursery could contaminate water bodies</p> <p>4. Toxic waste (while being transported to the rebar, or when it is stored in the rebar) could contaminate soil and water</p> <p>5. Solid waste could pollute water and soil</p> <p>6. Occurrence of fire</p> <p>7. Occurrence of grass fire</p>	<ul style="list-style-type: none"> <li>• Establishing caretakership contract for maintenance, regular monitoring and inspection of tailings dam facility.</li> <li>• Installation of piezometer to monitor dam strength</li> </ul> <p>2. DRCS-30 (Protocol for Possible Emergency Situations)</p> <ul style="list-style-type: none"> <li>• Emergency protocol for tailings dam breach</li> </ul> <p>3. EMSG-01 (Chemicals and Reagents – Handling and Storage)</p> <p>4. EMSG-07 (Hazardous Waste Management)</p> <p>5. EMSG-09 (Solid Waste Management)</p> <p>6. Garbage collection day is different for different types of garbage to ensure segregation is maintained in disposal</p> <p>7. DRCS-30 (Protocol for Possible Emergency Situations)</p> <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> <li>• Establishment of fire lines</li> <li>• Clearing of dried shrubs especially during dry season</li> <li>• IEC on Fire Prevention not only during fire prevention month</li> </ul>
	<b>RISKS</b>	
	<p>A. Collected waste by the local collector might not be segregated properly after collection or during disposal</p> <p>B. Lack of awareness of environmental policies, guidelines and programs</p> <p>C. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. <i>Strictly implement waste segregation at source</i></p> <p>B. <i>PCO Training and cascading of updated environmental policies and guidelines must be conducted regularly</i></p> <p>C. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i></p>
<b>Metallurgy Laboratory</b>	<p>1. Tails or pulp spill may pollute water bodies</p> <p>2. Chemical spill could contaminate river and soil</p> <p>3. Uncontrolled release of harmful hydrocyanic gas</p> <p>4. Occurrence of fire</p>	<p>1. EMSG-07-C Hazardous Waste Mill Tailings)</p> <ul style="list-style-type: none"> <li>• Sluicing of spill to canal leading to tails treatment facility</li> <li>• Close monitoring of tanks to avoid overflow</li> </ul> <p>2. DRCS-30 (Protocol for Possible Emergency Situations)</p> <ul style="list-style-type: none"> <li>• In case of major pulp or discharge spill, turn off all operating machines</li> <li>• Emergency procedure for pulp spill</li> <li>• Emergency procedure for chemical spill</li> <li>• Spill kit and MSDS available (for oil and chemical spill)</li> </ul>



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	<p>5. Transport vehicle may leak oil/fuel that will contaminate soil and water</p> <p>6. Excessive dust and smoke from vehicle can degrade air quality</p> <p>7. Excessive dust can degrade air quality</p> <p>8. Toxic waste could contaminate soil and water</p> <p>9. Solid waste can pollute land and water</p> <p>10. Contaminated water could be released into the river or contaminate soil or water table.</p>	<ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> <p>3. EMSG-01 (Chemicals and Reagents – Handling and Storage)</p> <p>4. EMSG-02 (Contaminated Containers)</p> <p>5. Regular maintenance of surface vehicles</p> <p>6. Spill kit available on vehicle (EMSG-03 Diesel – Handling, Transport and Storage)</p> <p>7. Regular monitoring of ambient air quality (EMSG-04 Dust Control)</p> <p>8. EMSG-07-C (Hazardous Waste Mill Tailings)</p> <p>9. EMSG-07-D (Hazardous Waste Cyanide Containers)</p> <p>10. EMSG-07-E (Hazardous Waste Reagent Sacks)</p> <p>11. EMSG-07-F (Hazardous Waste Lab Wastes)</p> <p>12. EMSG-07-H (Hazardous Waste Batteries)</p> <p>13. EMSG-07-I (Hazardous Waste Lights)</p> <p>14. EMSG-07-L (Hazardous Waste Other Chemical Containers)</p> <p>15. EMSG-07-N (Hazardous Waste Ink Cartridges)</p> <p>16. EMSG-09 (Solid Waste Management)</p> <p>17. EMSG-11 (Acids and Chemical Fumes)</p> <ul style="list-style-type: none"> <li>• To prevent release of HCN gas, ensure pH to stay at 10.75 to 11</li> <li>• Regular monitoring of ambient air quality</li> </ul> <p>18. EMSG-12 (Contaminated Water)</p> <ul style="list-style-type: none"> <li>• Water drain in the met lab is connected to the Tails Treatment Facility</li> <li>• Regular monitoring of water quality and effluent</li> </ul>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Erroneous laboratory results may lead to excessive use of milling reagents, extended time of milling processes and production of excessive waste/byproduct</p> <p>B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. <i>Strictly implement Standard Operating Procedures of the department.</i></p> <p>B. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i></p>
<b>Mill Mechanical</b>	<p>1. Used oil, and oil-contaminated items could contaminate soil and water (spill or leak)</p> <p>2. Contaminated water (usually mixed with oil and grease) could leak into the river</p> <p>3. Occurrence of fire</p> <p>4. Equipment might leak oil/diesel during breakdown or repair</p>	<p>1. DRCS-30 (Protocol for Possible Emergency Situations)</p> <ul style="list-style-type: none"> <li>• Emergency procedure for oil spill</li> <li>• Spill kit and MSDS available (for oil spill)</li> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> <p>2. Oil-settling facility to recycle used oil (EMSG-03 Diesel – Handling, Transport and Storage)</p> <p>3. Regular maintenance of surface loaders and forklift</p> <p>4.</p>



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	<p>5. Excessive dust and smoke emission can degrade air quality</p> <p>6. Toxic waste could contaminate water and soil</p> <p>7. Solid waste could pollute soil and river</p>	<p>5. (EMSG-04 Dust Control)</p> <ul style="list-style-type: none"> <li>Using fire truck to spray water on the road</li> <li>Regular monitoring of ambient air quality</li> </ul> <p>6. EMSG-07-A (Hazardous Waste Used Oil, Oil-Contaminated Items)</p> <p>7. EMSG-07-L (Hazardous Waste Other Chemical Containers)</p> <p>8. EMSG-07-N (Hazardous Waste Ink Cartridges)</p> <p>9. EMSG-09 (Solid Waste Management)</p> <p>10. EMSG-05 (Gas Cylinders and Tanks)</p>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Discarded oil, fuel and lubricants during repairs and maintenance of vehicles and equipment</p> <p>B. Unimplemented PMS will reduce mechanical efficiency</p> <p>C. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. Implement guidelines on proper handling and ensure availability of secondary containment, spill kits and PPEs.</p> <p>B. Strict implementation of regular preventive maintenance service schedules</p> <p>C. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>
<b>Mill Operations</b>	<p>1. Oil leak may contaminate soil and water</p> <p>2. Contaminated water could be released into the river</p> <p>3. Spill of excess grease could contaminate soil and water</p> <p>4. Pulp and ball mill discharge could spill (or leak in case pipes are breached) contaminating soil and water</p> <p>5. Pulp and tails could overflow (or leak at discharge valves and breached pipes) contaminating soil and water</p> <p>6. Chemical, waste solution spill could contaminate river and soil</p> <p>7. Sodium Hypochlorite spill could contaminate air, river and soil</p>	<p>1. Regular maintenance of surface loaders</p> <p>2. Regular maintenance of conveyor belts/system</p> <p>3. DRCS-30 Protocol for Possible Emergency Situations</p> <ul style="list-style-type: none"> <li>Spill kit available (for oil spill)</li> <li>MSDS available for chemical spill</li> <li>For minor pulp/tail spill, sluice spill area with hose towards canals that lead to tails treatment facility</li> <li>In case of major pulp or discharge spill, turn off all operating machines</li> <li>Tails/Pulp Spill emergency protocol</li> <li>Chemical spill emergency protocol</li> </ul> <p>4. (EMSG-07-C Hazardous Waste Mill Tailings)</p> <ul style="list-style-type: none"> <li>Mill tailings are directed to the Tails Treatment Facility</li> <li>Plug outlet to any possible outlet to river system</li> <li>Regular effluent monitoring</li> <li>Close monitoring of tanks to avoid overflow</li> <li>Regular check and maintenance of canals, pipe connections and discharge valves)</li> </ul> <p>5. EMSG-12 Contaminated Water</p> <ul style="list-style-type: none"> <li>Regular clean up and maintenance of drainage pipes</li> <li>Contaminated water goes to tails treatment facility</li> <li>Regular monitoring of effluent/water quality</li> </ul>



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	<p>8. Chemical (cyanide solution, silver nitrate, potassium iodide solution, caustic soda) spill could contaminate river and soil</p> <p>9. Excessive dust can degrade air quality</p> <p>10. Reduction of air quality through uncontrolled release of fumes and dust</p> <p>11. Uncontrolled release of harmful and corrosive fumes</p> <p>12. Solid waste can pollute land and water</p> <p>13. Toxic waste can contaminate soil and water</p>	<ul style="list-style-type: none"> <li>• Close monitoring of tanks, discharge valve to avoid overflow (and spill).</li> <li>• Regular maintenance of pipes, valves etc.</li> </ul> <p>6. Withdraw Sodium Hypochlorite only in time of use (EMSG-11 Acids and Chemical Fumes)</p> <p>7. DRCS-30 Protocol for Possible Emergency Situations</p> <ul style="list-style-type: none"> <li>• For minor pulp/tail spill, sluice spill area with hose towards canals that lead to tails treatment facility</li> <li>• In case of major pulp or discharge spill, turn off all operating machines</li> <li>• Spill kit and MSDS available (for chemical spill)</li> </ul> <p>8. EMSG-01 (Chemicals and Reagents – Handling and Storage)</p> <p>9. EMSG-04 Dust Control</p> <ul style="list-style-type: none"> <li>• Wet crushing</li> <li>• Regular monitoring of ambient air quality</li> </ul> <p>10. EMSG-04 (Dust Control)</p> <ul style="list-style-type: none"> <li>• After ashing, handle the ashing vessel carefully to prevent dispersal of ashes</li> <li>• Regular monitoring of ambient air quality</li> </ul> <p>11. EMSG-11 (Acids and Chemical Fumes)</p> <ul style="list-style-type: none"> <li>• Wear respirators</li> <li>• To install fume hood in the ashing area</li> <li>• Regular monitoring of ambient air quality</li> <li>• Install 2 units of acid scrubber (for the purpose of making the acid fume discharge basic – addition of caustic soda)</li> <li>• A fume hood with chimney is installed to control firing fumes, heat and smoke</li> <li>• Reduce nitric acid usage and at intervals</li> </ul> <p>12. Inspection of kerosene supply lines and proper handling of oxy-acetylene tanks (EMSG-05 Gas Cylinders and Tanks)</p> <p>13. EMSG-09 (Solid Waste Management)</p> <p>14. EMSG-08 (Recyclable Waste Materials)</p> <p>15. EMSG-03 (Diesel/Oil– Handling, Transport and Storage)</p> <p>16. EMSG-02 (Contaminated Containers)</p> <p>17. EMSG-03 (Diesel/Oil– Handling, Transport and Storage)</p> <p>18. EMSG-07-A (Hazardous Waste Used Oil, Oil-Contaminated Items)</p> <p>19. EMSG-07-C (Hazardous Waste Mill Tailings)</p> <p>20. EMSG-07-D (Hazardous Waste Cyanide Containers)</p> <p>21. EMSG-07-E (Hazardous Waste Reagent Sacks)</p> <p>22. EMSG-07-F (Hazardous Waste Lab Wastes)</p> <p>22. EMSG-07-L (Hazardous Waste Other Chemical</p>
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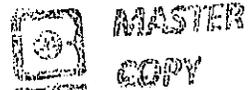
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	<p>14. Uncontrolled release of harmful hydrocyanic gas</p> <p>15. Contaminated water could be released into the river</p> <p>16. Occurrence of fire</p> <p>17. Occurrence of flood</p>	<p>Containers)</p> <p>23. Contaminated sand, slags, broken clay pots used in fluxing and refinery are reprocessed in the gravity concentrator to further extract gold (EMSG-08 Recyclable Waste Materials)</p> <p>24. EMSG-11 (Acids and Chemical Fumes)</p> <ul style="list-style-type: none"> <li>To prevent release of HCN gas, ensure pH to stay at 10.75 to 11</li> <li>Regular monitoring of ambient air quality</li> </ul> <p>25. EMSG-12 Contaminated Water</p> <ul style="list-style-type: none"> <li>Regular clean up and maintenance of drainage pipes</li> <li>Contaminated water goes to tails treatment facility</li> <li>Close monitoring of tanks, discharge sump boxes to avoid overflow (and spill)</li> <li>Regular monitoring of effluent/water quality</li> </ul> <p>26. DRCS-30 Protocol for Possible Emergency Situations:</p> <ul style="list-style-type: none"> <li>Emergency procedure for fire</li> <li>Fire extinguisher available</li> <li>Procedure for flood</li> </ul>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Failure to produce the desired size of crushed ore, grinding time of the ore will be adversely affected (i.e., longer time in grinding / longer operating time for ball mills, thus increase in use electricity and use of steel balls)</p> <p>B. Failure to grind the ore to desired size or mesh could adversely affect gold recovery</p> <p>C. Pilferage of loaded carbon during harvesting</p> <p>D. Excessive use of chemicals, such as cyanide could affect the tails treatment efficiency</p> <p>E. Theft of loaded or ashed carbon during ashing</p> <p>F. Deterioration of health condition of Ashing personnel if they are wearing their PPE's properly during the activity.</p> <p>G. Pilferage of gold, gold laden materials or concentrates during refining and smelting</p> <p>H. Untreated tails are very unstable, even if stored in a controlled environment (tailings storage facility) that may lead to future environmental issues.</p> <p>I. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS,</p>	<p>A. Strictly implement Standard Operating Procedures on Crushing Operations.</p> <p>B. Strictly implement Standard Operating Procedures on Grinding Operations.</p> <p>C. Strict implementation of Security Protocols</p> <p>D. Strictly implement Standard Operating Procedures on Leaching and Reagent Addition.</p> <p>E. Strict implementation of Security Protocols</p> <p>F. Close coordination with MEPEO on the scheduling of Stack Sampling and Emission Testing of equipment</p> <p>G. Strict implementation of Security Protocols</p> <p>H. Strictly implement Standard Operating Procedures on Detoxification Process. (to include regular monitoring/sampling)</p> <p>I. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>



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	government and other environmental requirements.	
<b>Mine Mechanical</b>	<ol style="list-style-type: none"> <li>Used oil, and oil-contaminated items could contaminate soil and water (spill or leak)</li> <li>Oil spill during compressor re-fueling</li> <li>Vehicles/equipment might leak oil/diesel during breakdown or repair</li> <li>Occurrence of fire</li> <li>Excessive smoke emission can degrade air quality</li> <li>Toxic waste could contaminate water and soil</li> <li>Solid waste could pollute soil and river</li> <li>Contaminated water (usually mixed with oil and grease) could leak into the river</li> </ol>	<ol style="list-style-type: none"> <li>DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>Emergency procedure for oil spill</li> <li>Spill kit and MSDS available (for oil spill)</li> <li>Emergency procedure for fire</li> <li>Fire extinguisher available</li> </ul> </li> <li>EMSG-03 (Diesel – Handling, Transport and Storage)</li> <li>EMSG-05 (Gas Cylinders and Tanks)</li> <li>Regular maintenance of mine cars, locomotives, compressors and drills.</li> <li>Mine ventilation efficiently dissipates smoke generated underground (EMSG-04 Dust Control)</li> <li>EMSG-07-A (Hazardous Waste Used Oil, Oil-Contaminated Items)</li> <li>EMSG-07-H (Hazardous Waste Batteries)</li> <li>EMSG-07-L (Hazardous Waste Other Chemical Containers)</li> <li>EMSG-09 (Solid Waste Management)</li> <li>Oil-water separator installed in the mine mechanical workshop (EMSG-12 Contaminated Water)</li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p><i>A. Improper repair and maintenance works may result to oil, fuel and lubricants spill</i></p> <p><i>B. Unimplemented PMS will reduce mechanical efficiency.</i></p> <p><i>C. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</i></p>	<p><i>A. Availability of Spill Kits, secondary containment areas and proper use of PPE</i></p> <p><i>B. Strict implementation of regular preventive maintenance service schedules</i></p> <p><i>C. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i></p>
<b>Mine Operations</b>	<ol style="list-style-type: none"> <li>Used water (with rock fragments) may be discharged in the river.</li> <li>Drill oil might spill and contaminate water in the river.</li> <li>Dust and explosive fumes may be expelled outside of the mine.</li> <li>Solid waste may pollute soil and water.</li> <li>Occurrence of unwanted blasting incident.</li> <li>Leaks from the use of heavy equipment may contaminate water tables and soil.</li> <li>Occurrence of fire</li> </ol>	<p>EMSG-12 (Contaminated Water)</p> <ul style="list-style-type: none"> <li>Mine Drainage (installed series of silt traps plus sediment settling facility before discharge)</li> <li>Monitor water discharge from underground drainage by getting quarterly samples</li> </ul> <p>EMSG-04 (Dust Control)</p> <ul style="list-style-type: none"> <li>Mine Ventilation</li> <li>Wet Drilling</li> </ul> <p>EMSG-09 (Solid Waste Management)</p> <p>Banning of PET bottles in underground.</p> <p>Routine maintenance of loader</p> <p>Spill kit on loader (EMSG-03 (Diesel – Handling, Transport and Storage)</p>



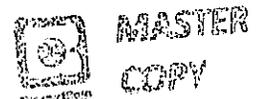
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	<p>8.Unwanted incident due to bump or ran over by running LHD equipment.          Dust and smoke from loader may be expelled outside of the mine          Solid waste may pollute soil and water          Toxic waste contaminating water/soil          Diesel spill during transport or refueling          Leaks from the use of heavy equipment may contaminate water and soil.          Occurrence of fire          Oil leaks from heavy equipment such as diesel locomotive, loader, tractor, etc. during operation. This may contaminate water and soil.</p>	<p>DRCS-30 (Protocol for Possible Emergency Situations)</p> <ul style="list-style-type: none"> <li>• Emergency procedure for oil spill</li> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> <p>Mine Ventilation (EMSG-04 (Dust Control)          EMSG-07-H (Hazardous Waste Batteries)          EMSG-03 (Diesel-Handling, Transport &amp; Storage)</p> <ul style="list-style-type: none"> <li>• Refueling to be done on designated refueling stations by authorized (trained) personnel only</li> <li>• Spill kit on loader and on UG refueling stations</li> <li>• Use mine cars when transporting diesel</li> </ul> <p>DRCS-30 (Protocol for Possible Emergency Situations)</p> <ul style="list-style-type: none"> <li>• Emergency procedure for oil spill</li> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> <p>Routine maintenance of loader and locomotives          SOPs of Handling of Explosives          SOPs of the Disposal of Empty Carton Boxes of Dynamite and the Excess Cuttings of Safety Fuse.</p>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Underground openings might result to subsidence in the surface as a result of frequent blasting.</p> <p>B. Mixing of ore and waste materials (mulok) at the stockpile areas, chutes or storages that will result to dilution of ore and eventually unnecessary cost to be incurred by the company due to milling of waste materials.</p> <p>C Failure to install timber support in loose ground or collapsing ground especially in the main access and work areas may result to serious or fatal accident.</p> <p>D. Spillages of diesel fuel may occur if proper protocols and guidelines of refueling are not implemented and this may result to destruction of environment, wastage of company resources and contamination of land and water</p>	<p>A. Mine Engineering to conduct survey in all mine working stopes near the surface in order to ensure that the desired surface pillar is maintained</p> <p>B. Separate chutes / storages are designated for ore and waste materials of BC in underground.</p> <p>C. Company Safety Rules and Regulations          Any manifestation of loose ground or collapsing ground must be provided with timber support the soonest possible time.</p> <p>D. Existing Protocols and Guidelines of Refueling</p> <ul style="list-style-type: none"> <li>• Proper orientation of Fuel tenders and LHD / Locomotive operators</li> <li>• Investigate all oil spillages and come up with action plans to prevent recurrence.</li> </ul>



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	<p>E. Siltation of the river system due to irresponsible dumping of waste materials</p> <p>F. Premature explosion may result to death and damage of Company properties</p> <p>G. Issued explosives might be smuggled out from underground to surface that will be used for illegal activities.</p>	<p>E. Presence of dumping area for waste materials (mulok). Dumping of waste materials is exclusively at TSF-1, Batuang.</p> <p>F. SOP's in the Withdrawal and Handling of Explosives.</p> <ul style="list-style-type: none"> <li>No Smoking Policy</li> <li>Detonators such as blasting caps and dynamites must be kept in a separate bag.</li> </ul> <p>G. Policies and SOP's in the use of explosives.</p> <ul style="list-style-type: none"> <li>Inventory of explosives in underground bodegas is regularly monitored by PNP.</li> </ul> <p>H. SOPs of the withdrawal of explosives. Withdrawal of explosives must be done after the drilling activities to ensure that all withdrawn explosives will be used for the day only.</p>
<b>Motorpool</b>	<ol style="list-style-type: none"> <li>Used oil, and oil-contaminated items could contaminate soil and water (spill or leak)</li> <li>Oil spill during equipment/vehicle re-fueling</li> <li>Vehicles/equipment might leak oil/diesel during breakdown or repair</li> <li>Occurrence of fire</li> <li>Excessive dust and smoke emission can degrade air quality</li> <li>Toxic waste could contaminate water and soil</li> <li>Solid waste could pollute soil and river</li> <li>Contaminated water (usually mixed with oil and grease) could leak into the river</li> </ol>	<ol style="list-style-type: none"> <li>DRCS-30 (Protocol for Possible Emergency Situations)           <ul style="list-style-type: none"> <li>Emergency procedure for oil spill</li> <li>Spill kit and MSDS available (for oil spill)</li> <li>Emergency procedure for fire</li> <li>Fire extinguisher available</li> </ul> </li> <li>EMSG-03 (Diesel – Handling, Transport and Storage)</li> <li>EMSG-05 (Gas Cylinders and Tanks)</li> <li>Regular maintenance of surface loaders, forklift and all light vehicles</li> <li>(EMSG-04 Dust Control)           <ul style="list-style-type: none"> <li>Using fire truck to spray water on the road</li> <li>Regular monitoring of ambient air quality</li> </ul> </li> <li>EMSG-07-A (Hazardous Waste Used Oil, Oil-Contaminated Items)</li> <li>EMSG-07-H (Hazardous Waste Batteries)</li> <li>EMSG-07-L (Hazardous Waste Other Chemical Containers)</li> <li>EMSG-09 (Solid Waste Management)</li> <li>Oil-water separator installed in the motor pool garage and workshop (EMSG-12 Contaminated Water)</li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Discarded oil, fuel and lubricants during repairs and maintenance of vehicles and equipment.</p> <p>B. Unimplemented PMS will reduce mechanical efficiency.</p> <p>C. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS,</p>	<p>A. Implement guidelines on proper handling and ensure availability of secondary containment, spill kits and PPEs.</p> <p>B. Strict implementation of regular preventive maintenance service schedules</p> <p>C. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>



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	government and other environmental requirements.	
<b>MTME/Claims</b>	<ol style="list-style-type: none"> <li>1. Solid waste may pollute soil and water</li> <li>2. Toxic waste may contaminate soil and water</li> <li>3. Occurrence of fire</li> </ol>	<ol style="list-style-type: none"> <li>1. EMSG-09 (Solid Waste Management)</li> <li>2. EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>3. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> </li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>
<b>MTS</b>	<ol style="list-style-type: none"> <li>1. Toxic waste may contaminate soil and water</li> <li>2. Solid waste may pollute soil and water</li> <li>3. Occurrence of fire</li> </ol>	<ol style="list-style-type: none"> <li>1. EMSG-07-B (Hazardous Waste Aerosol Cans)</li> <li>2. EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>3. EMSG-09 (Solid Waste Management)</li> <li>4. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> </li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Incomplete information from outdated mapping and absence of survey of underground work areas may affect good judgement during mine operation</p> <p>B. Inadequate ventilation system may pose health hazard.</p> <p>C. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. Strictly implement Standard Operating Procedures.</p> <p>B. Provide sufficient ventilation system.</p> <p>C. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>
<b>Operations Planning and Control</b>	<ol style="list-style-type: none"> <li>1. Toxic waste may contaminate soil and water</li> <li>2. Solid waste may pollute soil and water</li> <li>3. Occurrence of fire</li> </ol>	<ol style="list-style-type: none"> <li>1. EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>2. EMSG-09 (Solid Waste Management)</li> <li>3. DRCS-30 (Protocol for Possible Emergency Situations) <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> </li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Outsourced infrastructure projects which are sub-standard in quality may have harmful effects and may connote improper use of the Company's financial resources.</p> <p>B. The department's failure to comply or implement the Company's Environmental</p>	<p>A. Engage the company's consultant to conduct assessment of projects before implementation.</p> <p>B. Departmental Pep Talk Meetings must be conducted regularly and discussion on the</p>



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	Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.	<i>Company's Environmental Policy must be part of each meeting.</i>
<b>Procurement</b>	<ol style="list-style-type: none"> <li>1. Oil spill or leak can cause soil and water contamination</li> <li>2. Excessive dust and smoke will degrade air quality</li> <li>3. Toxic waste may contaminate soil and water</li> <li>4. Solid waste may pollute soil and water</li> <li>5. Occurrence of fire</li> </ol>	<ol style="list-style-type: none"> <li>1. DRCS-30 (Protocol for Possible Emergency Situations)           <ul style="list-style-type: none"> <li>• Emergency procedure for oil spill</li> <li>• Spill kit and MSDS available (for oil spill)</li> </ul> </li> <li>2. Regular maintenance of service vehicles</li> <li>3. (EMSG-04 Dust Control)           <ul style="list-style-type: none"> <li>• Using fire truck to spray water on the road</li> <li>• Regular monitoring of ambient air quality</li> </ul> </li> <li>4. EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>5. EMSG-09 (Solid Waste Management)</li> <li>6. DRCS-30 (Protocol for Possible Emergency Situations)           <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> </li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. <i>Materials and supplies obtained may be sub-standard and procured from illegitimate sources or suppliers</i></p> <p>B. <i>The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</i></p>	<p>A. <i>Ensure that suppliers are duly accredited with related government agencies and off-specs or substandard materials and supplies delivered by suppliers are returned for replacement</i></p> <p>B. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i></p>
<b>Safety</b>	<ol style="list-style-type: none"> <li>1. Oil and chemical spill or leak can cause soil and water contamination</li> <li>2. Excessive dust and smoke will degrade air quality</li> <li>3. Toxic waste may contaminate soil and water</li> <li>4. Solid waste may pollute soil and water</li> <li>5. Occurrence of fire</li> </ol>	<ol style="list-style-type: none"> <li>1. DRCS-30 (Protocol for Possible Emergency Situations)           <ul style="list-style-type: none"> <li>• Emergency procedure for diesel/chemical spill</li> </ul> </li> <li>2. (EMSG-04 Dust Control)           <ul style="list-style-type: none"> <li>• Using fire truck to spray water on the road</li> <li>• Regular monitoring of ambient air quality</li> </ul> </li> <li>3. Regular maintenance of service vehicles, ambulance and fire truck</li> <li>4. EMSG-07-K (Hazardous Waste Medical Waste)</li> <li>5. EMSG-07-L (Hazardous Waste Other Chemical Containers)</li> <li>6. EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>7. EMSG-09 (Solid Waste Management)</li> <li>8. DRCS-30 (Protocol for Possible Emergency Situations)           <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> </li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. <i>The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS,</i></p>	<p>A. <i>Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</i></p>



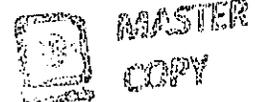
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	government and other environmental requirements.	
<b>Security</b>	<ol style="list-style-type: none"> <li>Oil spill or leak can cause soil and water contamination</li> <li>Occurrence of fire</li> <li>Excessive dust and smoke will degrade air quality</li> <li>Toxic waste may contaminate soil and water</li> <li>Solid waste may pollute soil and water</li> </ol>	<ol style="list-style-type: none"> <li>DRCS-30 (Protocol for Possible Emergency Situations)           <ul style="list-style-type: none"> <li>Emergency procedure for oil spill</li> <li>Spill kit and MSDS available (for oil spill)</li> <li>Emergency procedure for fire</li> <li>Fire extinguisher available</li> </ul> </li> <li>Regular maintenance of service vehicles</li> <li>(EMSG-04 Dust Control)           <ul style="list-style-type: none"> <li>Using fire truck to spray water on the road</li> <li>Regular monitoring of ambient air quality</li> </ul> </li> <li>EMSG-07-N (Hazardous Waste Ink Cartridges)</li> <li>EMSG-07-H (Hazardous Waste Batteries)</li> <li>EMSG-09 (Solid Waste Management)</li> </ol>
	<p style="text-align: center;"><b>RISKS</b></p> <p>A. Uncontrolled illegal activities, i.e. illegal logging, tunneling, vandalism and sabotage may cause depletion of natural resources and land degradation.</p> <p>B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. Ensure that security agencies maintain required manpower, and closely coordinate with management and law enforcement agencies, if necessary; management to strictly implement standard operating procedures</p> <p>B. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>
<b>Special Projects</b>	<ol style="list-style-type: none"> <li>Tailings stored in the TSF could spill in case of dam failure or breached on the TSF related structure</li> <li>Mill tailings could leak from breached pipe breach</li> <li>Oil/chemical spill or leak during construction can cause soil and water contamination</li> <li>Occurrence of fire</li> <li>Excessive fumes, dust and smoke will degrade air quality</li> </ol>	<ol style="list-style-type: none"> <li>DRCS-30 (Protocol for Possible Emergency Situations)           <ul style="list-style-type: none"> <li>Emergency protocol for tailings tails pipe breach</li> <li>Emergency protocol for tailings dam breach</li> <li>Emergency protocol for tailings dam overflow/overtopping</li> </ul> </li> <li>EMSG-07-C (Hazardous Waste Mill Tailings)           <ul style="list-style-type: none"> <li>Installation of stopper boards</li> <li>Establishing caretakership contract for maintenance, regular monitoring and inspection of tailings dam facility.</li> <li>Installation of piezometer to monitor dam strength</li> </ul> </li> <li>DRCS-30 (Protocol for Possible Emergency Situations)           <ul style="list-style-type: none"> <li>Emergency procedure for oil spill</li> <li>Spill kit and MSDS available (for oil spill)</li> <li>Emergency procedure for fire</li> <li>Fire extinguisher available</li> </ul> </li> <li>Regular maintenance of equipment and service vehicles</li> <li>(EMSG-04 Dust Control)           <ul style="list-style-type: none"> <li>Using fire truck to spray water on the road</li> <li>Regular monitoring of ambient air quality</li> </ul> </li> </ol>



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	<p>6. Toxic waste may contaminate soil and water</p> <p>7. Solid waste may pollute soil and water</p> <p>8. Contaminated water may be discharged into the river</p>	<p>6. EMSG-07-L (Hazardous Waste Other Chemical Containers)</p> <p>7. EMSG-07-N (Hazardous Waste Ink Cartridges)</p> <p>8. EMSG-09 (Solid Waste Management)</p> <p>9. EMSG-12 (Contaminated Water)</p> <p>10. EMSG-05 (Gas Cylinders and Tanks)</p>
	<p align="center"><b>RISKS</b></p> <p>A. Non-identification of sub-standard materials used in dam raising will lead to dam breach and catastrophic environmental hazards.</p> <p>B. Tailings stored in TSF could overflow if the allowed Free Board is not monitored.</p> <p>C. Failure to comply with related government regulations on TSF maintenance and operation may compromise the Company's mining operations.</p> <p>D. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. Engage competent person to inspect the dam raising activity.</p> <p>B. Conduct regular monitoring by MEPEO and third party (MMT).</p> <p>C. Ensure continuous compliance with related government regulations</p> <p>D. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>
<b>Treasury</b>	<p>1. Toxic waste may contaminate soil and water</p> <p>2. Solid waste may pollute soil and water</p> <p>3. Occurrence of fire</p>	<p>1. EMSG-07-N (Hazardous Waste Ink Cartridges)</p> <p>2. EMSG-09 (Solid Waste Management)</p> <p>3. DRCS-30 (Protocol for Possible Emergency Situations)</p> <ul style="list-style-type: none"> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul>
	<p align="center"><b>RISKS</b></p> <p>A. Loss of cash or gold deposits at Treasury due to robbery or burglary</p> <p>B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. Ensure security measures are in place and functional</p> <p>B. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>
<b>Warehouse</b>	<p>1. Oil and chemical spill or leak can cause soil and water contamination</p> <p>2. Occurrence of fire</p> <p>3. Excessive dust and smoke will degrade air quality</p>	<p>1. DRCS-30 (Protocol for Possible Emergency Situations)</p> <ul style="list-style-type: none"> <li>• Emergency procedure for oil and chemical spill</li> <li>• Spill kit and MSDS available (for oil and chemical spill)</li> <li>• Emergency procedure for fire</li> <li>• Fire extinguisher available</li> </ul> <p>2. Regular maintenance of forklift</p> <p>3. (EMSG-04 Dust Control)</p> <ul style="list-style-type: none"> <li>• Using fire truck to spray water on the road</li> <li>• Regular monitoring of ambient air quality</li> </ul>

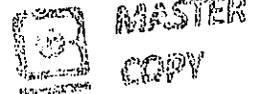


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	<p>4. Toxic waste may contaminate soil and water</p> <p>5. Solid waste may pollute soil and water</p>	<p>4. EMSG-01 (Chemicals and Reagents – Handling and Storage)</p> <p>5. EMSG-02 (Contaminated Containers)</p> <p>6. EMSG-03 (Diesel – Handling, Transport and Storage)</p> <p>7. EMSG-05 (Gas Cylinders and Tanks)</p> <p>8. EMSG-07-D (Hazardous Waste Cyanide Containers)</p> <p>9. EMSG-07-H (Hazardous Waste Batteries)</p> <p>10. EMSG-09 (Solid Waste Management)</p>
	<p><b>RISKS</b></p> <p>A. Improper handling and storage of hazardous materials pose a high risk of land contamination and other environmental impacts</p> <p>B. The department's failure to comply or implement the Company's Environmental Policy would affect the company's compliance to Company's EMS, government and other environmental requirements.</p>	<p>A. Ensure availability of Material Safety Data Sheet (MSDS), spill kits, secondary containment, proper use of PPEs and training of personnel on chemical handling</p> <p>B. Departmental Pep Talk Meetings must be conducted regularly and discussion on the Company's Environmental Policy must be part of each meeting.</p>



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DEPARTMENT	OPPORTUNITIES
<b>Assay Laboratory</b>	<ol style="list-style-type: none"> <li>1. Higher accuracy rate of assay result will lead to:               <ol style="list-style-type: none"> <li>a. Prudent use of reagents by the Mill Operations</li> <li>b. Conservation of resources through shortened milling time</li> <li>c. Reduction of generated pollutants</li> </ol> </li> <li>2. Rendering assaying services to other mining companies</li> <li>3. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Camp Administration</b>	<ol style="list-style-type: none"> <li>1. Improved company image if environmental principles and standards are:               <ol style="list-style-type: none"> <li>a. Implemented on bunk houses and staff houses</li> <li>b. Safety and wellness of occupants and employees are ensured</li> </ol> </li> <li>2. Opportunity for income generation</li> <li>3. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Claims Protection</b>	<ol style="list-style-type: none"> <li>1. Preserved company's property and assets</li> <li>2. Protected claims against environmental degradation due to small scale mining activities</li> <li>3. Opportunity for other business ventures</li> <li>4. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Community Relations</b>	<ol style="list-style-type: none"> <li>1. The company can create better partnership with the community in implementing environmental programs</li> <li>2. Environmental awareness could be raised through community projects and programs</li> <li>3. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Construction and Civil Works</b>	<ol style="list-style-type: none"> <li>1. Generated waste such as saw dust can be used for spill kit and for ashing activities</li> <li>2. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Document and Record Control</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures through the reuse and recycling of paper</li> <li>2. Reduced paper use through electronic communication</li> </ol>
<b>Electrical</b>	<ol style="list-style-type: none"> <li>1. Efficient use of energy leads to increased equipment efficiency and reduced carbon footprint</li> <li>2. Scraps, worn out tools, parts and equipment generated from repair and maintenance could be sold as scraps by the company to generate additional income</li> <li>3. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Finance</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Geology and Exploration</b>	<ol style="list-style-type: none"> <li>1. Gathered data from geologic drilling can also be used as reference by other sectors (agriculture, biological research, environment studies)</li> <li>2. Extend assistance such as geo-hazard mapping to other departments, including private and government entities</li> <li>3. Used drill casings and drill rods could be used for Company's environmental or construction projects.</li> <li>4. Generated scraps on drilling activities could be sold by the company to generate additional income</li> </ol>
<b>Human Resources</b>	<ol style="list-style-type: none"> <li>1. Reduced training cost and time through hiring of right employees</li> </ol>



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	<p>2. Cost saving measures from efficient use of energy, paper and other resources</p>
<b>Internal Audit</b>	<p>1. Timely and effective audit will lead to the following:</p> <ul style="list-style-type: none"> <li>a. Reduced accidents</li> <li>b. Improved operational efficiency</li> <li>c. Zero penalties from regulatory bodies</li> <li>d. Improved teamwork and synergy among employees</li> </ul> <p>2. Cost saving measures from efficient use of energy, paper and other resources</p>
<b>Legal</b>	<p>1. Extend free legal services to employees, community and other stakeholders</p> <p>2. Raise environmental awareness of suppliers and contractors by incorporating environmental policies on their contracts</p> <p>3. Cost saving measures from efficient use of energy, paper and other resources</p>
<b>Medical / Clinic</b>	<p>1. Emergency medical services could be also extended not only to company employees, dependents and contractors but to adjacent community surrounding the company's operations</p> <p>2. Cost saving measures from efficient use of energy, paper and other resources</p>
<b>MEPEO</b>	<p>1. Extend community awareness on environment-friendly activities by educational discussions, exhibits and by implementing environmental policies</p> <p>2. Company's Environmental Program could serve as role model to other government and private entities</p> <p>3. Cost saving measures from efficient use of energy, paper and other resources</p>
<b>Metallurgy Laboratory</b>	<p>1. Optimization of plant operating parameters will result to higher gold production with the least operating cost.</p> <p>2. Rendering laboratory services to other mining companies and conducting research works for company's future reference</p> <p>3. Cost saving measures from efficient use of energy, paper and other resources</p>
<b>Mill Mechanical</b>	<p>1. Savings from use of recycled oil</p> <p>2. Scraps, worn out tools, parts and equipment generated from repair and maintenance could be sold as scraps by the company to generate additional income</p> <p>3. Cost saving measures from efficient use of energy, paper and other resources</p>
<b>Mill Operations</b>	<p>1. If required, Ball Mill feed size is produced by the Crushing Circuit this will result to the reduction in grinding time of ore being milled. The reduction in grinding time would mean reduction in power (electricity), weaving of shell liners and steel ball which can reduce the operating cost of the plant.</p> <p>2. Recycling of used oil, used steel balls and drum</p> <p>3. Better gold recovery, if the grinding circuit will deliver the desired size or mesh or the grind ore to be fed on leaching tanks.</p> <p>4. Use of chemicals and other company resources is used wisely could result to significant monetary saving to the company.</p> <p>5. The recovery of gold from used gangi adds to company's gold production.</p> <p>6. Re-using of sacks for environmental programs</p>



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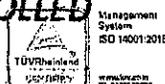
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	<ol style="list-style-type: none"> <li>7. Returning of shared used sacks to ACMP Contractors which can be re-used in sacking mined ore and waste</li> </ol>
<b>Mine Mechanical</b>	<ol style="list-style-type: none"> <li>1. Reduction of storage and disposal cost from use of recycled oil</li> <li>2. Scraps, worn out tools, parts and equipment generated from repair and maintenance could be sold as scraps by the company to generate additional income</li> <li>3. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Mine Operations</b>	<ol style="list-style-type: none"> <li>1. Worn out drill steel can be recycled and fabricated to pinch bars and claw bars</li> <li>2. Mine operations of BC has better production in terms of quantity due to the availability of production loader.</li> <li>3. Proper installation of timber support will avoid the risk of ground collapse and will prevent unwanted incident.</li> <li>4. Broken timbers may be recycled and used for other purposes such as firewood.</li> <li>5. Proper implementation of all protocols and guidelines on refueling will result to energy conservation.</li> <li>6. Efficient hauling of ore will result to better gold production.</li> <li>7. Empty sacks of ANFO can be recycled to be used for sacking of ore spillages during cleaning activity along the haulage roadways or underneath the ore chutes/storages.</li> <li>8. The water coming out from L-2000 through Auxiliary Tunnel is being pumped at pumping station near portal and recycled for the Mill operation.</li> <li>9. Properly maintained haulage roadways will result to efficient operation of the mine haulage.</li> </ol>
<b>Motor Pool</b>	<ol style="list-style-type: none"> <li>1. Savings from use of recycled oil</li> <li>2. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>MTME/Claims</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>MTS</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Operations Planning and Control</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Procurement</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Safety</b>	<ol style="list-style-type: none"> <li>1. The company's Emergency Response Team (ERT) acts as volunteers during rescue operations within and nearby communities</li> <li>2. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Security</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Special Projects</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Treasury</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>
<b>Warehouse</b>	<ol style="list-style-type: none"> <li>1. Cost saving measures from efficient use of energy, paper and other resources</li> </ol>



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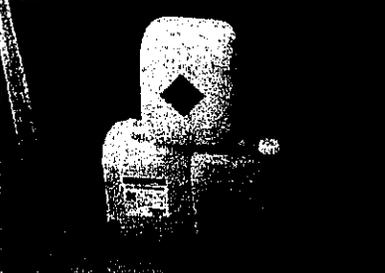
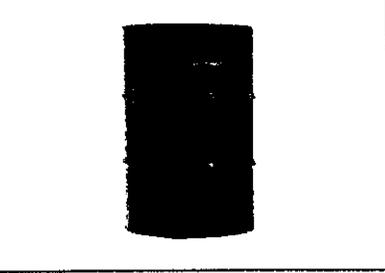
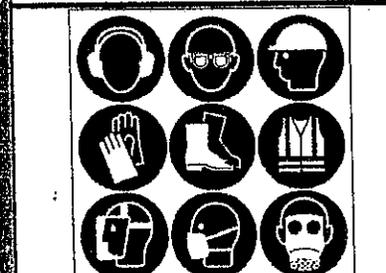
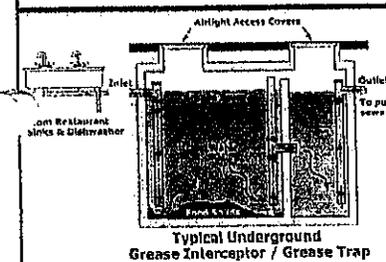
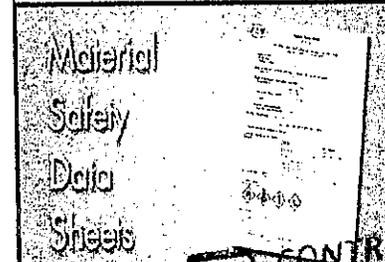


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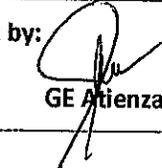
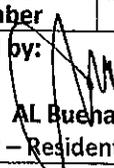


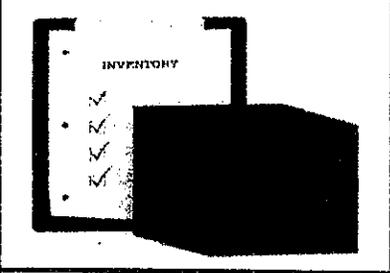
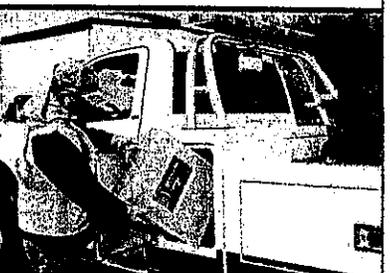
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Document Title	<b>EMS GUIDELINES</b>				
Process	<b>Diesel, Oil and Grease – Handling, Transport and Storage</b>				
Document Code	EMSG-03	Revision No.	00	Effective Date	Sept. 15, 2015
Department	Motorpool, Mine Mechanical, Mill Mechanical			Page Number	Page 1 of 2
Prepared by:	 <b>GE Atienza</b>		Reviewed by:	 <b>AL Buenavista</b> AVP – Resident Manager	

STORAGE	Long Term Storage: Steel Tanks	STORAGE	Short Term/Transport: Plastic Car Buoys	STORAGE	Short Term/Transport: Plastic/Steel Drums
					
STORAGE	Storage 6-12 months at an ambient temp higher than	STORAGE	Required secondary container	STORAGE	Proper GHS label on the containers
					
HANDLING	Use proper PPE	HANDLING	Secondary catchment when refilling/transferring container	HANDLING	Oil-soaked materials are disposed separately
					
OIL RECOVERY	Oil-Water Separator	EMERGENCY	MSDS available	EMERGENCY	Spill Kit Nearby
					

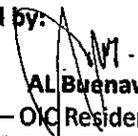

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Document Title	<b>EMS GUIDELINES</b>			 BenguetCorp	
Process	<b>Diesel, Oil and Grease – Handling, Transport and Storage</b>				
Document Code	EMSG-03	Revision No.	00	Effective Date	Sept. 15, 2015
Department	Motorpool, Mine Mechanical, Mill Mechanical			Page Number	Page 2 of 2
Prepared by:	 GE Atienza		Reviewed by:	 ISO Core Team	
			Approved by:	 AL Buenavista AVP – Resident Manager	

<b>OIL RECOVERY</b>	Use of Oil-Settling Tanks	<b>MONITORING</b>	Monitoring and recording of consumption	<b>REFUELING</b>	Only authorized personnel are allowed to refuel diesel containers
					 © Can Stock Photo
<b>REFUELING</b>	Designated underground refueling stations will be assigned	<b>EMERGENCY</b>	Use mine cars when transporting diesel underground	<b>EMERGENCY</b>	All vehicles are required to bring spill kit for emergency spills on site
					
<b>EMERGENCY</b>	Spill Kit: contains SAND, hand shovel, small dustpan, rags, plastic bag (labeled "Toxic Waste"). After soaking the spill using sand, collect the contaminated sand into a labeled plastic bag. Dispose accordingly				
					

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Document Title	<b>EMS GUIDELINES</b>			 <span style="font-size: 2em; vertical-align: middle;">"E"</span>	
Process	<b>Contaminated Water</b>				
Document Code	EMSG-12	Revision No.	00	Effective Date	September 15, 2015
Department	Mill, Mine, Mill and Mine Mechanical, Motor Pool, Environment			Page Number	Page 1 of 2
Prepared by:	 <b>GE Atienza</b>		Reviewed by:	 <b>ISO Core Team</b>	
			Approved by:	 <b>AL Buenavista</b> AVP – OIC Resident Manager	

**MINES**

Built underground drainage systems and canals to drain run-off water. These canals are drained by pump station near the portal, where a settling dam is installed before being discharged in the river. Some water are pumped to the mill (recycled)



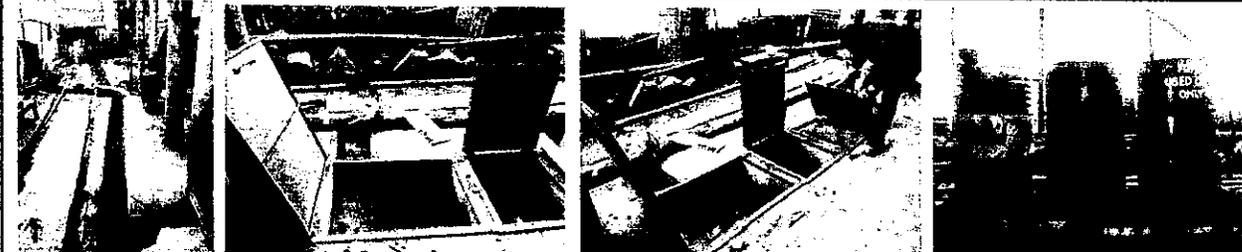
**MOTOR POOL**

Oil-water separator built in motor pool workshop/garage that "de-contaminates" used water. Collected used oil from separator is stored in a hazard waste container to be disposed appropriately



**MINE MECHANICAL**

Oil-water separator built in mechanical workshop that "de-contaminates" used water. Collected used oil from separator is stored in a hazard waste container to be disposed appropriately

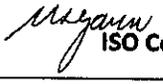
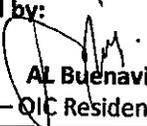


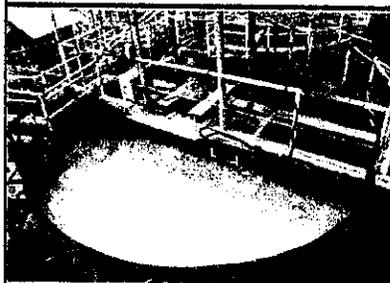
**MILL**

All discharge (pulp, tails, contaminated water) from the mill (from crushing, grinding to refining and smelting) goes into the Tails Treatment Facility. The solution is treated with SMBS before being pumped to Tails Storage Facility




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Document Title	<b>EMS GUIDELINES</b>			 BenguetCorp	
Process	Contaminated Water				
Document Code	EMSG-12	Revision No.	00	Effective Date	September 15, 2015
Department	Mill, Mine, Mill and Mine Mechanical, Motor Pool, Environment			Page Number	Page 2 of 2
Prepared by:	 GE Atienza		Reviewed by:	 ISO Core Team	
			Approved by:	 Al Buenavista AVP – QIC Resident Manager	

<b>MONITORING</b>	Effluent Monitoring	<b>MONITORING</b>	Monitor tanks to avoid overflow	<b>MAINTENANCE</b>	Regular cleanup of canal/drain
					
<b>MAINTENANCE</b>	Regular check of discharge valves pipes and connections				


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**GREENTEK**

ENVIRONMENTAL  
ENGINEERING  
SERVICES

ANNEX

"F"

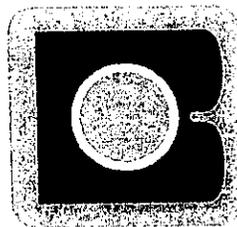
# **SOURCE EMISSION TEST REPORT**

**PARTICULATE MATTER, SULFUR OXIDES  
NITROGEN OXIDES & CARBON MONOXIDE**

**Thermo Digestion Chamber with Acid Fume Scrubber (Chamber Area)  
Thermo Digestion Chamber with Acid Fume Scrubber (Parting Area)**

*Reference No.: GEES-SST-2002-054*

**Prepared for:**



**BENGUET CORPORATION  
ACUPAN CONTRACT MINING PROJECT  
Balatoc, Virac, Itogon, Benguet**

**Sampling Date: February 27 and 28, 2020**

**Report Date: May 27, 2020**

# REPORT CERTIFICATION

**SOURCE EMISSION TEST REPORT**  
*Reference No. GEES-SST-2002-054*

**BENGUET CORPORATION**  
**ACUPAN CONTRACT MINING PROJECT**  
Balatoc, Virac, Itogon, Benguet

**Thermo Digestion Chamber with Acid Fume Scrubber (Chamber Area)**  
**Thermo Digestion Chamber with Acid Fume Scrubber (Parting Area)**

The sampling performed for this report was carried out under my direction and supervision. The analytical results that were performed by sub-contracted laboratories had been verified and were found to be in order. Thus, I hereby certify, to the best of my knowledge, that this test report is authentic and accurate.

Signature: \_\_\_\_\_

Date: MAY 27, 2020

**Ms. Maricon D. Nuñez**  
**QA/QC Manager**  
**SAT No. 2018-92**

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Appendix A	Summary of Results, Example Calculations
Appendix B	Field Data Sheets
Appendix C	Facility Process Data
Appendix D	Analytical Data
Appendix E	Equipment Calibration Records
Appendix F	Test Participants
Appendix G	Test Plan, Facility Permit and Certificate of Accreditation

**SECTION 1.0****INTRODUCTION**

Benguet Corporation - Acupan Contract Mining Project contracted Greentek Environmental Engineering Services to conduct stationary stack emission tests on its two (2) units Thermo Digestion Chamber Area with Acid Fume Scrubber in its facility located in Balatoc, Virac, Itogon, Benguet. Emission testing consists of three runs for Particulate Matter (PM), Sulfur oxides (SO<sub>x</sub>), Nitrogen oxides (NO<sub>x</sub>) and Carbon monoxide (CO) was performed last February 27 and 28, 2020 as part of their environmental program and in determination of facility's compliance as compared to emission limits defined in the Philippine Clean Air Act of 1999 (PCAA) and Implementing Rules and Regulations (IRR). Volumetric flow testing was performed to allow calculation of mass emission rates for potential use in calculating emission factors. A list of participants in the project is included in Appendix F.

A summary and discussion of the test results are provided in Section 2. The source description, test procedures and quality assurance activities are described in the subsequent sections. All supporting field data, analytical reports, calibration records, project participants, test plan, and a copy of the facility permit are provided in the appendices.

## SECTION 2.0

### SUMMARY OF RESULTS

Tables 2-1 and 2-2 present the summary of the test results for the source tested in comparison to the National Emission Standards identified in IRR Part VII Rule XXV Table 2. Detailed descriptions of the specific run information and the example calculations used to calculate the tabular summary are attached in Appendix A. The raw field data used to prepare the run summary information in Appendix A are included in Appendix B. Emissions have been corrected to the standard conditions of 25°C and 760mmHg on a dry-basis (unless otherwise indicated).

The Greentek Monitoring Logsheets completed by the facility's representative indicates that the sources were installed on August 30, 2014, when the implementation of the IRR was already applied. The applicable standards applied to the two (2) units Thermo Digestion Chamber with Acid Fume Scrubber under the CAA/IRR as new source, other stationary source located in an industrial area.

The results of testing indicate that the average PM, SO<sub>x</sub>, NO<sub>x</sub> and CO concentrations are within the applicable IRR standards. The concentrations measured have not been corrected to a standard Oxygen or Carbon dioxide percentage as these corrections are not included in the source permit (per DAO 2004-26 Rule XIX Section 12 Amendment to Rule XIX of the IRR).

A description of any method deviations and quality assurance assessments is included in Sections 4 and 5 of this report. Based on a review of the sampling data, facility operating information, test method description and quality assurance results, the average of the three test runs are judged to be representative of the source and suitable for comparison to the regulatory limits.

TABLE 2-1

**SUMMARY OF TEST RESULTS**  
**Thermo Digestion Chamber with Acid Fume Scrubber (Chamber Area)**  
**N 16°21'33" E 120°39'31"**  
**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
**Balatoc, Virac, Itogon, Benguet**

Run Number	RUN 1	RUN 2	RUN 3	Average	CAA Limit
Sampling Date	27-Feb-20	27-Feb-20	27-Feb-20		
Sampling Time	1122H-1238H	1344H-1501H	1525H-1642H		mg / Ncm
<b>Source Data</b>					
Volumetric Flow Rate (dry std), Ncmm	34	33	33	33	
Volumetric Flow Rate (actual), Ncmm	37	37	38	37	
Moisture Content, %	2.5	2.9	3.5	3.0	
Stack Gas Temperature, °C	20	22	25	22	
Carbon dioxide Concentration, %	0.0	0.0	0.0	0.0	
Oxygen Concentration, %	20.0	20.0	20.0	20.0	
<b>Process Rate Information</b>					
tons of gold ores	508.48	508.48	508.48	508	
% of Load during test	100%	100%	100%	100%	
Hours of operation per year	8,600	8,600	8,600	8,600	
<b>Particulate Matter (as PM) Emissions</b>					
Concentration, mg/Ncm	6	6	11	8	150
Mass Emission Rate, kg/hr	0.0119	0.0114	0.0225	0.0153	
Annual Emission Rate, MT/yr*	0.1027	0.0978	0.1937	0.1314	
<b>Sulfur oxides (as SO<sub>x</sub>) Emissions</b>					
Concentration, mg/Ncm	1	1	1	1	700
Mass Emission Rate, kg/hr	0.00239	0.00227	0.00225	0.00230	
Annual Emission Rate, MT/yr*	0.02054	0.01956	0.01937	0.01982	
<b>Nitrogen oxides (as NO<sub>2</sub>) Emissions</b>					
Concentration, mg/Ncm	298	413	404	372	500
Mass Emission Rate, kg/hr	0.602	0.823	0.798	0.741	
Annual Emission Rate, MT/yr*	5.177	7.082	6.859	6.372	
<b>Carbon monoxide (as CO) Emissions</b>					
Concentration, mg/Ncm	11.5	11.5	14.9	12.6	500
Mass Emission Rate, kg/hr	0.0231	0.0228	0.0294	0.0251	
<b>DENR Classification</b>	Other Stationary Source (New Source)				

\* Annual emissions are presented as metric tons (MT) per year based on the reported plant operating hours per year.

**Remarks:**

- a. Particulate Matter (as PM) Emissions : Within the standard of 150 mg/Ncm
- b. Sulfur oxides (as SO<sub>x</sub>) Emissions : Within the standard of 700 mg/Ncm
- c. Nitrogen oxides (as NO<sub>2</sub>) Emissions : Within the standard of 500 mg/Ncm
- c. Carbon monoxide (as CO) Emissions : Within the standard of 500 mg/Ncm

TABLE 2-2

**SUMMARY OF TEST RESULTS**  
**Thermo Digestion Chamber with Acid Fume Scrubber (Parting Area)**  
**N 16°21'33" E 120°39'31"**  
**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
**Balatoc, Virac, Itogon, Benguet**

Run Number Sampling Date Sampling Time	RUN 1 28-Feb-20 0928H-1044H	RUN 2 28-Feb-20 1110H-1225H	RUN 3 28-Feb-20 1340H-1456H	Average	CAA Limit mg / Ncm
<b>Source Data</b>					
Volumetric Flow Rate (dry std), Ncmm	34	33	33	33	
Volumetric Flow Rate (actual), Ncmm	36	37	37	37	
Moisture Content, %	1.8	2.4	2.7	2.3	
Stack Gas Temperature, °C	15	19	21	18	
Carbon dioxide Concentration, %	1.0	1.0	1.0	1.0	
Oxygen Concentration, %	20.0	20.0	20.0	20.0	
<b>Process Rate Information</b>					
tons of gold ores	511.03	511.03	511.03	511	
% of Load during test	100%	100%	100%	100%	
Hours of operation per year	8,600	8,600	8,600	8,600	
<b>Particulate Matter (as PM) Emissions</b>					
Concentration, mg/Ncm	7	4	7	6	150
Mass Emission Rate, kg/hr	0.0137	0.0089	0.0134	0.0120	
Annual Emission Rate, MT/yr*	0.1174	0.0767	0.1149	0.1030	
<b>Sulfur oxides (as SO<sub>x</sub>) Emissions</b>					
Concentration, mg/Ncm	2	1	2	2	700
Mass Emission Rate, kg/hr	0.00455	0.00223	0.00445	0.00375	
Annual Emission Rate, MT/yr*	0.03914	0.01918	0.03830	0.03221	
<b>Nitrogen oxides (as NO<sub>2</sub>) Emissions</b>					
Concentration, mg/Ncm	33	66	81	60	500
Mass Emission Rate, kg/hr	0.0671	0.133	0.162	0.121	
Annual Emission Rate, MT/yr*	0.5772	1.144	1.390	1.0370	
<b>Carbon monoxide (as CO) Emissions</b>					
Concentration, mg/Ncm	12.6	11.5	12.6	12.2	500
Mass Emission Rate, kg/hr	0.0256	0.0229	0.0250	0.0245	
<b>DENR Classification</b>	<b>Other Stationary Source (New Source)</b>				

\* Annual emissions are presented as metric tons (MT) per year based on the reported plant operating hours per year.

**Remarks:**

- a. Particulate Matter (as PM) Emissions : Within the standard of 150 mg/Ncm
- b. Sulfur oxides (as SO<sub>x</sub>) Emissions : Within the standard of 700 mg/Ncm
- c. Nitrogen oxides (as NO<sub>2</sub>) Emissions : Within the standard of 500 mg/Ncm
- c. Carbon monoxide (as CO) Emissions : Within the standard of 500 mg/Ncm

**SECTION 3.0****PROCESS DESCRIPTION AND OPERATION**

Benguet Corporation - Acupan Contract Mining Project uses the two (2) units thermo digestion chamber in their facility located at Balatoc, Virac, Itogon, Benguet.

During sampling, the two (2) units Thermo Digestion Chamber with Acid Fume Scrubber were using Electricity as their fuel and operating 100% of their rated capacity. According to the facility representative, the Thermo Digestion Chamber with Acid Fume Scrubber for Chamber and Parting Area were operating for about 8,600 hours per year. The production output during sampling for Chamber Area and Parting Area were 508.48 tons and 511.03 tons of gold ores, respectively. The emission for the said sources is presented in Tables 2-1 and 2-2 on a yearly basis using these hours of operation.

The Monitoring Logsheet and the Process Facility Data completed by Benguet Corporation - Acupan Contract Mining Project representative during sampling and the Photo Documentation conducted by the Greentek Environmental Engineering Services Personnel are included in Appendix C.

**SECTION 4.0****SAMPLING AND ANALYTICAL PROCEDURES**

All sampling and analytical procedures were those recommended by the Philippines Department of Environmental and Natural Resources (DENR) and United States Environmental Protection Agency (USEPA). This section provides brief descriptions of the sampling and analytical procedures with the focus primarily on any clarifications, deviations or modifications to the stated test methods.

The test team utilized the following EPA Reference Methods:

Method 1	Sample and Velocity Traverse Point Locations
Method 2	Stack Gas Velocity and Volumetric Flow Rate (S-type Pitot)
Method 3	Gas Analysis for Determination of Dry Molecular Weight
Method 4	Determination of Moisture Content in Stack Gases
Method 5	Determination of Particulate Matter Emissions from Stationary Sources
Method 6	Determination of Sulfur Dioxide Emissions from Stationary Sources
Method 7	Determination of Nitrogen Oxides Emissions from Stationary Sources
Method 10	Determination of Carbon Monoxide Emissions from Stationary Sources

**4.1 Methods 1-2 Stack Velocity****4.1.1 Sampling Points**

The number and location of the sampling points for each source were determined according to the procedures outlined in EPA Method 1. Two test ports were present in the Smoke Stacks in same horizontal plane forming two sampling axes at 90° to each other. A total of 24 points were sampled with 12 points on each axis for each source. Details of the number and location of sample points are included in the field data sheets in Appendix B.

**4.1.2 Cyclonic Flow Check**

A type-S pitot tube assembly, liquid manometer, and a universal protractor (angle finder) were used to determine the rotation angles at each of the sampling or velocity traverse points. The pitot tube was positioned at each point so that the planes of the

face openings of the pitot tube were perpendicular to the cross-sectional plane and the rotational angles were determined by rotating the pitot tube until a null reading was obtained on the manometer. When the null angle was obtained on the manometer, the yaw angle of the Pitot tube was recorded. The test location's average absolute value of the rotation angle was less than 20°, which met the Method 1 criteria.

#### **4.1.3 Flue Gas Velocity**

The flue gas velocity and volumetric flow rate were determined according to the procedures outlined in EPA Method 2. Velocity head measurements ( $\Delta P$ ) were made using Type S pitot tubes conforming to the geometric specifications outlined in EPA Method 2. Accordingly, each has been assigned a coefficient of 0.84. Differential pressures were measured with an inclined manometer. Flue gas temperatures were measured with chromel-alumel thermocouples equipped with digital readouts.

#### **4.2 Method 3 Flue Gas Composition**

The flue gas composition and molecular weight were determined using EPA Method 3. An integrated flue gas sample was collected from each particulate test point at a constant rate into a Tedlar bag during each EPA Method 5 sampling run. Fyrite analyzers were used to determine the oxygen and carbon dioxide concentrations of the samples.

#### **4.3 Method 4 Flue Gas Moisture Content**

The moisture content was determined by EPA Method 4 in conjunction with EPA Method 5/6, which is discussed in the following section.

#### **4.4 Method 5/6 Particulate Matter and Sulfur oxides**

##### **4.4.1 Sample Collection**

Samples were withdrawn isokinetically from the source using an EPA Method 5 sampling train. The sampling train consisted of a stainless steel nozzle, a heated glass probe with a Type S Pitot tube attached, a heated filter, four chilled impingers, and a metering console. The particulate sample was collected on a glass fiber filter maintained at a temperature of  $120^{\circ}\text{C} \pm 14^{\circ}\text{C}$ . The first two impingers each contained 100mL of 3% Hydrogen peroxide, the third remained empty, and the fourth contained pre-weighed silica gel. Three 72-minute replicate test runs were performed for each source.

As described in EPA Method 6, the isopropanol impingers designed to separately measure the SO<sub>3</sub> was not used. The peroxide impingers allowed collection of both SO<sub>2</sub> and SO<sub>3</sub> to simultaneously determine SO<sub>x</sub>. As a result of removing the isopropanol impingers, the sample purge at the end of the test run was not necessary and therefore not performed.

#### **4.4.2 Sample Recovery**

Sample recovery was performed around the Boiler Area. The filter was removed from the filter holder and placed in a petri dish. The nozzle, probe, and front-half of the filter holder were rinsed with acetone into a 500 mL polypropylene bottle. The interior of the probe and nozzle were brushed repeatedly to remove any adhering PM from the inside surfaces. The brushes and interior surfaces were rinsed again into the flask and then combined with the rinses into the polypropylene bottle. The volume of water vapor condensed in the impingers and the volume of water vapor collected in the silica gel were summed and entered into moisture content calculations.

The impingers were weighed individually and the contents from impingers 1-3 were placed in a 500 mL polyethylene sample bottle. The three impingers and connecting glassware were rinsed with distilled deionized (DI) water into the bottle containing the impinger's contents. The silica gel was returned to the original container after weighing.

#### **4.4.3 Sample Analysis**

EPA Method 5 analytical procedures were used to analyze the filter and front-half acetone rinse for filterable particulate matter. EPA Method 6 procedures were utilized to determine the mass of sulfur oxides in the impinger's contents. Blank samples of the acetone and peroxide solutions, sufficient to determine potential contamination or bias from the sampling media, were submitted to the laboratory for analysis with the stack samples.

### **4.5 Method 7 Nitrogen Oxides**

#### **4.5.1 Sample Collection**

Nitrogen oxides (composed of both NO and NO<sub>2</sub>) were determined for each test run according to EPA Reference Method 7, "Determination of Nitrogen Oxide Emissions from Stationary Sources". The sampling train consisted of glass collection flask

connected to a heated glass probe with glass wool at the tip to function as a filter. The glass collection flask contained 25 mL of the nitrogen oxide absorbing solution. The flask was evacuated to within 75 mm Hg (3 inches) of absolute pressure, or less. The initial flask temperature and evacuated pressure were recorded. The probe was placed into the stack and connected to the flask. After purging the probe, a grab sample was drawn into the flask. The flask was shaken for five minutes and then transported to the warehouse. Three flasks were collected for each test run (nine flasks for the three test runs) simultaneous with the Method 5 testing.

#### **4.5.2 Sample Recovery**

After a minimum of 16 hours, the flask was shaken for two minutes and then the final flask temperature and pressure were measured. The contents were transferred to a polyethylene bottle and the flask was rinsed per the test method. The pH was adjusted to between 9 and 12.

#### **4.5.3 Sample Analysis**

The samples were prepared for analysis as per EPA Method 7 and then measured colorimetrically using a spectrophotometer.

#### **4.6 Method 10 Carbon Monoxide**

The integrated sample that was collected per EPA Method 3 for oxygen and carbon dioxide was also used for EPA Method 10 analysis for carbon monoxide (see Section 4.2). An integrated flue gas sample was collected from each particulate test point at a constant rate into a Tedlar bag during each EPA Method 5 sampling run. The sample was analyzed at the Greentech Laboratory and Allied Services, Inc. in accordance with EPA Method 10 using the non-dispersive infrared (NDIR) analyzer Model 48i / SN-608216118. Samples were analyzed using the 0-1,000 ppm range and using a 0-499.3 ppm analytical span. The analyzer has a built-in sample pump and was filtered prior to introduction to the analyzer. Analytical results were recorded on the CO analytical data sheet in ppm from the analyzer display. The value was recorded several minutes after the sample was first introduced and a stable concentration reading was observed.

## SECTION 5.0

### QA/QC PROCEDURES AND RESULTS

The objective of an internal quality assurance and quality control (QA/QC) program is to assure that the precision and accuracy of all data generated are scientifically sound and documented to be "in control". To accomplish this, standardized methods or procedures were used. They must be validated for their intended use, rigorously followed, and data reported with quality indicators (precision, accuracy, completeness, representativeness, etc.).

As a guide, Greentek uses the EPA document *Quality Assurance Handbook for Air Pollution Measurement System*, Volume III (EPA-600/4-77-027b). The Greentek's QA/QC plan has incorporated certain considerations to the production of quality data in all of its' sampling programs regardless of the scope and purpose of the testing. These considerations include:

- Planning the individual test programs by preparation and submission of a Source Specific Test Plan to DENR-EMB (included in Appendix G);
- Using reliable and well-maintained calibrated equipment;
- Using appropriate forms for recording sampling data (Appendix B);
- Using calibration and audit gases traceable to the National Institute of Standards and Technology (NIST);
- Controlling errors by checking data inputs and performing redundant calculations; and
- Adhering to the established Test Plan.

#### 5.1 Particulate Matter Sampling Procedures

Particulate matter (PM) was determined according to EPA Method 5 in "*Determination of Particulate Emissions from Stationary Sources*". Appropriate performance of this test method includes the performance of EPA Methods 1,2,3, and 4. The following items describe the primary quality control measures that the Greentek used to ensure a representative sample that met the method precision and bias criteria, was collected:

- Measurements of the upstream and downstream disturbances (to the velocity at the test location) and selection of the appropriate number of the sampling test points to determine a representative stack gas velocity.
- Performance of a cyclonic flow check.
- Calibration and QA/QC checks of the dry gas meter, thermocouples, pitot tubes, nozzles, temperature display, and manometer assembly.
- Leak checks of the entire Method 5 sampling train were performed before and after each sampling run. All leak checks and leakage rates were documented on the relevant field test data sheets. The acceptance criteria for the Method 5 train post sample leak check is a leak rate of  $<0.00057 \text{ m}^3/\text{minute}$  at the highest vacuum obtained during the test run.
- Maintenance of the chilled impinger system below  $20^\circ\text{C}$  (measured at the silica gel outlet).
- Collection of an integrated Tedlar bag sample for oxygen, carbon dioxide and carbon monoxide.
- Maintenance of the isokinetic sampling rate at 90–110% of the actual gas stream velocity.
- Maintenance of the heating system for the filter and sampling probe at  $120^\circ\text{C}$  ( $\pm 14^\circ\text{C}$ ).
- Proper recovery of the sample.
- Accurate gravimetric analyses of samples.
- Collection and analyses of representative “blank” samples.

Equipment calibration procedures are described below.

## **5.2 Particulate Matter Sampling Equipment**

### **5.2.1 Barometer**

Barometric pressure values for the testing period were recorded from a calibrated digital barometer on-site at the platform level. Digital barometer was calibrated at the Instrument Development and Research Unit (IDRU) of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) in Diliman, Quezon City, Metro Manila. A copy of the barometer calibration form is in Appendix E.

### **5.2.2 Probe Nozzle**

The probe nozzles used in this test were calibrated initially by the manufacturer and prior to use by the field sampling crew by checking for dimension roundness. This was done by making three separate measurements using alternative inside diameters and calculating the average. A micrometer with a minimum tolerance of 0.025 mm was used for measuring. If a deviation of more than 0.1 mm is found between any measurements, the nozzle is either discarded or repaired and re-measured. A copy of the nozzle calibration forms is in Appendix E.

### **5.2.3 Pitot Tube**

Each pitot tube used in sampling meets the design specifications for Type S pitot tubes in EPA Method 2. Therefore, in accordance with Method 2 procedures, a baseline coefficient ( $C_p$ ) of 0.84 was assigned to each pitot tube. Calibration at the manufacturer for pitot face-opening alignment included measuring the external tubing diameter (dimension  $D_t$ ), the base-to-opening misalignment angles, with all terms as described in Figures 2-2 and 2-3 of EPA Method 2. Pitot tubes were visually inspected at the completion of the test to ensure structural integrity. A copy of the calibration check is included in Appendix E.

### **5.2.4 Calibration Meter and Metering System**

The meter console dry gas meter calibration was performed in accordance with EPA Method 5 section 16, using critical orifices. The meter is allowed to warm up and is leak checked using the specifications in Method 5 of no detectable leak for a period of one minute. The dry gas meter is calibrated with five orifices with orifice values that ranged from 14.50 to 116.0 mm of water. For each critical orifice the meter coefficient ( $\gamma$  or gamma) and the orifice pressure differential ( $\Delta H@$ ) were calculated. The criterion for the gamma difference for each point is not to exceed  $\pm 0.02$  of the average of all the points. The orifice pressure differential that equates to 0.0212 m<sup>3</sup>/min at standard conditions ( $\Delta H@$ ) was then calculated for each point and averaged. A copy of the metering system calibration is included in Appendix E.

### **5.2.5 Post-Test Meter Calibration**

Post-test meter calibrations to determine the  $\gamma$  (or  $Y_{qa}$ ) were conducted on the dry gas meter after the test to check their accuracy against the original pretest calibration. This post-test calibration was made using the alternative procedure defined by EPA as ALT-

009. This procedure is performed on-site using the data collected for each of the test runs. It is preferred by EPA over the post-test procedure identified in Method 5 Section 10.3.2 because it 1) eliminates the question of possible meter damage during transport *after* the emission test; and, 2) because the calibration data are available in the field immediately following the test, it eliminates the costly travel, remobilization, and scheduling of a retest should the meter fail the post-test calibration. A copy of the post-test calibration is included in Appendix E of this Test Report. A complete copy of EPA ALT-009 is available on the EPA website.

### **5.2.6 Thermocouples and Digital Temperature Indicators**

Thermocouples were calibrated by comparing them against an ASTM-3F mercury-in-glass thermometer at approximately 0°C (ice water), ambient temperature and approximately 100°C (boiling water). A post-test calibration was performed in accordance with EPA ALT-011 using a single point calibration against an ASTM mercury-in-glass thermometer in addition to a continuity check of the thermocouple. The continuity check involved verifying that the thermocouple read-out trended in the appropriate direction when exposed to a temperature change. A copy of the original calibration and the ALT-011 post-test QA check is included in Appendix E. A complete copy of EPA ALT-011 is available on the EPA website.

Digital indicators were checked by introducing a series of millivolt signal strengths to the input and comparing the indicator reading with the actual signal strength. Acceptable calibration error does not exceed 1.5 percent when temperatures are expressed in °K.

### **5.3 Particulate Matter Analysis**

The primary quality control procedures involved in the particulate matter analysis include use of a properly calibrated analytical balance, use of appropriately specified sampling media (filters and acetone), and following the Method 5 analytical procedures. The laboratory followed the procedures specified in the method and calibrated the analytical balance using Class S weights. A routine calibration log is maintained at the laboratory with the analytical balance. The acetone probe rinse was taken to dryness at ambient temperature in a laboratory fume hood. Pre and post measurements were made until replicate analyses at least 6 hours apart agreed within 0.5 mg. The summary gravimetric analysis data sheet presents the final measurement results while any intermediate measurements are maintained in a sample log at the laboratory.

The field blank acetone samples for Acid Fume Scrubber had residues that were slightly greater than the 0.001% correction allowed by the test method. The laboratory did not report any problems relating to samples or analytical procedures. The probe rinse value was blank corrected on its mass value using the allowable 0.001% of the acetone volume. The blank corrections were insignificant as to the PM compliance status of the acid fume scrubber.

#### **5.4 Oxygen and Carbon Dioxide**

The primary quality control procedures involved in the analysis of the oxygen (O<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>) samples include collection of a representative bag sample, use of fresh absorbing solutions and performance of an audit check of the Fyrite analyzers. The Fyrite analyzers are checked against the EPA Protocol calibration gas for oxygen and carbon monoxide prior to sample analysis. The field staff followed the procedures specified in the method.

#### **5.5 Sulfur Oxides**

This sample procedure for sulfur oxides (SO<sub>x</sub>) was combined with EPA Method 5 as described in Section 4.4. The primary QA/QC procedures utilized during testing were as follows:

- Use of fresh chemical solutions (mixed daily).
- Proper recovery of the sample.
- Accurate analyses (using barium-thorin titration) of samples.
- Collection and analyses of representative "blank" samples.
- Calibration and QA/QC checks of the sampling system.

The laboratory followed the procedures specified in the method. Blank samples from the field test were analyzed with the samples and demonstrated a very small amount of contamination from the chemical reagents used in the test program. The presented results were blank corrected as per method requirements.

#### **5.6 Nitrogen Oxides**

This sample procedure for nitrogen oxides (NO<sub>x</sub>) is described in Section 4.5. The primary QA/QC procedures utilized during testing and analysis were as follows:

- Use of fresh chemical solutions.
- Proper recovery of the sample.
- Accurate analyses (using spectrophotometry) of samples.
- Calibration of the spectrophotometer and verification of linearity.
- Calibration and QA/QC checks of the sampling system.

The laboratory followed the procedures specified in the method. The spectrophotometer was calibrated on the day the samples were analyzed and verified to be linear over the range to be measured.

### **5.7 Carbon Monoxide**

This sample procedure for carbon monoxide (CO) is described in Section 4.3. The primary QA/QC procedures utilized during the testing and analysis were as follows:

- Collection and analysis of representative gas samples.
- Maintenance of a leak free bag prior to sampling.
- Calibration of CO NDIR instrument prior to analysis.
- Analysis of samples within three days of collection.
- Strict acceptance to span and drift criteria (two percent & ten percent, respectively).
- Use of EPA Protocol 1 calibration gases (although the method allows use of certified rather than Protocol 1 gas standards for calibration.)
- Interference check for carbon dioxide (or use of an ascarite trap to remove CO<sub>2</sub>).

The laboratory results for carbon monoxide indicates that the analyst of Greentech Laboratory and Allied Services followed the procedures specified in the method. The CO analyzer met the calibration and drift requirements in the test method. No audit samples, separate from the calibration gas, are specified in EPA Method 10. An interference check was performed on the CO analyzer prior to any analysis, as described in EPA Method 20, to ensure there is no interference from carbon dioxide, oxygen, sulfur oxides, and nitrogen oxides. The CO analyzer includes both a linearity verification of the 0-1,000 ppm scale and an interference check for carbon dioxide (for 10% and 22% CO<sub>2</sub>). Because the analyzer met the acceptance limit for interference, no ascarite trap to remove CO<sub>2</sub> was used during analysis.

**APPENDIX TABLE**  
**TEST RESULTS**  
**PARTICULATE MATTER, SULFUR OXIDES, NITROGEN OXIDES, & CARBON MONOXIDE**  
**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
**Thermo Digestion Chamber with Acid Fume Scrubber (Chamber Area)**  
**Balatoc, Virac, Itogon, Benguet**

	RUN NUMBER	RUN 1	RUN 2	RUN 3	AVERAGE
	RUN DATE	27-Feb-20	27-Feb-20	27-Feb-20	
	RUN TIME	1122H-1238H	1344H-1501H	1525H-1642H	
<b>MEASURED DATA</b>					
(Y)	Meter Box, Y	0.9999	0.9999	0.9999	
(Delta H)	Avg Delta H, mm H <sub>2</sub> O	16.5	18.1	18.0	
(Pbar)	Barometric Pressure, mm Hg	692.4	690.4	689.9	
(Vm)	Meter Volume, m <sup>3</sup>	0.9586	0.9980	1.0020	
(Tm)	Avg Meter Temp, °C	35	36	36	
(Pg)	Static Pressure, mm H <sub>2</sub> O	-1.2	-1.2	-1.2	
(Ts)	Avg Stack Temp, °C	20	22	25	
(Vlc)	Water Collected, mg	30.0	31.5	28.0	
(%CO <sub>2</sub> )	Carbon dioxide, %	0.0	0.0	0.0	0.0
(%O <sub>2</sub> )	Oxygen, %	20.0	20.0	20.0	20.0
(%N <sub>2</sub> )	Nitrogen, %	80.0	80.0	80.0	
(Cp)	Pitot Tube Coefficient	0.84	0.84	0.84	
(sqrtDeltaP)avg	Avg Sqrt Delta P, (mm H <sub>2</sub> O) <sup>½</sup>	2.299	2.290	2.294	
(time)	Sample Time, min	72	72	72	
(Dn)	Nozzle Diameter, mm	6.000	6.000	6.000	
<b>CALCULATED DATA</b>					
(An)	Nozzle Area, m <sup>2</sup>	2.83E-05	2.83E-05	2.83E-05	
(Vmstd)	Standard Meter Volume, Ncm	0.8456	0.8762	0.8777	
(Ps)	Stack Pressure, mm Hg	692.3	690.3	689.6	
(%H <sub>2</sub> Omeas)	Moisture (measured), %	4.5	4.7	4.2	4.5
(%H <sub>2</sub> Osat)	Moisture (at saturation), %	2.5	2.9	3.5	
(%H <sub>2</sub> O)	Moisture (actual), %	2.5	2.9	3.5	3.0
(Vwstd)	Standard Water Vapor Volume, Ncm	0.041	0.043	0.038	
(Mfd)	Dry Mole Fraction	0.975	0.971	0.965	
(MWd)	Molecular Weight-dry, gm/gm-mole	28.80	28.80	28.80	
(MWs)	Molecular Weight-wet, gm/gm-mole	28.53	28.48	28.42	
(Vs)	Velocity, m/s	8.2	8.2	8.3	8.3
(A)	Stack Area, m <sup>2</sup>	0.08	0.08	0.08	
(%EA)	Percent Excess Air, %	126	126	126	126
Qa (act)	Actual Volumetric Flow, acmm	37	37	38	37
Qs (std)	Standard Volumetric Flow, dscmm	34	33	33	33
(I)	Isokinetic Rate, %	93.1	97.8	98.8	
<b>PARTICULATE EMISSIONS DATA</b>					
(mg)	Mass, mg	5	5	10	
(mg/Ncm)	Concentration, mg/Ncm	6	6	11	8
(kg/hr)	Emission Rate, kg/hr	0.0119	0.0114	0.0225	0.0153
<b>SULFUR OXIDES (as SO<sub>2</sub>) EMISSIONS DATA</b>					
(mg)	Mass, mg	1	1	1	
(mg/Ncm)	Concentration, mg/Ncm	1	1	1	1
(kg/hr)	Emission Rate, kg/hr	0.0024	0.0023	0.0023	0.0023
<b>NITROGEN OXIDES (as NO<sub>2</sub>) EMISSIONS DATA</b>					
(mg/Ncm)	Concentration, mg/Ncm	298	413	404	372
(kg/hr)	Emission Rate, kg/hr	0.6019	0.8234	0.7976	0.7410
<b>CARBON MONOXIDE EMISSIONS DATA</b>					
(ppm)	Concentration, ppm dry	10.0	10.0	13.0	11.0
(mg/Ncm)	Concentration, mg/Ncm	11.5	11.5	14.9	12.6
(kg/hr)	Emission Rate, kg/hr	0.0231	0.0228	0.0294	0.0251

**EXAMPLE CALCULATIONS**  
**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
**Thermo Digestion Chamber with Acid Fume Scrubber (Chamber Area)**  
**RUN 1**

**VOLUME OF DRY GAS SAMPLED AT STANDARD CONDITIONS**

$$Vmstd = Y \cdot 0.392 \cdot Vm \cdot \left( \frac{[ Pbar + \frac{(\Delta H / 13.6)}{273 + Tm} ]}{1} \right)$$

$$Vmstd = 0.9999 \cdot 0.392 \cdot 0.9586 \cdot \left( \frac{[ 692.4 + \frac{(16.5 / 13.6)}{273 + 35} ]}{1} \right) = 0.8456 \text{ Ncm}$$

**VOLUME OF WATER VAPOR AT STANDARD CONDITIONS**

$$Vwstd = 0.001358 \cdot Vic$$

$$Vwstd = 0.001358 \cdot 30.0 = 0.041 \text{ Ncm}$$

**PERCENT MOISTURE, BY VOLUME, AS MEASURED IN FLUE GAS**

$$\% H_2O = \left( \frac{Vwstd}{Vwstd + Vmstd} \right) \cdot 100$$

$$\% H_2O = \left( \frac{0.041}{0.041 + 0.8456} \right) \cdot 100 = 4.6 \%$$

**ABSOLUTE FLUE GAS PRESSURE**

$$Ps = Pbar + \frac{Pg}{13.6}$$

$$Ps = 692.4 + \frac{-1.2}{13.6} = 692.3 \text{ mm Hg}$$

**DRY MOLE FRACTION OF FLUE GAS**

$$Mfd = 1 - \frac{\% H_2O}{100}$$

$$Mfd = 1 - \frac{2.5}{100} = 0.975 \text{ (unitless)}$$

**PERCENT EXCESS AIR**

$$\% EA = \left( \%O_2 - 0.5 \cdot \%CO \right) / \left[ 0.264 \cdot \%N_2 - \left( \%O_2 - (0.5 \cdot \%CO) \right) \right] \cdot 100 \%$$

$$\% EA = \left( 20 - 0.5 \cdot 0.0 \right) / \left[ 0.264 \cdot 79.999 - \left( 20 - (0.5 \cdot 0.0) \right) \right] \cdot 100 \%$$

$$\% EA = 126 \text{ \% excess air}$$

**DRY MOLECULAR WEIGHT OF FLUE GAS**

$$MWd = \left( \%CO_2 \cdot \frac{44}{100} \right) + \left( \%O_2 \cdot \frac{32}{100} \right) + \left[ \left( 100.0 - \%CO_2 - \%O_2 \right) \cdot \left( \frac{28}{100} \right) \right]$$

$$MWd = \left( 0.0 \cdot \frac{44}{100} \right) + \left( 20.0 \cdot \frac{32}{100} \right) + \left[ \left( 100.0 - 0.0 - 20.0 \right) \cdot \left( \frac{28}{100} \right) \right]$$

$$MWd = 28.80 \text{ g/g-mole}$$

**WET MOLECULAR WEIGHT OF FLUE GAS**

$$MWs = \left( MWd \cdot Mfd \right) + fwH_2O \cdot H_2O / 100$$

$$MWs = \left( 28.80 \cdot 0.975 \right) + 18 \cdot \frac{2.5}{100} = 28.53 \text{ g/g-mole}$$

**AVERAGE FLUE GAS VELOCITY**

$$Vs = 34.97 \cdot Cp \cdot (\Delta P)_{avg} \cdot \sqrt{\frac{Ts + 273}{Ps \cdot MWs}}$$

$$Vs = 34.97 \cdot 0.84 \cdot 2.299 \cdot \sqrt{\frac{20 + 273}{692.3 \cdot 28.53}} = 8.2 \text{ m/s}$$

**VOLUMETRIC FLUE GAS FLOW RATE AT ACTUAL CONDITIONS (wet basis)**

$$Q_a(\text{act}) = 60 \cdot V_s \cdot A$$

$$Q_a(\text{act}) = 60 \cdot 8.2 \cdot 0.08 = 37 \text{ acmm}$$

**VOLUMETRIC FLUE GAS FLOW RATE AT STANDARD CONDITIONS (dry standard basis)**

$$Q_s(\text{std}) = 60 \cdot Mfd \cdot V_s \cdot A \cdot \frac{298}{273 + T_s} \cdot \frac{P_s}{P_{\text{std}}}$$

$$Q_s(\text{std}) = 60 \cdot 0.975 \cdot 8.2 \cdot 0.08 \cdot \frac{298}{273 + 20} \cdot \frac{692.3}{760} = 34 \text{ dscmm}$$

**PARTICULATE CONCENTRATION**

$$\text{mg/Ncm} = \frac{\text{mg}_{\text{particulate}}}{\text{Ncm}}$$

$$\text{mg/Ncm} = \frac{5.0}{0.8456} = 5.9 \text{ mg/Ncm}$$

**PARTICULATE MASS EMISSION RATE**

$$\text{kg/hr} = \frac{60}{10^6} \cdot \frac{\text{mg}}{\text{Ncm}} \cdot Q_s$$

$$\text{kg/hr} = \frac{60}{10^6} \cdot 5.9 \cdot 34 = 0.0119 \text{ kg/hr}$$

**SULFUR DIOXIDE CONCENTRATION**

$$\text{mg/Ncm} = \frac{\text{mg}_{\text{SO}_2}}{\text{Ncm}}$$

$$\text{mg/Ncm} = \frac{1}{0.8456} = 1 \text{ mg/Ncm}$$

**SULFUR DIOXIDE EMISSION RATE**

$$\text{kg/hr} = \frac{60}{10^6} \cdot \frac{\text{mg}}{\text{Ncm}} \cdot Q_s$$

$$\text{kg/hr} = \frac{60}{10^6} \cdot 1 \cdot 34 = 0.0024 \text{ kg/hr}$$

**NITROGEN OXIDES (as NO<sub>2</sub>) EXAMPLE CALCULATIONS, RUN 1a****1.0 INITIAL ABSOLUTE PRESSURE IN FLASK**

$$P_{\text{mmHg}} = P_{\text{inHg}} \times 25.4 \text{ mmHg/in Hg}$$

$$P_i = P_{\text{bar}(i)} - P_{\text{g}(i)}$$

$$P_i = 27.26 - 26.8 = 0.46 \text{ in Hg} = 11.68 \text{ mm Hg}$$

**2.0 FINAL ABSOLUTE PRESSURE IN FLASK**

$$P_f = P_{\text{bar}(f)} - P_{\text{g}(f)}$$

$$P_f = 27.26 - 0.22 = 27.04 \text{ in Hg} = 686.8 \text{ mm Hg}$$

**3.0 VOLUME OF DRY GAS SAMPLED AT STANDARD CONDITIONS USING FLASK**

$$V_{\text{sc}} = (V_f - 25) \cdot \left( \frac{P_f}{T_f + 273} - \frac{P_i}{T_i + 273} \right) \cdot 0.392$$

$$V_{\text{sc}} = (2237.5 - 25) \cdot \left( \frac{686.8}{300.8} - \frac{11.7}{305} \right) \cdot 0.392 = 1,947 \text{ ml}$$

**4.0 CONCENTRATION OF NO<sub>x</sub> as NO<sub>2</sub>**

$$\text{mg/Ncm} = (\mu\text{g}/V_{\text{sc}}) \cdot 10^6 (1,000 \text{ ml/lL}) \cdot (1,000 \text{ L} / \text{Ncm}) \cdot (1 \text{ mg} / 1,000 \mu\text{g})$$

$$\text{mg/Ncm} = (488 / 1,947) \cdot 1,000 = 251 \text{ mg/Ncm}$$

**CARBON MONOXIDE (CO) CONVERSION, ppm to mg/Nc: (Run 1)**

$$\text{CO}_{\text{mg/Ncm}} = (\text{CO}_{\text{ppm}} \times \text{MW}_{\text{CO}}) / 24.5 \text{ Liters CO/mole}$$

$$\text{CO}_{\text{mg/Ncm}} = 10.0 \times 28.01 / 24.45 = 11.5 \text{ mg/Ncm}$$

**APPENDIX SUMMARY TABLE**  
**NITROGEN OXIDES (as NOx) EMISSIONS DATA**  
**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
 Balatoc, Virac, Ilogon, Benguet  
 Thermo Digestion Chamber with Acid Fume Scrubber (Chamber Area)

*Sample Collection Information*

Sample ID	Flask Volume (ml)	Barometric Pressure, Pbar (in Hg):			Sample Collection Time <sup>2</sup> 24-Hour	Barometric Pressure, Pbar (in Hg):			Flask Temp T <sub>f</sub> °K
		Evacuated Pressure P <sub>gl</sub> (in Hg)	Flask abs. Pressure Initial P <sub>i</sub> , Pbar - P <sub>gl</sub> (in Hg) <sup>1</sup>	Flask Temp °C		Final Pressure P <sub>gf</sub> (in Hg)	Flask abs. Pressure Final P <sub>f</sub> , Pbar - P <sub>gf</sub> (in Hg) <sup>1</sup>	Flask Temp °C	
Run 1A	2,237.50	26.80	0.46	31.8	304.8	1125	27.04	27.8	300.8
Run 1B	2,244.35	25.50	1.76	31.6	304.6	1135	26.77	27.5	300.5
Run 1C	2,260.45	25.57	1.69	31.7	304.7	1205	26.06	27.7	300.7

*Calculated Results*

Std. Gas Volume (ml)	Mass Catch Weight, µg (µg)	NOx Concentration, as NO2 (mg/Ncm)
1,948	488	251
1,841	340	185
1,806	829	459
Average		298

*Sample Recovery Information*

Run	Barometric Pressure, Pbar (in Hg):			Sample Collection Time <sup>2</sup> 24-Hour	Barometric Pressure, Pbar (in Hg):			Flask Temp T <sub>f</sub> °K
	Evacuated Pressure P <sub>gl</sub> (in Hg)	Flask abs. Pressure Initial P <sub>i</sub> , Pbar - P <sub>gl</sub> (in Hg) <sup>1</sup>	Flask Temp °C		Final Pressure P <sub>gf</sub> (in Hg)	Flask abs. Pressure Final P <sub>f</sub> , Pbar - P <sub>gf</sub> (in Hg) <sup>1</sup>	Flask Temp °C	
Run 2A	25.80	1.38	32.9	305.9	1350	26.16	27.8	300.8
Run 2B	25.92	1.26	33.0	306.0	1405	26.11	27.9	300.9
Run 2C	25.81	1.37	33.1	306.1	1430	26.16	27.8	300.8

*Calculated Results*

Std. Gas Volume (ml)	Mass Catch Weight, µg (µg)	NOx Concentration, as NO2 (mg/Ncm)
1,652	965	584
1,797	611	340
1,798	567	315
Average		413

*Sample Recovery Information*

Run	Barometric Pressure, Pbar (in Hg):			Sample Collection Time <sup>2</sup> 24-Hour	Barometric Pressure, Pbar (in Hg):			Flask Temp T <sub>f</sub> °K
	Evacuated Pressure P <sub>gl</sub> (in Hg)	Flask abs. Pressure Initial P <sub>i</sub> , Pbar - P <sub>gl</sub> (in Hg) <sup>1</sup>	Flask Temp °C		Final Pressure P <sub>gf</sub> (in Hg)	Flask abs. Pressure Final P <sub>f</sub> , Pbar - P <sub>gf</sub> (in Hg) <sup>1</sup>	Flask Temp °C	
Run 3A	26.00	1.16	31.5	304.5	1530	26.21	27.8	300.8
Run 3B	25.24	1.92	31.6	304.6	1555	26.36	27.8	300.8
Run 3C	25.88	1.28	31.6	304.6	1610	26.38	27.7	300.7

*Calculated Results*

Std. Gas Volume (ml)	Mass Catch Weight, µg (µg)	NOx Concentration, as NO2 (mg/Ncm)
1,827	921	504
1,774	459	259
1,815	813	448
Average		404

**APPENDIX TABLE  
TEST RESULTS  
PARTICULATE MATTER, SULFUR OXIDES, NITROGEN OXIDES, & CARBON MONOXIDE  
BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
Thermo Digestion Chamber with Acid Fume Scrubber (Parting Area)  
Balatoc, Virac, Itogon, Benguet**

RUN NUMBER	RUN 1	RUN 2	RUN 3	AVERAGE
RUN DATE	28-Feb-20	28-Feb-20	28-Feb-20	
RUN TIME	0928H-1044H	1110H-1225H	1340H-1456H	
<b>MEASURED DATA</b>				
(Y)	Meter Box, Y	0.9999	0.9999	0.9999
(Delta H)	Avg Delta H, mm H <sub>2</sub> O	18.0	18.8	18.7
(Pbar)	Barometric Pressure, mm Hg	692.4	691.6	690.1
(Vm)	Meter Volume, m <sup>3</sup>	0.9994	1.0248	1.0190
(Tm)	Avg Meter Temp, °C	32	38	37
(Pg)	Static Pressure, mm H <sub>2</sub> O	-1.2	-1.2	-1.2
(Ts)	Avg Stack Temp, °C	15	19	21
(Vic)	Water Collected, mg	17.0	18.5	21.0
(%CO <sub>2</sub> )	Carbon dioxide, %	1.0	1.0	1.0
(%O <sub>2</sub> )	Oxygen, %	20.0	20.0	20.0
(%N <sub>2</sub> )	Nitrogen, %	79.0	79.0	79.0
(Cp)	Pitot Tube Coefficient	0.84	0.84	0.84
(sqrtDeltaP)avg	Avg Sqrt Delta P, (mm H <sub>2</sub> O) <sup>1/2</sup>	2.283	2.281	2.279
(time)	Sample Time, min	72	72	72
(Dn)	Nozzle Diameter, mm	6.000	6.000	6.000
<b>CALCULATED DATA</b>				
(An)	Nozzle Area, m <sup>2</sup>	2.83E-05	2.83E-05	2.83E-05
(Vmstd)	Standard Meter Volume, Ncm	0.8919	0.8965	0.8924
(Ps)	Stack Pressure, mm Hg	692.3	691.6	690.0
(%H <sub>2</sub> Omeas)	Moisture (measured), %	2.5	2.7	3.1
(%H <sub>2</sub> Osat)	Moisture (at saturation), %	1.8	2.4	2.7
(%H <sub>2</sub> O)	Moisture (actual), %	1.8	2.4	2.7
(Vwstd)	Standard Water Vapor Volume, Ncm	0.023	0.025	0.029
(Mfd)	Dry Mole Fraction	0.982	0.976	0.973
(MWd)	Molecular Weight-dry, gm/gm-mole	28.96	28.96	28.96
(MWs)	Molecular Weight-wet, gm/gm-mole	28.76	28.70	28.67
(Vs)	Velocity, m/s	8.1	8.1	8.2
(A)	Stack Area, m <sup>2</sup>	0.08	0.08	0.08
(%EA)	Percent Excess Air, %	128	128	128
Qa (act)	Actual Volumetric Flow, acmm	36	37	37
Qs (std)	Standard Volumetric Flow, dscmm	34	33	33
(I)	Isokinetic Rate, %	97.7	99.7	99.9
<b>PARTICULATE EMISSIONS DATA</b>				
(mg)	Mass, mg	6	4	6
(mg/Ncm)	Concentration, mg/Ncm	7	4	7
(kg/hr)	Emission Rate, kg/hr	0.0137	0.0089	0.0134
<b>SULFUR OXIDES (as SO<sub>2</sub>) EMISSIONS DATA</b>				
(mg)	Mass, mg	2	1	2
(mg/Ncm)	Concentration, mg/Ncm	2	1	2
(kg/hr)	Emission Rate, kg/hr	0.0046	0.0022	0.0045
<b>NITROGEN OXIDES (as NO<sub>2</sub>) EMISSIONS DATA</b>				
(mg/Ncm)	Concentration, mg/Ncm	33	66	81
(kg/hr)	Emission Rate, kg/hr	0.0671	0.1330	0.1617
<b>CARBON MONOXIDE EMISSIONS DATA</b>				
(ppm)	Concentration, ppm dry	11.0	10.0	11.0
(mg/Ncm)	Concentration, mg/Ncm	12.6	11.5	12.6
(kg/hr)	Emission Rate, kg/hr	0.0256	0.0229	0.0250



**VOLUMETRIC FLUE GAS FLOW RATE AT ACTUAL CONDITIONS (wet basis)**

$$Q_a(\text{act}) = 60 \cdot V_s \cdot A$$

$$Q_a(\text{act}) = 60 \cdot 8.1 \cdot 0.08 = 36 \text{ acmm}$$

**VOLUMETRIC FLUE GAS FLOW RATE AT STANDARD CONDITIONS (dry standard basis)**

$$Q_s(\text{std}) = 60 \cdot Mfd \cdot V_s \cdot A \cdot \frac{298}{273 + T_s} \cdot \frac{P_s}{P_{\text{std}}}$$

$$Q_s(\text{std}) = 60 \cdot 0.982 \cdot 8.1 \cdot 0.08 \cdot \frac{298}{273 + 15} \cdot \frac{692.3}{760} = 34 \text{ dscmm}$$

**PARTICULATE CONCENTRATION**

$$\text{mg/Ncm} = \frac{\text{mg}_{\text{particulate}}}{\text{Ncm}}$$

$$\text{mg/Ncm} = \frac{6.0}{0.8919} = 6.7 \text{ mg/Ncm}$$

**PARTICULATE MASS EMISSION RATE**

$$\text{kg/hr} = \frac{60}{10^6} \cdot \frac{\text{mg}}{\text{Ncm}} \cdot Q_s$$

$$\text{kg/hr} = \frac{60}{10^6} \cdot 6.7 \cdot 34 = 0.0137 \text{ kg/hr}$$

**SULFUR DIOXIDE CONCENTRATION**

$$\text{mg/Ncm} = \frac{\text{mg}_{\text{SO}_2}}{\text{Ncm}}$$

$$\text{mg/Ncm} = \frac{2}{0.8919} = 2 \text{ mg/Ncm}$$

**SULFUR DIOXIDE EMISSION RATE**

$$\text{kg/hr} = \frac{60}{10^6} \cdot \frac{\text{mg}}{\text{Ncm}} \cdot Q_s$$

$$\text{kg/hr} = \frac{60}{10^6} \cdot 2 \cdot 34 = 0.0046 \text{ kg/hr}$$

**NITROGEN OXIDES (as NO<sub>2</sub>) EXAMPLE CALCULATIONS, RUN 1a****1.0 INITIAL ABSOLUTE PRESSURE IN FLASK**

$$P_{\text{mmHg}} = P_{\text{inHg}} \times 25.4 \text{ mmHg/in Hg}$$

$$P_i = P_{\text{bar}(i)} - P_{\text{g}(i)}$$

$$P_i = 27.26 - 26.16 = 1.1 \text{ in Hg} = 27.94 \text{ mm Hg}$$

**2.0 FINAL ABSOLUTE PRESSURE IN FLASK**

$$P_f = P_{\text{bar}(f)} - P_{\text{g}(f)}$$

$$P_f = 29.86 - 0.73 = 29.13 \text{ in Hg} = 739.9 \text{ mm Hg}$$

**3.0 VOLUME OF DRY GAS SAMPLED AT STANDARD CONDITIONS USING FLASK**

$$V_{\text{sc}} = (V_f - 25) \cdot \left( \frac{P_f}{T_f + 273} - \frac{P_i}{T_i + 273} \right) \cdot 0.392$$

$$V_{\text{sc}} = (2237.5 - 25) \cdot \left( \frac{739.9}{302.2} - \frac{27.9}{299} \right) \cdot 0.392 = 2,042 \text{ ml}$$

**4.0 CONCENTRATION OF NO<sub>x</sub> as NO<sub>2</sub>**

$$\text{mg/Ncm} = (\mu\text{g}/V_{\text{sc}}) \cdot 10^6 (1,000 \text{ ml}^3/\text{L}) \cdot (1,000 \text{ L} / \text{Ncm}) \cdot (1 \text{ mg} / 1,000 \mu\text{g})$$

$$\text{mg/Ncm} = (90 / 2,042) \cdot 1,000 = 44 \text{ mg/Ncm}$$

**CARBON MONOXIDE (CO) CONVERSION, ppm to mg/Ncm (Run 1)**

$$\text{CO}_{\text{mg/Ncm}} = (\text{CO}_{\text{ppm}} \times \text{MW}_{\text{CO}}) / 24.5 \text{ Liters CO/mole}$$

$$\text{CO}_{\text{mg/Ncm}} = 11.0 \times 28.01 / 24.5 = 12.6 \text{ mg/Ncm}$$

**APPENDIX SUMMARY TABLE**  
**NITROGEN OXIDES (as NOx) EMISSIONS DATA**  
**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
**Balatoc, Virac, Itogon, Benguet**  
**Thermo Digestion Chamber with Acid Fume Scrubber (Parting Area)**

*Sample Collection Information*

Sample ID	Flask Volume (ml)	Barometric Pressure, Pbar (in Hg):			Sample Collection Time <sup>2</sup> 24-Hour	Flask Temp		Flask Temp Tf °K
		Evacuated Pressure Pgi (in Hg)	Flask abs. Pressure Initial Pi, Pbar - Pgi (in Hg) <sup>1</sup>	Flask Temp °C		Final Pressure Pgf (in Hg)	Flask Temp °C	
Run 1A	2,237.50	26.16	1.10	26.1	0.935	299.1	29.2	302.2
Run 1B	2,244.35	26.30	0.96	26.0	0.950	299.0	28.9	301.9
Run 1C	2,260.45	26.62	0.64	26.8	1.010	299.8	29.2	302.2

*Calculated Results*

Std. Gas Volume (ml)	Mass Catch Weight, µg (µg)	NOx Concentration, as NO2 (mg/Ncm)
2,043	90	44
2,095	59	28
2,111	57	27
Average		33

*Sample Recovery Information*

Run	Barometric Pressure, Pbar (in Hg):			Sample Collection Time <sup>2</sup> 24-Hour	Flask Temp		Flask Temp Tf °K
	Evacuated Pressure Pgi (in Hg)	Flask abs. Pressure Initial Pi, Pbar - Pgi (in Hg) <sup>1</sup>	Flask Temp °C		Final Pressure Pgf (in Hg)	Flask Temp °C	
Run 2A	25.89	1.34	26.9	1.115	299.9	29.2	302.2
Run 2B	26.27	0.96	27.1	1.140	300.1	29.0	302.0
Run 2C	26.16	1.07	27.3	1.200	300.3	29.1	302.1

Std. Gas Volume (ml)	Mass Catch Weight, µg (µg)	NOx Concentration, as NO2 (mg/Ncm)
1,873	173	92
2,059	106	51
2,069	115	56
Average		66

*Sample Collection Information*

Run	Barometric Pressure, Pbar (in Hg):			Sample Collection Time <sup>2</sup> 24-Hour	Flask Temp		Flask Temp Tf °K
	Evacuated Pressure Pgi (in Hg)	Flask abs. Pressure Initial Pi, Pbar - Pgi (in Hg) <sup>1</sup>	Flask Temp °C		Final Pressure Pgf (in Hg)	Flask Temp °C	
Run 3A	26.14	1.03	28.9	1.345	301.9	29.1	302.1
Run 3B	26.18	0.99	28.9	1.425	301.9	28.9	301.9
Run 3C	26.12	1.05	28.7	1.445	301.7	29.2	302.2

Std. Gas Volume (ml)	Mass Catch Weight, µg (µg)	NOx Concentration, as NO2 (mg/Ncm)
2,070	118	57
2,051	77	38
2,007	300	150
Average		81

**APPENDIX B**  
**Field Data Sheet**

## METHOD 1

### TRAVERSE POINT LOCATIONS

Facility Name	Benquet Corp - Acupon Contract Mining Project		
Town/Province	Dalatoc, Virac, Ibaog, Benquet	Municipal Chamber Area	
Source Tested	Acid Fume, Schuber		
Personnel	MDN, AVG, MRC, ADM	Date	2/27/20

Type of Stack	Circular <input checked="" type="checkbox"/>	Rectangle
Ports	# of ports available	2
	# of ports used	2
	Port inside dia., cm	10

Dimensions	Far wall to end of port, cm (a)	40
Draw a diagram of the test location on the back of this sheet	Port length, cm (b)	9
	Stack Dia. or depth, cm (a-b)	31
	Stack width (if rectangle), cm	-
	Equivalent Stack Diameter, cm	-
	Area of stack, m <sup>2</sup>	0.0155

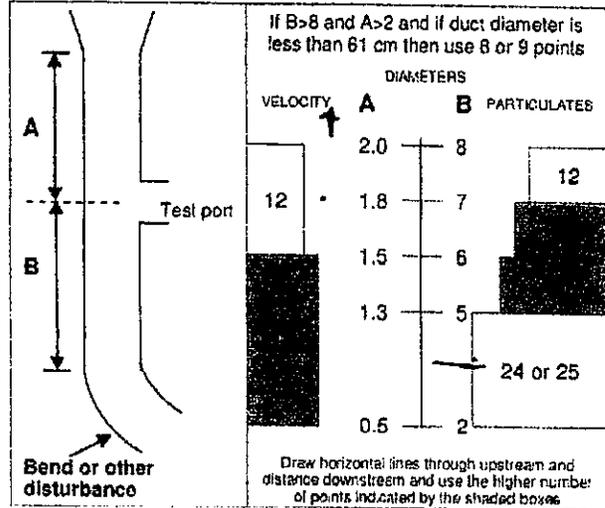
Distance to flow disturbance	Meters	Diameters
Upstream (A)	2.60	8.39D
Downstream (B)	1.10	3.55D

Minimum # of traverse points required:	
Particulate traverse	24
Velocity traverse	24
# of ports used	2
# points/port	12
Number of traverse points used	24

Point #	Fraction of stack diameter	Dist. from inside wall	Port length	Dist. from edge of port
1	0.021	0.651	9	9.651
2	0.067	2.077	9	11.077
3	0.118	3.658	9	12.658
4	0.177	5.487	9	14.487
5	0.250	7.750	9	16.750
6	0.356	11.036	9	20.036
7	0.444	14.964	9	28.964
8	0.700	23.250	9	32.250
9	0.823	25.513	9	34.513
10	0.882	27.342	9	36.342
11	0.933	28.923	9	37.923
12	0.979	30.349	9	39.349

\* For stacks having dia. 30 to 61 cm, no traverse points shall be within 1.3 cm of the stack walls.  
 \* For stacks having the greater than 61 cm, no traverse points shall be within 2.5 cm of the stack walls.

Note: When using 4 ports in a circular duct, the probe is marked with only the points for the first half of the full diameter traverse.



Equivalent diameter for rectangular duct:  
 $D_e = 2 \times \text{depth} \times \text{width} \div (\text{depth} + \text{width})$   
 $D_e = 2 \times ( ) \times ( ) \div ( + ) =$

	Fraction of stack diameter from inside wall					
	2	4	6	8	10	12
1	0.146	0.067	0.044	0.032	0.026	0.021
2	0.854	0.250	0.146	0.105	0.082	0.067
3		0.750	0.296	0.194	0.146	0.118
4		0.933	0.704	0.323	0.266	0.177
5			0.854	0.677	0.342	0.250
6			0.956	0.806	0.658	0.356
7				0.895	0.774	0.644
8				0.958	0.854	0.750
9					0.918	0.823
10					0.974	0.882
11						0.933
12						0.979

	Fraction of stack diameter from inside wall											
	2	3	4	5	6	7	8	9	10	11	12	
1	.250	.167	.125	.100	.083	.071	.063	.056	.050	.045	.042	
2	.750	.500	.375	.300	.250	.214	.188	.167	.150	.138	.125	
3		.833	.525	.500	.417	.357	.313	.278	.250	.227	.208	
4			.875	.700	.583	.500	.438	.389	.350	.318	.292	
5				.900	.750	.643	.563	.500	.450	.409	.375	
6					.917	.785	.688	.611	.550	.500	.458	
7						.929	.813	.722	.650	.591	.542	
8							.938	.833	.750	.682	.625	
9								.944	.850	.773	.706	
10									.950	.864	.792	
11										.955	.875	
12											.958	

#### ACCEPTABLE MATRICES FOR SQUARE DUCTS

3 x 3	4 x 5	6 x 6
3 x 4	5 x 5	6 x 7
4 x 4	5 x 6	2/27/20 7 x 7

Team Leader / Date: ANSELMO T. GUEVARRA

QA/QC Date: MARILYN D. SUAREZ



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 SAT No 2018-93  
 SAT No 2019-99





**EPA METHOD 1 & 2  
GAS VELOCITY and CYCLONIC FLOW CHECK**

Facility	BENIGNT CORP. - Acupan Contract Mining Project			Assume Values
Town/Province	Palatoc, Virac, Ilogon, Benguet			
Source	Thermo Digestion Chamber with Acid Fume Scrubber Chamber Area			%BWS = 10.0
Personnel	MDN, AVG, MRC, ADJ	Bar. Pressure, in Hg	27.26	Md = 30.0
Date / Time	Feb. 27, 2020 ; 0944H	Pitot Coefficient	0.84	Tm = 28 + 0.4

Static Pressure, mm H<sub>2</sub>O - 1.2 (include pos. or neg.)

Measured at which traverse point B-6

Traverse Point	Velocity Pressure (mmH <sub>2</sub> O)	Temperature (°C)	Angle Which Yields Null (Degrees)
A-12	5.2	19	15
11	5.4	18	9
10	5.4	17	14
9	5.6	17	18
8	5.6	16	16
7	5.4	16	19
6	5.2	16	12
5	5.4	16	18
4	4.8	17	16
3	4.8	16	18
2	4.8	18	21
1	5.2	17	17
B-12	5.6	17	14
11	5.8	16	13
10	5.4	16	18
9	5.4	16	14
8	5.2	15	16
7	5.4	16	13
6	5.2	16	14
5	5.0	17	15
4	5.2	17	12
3	5.2	18	12
2	5.6	18	9
1	5.0	18	10
Average	2.296	16.792	14.792

Team Leader / Date: ANGELO V. GUEVARA 2/27/20

QAQC / Date: MARICOM D. NUNEZ 27-FEB-2020



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Source Emission Testing Firm  
SAT No 2018-82  
SAT No 2018-93  
SAT No 2019-99





METHOD 3

FYRITE ANALYSIS FIELD DATA

Facility	Benguet Corp. - Acupan contract Mining Project	Fuel Type	N/A - ELECTRIC
Town/Province	Balatoc, Virac, Itogon, Benguet	Fyrite ID	GBF-TD1
Source	Acid Fume Scrubber Chamber Area	Analysis Location	Onsite

Run No: 1	Bag ID: BCACMP- <del>SEA</del> -M3/M10-R1	Operator (name & sign): ADM <i>[Signature]</i>		
Run Date	Date of Analysis	% CO <sub>2</sub>	% O <sub>2</sub>	% N <sub>2</sub>
2/27/20	2/27/20			
Run Time	Time of Analysis	Reading (A)	Reading (B)	100-(A+B)
Start 1122H	Start 1240H	0	20.0	
		0	20.0	
Stop 1238H	Stop 1243H	0	20.0	
Leak chk <input checked="" type="checkbox"/>				
Average		0	20.0	80.0

Run No: 2	Bag ID: BCACMP-ARSC-M3/M10-P2	Operator (name & sign): AVG <i>[Signature]</i>		
Run Date	Date of Analysis	% CO <sub>2</sub>	% O <sub>2</sub>	% N <sub>2</sub>
2/27/20	2/27/20			
Run Time	Time of Analysis	Reading (A)	Reading (B)	100-(A+B)
Start 1344H	Start 1453H	0	20.0	
		0	20.0	
Stop 1501H	Stop 1456H	0	20.0	
Leak chk <input checked="" type="checkbox"/>				
Average		0	20.0	80.0

Run No: 3	Bag ID: BCACMP-ARSC-M3/M10-P3	Operator (name & sign): AVG <i>[Signature]</i>		
Run Date	Date of Analysis	% CO <sub>2</sub>	% O <sub>2</sub>	% N <sub>2</sub>
2/27/20	2/27/20			
Run Time	Time of Analysis	Reading (A)	Reading (B)	100-(A+B)
Start 1525H	Start 1644H	0	20.0	
		0	20.0	
Stop 1642H	Stop 1647H	0	20.0	
Leak chk <input checked="" type="checkbox"/>				
Average		0	20.0	80.0

Team Leader / Date: *[Signature]* 2/27/20  
 ANSELMO V. GUEVARRA

QA/QC / Date: *[Signature]* 27-FEB-20  
 MARICELI D. NUNES



DENV ACCREDITED  
 Source Emission Testing Firm  
 SAT No 2018-92  
 SAT No 2018-93  
 SAT No 2019-09



## METHOD 4 MOISTURE ANALYSIS DATA SHEET

Facility	BENQUET CORP. - ANIPAN CONTRACT MINING PROJECT	Sample Method	4
Town/Province	BALATOC, ROSON, BENQUET	Recovery Location	ASSAY LABORATORY
Source	HEATING DIGESTION CHAMBER / ACID FUME SCRUBBER CHAMBER AREA	Personnel	MEN, AVG, MRC, ADM

Run Number	1	2	3
Test Date	27-FEB-2020	27-FEB-2020	27-FEB-2020
Recovery Date	27-FEB-2020	27-FEB-2020	27-FEB-2020
Recovered By	M.D.N	M.D.N	M.D.N
Impinger 1 100mL 3% H <sub>2</sub> O <sub>2</sub> ; DI H <sub>2</sub> O			
Final Weight, g	628.5	626.5	626.5
Initial Weight, g	614.7	613.0	618.0
Net Weight, g	14.0	13.5	8.5
Impinger 2 100mL 3% H <sub>2</sub> O <sub>2</sub> ; DI H <sub>2</sub> O			
Final Weight, g	642.5	642.5	642.5
Initial Weight, g	637.5	636.0	637.0
Net Weight, g	5.0	6.5	5.5
Impinger 3 EMPTY			
Final Weight, g	529.5	531.5	534.5
Initial Weight, g	528.5	529.5	531.5
Net Weight, g	1.0	2.0	3.0
Impinger 4 W/ SILICA GEL			
Final Weight, g	817.5	831.0	798.5
Initial Weight, g	805.5	821.5	787.5
Net Weight, g	10.0	9.5	11.0
Impinger 5			
Final Weight, g			
Initial Weight, g			
Net Weight, g			
Impinger 6			
Final Weight, g			
Initial Weight, g			
Net Weight, g			
Impinger 7			
Final Weight, g			
Initial Weight, g			
Net Weight, g			
<b>Total Catch, g</b>	<b>30.0</b>	<b>31.5</b>	<b>28.0</b>
<b>Filter ID#</b>	<b>200174</b>	<b>200177</b>	<b>200176</b>
<b>Filter Wt.</b>	<b>0.3535</b>	<b>0.3565</b>	<b>0.3550</b>

Team Leader / Date: ANGULO V. GUEVARRA 2/27/20

QAQC / Date: MARICOM D. KUNDA 27-FEB-20



DENR ACCREDITED  
Source Emission Testing Firm  
SAT No 2018-82  
SAT No 2018-03  
SAT No 2019-09





ISOKINETIC FIELD DATA SHEET  
METHOD(S) 5 & 6

Facility Name	Benguet Corp. - Acofan Contract Mining Project	Run Number	1
Town/Province	Balatoc, Virac, Itogon, Benguet	Job Number	-
Source	Acid Fume Scrubber Chamber Area	Test Date	2/27/20
Test Personnel	MDN, AVE, MRC, ADM	Operator Signature	<i>[Signature]</i>

Filter ID	Tare(s)	Barometric Pressure (in Hg)	Static Pressure (mmHg)	Meter/Box			Nozzle		Pitot Tube/Probe		Probe Material
				ID #	Gamma	Delta H@	ID #	Diameter	ID #	Cp	
220174	0.2535	27.26	-1.2	GNC-01	0.9999	42.30	GN-03	6.00	GP-04	0.84	SS
Sample Train Leak Checks											
K Factor	3.128	Vacuum, in Hg	15.0	Initial	Interim	Final	Time	%CO <sub>2</sub>	%O <sub>2</sub>		
Pitot Leak Checks	Leak Rate, m <sup>3</sup> /m	0	0	0	0	0	0	0	0		
OK	Pre-test	Start Volume	393.7094				394.6696	Fynio System Leak Check		OK	
OK	Post-test	Stop Volume	393.7094				394.6696	Bag ID		3CACUP-AFSC-M3/MA-R1	

Port & Point	Time		DGM Reading (cu. meter)	Pitot Reading (mmH <sub>2</sub> O)	Delta H Calc. (mmH <sub>2</sub> O)	Delta H Actual (mmH <sub>2</sub> O)	Gauge Vacuum (in Hg)	Temperature °C				
	Clock (24-hr)	Test (min)						Stack	DGM	Probe	Filter	Imp. Est.
A-12	1122H	0	393.7106	5.6	17.52	17.6	1.5	17	31	118	114	19
11	1125H	3	393.7620	5.8	18.14	18.2	1.5	16	31	123	118	11
10	1128H	6	393.8002	5.6	17.52	17.6	1.5	15	32	121	120	9
9	1131H	9	393.8440	5.4	16.89	16.8	1.5	16	32	119	121	9
8	1134H	12	393.8814	5.4	16.89	16.8	1.5	16	32	122	121	16
7	1137H	15	393.9204	5.6	17.52	17.6	1.5	16	33	119	121	10
6	1140H	18	393.9618	5.2	16.27	16.2	1.5	16	33	119	120	6
5	1143H	21	394.0022	5.0	15.64	15.6	1.5	19	34	122	120	5
4	1146H	24	394.0486	4.8	15.01	15.0	1.5	19	35	121	119	5
3	1149H	27	394.0736	5.2	16.27	16.2	1.5	19	35	120	121	5
2	1152H	30	394.1150	5.0	15.64	15.6	1.5	20	36	119	120	5
1	1155H	33	394.1550	4.8	15.01	15.0	1.5	20	36	121	120	6
B-12	1202H	36	394.1902	5.4	16.89	16.8	1.5	22	36	119	120	6
11	1205H	39	394.2380	5.6	17.52	17.6	1.5	22	36	119	120	6
10	1208H	42	394.2690	5.4	16.89	16.8	1.5	21	36	119	119	5
9	1211H	45	394.3122	5.8	18.14	18.2	1.5	22	36	121	120	5
8	1214H	48	394.3554	5.4	16.89	16.8	1.5	22	37	120	120	5
7	1217H	51	394.3970	5.0	15.64	15.6	1.5	22	37	120	120	4
6	1220H	54	394.4336	5.0	15.64	15.6	1.5	23	37	120	120	8
5	1223H	57	394.4732	5.2	16.27	16.2	1.5	23	38	119	120	7
4	1226H	60	394.5130	5.4	16.89	16.8	1.5	22	38	120	120	5
3	1229H	63	394.5552	5.2	16.27	16.2	1.5	22	38	119	119	5
2	1232H	66	394.5932	4.8	15.01	15.0	1.5	22	38	120	121	9
1	1235H	69	394.6214	5.4	16.89	16.8	1.5	24	38	120	121	8
0	1238H	72	394.6692									

Run Time	Total Volume	RMS Delta P
72	0.9586	2.299

Delta H Ave.	High Vac.	Ts Ave.	Tm Ave.
16.525	1.5	19.833	35.208

Isokinetic %
94.857

Team Leader / Date: *[Signature]* / 2/27/20

QA/QC / Date: *[Signature]* / 27-FEB-20



DENR ACCREDITED  
Source Emission Testing Firm  
SAT No 2018-52  
SAT No 2018-93  
SAT No 2018-99





ISOKINETIC FIELD DATA SHEET  
METHOD(S) SP6

Facility Name	BENQUET CORP - ACUPAN CONTRACT MINING PROJECT	Run Number	2
Town/Province	Trogon, Benguet	Job Number	-
Source	Delta Pignation Chamber with Acid Fume Scrubber Chamber Area	Test Date	2/27/20
Test Personnel	MDN, AVG, MRC, ADM	Operator Signature	<i>[Signature]</i>

Filter ID	Tere(s)	Barometric Pressure (in Hg)	Static Pressure (mmHg)	Meterbox			Nozzle		Pilot Tube/Probe		Probe Material
				ID #	Gain	Delta H@	ID #	Diameter	ID #	Cp	
20075	0.3568	27.18	-1.2	GMC-01	0.9999	48.30	GN-03	6.00	GP-04	0.84	CS
Sample Train Leak Checks											
Fyrites											
K Factor	3.443	Vacuum, in Hg	15.0	Initial	Interim	Final	Time	%CO <sub>2</sub>	%O <sub>2</sub>		
Pilot Leak Checks		Leak Rate, m <sup>3</sup> /m	0			2.5	1230H	0	20.0		
OK	Pretest	Start Volume	394.6788			0					
OK	Post-rest	Stop Volume	394.6788			395.6786				Fyrites System Leak Check OK	
										Bag ID	BCACUP-ARSC-N9/M10-R1

Port & Point	Time		DGM Reading (cu. meter)	Pilot Reading (mmH <sub>2</sub> O)	Delta H Calc. (mmH <sub>2</sub> O)	Delta H Actual (mmH <sub>2</sub> O)	Gauge Vacuum (in Hg)	Temperature °C				
	Clock (24-hr)	Test (min)						Stack	DGM	Probe	Filter	Imp. Ext.
A-12	1344H	0	394.6800	5.6	19.28	19.2	2.5	21	33	123	116	8
11	1347H	3	394.7250	5.4	18.59	18.6	2.5	20	33	125	121	7
10	1350H	6	394.7602	5.6	19.28	19.2	2.0	21	33	124	121	7
9	1353H	9	394.8060	5.6	19.28	19.2	2.5	19	33	121	117	6
8	1356H	12	394.8508	5.8	19.97	20.0	2.5	19	33	119	121	7
7	1359H	15	394.8962	5.6	19.28	19.2	2.5	21	34	121	122	7
6	1402H	18	394.9380	5.2	17.91	18.0	2.5	21	34	122	121	7
5	1405H	21	394.9802	5.4	18.59	18.6	2.5	22	35	122	121	7
4	1408H	24	395.0200	5.4	18.59	18.6	2.5	22	35	122	119	8
3	1411H	27	395.0652	5.0	17.22	17.2	2.5	22	36	119	118	8
2	1414H	30	395.1060	5.2	17.91	18.0	2.5	22	36	120	121	8
1	1417H	33	395.1478	5.0	17.22	17.2	2.5	23	37	119	120	8
B-12	1420H	36	395.1848	5.4	18.59	18.6	2.5	23	36	118	113	9
11	1429H	39	395.2280	5.4	18.59	18.6	2.5	24	37	123	120	9
10	1431H	42	395.2720	5.6	19.28	19.2	2.5	24	37	123	122	10
9	1434H	45	395.3142	5.2	17.91	18.0	2.5	23	37	123	121	11
8	1437H	48	395.3542	5.4	18.59	18.6	2.5	22	37	122	121	10
7	1440H	51	395.3974	5.0	17.22	17.2	2.5	22	37	118	120	11
6	1443H	54	395.4402	4.8	16.53	16.6	2.0	22	37	122	120	10
5	1446H	57	395.4770	4.8	16.53	16.6	2.0	23	37	120	120	10
4	1449H	60	395.5176	5.0	17.22	17.2	2.0	24	37	120	120	16
3	1452H	63	395.5580	4.8	16.53	16.6	2.0	24	38	119	120	12
2	1455H	66	395.5990	4.8	16.53	16.6	2.0	25	38	120	121	12
1	1458H	69	395.6390	5.0	17.22	17.2	2.0	25	38	119	121	12
0	1501H	72	395.6780									

Run Time	Total Volume	RMS Delta P
72	0.9980	2.290

Delta H Ave.	High Vac.	Ts Ave.	Tm Ave.
18.083	2.5	22.25	35.75

Isokinetic %
99.34

Team Leader / Date: ANGILO V. GUEVARRA 2/27/20  
 DENR ACCREDITED Source Emission Testing Firm  
 SAT No 2018-92  
 SAT No 2018-93  
 SAT No 2019-89

OAGC / Date: MARICON D. NUNEZ 27-FEB-20



ISOKINETIC FIELD DATA SHEET  
METHOD(S) 326

Facility Name	BENQUET CORP - ACUPAN CONTRACT MINING PROJECT	Run Number	3
Town/Province	Balabac, Virac, Ibaan, Benguet	Job Number	-
Source	Thermal Dustbin Chamber with Acid Fume Scrubber Chamber Area	Test Date	2/27/20
Test Personnel	MDJ, ANG, MRC, ADM	Operator Signature	<i>[Signature]</i>

Filter ID	Tare(s)	Barometric Pressure (in Hg)	Static Pressure (mmHg)	Meterbox			Nozzle		Pilot Tube/Probe		Probe Material
				ID #	Gamma	Delta H@	ID #	Diameter	ID #	Cp	
20076	0.3550	27.14	-1.2	GMC-01	0.9999	48.30	GN-03	G-0	GP-04	1320.81	CS
Sample Train Leak Checks											
K Factor	3.418	Vacuum, in Hg	15.0	Initial	Interim	Final	Time	%CO <sub>2</sub>	%O <sub>2</sub>		
Pilot Leak Checks	Leak Rate, m <sup>3</sup> /m										
OK	Pretest	Start Volume	395.6834				396.6870	Fyrite System Leak Check		OK	
OK	Post-test	Stop Volume	395.6834				396.6870			Bag ID: BC ACUP-APSC-13/110-R3	

Port & Point	Time		DGM Reading (cu. meter)	Pilot Reading (mmH <sub>2</sub> O)	Delta H Calc. (mmH <sub>2</sub> O)	Delta H Actual (mmH <sub>2</sub> O)	Gauge Vacuum (in Hg)	Temperature °C				
	Clock (24-hr)	Test (min)						Stack	DGM	Probe	Filter	Imp. Est.
A-12	1525H	0	395.6846	5.0	19.14	19.2	1.5	25	35	124	121	12
11	1528H	3	395.7302	5.4	18.45	18.4	1.5	24	35	121	120	12
10	1531H	6	395.7714	5.4	18.45	18.4	1.5	23	35	121	120	12
9	1534H	9	395.8130	5.4	18.45	18.4	1.5	24	35	121	119	12
8	1537H	12	395.8566	5.2	17.77	17.8	1.5	23	35	120	120	11
7	1540H	15	395.8980	5.6	19.14	19.2	1.5	24	35	122	121	12
6	1543H	18	395.9394	5.6	19.14	19.2	1.5	26	36	122	120	13
5	1546H	21	395.9842	5.8	19.82	19.8	1.5	28	36	120	120	16
4	1549H	24	396.0280	5.0	17.09	17.0	1.5	25	36	121	119	13
3	1552H	27	396.0722	5.4	18.45	18.4	1.5	22	37	120	121	13
2	1555H	36	396.1110	5.2	17.77	17.8	1.5	23	37	121	121	13
1	1558H	33	396.1524	5.0	17.09	17.0	1.5	21	37	121	120	13
B-12	1601H	36	396.1910	5.4	18.45	18.4	1.5	26	36	120	120	15
11	1604H	39	396.2342	5.6	19.14	19.2	1.5	25	37	119	120	15
10	1612H	42	396.2802	5.4	18.45	18.4	1.5	27	37	119	119	15
9	1615H	45	396.3202	5.0	17.09	17.0	1.5	24	37	120	119	14
8	1618H	48	396.3614	5.2	17.77	17.8	1.5	28	37	121	120	14
7	1621H	51	396.4070	5.4	18.45	18.4	1.5	26	37	119	120	15
6	1624H	54	396.4464	5.2	17.77	17.8	1.5	27	37	120	120	15
5	1627H	57	396.4872	5.0	17.09	17.0	1.5	29	37	121	121	16
4	1630H	60	396.5278	4.8	16.41	16.4	1.5	29	37	120	119	16
3	1633H	63	396.5672	5.0	17.09	17.0	1.5	25	37	120	120	16
2	1636H	66	396.6078	5.0	17.09	17.0	1.5	24	37	121	124	16
1	1639H	69	396.6492	4.8	16.41	16.4	1.5	26	37	120	122	16
0	1642H	72	396.6866									

Run Time	Total Volume	RMS Delta P
72	1.0020	2.294

Delta H Ave.	High Vac.	Ts Ave.	Tm Ave.
18.617	1.5	25.167	36.375

Isokinetic %
99.348

Team Leader / Date: *[Signature]* 2/27/20  
ANGITO V. GUEVARRA

QAQC / Date: *[Signature]* 27-FEB-20  
MARICEL D. NUNEZ



DENR ACCREDITED  
Source Emission Testing Firm  
SAT No 2018-92  
SAT No 2018-93  
SAT No 2019-99





METHOD 7 FLASK SAMPLE AND RECOVERY DATA

Facility: BENQUET CORP. - ACUFAN CONTRACT MININGS PROJECT  
 Town/Province: BALAITOC, LITOGON, BENGUET  
 Source: THERMO DIGESTION CHAMBER WITH ACID FLUO SCRUBBER  
 Personnel: MDN AVG MRC ADM  
 Test Date: 2/27/2020

Absorbing Solution Volume, ml: 25  
 Heated Probe? (check) Yes  No   
 Chamber Filter Used? (check) Yes  No   
 Remarks: ADFA

\* If No, explain in "Remarks"  
 \* If No, explain in "Remarks"

Run No	Sample ID (from Sample Label)	Flask ID Number	Flask Volume (ml)	Leak Check OK	Evacuated Pressure Ppg (in Hg)	Flask Abs Pressure Initial P, Ppg (in Hg)	Flask Temp (°C)	Sendin Collection Time? (24-hour)	Shaken for 5 min?	Sample Recovery Information				
										Bar Pressure, Ppg (in Hg)	Sample Recovery Temp <sup>1</sup> (24-hour)	First Pressure Ppg (in Hg)	Flask Abs Press eval P, Ppg (in Hg)	Flask Temp (°C)
1	BCACMP-AFSC-M7-R1A	GF-01	2237.50	OK	26.80	0.46	31.8	1125	YES	Bar Pressure, Ppg (in Hg): 27.26	Sample Recovery Temp <sup>1</sup> (24-hour): 0820	First Pressure Ppg (in Hg): 0.92	Flask Abs Press eval P, Ppg (in Hg): 27.04	Flask Temp (°C): 27.8
	BCACMP-AFSC-M7-R1B	GF-02	2244.35	OK	25.50	1.76	31.6	1135	YES	Date Performed: 02/27/20	By (in): MRC ADM			
	BCACMP-AFSC-M7-R1C	GF-03	2200.45	OK	25.57	1.69	31.7	1205	YES					

Run No	Sample ID	Flask ID	Vol. (ml)	Leak Check	Evacuated Pressure Ppg (in Hg)	Flask Abs Pressure Initial P, Ppg (in Hg)	Flask Temp (°C)	Sendin Collection Time? (24-hour)	Shaken for 5 min?	Sample Recovery Information				
										Bar Pressure, Ppg (in Hg)	Sample Recovery Temp <sup>1</sup> (24-hour)	First Pressure Ppg (in Hg)	Flask Abs Press eval P, Ppg (in Hg)	Flask Temp (°C)
2	BCACMP-AFSC-M7-R2A	GF04	2036.55	OK	25.80	1.38	32.9	1350	YES	Bar Pressure, Ppg (in Hg): 27.18	Sample Recovery Temp <sup>1</sup> (24-hour): 0830	First Pressure Ppg (in Hg): 1.10	Flask Abs Press eval P, Ppg (in Hg): 26.16	Flask Temp (°C): 27.8
	BCACMP-AFSC-M7-R2B	GF05	2207.55	OK	25.92	1.26	33.0	1405	YES	Date Performed: 02/27/20	By (in): MRC ADM			
	BCACMP-AFSC-M7-R2C	GF06	2213.25	OK	25.81	1.37	33.1	1430	YES					

Run No	Sample ID	Flask ID	Vol. (ml)	Leak Check	Evacuated Pressure Ppg (in Hg)	Flask Abs Pressure Initial P, Ppg (in Hg)	Flask Temp (°C)	Sendin Collection Time? (24-hour)	Shaken for 5 min?	Sample Recovery Information				
										Bar Pressure, Ppg (in Hg)	Sample Recovery Temp <sup>1</sup> (24-hour)	First Pressure Ppg (in Hg)	Flask Abs Press eval P, Ppg (in Hg)	Flask Temp (°C)
3	BCACMP-AFSC-M7-R3A	GF07	2227.00	OK	26.00	1.16	31.5	1530	YES	Bar Pressure, Ppg (in Hg): 27.16	Sample Recovery Temp <sup>1</sup> (24-hour): 0840	First Pressure Ppg (in Hg): 1.05	Flask Abs Press eval P, Ppg (in Hg): 26.21	Flask Temp (°C): 27.8
	BCACMP-AFSC-M7-R3B	GF08	2215.20	OK	25.24	1.92	31.6	1555	YES	Date Performed: 02/28/20	By (in): MRC			
	BCACMP-AFSC-M7-R3C	GF09	2206.75	OK	25.88	1.28	31.6	1410	YES					

Source Oxygen % Concentration? 20.0%  
 Was Additional Oxygen Introduced to the Flask? (circle) No

<sup>1</sup> Ppg, the initial flask pressure, must be evacuated to within 3 inches of mercury (in. Hg) of the absolute pressure (Barometric Pressure).  
<sup>2</sup> Additional oxygen should be introduced to the Flask if the Source O<sub>2</sub> is below 3%.  
<sup>3</sup> Flask must stand for 15 hours or greater after sampling before recovery can be performed.



MANAGED BY  
 MARI CON D. NUNEZ



To an Analyst: ANGEL V. GUEVARA  
 Date: 2/27/20  
 OK, CC, DWS: MARI CON D. NUNEZ  
 Date: 28 FEB 20

## METHOD 1

### TRAVERSE POINT LOCATIONS

Facility Name	Benguet Corp. - Acupan Contract Mining Project		
Town/Province	Palatoc, Virac, Ilocos Norte, Benguet		
Source Tested	Acid mine scrubber, Tailing Area		
Personnel	MDN, AVG, MRC	Date	2/28/20

Type of Stack	Circular	<input checked="" type="checkbox"/>	Rectangle
Ports	# of ports available	2	
	# of ports used	2	
	Port inside dia., cm	10	

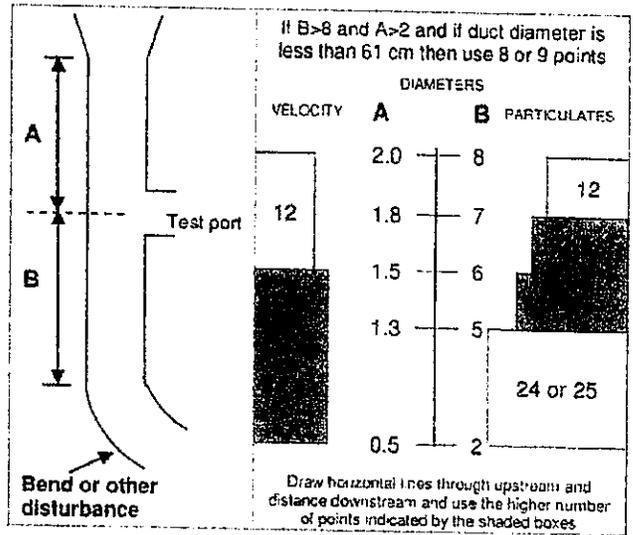
Dimensions	Far wall to end of port, cm (a)	40
Draw a diagram of the test location on the back of this sheet	Port length, cm (b)	9
	Stack Dia. or depth, cm (a-b)	31
	Stack width (if rectangle), cm	-
	Equivalent Stack Diameter, cm	-
	Area of stack, m <sup>2</sup>	0.0755

Distance to flow disturbance	Meters	Diameters
Upstream (A)	2.60	8.39D
Downstream (B)	1.10	3.55D

Minimum # of traverse points required:		
	Particulate traverse	24
	Velocity traverse	24
# of ports used	2	# points/port
	12	12
Number of traverse points used		24

Point #	Fraction of stack diameter	Dist. from inside wall	Port length	Dist. from edge of port
1	0.021	0.651	9	9.65
2	0.067	2.077	9	11.08
3	0.118	3.658	9	12.66
4	0.177	5.487	9	14.49
5	0.250	7.550	9	16.75
6	0.356	11.036	9	20.04
7	0.444	19.964	9	28.96
8	0.700	23.250	9	32.25
9	0.823	25.513	9	34.51
10	0.882	27.342	9	36.34
11	0.933	28.923	9	37.92
12	0.979	30.349	9	39.35

Note: When using 4 ports in a circular duct, the probe is marked with only the points for the first half of the full diameter traverse.



Equivalent diameter for rectangular duct:

$$D_e = 2 \times \text{depth} \times \text{width} \div (\text{depth} + \text{width})$$

$$D_e = 2 \times ( ) \times ( ) \div ( + ) =$$

LOCATION OF POINTS IN CIRCULAR STACK OR DUCTS						
	Fraction of stack diameter from inside wall					
	2	4	6	8	10	12
1	0.146	0.067	0.044	0.032	0.026	0.021
2	0.854	0.250	0.146	0.105	0.082	0.067
3		0.750	0.296	0.194	0.146	0.118
4		0.933	0.704	0.323	0.266	0.177
5			0.854	0.677	0.342	0.250
6			0.956	0.806	0.658	0.356
7				0.895	0.774	0.644
8				0.958	0.854	0.750
9					0.918	0.823
10					0.974	0.882
11						0.933
12						0.979

LOCATION OF POINTS IN RECTANGULAR STACKS OR DUCTS												
	Fraction of stack diameter from inside wall											
	2	3	4	5	6	7	8	9	10	11	12	
1	.250	.167	.125	.100	.083	.071	.063	.056	.050	.045	.042	
2	.750	.375	.300	.250	.214	.188	.167	.150	.138	.125		
3		.833	.525	.500	.417	.357	.313	.276	.250	.227	.208	
4			.875	.700	.583	.500	.438	.389	.350	.318	.292	
5				.900	.750	.643	.563	.500	.450	.409	.375	
6					.917	.786	.688	.611	.550	.500	.458	
7						.929	.813	.722	.650	.591	.542	
8							.938	.833	.750	.682	.625	
9								.944	.850	.773	.708	
10									.950	.864	.792	
11										.955	.875	
12											.958	

ACCEPTABLE MATRICES FOR SQUARE DUCTS		
3 x 3	4 x 5	6 x 6
3 x 4	5 x 5	6 x 7
4 x 4	5 x 6	7 x 7

Team Leader / Date: ANGEL D. GUYARRA 2/28/20

QAQC Date: MARICEN D. NUÑEZ 28-FEB-20



**EPA METHOD 1 & 2  
GAS VELOCITY and CYCLONIC FLOW CHECK**

Facility	Benguet Corp. - Acupan Contract Mining Project		Assume Values
Town/Province	Balatoc, Virac, Itogon, Benguet		%BWS = 5.0
Source	Acid Fume Scrubber Parting Area		Md = 30.0
Personnel	MDN, AVG, MPC, ADM	Bar. Pressure, in Hg	27.26
Date / Time	2/28/20 ; 0844 H	Pitot Coefficient	0.84
			Tm = 25 + 4

Static Pressure, mm H<sub>2</sub>O           -1.0           (include pos. or neg.)

Measured at which traverse point           A-C          

Traverse Point	Velocity Pressure (mmH <sub>2</sub> O)	Temperature (°C)	Angle Which Yields Null (Degrees)
A-12	5.8	11	9
11	5.6	11	11
10	5.6	13	10
9	5.4	11	5
8	5.4	11	12
7	5.2	10	8
6	5.2	9	5
5	5.2	9	7
4	4.4	8	3
3	4.0	9	4
2	4.2	10	6
1	5.0	10	7
B-12	5.4	13	2
11	5.8	13	3
10	5.8	9	2
9	5.4	9	3
8	5.2	9	8
7	5.0	8	5
6	5.0	10	4
5	5.2	12	5
4	4.4	11	4
3	4.0	10	6
2	4.2	12	8
1	4.8	11	4
Average	2.244	10.458	5.875

Team Leader / Date: ANGEL V. GUEVARRA 2/28/20

QAQC / Date: MARICON D. NUNEZ 28-FEB-20



DENR ACCREDITED  
Source Emission Testing Firm  
SAT No 2018-92  
SAT No 2018-93  
SAT No 2010-66





METHOD 3

FYRITE ANALYSIS FIELD DATA

Facility	BENGUET CORP. - ACUFAN CONTRACT MINING PROJECT	Fuel Type	Electricity
Town/Province	Salatoc, Virac, Itogon, Benguet	Fyrite ID	GDF-T01
Source	Acid Fume Scrubber Parking Area	Analysis Location	On-site

Run No: 1	Bag ID: BCACMP-AFSP-M3	M10-R1 Operator (name & sign): <i>AVG</i>		
Run Date	Date of Analysis	% CO <sub>2</sub>	% O <sub>2</sub>	% N <sub>2</sub>
2/28/20	2/28/20			
Run Time	Time of Analysis	Reading (A)	Reading (B)	100-(A+B)
Start 0928H	Start 1046H	1.0	20.0	
		1.0	20.0	
Stop 1044H	Stop 1049H	1.0	20.0	
Leak chk <input checked="" type="checkbox"/>				
Average		1.0	20.0	79.0

Run No: 2	Bag ID: BCACMP-AFSP-M3	M10-R2 Operator (name & sign): <i>AVG</i>		
Run Date	Date of Analysis	% CO <sub>2</sub>	% O <sub>2</sub>	% N <sub>2</sub>
2/28/20	2/28/20			
Run Time	Time of Analysis	Reading (A)	Reading (B)	100-(A+B)
Start 1110H	Start 1227H	1.0	20.0	
		1.0	20.0	
Stop 1225H	Stop 1230H	1.0	20.0	
Leak chk <input checked="" type="checkbox"/>				
Average		1.0	20.0	79.0

Run No: 3	Bag ID: BCACMP-AFSP-M3	M10-R3 Operator (name & sign): <i>AVG</i>		
Run Date	Date of Analysis	% CO <sub>2</sub>	% O <sub>2</sub>	% N <sub>2</sub>
2/28/20	2/28/20			
Run Time	Time of Analysis	Reading (A)	Reading (B)	100-(A+B)
Start 1340H	Start 1458H	1.0	20.0	
		1.0	20.0	
Stop 1456H	Stop 1501H	1.0	20.0	
Leak chk <input checked="" type="checkbox"/>				
Average		1.0	20.0	79.0

Team Leader / Date: *[Signature]* 2/28/20  
**ANGELO V. GUEVARRA**

QA/QC / Date: *[Signature]* 28 FEB 20  
**MARIZON D. NUNEZ**



DNR ACCREDITED  
 Source Emission Testing Firm  
 SAT No. 2016-92  
 SAT No. 2016-93  
 SAT No. 2019-90





**METHOD 4**  
**MOISTURE ANALYSIS DATA SHEET**

Facility	BENJNET CORP. - ACIDFLUME CONTRACT MINING PROJECT	Sample Method	4
Town/Province	BALATOC, ITOGON, BENJNET	Recovery Location	ASSAY LABORATORY
Source	TERMINO DISECTION CRABBER W/ ACID FLUME SCRUBBER PARTIAL AREA	Personnel	MEN, AVG, MRC, ADM

Run Number	1	2	3
Test Date	28-FEB-2020	28-FEB-2020	28-FEB-2020
Recovery Date	28-FEB-2020	28-FEB-2020	28-FEB-2020
Recovered By	M.D.N	M.D.N	M.D.N
Impinger 1 100mL 3% H <sub>2</sub> O <sub>2</sub> ; D.I H <sub>2</sub> O			
Final Weight, g	622.0	619.5	621.5
Initial Weight, g	620.0	616.0	616.0
Net Weight, g	2.0	3.5	5.5
Impinger 2 100mL 3% H <sub>2</sub> O <sub>2</sub> ; D.I H <sub>2</sub> O			
Final Weight, g	641.5	640.5	640.0
Initial Weight, g	637.0	636.0	636.0
Net Weight, g	4.5	4.5	4.0
Impinger 3 EMPTY			
Final Weight, g	532.5	532.5	535.5
Initial Weight, g	531.0	532.5	533.5
Net Weight, g	1.5	1.0	2.0
Impinger 4 w/ SILICA GEL			
Final Weight, g	807.0	828.0	814.5
Initial Weight, g	798.0	818.5	805.0
Net Weight, g	9.0	9.5	9.5
Impinger 5	/	/	/
Final Weight, g			
Initial Weight, g			
Net Weight, g			
Impinger 6	/	/	/
Final Weight, g			
Initial Weight, g			
Net Weight, g			
Impinger 7	/	/	/
Final Weight, g			
Initial Weight, g			
Net Weight, g			

Total Catch, g	17.0	18.5	21.0
Filter ID#	200177	200178	200179
Filter Wt.	0.3544	0.3538	0.3572

Team Leader / Date: ANGEL V. GUEVARA 2/28/20

QAQC / Date: MARICOM D. MUNIZ 28 FEB 20



DENR ACCREDITED  
Source Emission Testing Firm





**ISOKINETIC FIELD DATA SHEET**  
METHOD(S) 5.56

Facility Name	Benguet Corp - Acupan Contract Mining Project	Run Number	1
Town/Province	Balatoc, Virac, Iligan Benguet	Job Number	-
Source	Thermo Digestion Chamber with Acid Fume Scrubber Flaring Area	Test Date	2/28/20
Test Personnel	MDN, AVG, MRC, ADM	Operator Signature	<i>[Signature]</i>

Filter ID	Targets	Barometric Pressure (in Hg)	Static Pressure (mmHg)	Meterbox			Nozzle		Pilot Tube/Probe		Probe Material
				ID #	Gamma	Delta H@	ID #	Diameter	ID #	Cp	
20077	0.25/4	27.26	-1.0	GMC-01	0.9999	48.30	GN-03	6.00	GP-04	0.84	SS
Sample Train Leak Checks											
K Factor	3.461	Vacuum, in Hg	15.0	Initial	Interim	Final	Time	%CO <sub>2</sub>	%O <sub>2</sub>		
Pilot Leak Checks		Leak Rate, m <sup>3</sup> /m	0				0910H	1.0	20.0		
OK	Protest	Start Volume	396.6916				397.6928	Fyrite System Leak Check		OK	
OK	Post-test	Stop Volume	396.6916				397.6928	Bag ID	BCACMP-AFSP-113/110-R		

Port & Point	Time		DGM Reading (cu. meter)	Pilot Reading (mmH <sub>2</sub> O)	Delta H Calc. (mmH <sub>2</sub> O)	Delta H Actual (mmH <sub>2</sub> O)	Gauge Vacuum (in Hg)	Temperature °C				
	Clock (24-hr)	Test (min)						Stack	DGM	Probe	Filter	Imp Ext.
A-12	0928H	0	396.6930	5.8	20.08	20.0	2.0	11	25	126	119	11
11	0931H	3	396.7374	5.6	19.38	19.4	2.0	11	25	121	120	8
10	0934H	6	396.7802	5.4	18.69	18.6	1.5	11	25	122	121	8
9	0937H	9	396.8236	5.6	19.38	19.4	2.0	12	26	120	121	6
8	0940H	12	396.8652	5.4	18.69	18.6	2.0	13	27	119	120	7
7	0943H	15	396.9074	5.4	18.69	18.6	2.0	12	27	122	119	7
6	0946H	18	396.9492	5.2	17.99	18.0	2.0	11	28	121	121	7
5	0949H	21	396.9920	5.0	17.31	17.4	1.5	13	29	121	120	8
4	0952H	24	397.0322	5.0	17.31	17.4	1.5	11	30	121	121	7
3	0955H	27	397.0730	4.8	16.61	16.6	1.5	12	30	121	120	7
2	0958H	30	397.1120	4.4	15.23	15.2	1.5	13	31	121	121	7
1	1001H	33	397.1510	5.0	17.31	17.4	2.0	13	32	120	120	7
B-12	1004H	36	397.1888	5.4	18.69	18.6	1.5	14	32	121	126	10
11	1010H	39	397.2332	5.4	18.69	18.6	1.5	14	33	120	120	8
10	1013H	42	397.2774	5.8	20.08	20.0	2.0	15	33	119	120	9
9	1016H	45	397.3202	5.6	19.38	19.4	2.0	16	34	120	119	10
8	1019H	48	397.3642	5.4	18.69	18.6	2.0	18	35	121	119	11
7	1022H	51	397.4072	5.6	19.38	19.4	2.0	17	35	120	121	10
6	1025H	54	397.4500	5.2	17.99	18.0	2.0	17	36	120	119	11
5	1028H	57	397.4862	4.8	16.61	16.6	2.0	18	37	121	120	11
4	1031H	60	397.5340	5.0	17.31	17.4	2.0	19	37	121	119	11
3	1034H	63	397.5740	4.8	16.61	16.6	2.0	19	37	121	119	11
2	1037H	66	397.6122	4.8	16.61	16.6	1.5	19	38	119	120	10
1	1040H	69	397.6526	4.8	16.61	16.6	1.5	18	38	119	118	16
0	1044H	72	397.6924									

Run Time	Total Volume	RMS Delta P
72	0.9994	2.283

Delta H Ave.	High Vac.	Ts Ave.	Tm Ave.
18.042	2.0	14.458	31.667

Isokinetic %
98.866

Team Leader / Date: ANGELLO C. GUEVARRA 2/28/20

QAQC / Date: MARICOS D. NUNES 28-FEB-20



DENR ACCREDITED  
Source Emission Testing Firm  
SAT No 2018-92  
SAT No 2018-93  
SAT No 2019-98





ISOKINETIC FIELD DATA SHEET  
METHOD(S) 5 & 6

Facility Name	Bongvet Corp. - Acupan Contract Mining Project	Run Number	2
Town/Province	Balatoc, Virac, Itogon, Benguet	Job Number	-
Source	Acid Fume Scrubber Parking Area	Test Date	2/28/20
Test Personnel	MDN, AVG, MRC, ADM	Operator Signature	<i>AG</i>

Filter ID	Tare(s)	Barometric Pressure (in Hg)	Static Pressure (mmHg)	Meterbox			Nozzle		Pilot Tube/Probe		Probe Material
				ID #	Gamma	Delta Hg	ID #	Diameter	ID #	Cp	
200178	0.3508	27.23	-1.0	GMC-01	0.9999	48.30	GN-03	6.00	GP-04	0.84	SS
Sample Train Leak Checks											
K Factor		Vacuum, in Hg	Initial	Interim	Final	Time	%CO <sub>2</sub>	%O <sub>2</sub>			
3.607			15.0		2.5	1037H	1.0	20.0			
Pilot Leak Checks		Leak Rate, m <sup>3</sup> /m									
OK	Pretest	Start Volume	397.7002			398.7268	Fyrles System Leak Check				
OK	Post-test	Stop Volume	397.7002			398.7268	Bag ID	BCACMP-ARCP-MS/NO-R			

Port & Point	Time		DGM Reading (cu meter)	Pilot Reading (mmHg)	Delta H Calc. (mmHg)	Delta H Actual (mmHg)	Gauge Vacuum (in Hg)	Temperature °C				
	Clock (24-hr)	Test (min)						Stack	DGM	Probe	Filter	Imp Ext.
A-12	1110H	0	397.7014	5.6	20.20	20.2	2.5	21	36	124	117	7
11	1113H	3	397.7460	5.6	20.20	20.2	2.5	19	36	124	120	7
10	1116H	6	397.7944	5.8	20.92	21.0	2.5	18	36	122	121	7
9	1119H	9	397.8300	5.8	20.92	21.0	2.5	19	36	120	121	7
8	1122H	12	397.8232	5.4	19.48	19.4	2.5	19	36	122	121	7
7	1125H	15	397.9236	5.4	19.48	19.4	2.5	18	37	121	121	7
6	1128H	18	397.9686	5.0	18.04	18.0	2.5	17	37	120	120	7
5	1131H	21	398.0102	5.2	18.76	18.8	2.0	17	37	120	120	7
4	1134H	24	398.0520	4.8	17.31	17.4	2.0	18	37	119	121	6
3	1137H	27	398.0924	4.8	17.31	17.4	2.0	19	37	119	120	9
2	1140H	30	398.1354	5.2	18.76	18.8	2.0	18	38	120	119	6
1	1143H	33	398.1788	4.8	17.31	17.4	2.0	19	38	119	120	5
8-12	1146H	36	398.2164	5.4	19.48	19.4	2.0	21	38	121	120	9
11	1152H	39	398.2602	5.4	19.48	19.4	2.0	20	38	120	119	7
10	1155H	42	398.3050	5.8	20.92	21.0	2.5	20	38	121	120	9
9	1158H	45	398.3510	5.2	18.76	18.8	2.5	20	38	121	120	9
8	1201H	48	398.3926	5.6	20.20	20.2	2.0	21	38	121	121	10
7	1204H	51	398.4370	5.2	18.76	18.8	2.0	20	38	119	119	9
6	1207H	54	398.4810	4.6	16.59	16.6	2.0	19	38	121	120	7
5	1210H	57	398.5222	5.0	18.04	18.0	2.0	18	38	120	120	10
4	1213H	60	398.5614	5.0	18.04	18.0	2.0	19	38	120	120	7
3	1216H	63	398.6046	4.8	17.31	17.4	2.0	19	39	120	120	9
2	1219H	66	398.6450	4.6	16.59	16.6	2.0	19	39	121	120	11
1	1222H	69	398.6874	5.0	18.04	18.0	2.0	23	39	121	119	13
0	1225H	72	398.7262									

Run Time	Total Volume	RMS Delta P
72	1.0248	2.251

Delta H Ave.	High Vac.	Ts Ave.	Tm Ave.
18.800	2.5	19.208	37.50

Isokinetic %
99.995

Team Leader / Date: ANGEL V. GUEVARRA 2/28/20  
 DENR ACCREDITED  
 Source Emission Testing Firm  
 SAT N: 2018-92  
 SAT N: 2018-93  
 SAT N: 2019-99

QAQC / Date: MARICON B. LONIEZ 28 FEB 20



ISOKINETIC FIELD DATA SHEET  
METHOD(S) 536

Facility Name	Benguet Corp. - Acupan Contract Mining Project	Run Number	3
Town/Province	Balatoc, Virac, Iligan Benguet	Job Number	-
Source	Thermal Digestion Chamber with Acid Fume Scrubber Parking Area	Test Date	2/28/20
Test Personnel	MDN, AVG, MRC, ADM	Operator Signature	<i>[Signature]</i>

Filter ID	Tare(s)	Barometric Pressure (in Hg)	Static Pressure (mmHg)	Meterbox			Nozzle		Pilot Tube/Probe		Probe Material
				ID #	Gamma	Delta Hg	ID #	Diameter	ID #	Cp	
200199	0.3592	27.17	-1.0	6MC-01	0.9999	48.30	6N-03	6.00	6P-04	0.84	SS
Sample Train Leak Checks											
K Factor	3.589	Vacuum, in Hg	15.0	Initial	Interim	Final	Time	%CO <sub>2</sub>	%O <sub>2</sub>		
Pilot Leak Checks	Leak Rate, m <sup>3</sup> /m	Start Volume	398.7998				399.7602	Fyrite System Leak Check	OK		
OK	Post-test	Stop Volume	398.7998				399.7602	Bag ID	BCACUP-APSP-M3/MIO-F		

Port & Point	Time		DGM Reading (cu. meter)	Pilot Reading (mmH <sub>2</sub> O)	Delta H Calc. (mmH <sub>2</sub> O)	Delta H Actual (mmH <sub>2</sub> O)	Gauge Vacuum (in Hg)	Temperature C				
	Clock (24-hr)	Test (min)						Stack	DGM	Probe	Filter	Imp. Ext.
A-12	1340H	0	398.7408	5.4	19.38	19.4	2.0	16	33	122	120	15
11	1343H	3	398.7864	5.6	20.10	20.0	2.0	15	33	121	121	13
10	1346H	6	398.8280	5.6	20.10	20.0	2.0	17	33	120	121	17
9	1349H	9	398.8788	5.8	20.81	20.8	2.0	17	33	120	121	16
8	1352H	12	398.9172	5.8	20.81	20.8	2.0	18	34	121	122	18
7	1355H	15	398.9632	5.4	19.38	19.4	2.0	19	34	120	120	18
6	1358H	18	399.0040	5.4	19.38	19.4	2.0	18	35	122	120	18
5	1401H	21	399.0482	5.2	18.66	18.6	1.5	20	36	119	120	18
4	1404H	24	399.0920	4.6	16.51	16.6	1.5	18	36	119	120	18
3	1407H	27	399.1352	5.2	18.66	18.6	1.5	23	36	121	120	17
2	1416H	30	399.1740	5.0	17.94	18.0	1.5	22	37	121	121	17
1	1413H	33	399.2162	4.8	17.23	17.2	1.5	23	37	119	121	17
B-12	1415H	36	399.2544	5.6	20.10	20.0	1.5	23	37	121	121	17
11	1420H	39	399.3002	5.6	20.10	20.0	1.5	23	38	121	121	15
10	1426H	42	399.3446	5.4	19.38	19.4	1.5	23	38	120	120	14
9	1429H	45	399.4024	5.2	18.66	18.6	1.5	24	38	121	123	14
8	1432H	48	399.4302	4.6	16.51	16.6	1.5	23	38	120	120	14
7	1435H	51	399.4710	5.2	18.66	18.6	1.5	22	38	119	119	14
6	1438H	54	399.5134	4.8	17.23	17.2	1.5	21	38	121	121	13
5	1441H	57	399.5542	5.0	17.94	18.0	1.5	22	39	120	120	13
4	1444H	60	399.5972	4.6	16.51	16.6	2.0	22	39	119	119	13
3	1447H	63	399.6384	5.0	17.94	18.0	2.0	23	39	119	120	13
2	1400H	66	399.6790	4.8	17.23	17.2	2.0	22	39	119	120	13
1	1453H	69	399.7182	5.2	18.66	18.6	2.0	22	39	121	120	13
0	1456H	72	399.7598									

Run Time	Total Volume	RMS Delta P
72	1.019	2.239

Delta H Ave.	High Vac.	Ts Ave.	Tm Ave.
18.65	2.0	20.667	20.542

Isokinetic %
100.273

Team Leader / Date: *ANGELO J. GUEVARRA* 2/28/20

QAQC / Date: *MARICEN D. KUNED* 28 FEB 20



DENR ACCREDITED  
Source Emission Testing Firm  
SAT No 2018-82  
SAT No 2018-93  
SAT No 2018-99





METHOD 7 FLASK SAMPLE AND RECOVERY DATA

Facility: BENELET CORP - OCUAPAN CONTRACT MINING PROJECT Absorbing Solution Volume, ml: 25  
 Town/Province: (BOHATOC ITDGO) BENGUET Heated Probe? (check) Yes  No   
 Source: THERMO DIGESTION CHAMBER WITH ACO FUME SCRUBBER PARTING AREA Filter Used? (check) Yes  No   
 Personnel: MDN AVG MPC ADM Remarks:  
 Test Date: 2/28/2020

\* If No, explain in "Remarks"  
 \* If No, explain in "Remarks"

Run No	Sample ID (Use Sample Label)	Flask ID Number	Flask Volume (ml)	Leak Check < 0.4 (in Hg/min)	Evacuated Pressure (in Hg)	Flask Axis Pressure (in Hg)	Flask Temp (°C)	Sample Collection Time* (24 Hour)	Shaken for 5 min?	Sample Collection Information	
										Station Leak Ck	By (init)
1	BCACMP-AFSP-M7-R1A	GF 01	2237.50	OK	20.10	1.10	20.1	0935	YES	MDN	MDN
	BCACMP-AFSP-M7-R1B	GF 02	2244.85	OK	20.30	0.96	20.0	0950	YES		
	BCACMP-AFSP-M7-R1C	GF 03	2260.45	OK	20.02	0.64	20.8	1010	YES		

Sample Recovery Information						
Bar Pressure, P <sub>1</sub> (in Hg)	Date	Shaken for 2 min?	Sample Recovery Time* (24 Hour)	Final Pressure (in Hg)	By (init)	Flask Temp (°C)
02	MAR-20	YES	1130	0.73	MDN	29.2
02	MAR-20	YES	1133	0.28		28.9
02	MAR-20	YES	1136	0.50		29.2

Run No	Sample ID	Flask ID	Vol. (ml)	Leak Ck	Leak (in Hg)	System Leak Ck	Temp (°C)	Time	Shaken	System Leak Ck	
										Pre	Post
2	BCACMP-AFSP-M7-R2A	GF 04	2030.35	OK	25.89	1.34	20.9	1115	YES	MDN	MDN
	BCACMP-AFSP-M7-R2B	GF 05	2207.55	OK	26.27	0.96	27.1	1140	YES		
	BCACMP-AFSP-M7-R2C	GF 06	2213.75	OK	26.10	1.07	27.3	1200	YES		

Sample Recovery Information						
Bar Pressure, P <sub>1</sub> (in Hg)	Date	Shaken for 2 min?	Sample Recovery Time* (24 Hour)	Final Pressure (in Hg)	By (init)	Flask Temp (°C)
02	MAR-20	YES	1140	0.26	MDN	29.2
02	MAR-20	YES	1143	0.29		29.0
02	MAR-20	YES	1146	0.11		29.1

Run No	Sample ID	Flask ID	Vol. (ml)	Leak Ck	Leak (in Hg)	System Leak Ck	Temp (°C)	Time	Shaken	System Leak Ck	
										Pre	Post
3	BCACMP-AFSP-M7-R3A	GF 07	2227.00	OK	20.14	1.03	28.9	1345	YES	MDN	MDN
	BCACMP-AFSP-M7-R3B	GF 08	2215.20	OK	20.18	0.99	28.9	1425	YES		
	BCACMP-AFSP-M7-R3C	GF 09	2204.95	OK	20.12	1.65	28.7	1445	YES		

Sample Recovery Information						
Bar Pressure, P <sub>1</sub> (in Hg)	Date	Shaken for 2 min?	Sample Recovery Time* (24 Hour)	Final Pressure (in Hg)	By (init)	Flask Temp (°C)
02	MAR-20	YES	1149	0.32	MDN	29.1
02	MAR-20	YES	1152	0.49		28.9
02	MAR-20	YES	1155	0.90		29.2

Source Oxygen % Concentration? 20%  
 Was Additional Oxygen Introduced to the Flask? (circle) No

- \* P<sub>1</sub> the initial flask pressure, must be evacuated to within 3 inches of mercury (in. Hg) of the absolute pressure (Barometric Pressure).
- \* Additional oxygen should be introduced to the Flask. If the Source O<sub>2</sub> is below 3%.
- \* Flask must stand for 16 hours or greater after sampling before recovery can be performed.

Technician: ANGILO V. GUEVARA Date: 2/28/20  
 QA - QC - Dept: MARCOON P. NUNEZ Date: 2-MAR-20  
 (Signature)



TECHNICAL SERVICES  
 1000 W. 10th St.  
 LAKE CHARLES, LA 70601



**APPENDIX C**  
**Facility Process Data**



# GREENTEK MONITORING LOGSHEET

### Facility Information

FACILITY NAME  
 LOCATION  
 PCO NAME  
 TELEPHONE/FAX NUMBER  
 EMAIL ADDRESS  
 DATE OF SAMPLING  
 STACK TEST PERSONNEL

BENGLUET CORP. - ACUFAN CONTRACT MINING PROJE  
 BALATOC, VIRAC, NEGOS, BENGLUET  
 MS. JEMIMAH R. SALAYOG  
 0918-922-2769

FEBRUARY 27, 2020  
 MDN, AVG, MRC, ADM

### Source Description

SOURCE TESTED (ID or Name used by Facility)  
 SOURCE TYPE (Genset, Boiler, etc)  
 BRAND (Made By)  
 RATED CAPACITY (with units: BHp, MW, MT/hr, etc)  
 DATE CONSTRUCT STARTED (on source) month/year  
 DATE OF ANY MODIFICATION (that increased emissions)  
 HAS THE SOURCE BEEN MOVED (Specify Date)  
 EXISTING (const. before 11/25/00) or NEW (or modified) SOURCE  
 OPERATION (estimated hours per year for source)  
 TYPE OF APCD\* (baghouse, ESP, cyclone, scrubber, etc)  
 DATE OF APCD INSTALLED  
 TOTAL STACK HEIGHT (m, ft., etc)  
 STACK ORIENTATION

THERMO DIGESTION CHAMBER WITH  
 ACID FUME SCRUBBER CHAMBER AREA  
 THERMO DIGESTION CHAMBER  
 SUPPLIED BY KRYPTON

AUGUST 00, 2019

YES/NO If Yes, Date Moved:  
 EXISTING SOURCE/NEW SOURCE

8,600 hrs/yr.  
 SCRUBBER

4th  
 VERTICAL/HORIZONTAL / w/ w/o COVER

\* APCD - Air Pollution Control Device  
 \* This item is critical to determining the standards that apply to the emission point

### Fuel Information

TYPE OF FUEL USED, %S (during sampling)  
 ORIGINAL FUEL USED, %S  
 DATE FUEL CHANGED?  
 ACTUAL FUEL CONSUMPTION DURING SAMPLING (liters, kg, etc)  
 \* Provide Certificate of Fuel Analysis for strict compliance with DENR

ELECTRIC

N/A

### Process Information

OPERATING RATE DURING TEST?  
 IS THE APCD OPERATING DURING SAMPLING?  
 IS PROCESS LOGSHEET PROVIDED BY THE PLANT?  
 PRODUCTION OUTPUT DURING SAMPLING

NORMAL OPERATION - 100%  
 YES/NO

YES/NO

Solutions of Gold Ores

### NOTES:

DENR CAR REPRESENTATIVE:  
 MR. JEFFERSON LUMIEREZ

Information recorded/gathered by:

MARCON D. KLINEZ  
 Name and signature of GEES personnel on-site

DENR ACCREDITED  
 Source/Emission Testing Firm  
 SAT No 2018-92  
 SAT No 2018-93  
 SAT No 2019-99



Information supplied by:

JEMIMAH R. SALAYOG  
 Name and signature of facility representative



ENVIRONMENTAL  
ENGINEERING  
SERVICES

# GREENTEK MONITORING LOGSHEET

### Facility Information

FACILITY NAME  
LOCATION  
PCO NAME  
TELEPHONE/FAX NUMBER  
EMAIL ADDRESS  
DATE OF SAMPLING  
STACK TEST PERSONNEL

BENQUET CORP.- ACUPAN CONTRACT MINING FROM  
BALATOC, VIRAC, ITOGON, BENQUET  
MS. JEMIMAH R. SALAYOG  
0918-922-2767

FEBRUARY 20, 2020  
MDN, AVG, MRC, ADM

### Source Description

SOURCE TESTED (ID or Name used by Facility)  
SOURCE TYPE (Genset, Boiler, etc)  
BRAND (Made By)  
RATED CAPACITY (with units: BHp, MW, MT/hr, etc)  
DATE CONSTRUCT STARTED (on source) month/year  
DATE OF ANY MODIFICATION (that increased emissions)  
HAS THE SOURCE BEEN MOVED (Specify Date)  
EXISTING (const. before 11/25/00) or NEW (or modified) SOURCE  
OPERATION (estimated hours per year for source)  
TYPE OF APCD\* (baghouse, ESP, cyclone, scrubber, etc)  
DATE OF APCD INSTALLED  
TOTAL STACK HEIGHT (m, ft., etc)  
STACK ORIENTATION  
\* APCD - Air Pollution Control Device  
\* This item is critical to determining the standards that apply to the emission point

THERMO DIGESTION CHAMBER WITH  
ACID FLUME SCRUBBER PARTING AREA  
THERMO DIGESTION CHAMBER  
SUPPLIED BY KRYPTON

August 30, 2014

YES/NO // Yes, Date Moved:

EXISTING SOURCE/NEW SOURCE

8,600 hrs/yr.  
SCRUBBER

4m

VERTICAL HORIZONTAL  w/  w/o COVER

### Fuel Information

TYPE OF FUEL USED, %S (during sampling)  
ORIGINAL FUEL USED, %S  
DATE FUEL CHANGED?  
ACTUAL FUEL CONSUMPTION DURING SAMPLING (liters, kg, etc)  
\* Provide Certificate of Fuel Analysis for strict compliance with DENR

ELECTRIC

N/A

### Process Information

OPERATING RATE DURING TEST?  
IS THE APCD OPERATING DURING SAMPLING?  
IS PROCESS LOGSHEET PROVIDED BY THE PLANT?  
PRODUCTION OUTPUT DURING SAMPLING

N/A

NORMAL OPERATION - 100%

YES/NO

YES/NO

511.03 TONS OF GOLD ORES

### NOTES:

DENR CAR REPRESENTATIVE:  
MR. JEFFERSON LUMEREZ

Information recorded/gathered by:

MARICON D. NUNEZ  
Name and signature of GEES personnel on-site

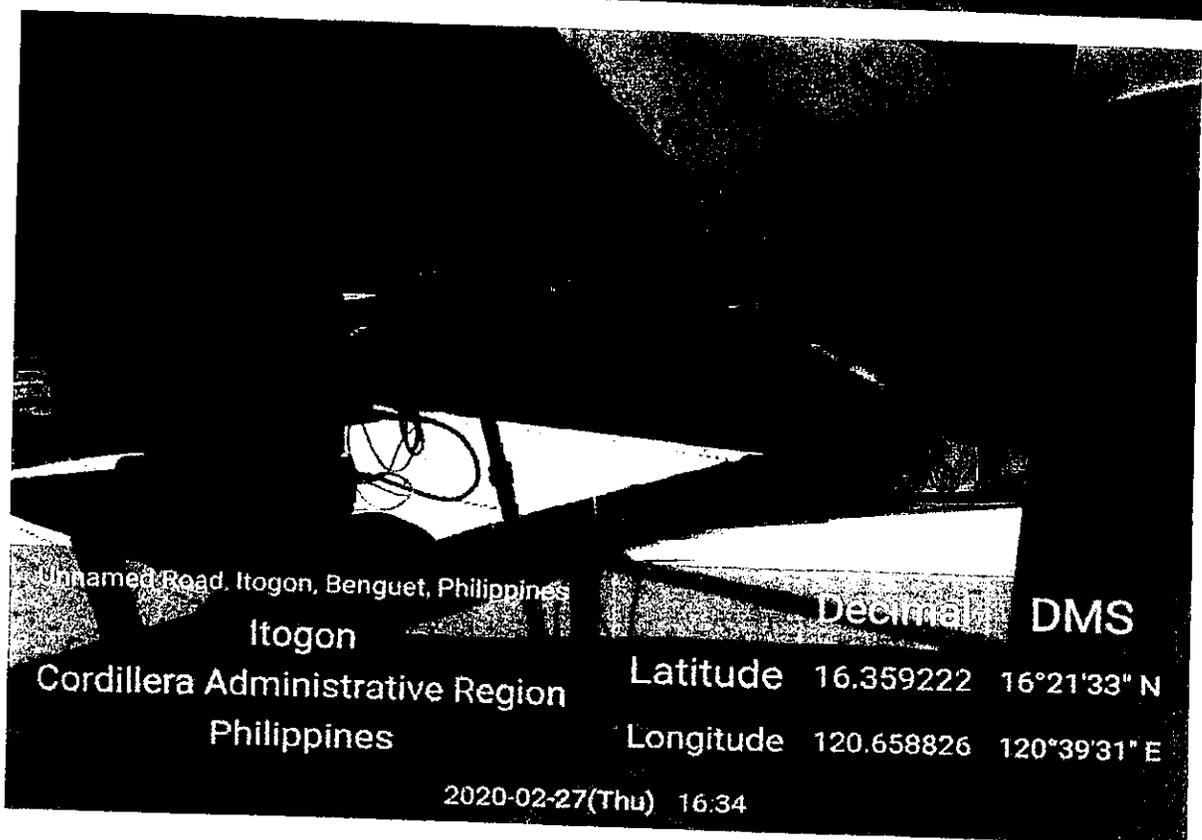
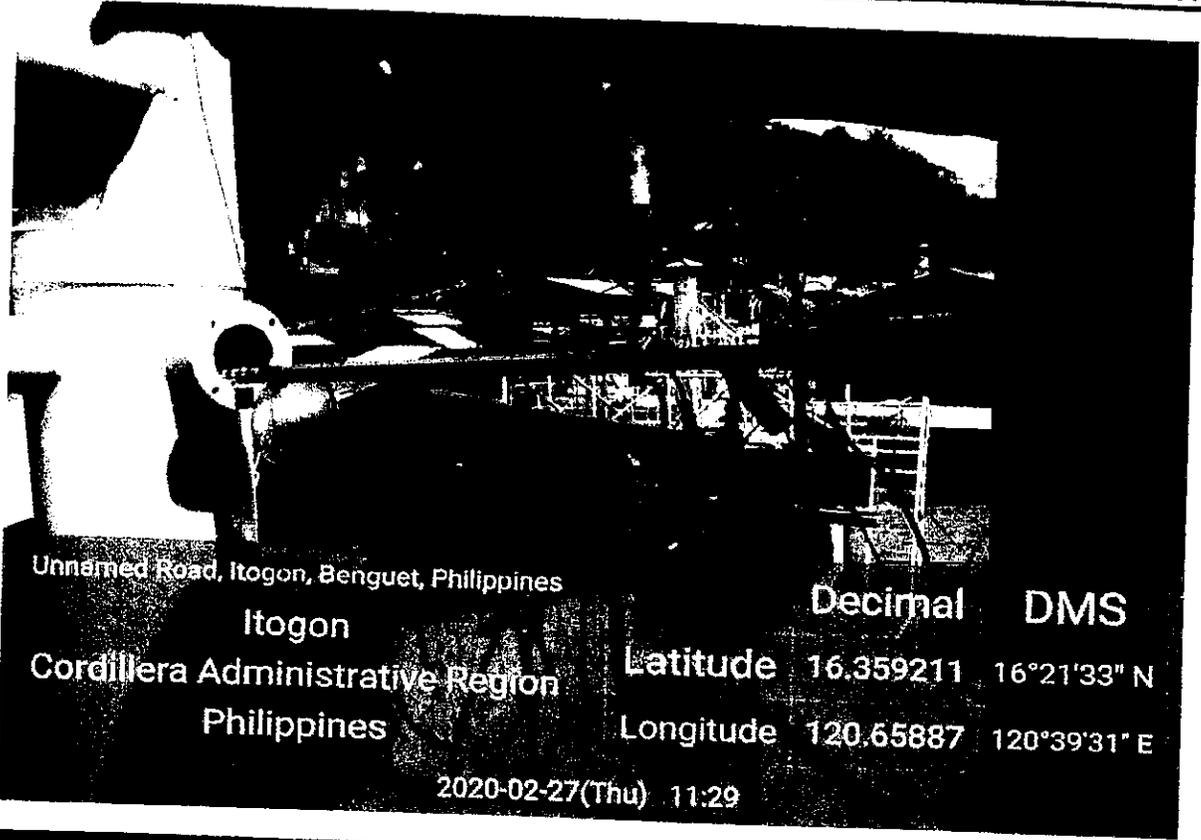


DENR ACCREDITED  
Source Emission Testing Firm  
SAT No 2018-82  
SAT No 2018-93  
SAT No 2019-99

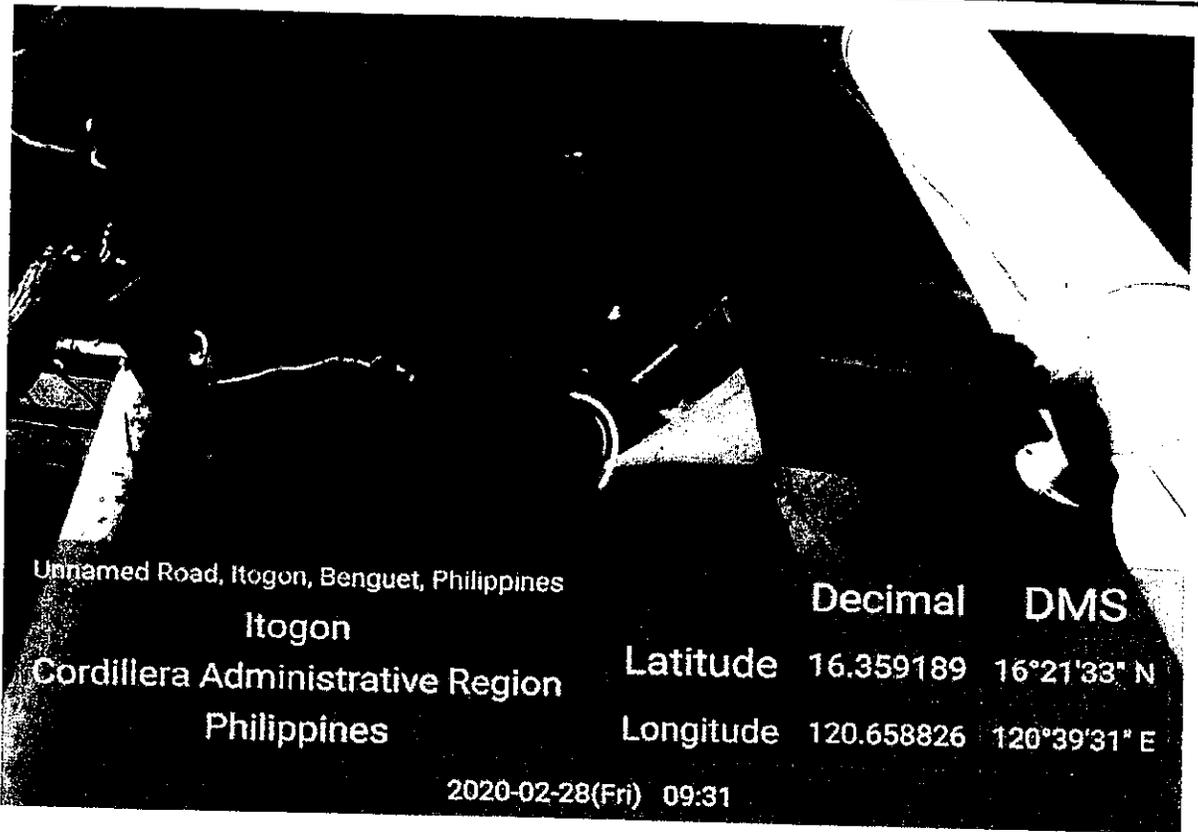


Information supplied by:

JEMIMAH R. SALAYOG  
Name and signature of facility representative



**Thermo Digestion Chamber with Acid Fume Scrubber (Chamber Area)**



**Thermo Digestion Chamber with Acid Fume Scrubber (Parting Area)**

**APPENDIX D**

**Analytical Data**



# MACH UNION LABORATORY

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Tel. No.: 553 8381 / 553 8382 / 553-8879 Fax No.: 553-8878  
Email: info@machunion.com • Website: www.machunion.com



Recognized Department of Health (DOH) • Department of Environment & Natural Resources (DENR)

## Result of Analysis

Job Number: MU20009981 Laboratory Number MU20009981-001 Date: 03/10/2020  
 Customer: NCRMUL-000366 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Address: 2430 Laura St., Pandacan, Manila  
 Project Name: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 Location: Balatoc, Virac, Itogon, Benguet  
 Date Sampled: 02/27/2020 Analyzed Date: 03/02/2020  
 Date Received: 03/02/2020  
 Sample Description: Air Stationary Source Sample in Filter in Petri Dish & Acetone wash in Amber Bottle  
 Sample Source: THERMO DIGESTION CHAMBER WITH ACID FUME SCRUBBER CHAMBER AREA

Analysis are based on sample (s) of: NCRMUL-000366 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Mach Union Water Laboratory, Inc. does not guarantee that sample(s) submitted is (are) representative of the whole bulk from where it/they was (were) taken. Reproduction of this report is not authorized except in full, without written approval of the laboratory.

Sample ID	Analyte	Method	Units	Result
BCACMP - AFSC - M5 - FILTER - R1	Particulate Matter	M5. Gravimetric	mg	5
BCACMP - AFSC - M5 - FILTER - R2	Particulate Matter	M5. Gravimetric	mg	5
BCACMP - AFSC - M5 - FILTER - R3	Particulate Matter	M5. Gravimetric	mg	10

Reference:  
Method 5 US CFR Part 160 United States Environmental Protection Agency (US EPA)

\*\*Customer/s is/are given (7) days upon receipt of report to question any discrepancies (i.e. customer name & address, sample description, result, etc.)  
This document has been signed by those names that appear on this report and are the authorized signatories.

Checked by  
  
 Katrina U. Bagulayan, RCh  
 Chemist  
 PRC#: 0013681

Certified by:  
  
 Marisa T. Manabo, RCh  
 Supervising Chemist  
 PRC#: 0005465

Noted by:  
  
 Aladino M. Abulencia, ChE  
 Technical Manager

MU20009981\_FINAL\_200310\_1546H



# MACH UNION WATER LABORATORY, INC.

## Method 5: Particulate Matter Analytical Results

NAME OF THE COMPANY: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 ADDRESS: Balatoc, Virac, Ilogon, Benguet  
 DATE SAMPLED: February 27, 2020 DENSITY OF ACETONE: 0.79 g/cm<sup>3</sup>  
 DATE RECEIVED: March 02, 2020 AMBIENT TEMPERATURE (°C): 23.0 - 24.4  
 DATE ANALYZED: March 02-05, 2020 RELATIVE HUMIDITY (%): 40 - 44  
 LABORATORY NO. MU20009981-001A-C ANALYTICAL BALANCE ID: ANAL. BALANCE No. 5

SAMPLE SOURCE	Units	THERMO DIGESTION CHAMBER WITH ACID FUME SCRUBBER CHAMBER AREA		
		BCACMP - AFSC - M5 - FILTER - R1	BCACMP - AFSC - M5 - FILTER - R2	BCACMP - AFSC - M5 - FILTER - R3
<b>Filter Analysis</b>				
Filter Identification		200174	200175	200176
Filter Observations/ Appearance		OFF WHITE	OFF WHITE	OFF WHITE
Filter Tare Weight	g		0.3588	0.3560
Filter Final Weight	g	0.3543	0.3576	0.3559
Dish Identification		174	175	176
Dish Tare Weight (If applicable)	g	-	-	-
Dish Final Weight (If applicable)		-	-	-
Difference	g	0.0008	0.0008	0.0009
Particulate Matter on Filter, Pmf	mg	0.8000	0.8000	0.9000
<b>Acetone Rinse Analysis</b>				
Acetone Rinse Appearance		WITH BLACK PRECIPITATE	WITH BLACK PRECIPITATE	WITH BLACK PRECIPITATE
Acetone Rinse Volume, V <sub>aw</sub>	mL	50	56	53
Beaker Identification		0919-BK150-007	0919-BK150-017	0919-BK150-025
Beaker Tare Weight	g	70.0240	72.2776	69.0812
Beaker Final Weight	g	70.0286	72.2818	69.0909
Difference	g	0.0046	0.0042	0.0097
Particulate Matter from Rinse, Pmr	mg	4.6000	4.2000	9.7000
<b>Acetone Blank Analysis</b>				
Acetone Blank Volume, A <sub>v</sub>	mL	100	100	100
Beaker Identification		0919-BK150-025	0919-BK150-025	0919-BK150-025
Beaker Tare Weight	g	69.0781	69.0781	69.0781
Beaker Final Weight	g	69.0784	69.0784	69.0784
Difference	g	0.0003	0.0003	0.0003
Blank Residue Mass, A <sub>b</sub>	mg	0.30	0.30	0.30
C <sub>a</sub> = A <sub>b</sub> / A <sub>v</sub>	mg/mL	0.0030	0.0030	0.0030
Acetone Blank, W <sub>a</sub> = C <sub>a</sub> × V <sub>aw</sub>	mg	0.1500	0.1680	0.1590
Max Blank Corr. Allowed, Am *	mg	0.3950	0.4424	0.4187
Acetone Blank Value Used **, A <sub>bu</sub>	mg	0.1500	0.1680	0.1590
*Max acetone blank is 0.001% of V <sub>aw</sub> mass, Am = V <sub>aw</sub> × Density of Acetone Used × 0.0001 **Mass of acetone blank correction. W <sub>a</sub> should be less than 0.001% of V <sub>aw</sub> mass, otherwise used W <sub>bu</sub>				
Total PM, Pmf + Pmr - A <sub>bu</sub>	mg	5	5	10

Analyzed by:

Checked by:



# MACH UNION LABORATORY

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Email: info@machunion.com • Website: www.machunion.com

Recognized Department of Health (DOH) • Department of Environment & Natural Resources (DENR)



## Result of Analysis

Job Number: MU20009982      Laboratory Number: MU20009982-001      Date: 03/10/2020  
 Customer: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Address: 2430 Laura St., Pandacan, Manila  
 Project Name: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 Location: Balatoc, Virac, Itogon, Benguet  
 Date Sampled: 02/27/2020      Analyzed Date: 03/02/2020  
 Date Received: 03/02/2020  
 Sample Description: Air Stationary Source Sample in Absorbing Solution in 500mL HDPE  
 Sample Source: THERMO DIGESTION CHAMBER WITH ACID FUME SCRUBBER CHAMBER AREA

Analysis are based on sample (s) of: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
Mach Union Water Laboratory, Inc. does not guarantee that sample(s) submitted is (are) representative of the whole bulk from where it/they was (were) taken. Reproduction of this report is not authorized except in full, without written approval of the laboratory.

Sample ID	Analyte	Method	Units	Result
BCACMP - AFSC - M6 - BLANK	Sulfur dioxide	M6. Barium-Thorin Titration	mg	0
BCACMP - AFSC - M6 - R1	Sulfur dioxide	M6. Barium-Thorin Titration	mg	1
BCACMP - AFSC - M6 - R2	Sulfur dioxide	M6. Barium-Thorin Titration	mg	1
BCACMP - AFSC - M6 - R3	Sulfur dioxide	M6. Barium-Thorin Titration	mg	1

Reference:  
Method 6 US CFR Part60 United States Environmental Protection Agency (US EPA)

\*\*Customer/s is/are given (7) days upon receipt of report to question any discrepancies (i.e. customer name & address, sample description, result, etc.)  
This document has been signed by those names that appear on this report and are the authorized signatories.

Checked by:

Katrina M. Manulayan, RCh  
Chemist  
PRC# 0004681

Certified by:

Marisa T. Manao, RCh  
Supervising Chemist  
PRC# 0005165

Noted by:

Atacino M. Abulencia, ChE  
Technical Manager

MU20009982\_FINAL\_200310\_154911



# MACH UNION WATER LABORATORY, INC.

Method 6: Sulfur Dioxide Analytical Results

**CUSTOMER NAME:**  
**ADDRESS:**  
**DATE SAMPLED:**  
**DATE RECEIVED:**  
**ANALYZED:**  
**LABORATORY NO.:**

**BENQUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**

Batiboc, Virac, Ilogon, Benguet

February 27, 2020

March 02, 2020

March 02, 2020

MU20009982-007A-D

Standardization of NaOH Solution			Standardization of H <sub>2</sub> SO <sub>4</sub> Solution			Standardization of BaCl <sub>2</sub> Solution					
TRIAL	Mass of KHP (g)	Volume NaOH used (mL)	Normality of NaOH (N)	TRIAL	NaOH Volume, mL (V <sub>Na</sub> )	H <sub>2</sub> SO <sub>4</sub> Volume, mL (V <sub>s</sub> )	H <sub>2</sub> SO <sub>4</sub> N, meq/mL (N <sub>s</sub> )	TRIAL	H <sub>2</sub> SO <sub>4</sub> Volume, mL (V <sub>s</sub> )	BaCl <sub>2</sub> Volume, mL (V <sub>Na</sub> )	BaCl <sub>2</sub> N, meq/mL (N <sub>Na</sub> )
TRIAL 1	0.0100	4.30	0.0114	T1	24.80	25.00	0.00997	T1	25.00	23.60	0.01058
TRIAL 2	0.0153	7.60	0.0099	T2	24.90	25.00	0.01001	T2	25.00	23.50	0.01063
TRIAL 3	0.0200	11.00	0.0089	AVERAGE	24.85	25.00	0.00999	AVERAGE	25.00	23.55	0.01061

$$M_{SO_2} = 32.03 \times N_{BaCl_2} \times [V_{(avg)} - V_{(avg)}] \times [V_{cal}/V_s]$$

ISOPROPANOL CHECK OK?  
(Absorbance  $\leq 0.100$ )

0.0600

SAMPLE SOURCE	SAMPLE ID	SAMPLE VOLUME, V <sub>soln</sub> mL	ALIQUOT VOLUME, V <sub>a</sub> mL		VOLUME TITRANT, V <sub>t</sub> (mL)		MASS as SO <sub>2</sub> (mg)
			RUN 1	RUN 2	RUN 1	RUN 2	
BLANK		200	20	20	0.10	0.10	
THERMO DIGESTION CHAMBER	BCACMP - AFSC - M6 - R1	293	20	20	0.40	0.40	1
WITH ACID FUME SCRUBBER	BCACMP - AFSC - M6 - R2	295	20	20	0.40	0.30	1
CHAMBER AREA	BCACMP - AFSC - M6 - R3	363	20	20	0.30	0.30	1
	BCACMP - AFSC - M6 - BLANK	58	20	20	0.10	0.10	0

Analyzed by: \_\_\_\_\_

Checked by: \_\_\_\_\_



# MACH UNION LABORATORY

duly registered under:

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Email: info@machunion.com • Website: www.machunion.com

Recognized Department of Health (DOH) • Department of Environment & Natural Resources (DENR)



PAB ACCREDITED  
TESTING LABORATORY  
PNS ISO/IEC 17025:2005  
LA-2012-215B

### Result of Analysis

Job Number: MU20009983 Laboratory Number: MU20009983-001 Date: 03/10/2020  
 Customer: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Address: 2430 Laura St., Pandacan, Manila  
 Project Name: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 Location: Balatoc, Virac, Itogon, Benguet  
 Date Sampled: 02/27/2020 Analyzed Date: 03/02/2020  
 Date Received: 03/02/2020  
 Sample Description: Air Stationary Source Sample in , Absorbing Solution in 50mL HDPE

Analysis are based on sample (s) of: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Mach Union Water Laboratory, Inc. does not guarantee that sample(s) submitted is (are) representative of the whole bulk from where it/they  
 was (were) taken. Reproduction of this report is not authorized except in full, without written approval of the laboratory.

Sample ID	Analyte	Method	Units	Result
BCACMP - AFSC - M7 - BLANK	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	11
BCACMP - AFSC - M7 - R1A	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	488
BCACMP - AFSC - M7 - R1B	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	340
BCACMP - AFSC - M7 - R1C	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	829
BCACMP - AFSC - M7 - R2A	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	965
BCACMP - AFSC - M7 - R2B	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	611
BCACMP - AFSC - M7 - R2C	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	567
BCACMP - AFSC - M7 - R3A	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	921
BCACMP - AFSC - M7 - R3B	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	459
BCACMP - AFSC - M7 - R3C	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	813

Reference:  
 Method 7 US CFR Part60 United States Environmental Protection Agency (US EPA)

\*\*Customer/s is/are given (7) days upon receipt of report to question any discrepancies (i.e. customer name & address, sample description, result, etc.)  
 This document has been signed by those names that appear on this report and are the authorized signatories.

Checked by:

Katrina Pagelayan, RCh  
 Chemist  
 PRC#: 0013681

Certified by:

Marisa T. Mansor, RCh  
 Supervising Chemist  
 PRC#: 0005465

Noted by:

Aladino M. Abulencia, ChE  
 Technical Manager

MU20009983\_FINAL\_200310 1540H



# MACH UNION WATER LABORATORY, INC.

Method 7: Nitrogen Oxides as NO2 Analytical Results

NAME OF THE COMPANY:

BENGLUET CORPORATION - ACUPAN CONTRACT MINING PROJECT

ADDRESS:

Balatoc, Virac, Ilogon, Benguet

DATE SAMPLED:

February 27, 2020

DATE RECEIVED:

March 02, 2020

DATE ANALYZED:

March 02, 2020

LABORATORY NUMBER

MU20009983- 001A-J

UV-Vis Spectrometer ID

Genesis 50

Date of Last Calibration (≤ 6 mos.)

March 03, 2020

WAVELENGTH

410 nm

Kc = 100

691.2435046

$$A_1 + 2A_2 + 3A_3 + 4A_4$$

$$A_1^2 + A_2^2 + A_3^2 + A_4^2$$

SAMPLE IDENTIFICATION	SAMPLE PRETREAT	VOLUME OF ABSORBING SOLUTION (mL)	FINAL VOLUME	DILUTION	VOLUME OF WORKING STANDARD (mL)	0	SAMPLE ABSORBANCE	NO <sub>2</sub> VALUE (µg NO <sub>2</sub> )	% DIFFERENCE
STD 1	pH adjust	25 vol. to 50	100	1	0.0	A <sub>2</sub> =	0.0000	-	-
STD 2	pH adjust	25 vol. to 50	100	1	2.0	A <sub>1</sub> =	0.1540	106.4514997	6.45
STD 3	pH adjust	25 vol. to 50	100	1	4.0	A <sub>2</sub> =	0.3010	208.0642949	4.03
STD 4	pH adjust	25 vol. to 50	100	1	6.0	A <sub>3</sub> =	0.4100	283.4098389	5.53
STD 5	pH adjust	25 vol. to 50	100	1	8.0	A <sub>4</sub> =	0.5870	405.759372	1.44

SAMPLE SOURCE	SAMPLE ID	SAMPLE PRETREAT	SAMPLE VOLUME (mL)	VOLUME OF ALIQUOT (mL)	FINAL VOLUME (mL)	DILUTION	SAMPLE ABSORBANCE		NO <sub>2</sub> VALUE (µg NO <sub>2</sub> )
							SAMPLE ABSORBANCE	ABSORBANCE ADJUSTMENT	
BLANK	6	pH adjust	25 vol. to 50	25	100	1	0.0000	0.000	-
THERMO DIGESTION CHAMBER WITH ACID	BCACMP - AFSC - M7 - R1A	pH adjust	25 vol. to 50	25	100	1.0	0.3530	0.3530	488
FUME SCRUBBER CHAMBER AREA	BCACMP - AFSC - M7 - R1B	pH adjust	25 vol. to 50	25	100	1.0	0.2460	0.2460	340
	BCACMP - AFSC - M7 - R1C	pH adjust	25 vol. to 50	25	100	2.0	0.3000	0.3000	829
	BCACMP - AFSC - M7 - R2A	pH adjust	25 vol. to 50	25	100	2.0	0.3490	0.3490	965
	BCACMP - AFSC - M7 - R2B	pH adjust	25 vol. to 50	25	100	1.0	0.4420	0.4420	611
	BCACMP - AFSC - M7 - R2C	pH adjust	25 vol. to 50	25	100	1.0	0.4100	0.4100	567
	BCACMP - AFSC - M7 - R3A	pH adjust	25 vol. to 50	25	100	2.0	0.3330	0.3330	921
	BCACMP - AFSC - M7 - R3B	pH adjust	25 vol. to 50	25	100	1.0	0.3320	0.3320	459
	BCACMP - AFSC - M7 - R3C	pH adjust	25 vol. to 50	25	100	2.0	0.2940	0.2940	613
	BCACMP - AFSC - M7 - BLANK	pH adjust	25 vol. to 50	25	100	1.0	0.0080	0.0080	11
QC (600 µg)	8	pH adjust	25 vol. to 50	25	100	1	0.4440	0.4440	614
QC	9	pH adjust	25 vol. to 50	25	100	1	0.4370	0.4370	604

Analyzed by:

Checked by:



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duly registered under:  
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Email: info@machunion.com • Website: www.machunion.com

Recognized Department of Health (DOH) • Department of Environment & Natural Resources (DENR)



## Result of Analysis

Job Number: MU20009984 Laboratory Number: MU20009984-001 Date: 03/10/2020  
 Customer: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Address: 2430 Laura St., Pandacan, Manila  
 Project Name: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 Location: Balatoc, Virac, Itogon, Benguet  
 Date Sampled: 02/28/2020 Analyzed Date: 03/02/2020  
 Date Received: 03/02/2020  
 Sample Description: Air Stationary Source Sample in Filter in Petri Dish & Acetone wash in Amber Bottle  
 Sample Source: THERMO DIGESTION CHAMBER WITH ACID FUME SCRUBBER PARTING AREA

Analysis are based on sample (s) of: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Mach Union Water Laboratory, Inc. does not guarantee that sample(s) submitted is (are) representative of the whole bulk from where it/they was (were) taken. Reproduction of this report is not authorized except in full, without written approval of the laboratory.

Sample ID	Analyte	Method	Units	Result
BCACMP - AFSP - M5 - R1	Particulate Matter	M5. Gravimetric	mg	6
BCACMP - AFSP - M5 - R2	Particulate Matter	M5. Gravimetric	mg	4
BCACMP - AFSP - M5 - R3	Particulate Matter	M5. Gravimetric	mg	0

Reference:  
Method 5 US CFR Part60 United States Environmental Protection Agency (US EPA)

\*\*Customer/s is/are given (7) days upon receipt of report to question any discrepancies (i.e. customer name & address, sample description, result, etc.)  
This document has been signed by those names that appear on this report and are the authorised signatories.

Checked by:

Katrina P. Pagatayan, RCh  
Chemist  
PRC#: 0013881

Certified by:

Marisa T. Manao, RCh  
Supervising Chemist  
PRC#: 0005465

Noted by:

Aladino M. Abulencia, CHE  
Technical Manager

MUZNM9984\_FINAL. 200310 1549H



# MACH UNION WATER LABORATORY, INC.

## Method 5: Particulate Matter Analytical Results

NAME OF THE COMPANY: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 ADDRESS: Balaboc, Virac, Ilogon, Benguet  
 DATE SAMPLED: February 28, 2020 DENSITY OF ACETONE: 0.79 g/cm<sup>3</sup>  
 DATE RECEIVED: March 02, 2020 AMBIENT TEMPERATURE (°C): 23.0 - 24.4  
 DATE ANALYZED: March 02-05, 2020 RELATIVE HUMIDITY (%): 40 - 44  
 LABORATORY NO. MU20009984-001A-C ANALYTICAL BALANCE ID: ANAL. BALANCE No. 5

SAMPLE SOURCE	Units	THERMO DIGESTION CHAMBER WITH ACID FUME SCRUBBER PARTING AREA		
		BCACMP - AFSP - M5 - R1	BCACMP - AFSP - M5 - R2	BCACMP - AFSP - M5 - R3
<b>Filter Analysis</b>				
Filter Identification		200177	200178	200179
Filter Observations/ Appearance		OFF WHITE	OFF WHITE	OFF WHITE
Filter Tare Weight	g		0.3538	
Filter Final Weight	g	0.3544	0.3543	0.3542
Dish Identification		177	178	179
Dish Tare Weight (If applicable)	g	-	-	-
Dish Final Weight (If applicable)	g	-	-	-
Difference	g	0.0009	0.0005	0.0015
Particulate Matter on Filter, Pmf	mg	0.9000	0.5000	1.5000
<b>Acetone Rinse Analysis</b>				
Acetone Rinse Appearance		WITH BLACK PRECIPITATE	WITH BLACK PRECIPITATE	WITH BLACK PRECIPITATE
Acetone Rinse Volume, V <sub>aw</sub>	mL	25	30	23
Beaker Identification		0919-BK150-030	0919-BK150-036	0919-BK150-025
Beaker Tare Weight	g	72.4797	69.3932	69.5737
Beaker Final Weight	g	72.4850	69.3970	69.5786
Difference	g	0.0053	0.0038	0.0049
Particulate Matter from Rinse, Pmr	mg	5.3000	3.8000	4.9000
<b>Acetone Blank Analysis</b>				
Acetone Blank Volume, A <sub>v</sub>	mL	100	100	100
Beaker Identification		0919-BK150-025	0919-BK150-025	0919-BK150-025
Beaker Tare Weight	g	69.0781	69.0781	69.0781
Beaker Final Weight	g	69.0784	69.0784	69.0784
Difference	g	0.0003	0.0003	0.0003
Blank Residue Mass, A <sub>b</sub>	mg	0.30	0.30	0.30
C <sub>a</sub> = A <sub>b</sub> / A <sub>v</sub>	mg/mL	0.0030	0.0030	0.0030
Acetone Blank, W <sub>a</sub> = C <sub>a</sub> × V <sub>aw</sub>	mg	0.0750	0.0900	0.0690
Max Blank Corr. Allowed, Am *	mg	0.1975	0.2370	0.1817
Acetone Blank Value Used **, A <sub>bu</sub>	mg	0.0750	0.0900	0.0690
*Max acetone blank is 0.001% of V <sub>aw</sub> mass, Am = V <sub>aw</sub> × Density of Acetone Used × 0.0001 **Mass of acetone blank correction. W <sub>a</sub> should be less than 0.001% of V <sub>aw</sub> mass, otherwise Used M <sub>bc</sub>				
Total PM, Pmf + Pmr - A <sub>bu</sub>	mg	6	4	6

Analyzed by: 

Checked by: 



# MACH UNION LABORATORY

duly registered under  
**MACH UNION WATER LABORATORY, INC.**  
 Mach Union Building, 335 Real Street, (formerly Alabang Zapote Rd.),  
 Taton 3, 1740 Las Piñas City, Philippines  
 Tel. No.: 553 8381 / 553 8382 / 553-8879 Fax No.: 553-8878  
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PAB ACCREDITED  
 TESTING LABORATORY  
 PNS ISO/IEC 17025:2005  
 LA-2012-215B

Recognized Department of Health (DOH) • Department of Environment & Natural Resources (DENR)

## Result of Analysis

Job Number: MU20009985 Laboratory Number MU20009985-001 Date: 03/10/2020  
 Customer: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Address: 2430 Laura St., Pandacan, Manila  
 Project Name: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 Location: Balatoc, Virac, Itogon, Benguet  
 Date Sampled: 02/28/2020 Analyzed Date: 03/02/2020  
 Date Received: 03/02/2020  
 Sample Description: Air Stationary Source Sample in Absorbing Solution in 500mL HDPE  
 Sample Source: THERMO DIGESTION CHAMBER WITH ACID FUME SCRUBBER PARTING AREA

Analysis are based on sample (s) of: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Mach Union Water Laboratory, Inc. does not guarantee that sample(s) submitted is (are) representative of the whole bulk from where it/they was (were) taken. Reproduction of this report is not authorized except in full, without written approval of the laboratory.

Sample ID	Analyte	Method	Units	Result
BCACMP - AFSP - M6 - BLANK	Sulfur dioxide	M6. Barium-Thorin Titration	mg	0
BCACMP - AFSP - M6 - R1	Sulfur dioxide	M6. Barium-Thorin Titration	mg	2
BCACMP - AFSP - M6 - R2	Sulfur dioxide	M6. Barium-Thorin Titration	mg	1
BCACMP - AFSP - M6 - R3	Sulfur dioxide	M6. Barium-Thorin Titration	mg	2

Reference:  
 Method 8 US CFR Part60 United States Environmental Protection Agency (US EPA)

\*\*Customer/s is/are given (7) days upon receipt of report to question any discrepancies (i.e. customer name & address, sample description, result, etc.)  
 This document has been signed by those names that appear on this report and are the authorized signatories.

Checked by:

Katrina P. Pagulayan, RCh  
 Chemist  
 PRC#: 0013681

Certified by:

Marisa T. Menador, RCh  
 Supervising Chemist  
 PRC#: 0005465

Noted by:

Atalindo M. Abudencia, ChE  
 Technical Manager



# MACH UNION WATER LABORATORY, INC.

Method 6: Sulfur Dioxide Analytical Results

**CUSTOMER NAME:** BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
**ADDRESS:** Baliatoc, Virac, Itogon, Benguet  
**DATE SAMPLED:** February 28, 2020  
**DATE RECEIVED:** March 02, 2020  
**ANALYZED:** March 02, 2020  
**LABORATORY NO.:** MU20069885-001A-D

Standardization of NaOH Solution			Standardization of H <sub>2</sub> SO <sub>4</sub> Solution			Standardization of BaCl <sub>2</sub> Solution					
TRIAL	Mass of KHP (g)	Volume NaOH used (mL)	Normality of NaOH (N <sub>Na</sub> )	TRIAL	H <sub>2</sub> SO <sub>4</sub> Volume, mL (V <sub>Na</sub> )	H <sub>2</sub> SO <sub>4</sub> Volume, mL (V <sub>Na</sub> )	Normality of H <sub>2</sub> SO <sub>4</sub> (N <sub>Na</sub> )	TRIAL	H <sub>2</sub> SO <sub>4</sub> Volume, mL (V <sub>Na</sub> )	BaCl <sub>2</sub> Volume, mL (V <sub>Na</sub> )	BaCl <sub>2</sub> N, meq/mL (N <sub>Na</sub> )
TRIAL 1	0.0100	4.30	0.0114	T1	24.80	25.00	0.00997	T1	25.00	23.60	0.01058
TRIAL 2	0.0153	7.60	0.0099	T2	24.90	25.00	0.01001	T2	25.00	23.50	0.01063
TRIAL 3	0.0200	11.00	0.0089	AVERAGE	24.85	25.00	0.00999	AVERAGE	25.00	23.55	0.01061

$$M_{SO_2} = 32.03 \times N_{BaCl_2} \times [V_{(avg)} - V_{(avg)}] \times [V_{(avg)} / V_d]$$

ISOPROPANOL CHECK OK?  
(Absorbance  $\leq 0.100$ )

0.0600

SAMPLE SOURCE	SAMPLE ID	SAMPLE VOLUME, V <sub>soln</sub>		ALIQOT VOLUME, V <sub>a</sub>	VOLUME TITRANT, V <sub>t</sub> (mL)		MASS as SO <sub>2</sub> (mg)
		mL	mL		RUN 1	RUN 2	
BLANK	-	200	20	20	0.10	0.10	
THERMO DIGESTION CHAMBER	BCACMP - AFSP - M6 - R1	363	20	20	0.40	0.50	2
WITH ACID FUME SCRUBBER	BCACMP - AFSP - M6 - R2	316	20	20	0.30	0.30	1
PARTING AREA	BCACMP - AFSP - M6 - R3	343	20	20	0.50	0.50	2
	BCACMP - AFSP - M6 - BLANK	50	20	20	0.10	0.10	0

Analyzed by: \_\_\_\_\_

Checked by: \_\_\_\_\_



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Recognized Department of Health (DOH) • Department of Environment & Natural Resources (DENR)



PAB ACCREDITED  
TESTING LABORATORY  
PNS ISO/IEC 17025:2005  
LA-2012-215B

### Result of Analysis

Job Number: MU20009986 Laboratory Number MU20009986-001 Date: 03/10/2020  
 Customer: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Address: 2430 Laura St., Pandacan, Manila  
 Project Name: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 Location: Balatoc, Virac, Itogon, Benguet  
 Date Sampled: 02/28/2020 Analyzed Date: 03/02/2020  
 Date Received: 03/02/2020  
 Sample Description: Air Stationary Source Sample in , Absorbing Solution in 50mL HDPE  
 Sample Source: THERMO DIGESTION CHAMBER WITH ACID FUME SCRUBBER PARTING AREA

Analysis are based on sample (s) of: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Mach Union Water Laboratory, Inc. does not guarantee that sample(s) submitted is (are) representative of the whole bulk from where it/they was (were) taken. Reproduction of this report is not authorized except in full, without written approval of the laboratory.

Sample ID	Analyte	Method	Units	Result
BCACMP - AFSP - M7 - BLANK	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	41
BCACMP - AFSP - M7 - R1A	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	90
BCACMP - AFSP - M7 - R1B	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	59
BCACMP - AFSP - M7 - R1C	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	57
BCACMP - AFSP - M7 - R2A	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	173
BCACMP - AFSP - M7 - R2B	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	106
BCACMP - AFSP - M7 - R2C	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	115
BCACMP - AFSP - M7 - R3A	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	118
BCACMP - AFSP - M7 - R3B	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	77
BCACMP - AFSP - M7 - R3C	Oxide of Nitrogen as NO2	M7.Phenoldisulfonic acid Method	ug	300

Reference:  
 Method 7 US CFR Part60 United States Environmental Protection Agency (US EPA)

\*\*Customer/s is/are given (7) days upon receipt of report to question any discrepancies (i.e. customer name & address, sample description, result, etc.)  
 This document has been signed by those names that appear on this report and are the authorized signatories.

Checked by:

Katrina J. Pagulayan, RCh  
 Chemist  
 PRC#: 1013681

Certified by:

Marisa T. Manao, RCh  
 Supervising Chemist  
 PRC#: 0005485

Noted by:

Aladino M. Abulencia, ChE  
 Technical Manager

MU20009986\_FINAL\_200310 15:19H



# MACH UNION WATER LABORATORY, INC.

Method 7: Nitrogen Oxides as NO<sub>2</sub> Analytical Results

WATER LABORATORY NO.

NAME OF THE COMPANY:

ADDRESS:

DATE SAMPLED:

DATE RECEIVED:

DATE ANALYZED:

LABORATORY NUMBER

BENQUET CORPORATION - ACUPAN CONTRACT MINING PROJECT

Balaboc, Virac, Itogon, Benguet

February 28, 2020

March 02, 2020

March 02, 2020

MU20009986-001A-J

UV-Vis Spectrometer ID

Genesis 50

Date of Last Calibration (± 6 mos.)

March 03, 2020

WAVELENGTH

410 nm

$K_C = 100$

$$A_1 + 2A_2 + 3A_3 + 4A_4$$

$$A_1^2 + A_2^2 + A_3^2 + A_4^2$$

691.2435046

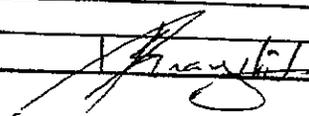
SAMPLE IDENTIFICATION	SAMPLE PRETREAT	VOLUME OF ABSORBING SOLUTION (mL)	FINAL VOLUME	DILUTION	VOLUME OF WORKING STANDARD (mL)	DILUTION		SAMPLE ABSORBANCE	NO <sub>2</sub> VALUE (µg NO <sub>2</sub> )	% DIFFERENCE
						0	A <sub>n</sub>			
STD 1	pH adjust	25 vol. to 50	100	1	0.0	0	A <sub>0</sub>	0.0000	-	-
STD 2	pH adjust	25 vol. to 50	100	1	2.0	100	A <sub>1</sub>	0.1540	106.4514987	6.45
STD 3	pH adjust	25 vol. to 50	100	1	4.0	200	A <sub>2</sub>	0.3010	208.0642949	4.03
STD 4	pH adjust	25 vol. to 50	100	1	6.0	300	A <sub>3</sub>	0.4100	283.4088369	5.53
STD 5	pH adjust	25 vol. to 50	100	1	8.0	400	A <sub>4</sub>	0.5870	405.7599372	1.44

SAMPLE SOURCE	SAMPLE ID	SAMPLE PRETREAT	SAMPLE VOLUME (mL)	VOLUME OF ALIQUOT (mL)	FINAL VOLUME (mL)	DILUTION	SAMPLE ABSORBANCE		NO <sub>2</sub> VALUE (µg NO <sub>2</sub> )
							SAMPLE ABSORBANCE	ABSORBANCE ADJUSTMENT	
BLANK	6					1	0.0000	0.000	
THERMO DIGESTION CHAMBER WITH ACID	BCACMP - AFSP - M7 - R1A	pH adjust	25 vol. to 50	25	100	1.0	0.0650	0.0650	90
FUME SCRUBBER	BCACMP - AFSP - M7 - R1B	pH adjust	25 vol. to 50	25	100	1.0	0.0430	0.0430	59
PARTING AREA	BCACMP - AFSP - M7 - R1C	pH adjust	25 vol. to 50	25	100	1.0	0.0410	0.0410	57
	BCACMP - AFSP - M7 - R2A	pH adjust	25 vol. to 50	25	100	1.0	0.1250	0.1250	173
	BCACMP - AFSP - M7 - R2B	pH adjust	25 vol. to 50	25	100	1.0	0.0770	0.0770	106
	BCACMP - AFSP - M7 - R2C	pH adjust	25 vol. to 50	25	100	1.0	0.0830	0.0830	115
	BCACMP - AFSP - M7 - R3A	pH adjust	25 vol. to 50	25	100	1.0	0.0650	0.0650	118
	BCACMP - AFSP - M7 - R3B	pH adjust	25 vol. to 50	25	100	1.0	0.0560	0.0560	77
	BCACMP - AFSP - M7 - R3C	pH adjust	25 vol. to 50	25	100	1.0	0.2170	0.2170	300
	BCACMP - AFSP - M7 - BLANK	pH adjust	25 vol. to 50	25	100	1.0	0.0300	0.0300	41
QC (600 µg)	8	pH adjust	25 vol. to 50	25	100	1	0.4440	0.4440	614
QC	9	pH adjust	25 vol. to 50	25	100	1	0.4370	0.4370	604

Analyzed by:

Checked by:

## CO BAG ANALYSIS

Company Name:	Benguet Corporation - Acupan Contract Mining Project		
Sample Date:	February 27, 2020	Analysis Date:	March 03, 2020
Collected by:	Greentek Team		
Analyzed by:	Kyra Gail Evangelista	Signature:	

Gas Analyzer	
Manufacturer:	Thermo Electron
Model No.:	48i
Serial No.:	608216118

Pre-Test Calibration Check				
Time:	Gas Value (ppm)	CO Response (ppm)	%Difference (% span)	Status (≤ 2% span)
0900				
Zero Gas	0	0	0	Passed
CO Gas	100	99.1	0.9	99.2
	1000	989.2	1.1	986.2

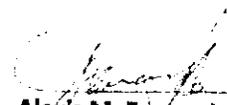
Note: % Difference =  $(\text{Gas Value} - \text{CO Response}) / \text{Span Value} \times 100$

CO Bag Samples					
Time	Tedlar Bag ID No.	CO Concentration (ppm)	Time	Tedlar Bag ID No.	CO Concentration (ppm)
0925H	BCACMP-AFSC - R1	10			
0928H	BCACMP-AFSC - R2	10			
0931H	BCACMP-AFSC - R3	13			

Post-Test Calibration Check				
Time:	Gas Value (ppm)	CO Response (ppm)	% Drift (% span)	Status (≤ 10% span)
Zero Gas	0	0	0	Passed
CO Gas	100	93.3	5.8	Passed
	1000	950.2	3.9	Passed

Note: % Drift =  $(\text{CO response (pre-test)} - \text{CO response (post-test)}) / \text{Span Value} \times 100$

QA/QC Check:  Legibility  Accuracy  Specifications  Reasonableness

Checked by:   
**Alexis M. Fernando**  
 General Manager

## CO BAG ANALYSIS

Company Name:	Benguet Corporation - Acupan Contract Mining Project		
Sample Date:	February 28, 2020	Analysis Date:	March 03, 2020
Collected by:	Greentek Team		
Analyzed by:	Kyra Gail Evangelista	Signature:	

Gas Analyzer	
Manufacturer:	Thermo Electron
Model No.:	48i
Serial No.:	608216118

Pre-Test Calibration Check				
Time:	Gas Value (ppm)	CO Response (ppm)	%Difference (% span)	Status (≤ 2% span)
0900				
Zero Gas	0	0	0	Passed
CO Gas	100	99.1	0.9	99.2
	1000	989.2	1.1	986.2

Note: % Difference =  $(\text{Gas Value} - \text{CO Response}) / \text{Span Value} \times 100$

CO Bag Samples					
Time	Tedlar Bag ID No.	CO Concentration (ppm)	Time	Tedlar Bag ID No.	CO Concentration (ppm)
0934H	BCACMP-AFSP - R1	11			
0937H	BCACMP-AFSP - R2	10			
0940H	BCACMP-AFSP - R3	11			

Post-Test Calibration Check				
Time:	Gas Value (ppm)	CO Response (ppm)	% Drift (% span)	Status (≤ 10% span)
Zero Gas	0	0	0	Passed
CO Gas	100	93.3	5.8	Passed
	1000	950.2	3.9	Passed

Note: % Drift =  $(\text{CO response (pre-test)} - \text{CO response (post-test)}) / \text{Span Value} \times 100$

QA/QC Check:  Legibility  Accuracy  Specifications  Reasonableness

Checked by:   
**Alexis M. Fernando**  
 General Manager

3<sup>rd</sup> Floor Hizon Building, #29 Quezon Avenue, Quezon City

Tel no.: (02)251-5779

Email: greentechlab@yahoo.com

**APPENDIX E**  
**Equipment Calibration Records**

## METER BOX POST TEST CALIBRATION CHECK

**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
 Balatoc, Virac, Itogon, Benguet  
 Thermo Digestion Chamber with Acid Fume Scrubber (Chamber Area)

Calculate Y<sub>qa</sub> for each test run using the following equation:

$$Y_{qa} = \frac{\theta}{V_m} \sqrt{\frac{0.00115 T_m}{\Delta H_{@} (P_b + \frac{\Delta H_{avg}}{13.6})} \frac{29}{M_d} (\sqrt{\Delta H})_{avg}}$$

where:

Y<sub>qa</sub>      dry gas meter calibration check value, dimensionless.  
 θ          total run time, min.  
 V<sub>m</sub>       total sample volume measured by dry gas meter, dcm.  
 T<sub>m</sub>       absolute average dry gas meter temp., °K.  
 P<sub>b</sub>       barometric pressure, mm Hg.  
 0.00115   = (760/298)(21.2/1000)<sup>2</sup> (mm Hg/°K) m<sup>3</sup>/min<sup>2</sup>.  
 ΔH<sub>avg</sub>    average orifice meter differential, mm H<sub>2</sub>O.  
 ΔH<sub>@</sub>      orifice meter calibration coefficient, mm H<sub>2</sub>O.  
 M<sub>d</sub>       dry molecular weight of stack gas, gm/gm-mole.  
 29         dry molecular weight of air, gm/gm mole.  
 13.6       specific gravity of mercury.

After each test run series, do the following:

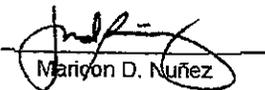
Average the three or more Y<sub>qa</sub>'s obtained from the test run series and compare this average with the dry gas meter calibration factor, Y. The average Y<sub>qa</sub> must be within 5 percent of Y.

If the average Y<sub>qa</sub> does not meet the +/- 5 percent criterion, recalibrate the meter over the full range of orifice settings, as detailed in Section 5.3.1 of Method 5. Then follow the procedure in Section 5.3.3 of Method 5.

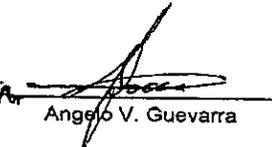
	RUN 1	RUN 2	RUN 3	Average
Meter Box	GMC 01	GMC 01	GMC 01	
time	72	72	72	
V <sub>m</sub> - total	0.9586	0.9980	1.0020	
T <sub>m</sub> avg, deg C	35	36	36	
T <sub>m</sub> , degrees K	308	309	309	
Barometric, mm Hg	692.4	690.4	689.9	
DH <sub>avg</sub> , mm H <sub>2</sub> O	16.5	18.1	18.0	
DH <sub>@</sub> , mm H <sub>2</sub> O	48.3	48.3	48.3	
M <sub>d</sub> stack gas, g/g-mole	28.80	28.80	28.80	
M <sub>d</sub> Air, g/g-mole	29.00	29.00	29.00	
Meter Box Gamma	0.9999	0.9999	0.9999	0.9999
QA Gamma	0.9961	1.0033	0.9975	0.9990
Difference:	0.4%	-0.3%	0.2%	0.1%
Average Difference within +/-5%				PASS*

\*The difference is based on the average QA gamma of the three test runs

QA/QC Manager:

  
 Mariyon D. Nuñez

Team Leader:

  
 Angelo V. Guevarra

## METER BOX POST TEST CALIBRATION CHECK

**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
 Balatoc, Virac, Itogon, Benguet  
 Thermo Digestion Chamber with Acid Fume Scrubber (Parting Area)

Calculate Yqa for each test run using the following equation:

$$Y_{qa} = \frac{\theta}{V_m} \sqrt{\frac{0.00115 T_m}{\Delta H_{@} (P_b + \frac{\Delta H_{avg}}{13.6})} \frac{29}{M_d} (\sqrt{\Delta H})_{avg}}$$

where:

- Yqa            dry gas meter calibration check value, dimensionless.
- θ              total run time, min.
- Vm            total sample volume measured by dry gas meter, dcm.
- Tm            absolute average dry gas meter temp., °K.
- Pb            barometric pressure, mm Hg.
- 0.00115      = (760/298)(21.2/1000)<sup>2</sup> (mm Hg/°K) m<sup>3</sup>/min<sup>2</sup>.
- ΔHavg        average orifice meter differential, mm H<sub>2</sub>O.
- ΔH@          orifice meter calibration coefficient, mm H<sub>2</sub>O.
- Md            dry molecular weight of stack gas, gm/gm-mole.
- 29            dry molecular weight of air, gm/gm mole.
- 13.6          specific gravity of mercury.

After each test run series, do the following:

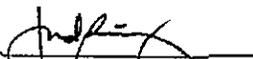
Average the three or more Yqa's obtained from the test run series and compare this average with the dry gas meter calibration factor, Y. The average Yqa must be within 5 percent of Y.

If the average Yqa does not meet the +/- 5 percent criterion, recalibrate the meter over the full range of orifice settings, as detailed in Section 5.3.1 of Method 5. Then follow the procedure in Section 5.3.3 of Method 5.

	RUN 1	RUN 2	RUN 3	Average
Meter Box	GMC 01	GMC 01	GMC 01	
time	72	72	72	
Vm - total	0.9994	1.0248	1.0190	
Tm avg, deg C	32	38	37	
Tm, degrees K	305	311	310	
Barometric, mm Hg	692.4	691.6	690.1	
DH <sub>avg</sub> , mm H <sub>2</sub> O	18.0	18.8	18.7	
DH@, mm H <sub>2</sub> O	48.3	48.3	48.3	
Md stack gas, g/g-mole	28.96	28.96	28.96	
Md Air, g/g-mole	29.00	29.00	29.00	
Meter Box Gamma	0.9999	0.9999	0.9999	0.9999
QA Gamma	0.9896	0.9950	0.9962	0.9936
Difference:	1.0%	0.5%	0.4%	0.6%
Average Difference within +/-5%				<b>PASS*</b>

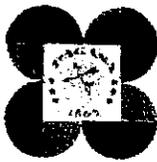
\*The difference is based on the average QA gamma of the three test runs

QA/QC Manager:

  
 Maricon D. Nuñez

Team Leader:

  
 Angelo V. Guevarra



## CALIBRATION CERTIFICATE NO. 195

Series 2019

Type of instrument : Digital Barometer  
 Brand : Traceable  
 Serial Number : None  
 Owner : Greentek Environmental Engineering Services  
 Calibration date : September 17, 2019



This is to certify that the above Instrument was calibrated at the Instrument Research and Development Unit (IRDU) of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) of the Department of Science and Technology (DOST) with the following results:

Reference Pressure, inHg	Observed Pressure, inHg	Correction, inHg	Uncertainty, inHg ( $\pm$ )
30.13	29.91	+0.22	0.009
29.83	29.61	+0.22	0.009
29.53	29.32	+0.21	0.009
28.94	28.73	+0.21	0.009
28.35	28.14	+0.21	0.009

Note: Interpolate between different readings if necessary.  
 Required achievable measurement uncertainty: 0.004 inHg

### ENVIRONMENTAL CONDITIONS:

Reference Temperature:  $(21.5 \pm 1) ^\circ\text{C}$       Relative Humidity:  $(63.7 \pm 2) \text{ RH}\%$       Pressure:  $(29.62 \pm 0.2) \text{ inHg}$

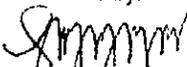
### UNCERTAINTY OF MEASUREMENT:

The uncertainty stated has been calculated based on a standard uncertainty multiplied by a coverage factor  $k=2$  with confidence level of 95%.

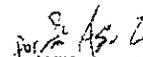
### Reference Used:

Type	Serial Number	Calibration Date	Certificate Number	Issuing Lab/Traceability
PTB 330	1023	May 31, 2019	002 series 2019	PAGASA

Calibrated by:

  
 Michelle M. Familiaran  
 Science Research Technician I

Noted by:

  
 Wilfredo H. Tuazon  
 Weather Specialist II

*"tracking the sky...helping the country"*

Science Garden Compound, BIR Road, Brgy. Central, Quezon City,  
 Metro Manila, Philippines 1100  
 Postal Address: P.O. Box 3278 Manila

Tel. No. (632) 284 0800 (loc. 117)  
 Tel/Fax No. (632) 929 2121  
 Website: <http://bagong.pagasa.dost.gov.ph>



## CALIBRATION CERTIFICATE NO.197

Series 2019

Type of Instrument : Probe Temperature Meter  
 Brand Name : Supco  
 Serial Number : None  
 Model Number : EM02  
 Body Number : Team A  
 Owner : Greentek Environmental  
 Calibration Date : September 12, 2019



This is to certify that the above Instrument was calibrated at the Instrument Research and Development Unit (IRDU) of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)/Department of Science and Technology (DOST).

### Calibration Results:

Reference Temperature (°C)	Observed Temperature (°C)	Correction (°C)	Uncertainty (±°C)
9.9	9.6	+0.3	0.09
19.9	19.6	+0.3	0.09
29.9	29.4	+0.5	0.09
39.8	39.5	+0.3	0.10

Note: Interpolate between different readings if necessary.  
 Required achievable measurement uncertainty: 0.2 °C

### ENVIRONMENTAL CONDITIONS:

Reference Temperature: (23.2 ± 2) °C    Relative Humidity: (62.1 ± 9) %RH    Pressure: (1001.2 ± 2) hPa

### UNCERTAINTY OF MEASUREMENT:

The uncertainty stated has been calculated based on a standard uncertainty multiplied by a coverage factor  $k=2$  with confidence level of 95%.

### Reference Used:

Type	Serial Number	Calibration Date	Certificate Number	Issuing Lab/Traceability
Mercurial Thermometer	943	2015-07-23	001458	National Metrology Lab. ITDI, DOST

### Calibrated by:

Jessa P. Candelario  
 Science Research Technician I

### Noted by:

Ferdinand Y. Barcenas  
 Senior Weather Specialist

"tracking the sky helping the country"

Science Garden Compound, BIR Road, Brgy. Central, Quezon City,  
 Metro Manila, Philippines 1100  
 Postal Address: P.O. Box 3278 Manila

Tel. No. (632) 284 0800 (loc. 117)  
 Tel/Fax No. (632) 929 2121  
 Website: <http://bagongpagasa.dost.gov.ph>



CERTIFICATE OF CALIBRATION  
GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
NOZZLE CALIBRATION

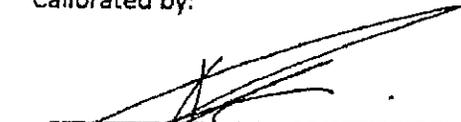
Nozzle Box ID: GN-T1 01-07  
Nozzle Type: STAINLESS STEEL NOZZLE

Date: January 22, 2020  
Personnel: AVG

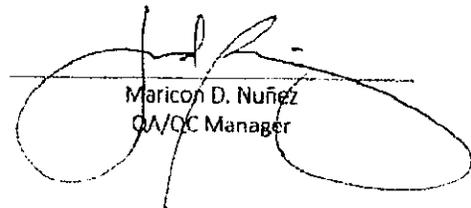
Nozzle ID	D <sub>1</sub> (mm)	D <sub>2</sub> (mm)	D <sub>3</sub> (mm)	D (mm)	Average (mm)
GNT1-01	3.16	3.17	3.17	0.01	3.17
GNT1-02	6.00	6.01	6.00	0.01	4.58
GNT1-03	4.57	4.58	4.58	0.01	6.00
GNT1-04	7.64	7.65	7.65	0.01	7.65
GNT1-05	9.43	9.44	9.44	0.01	9.44
GNT1-06	10.76	10.77	10.77	0.01	10.77
GNT1-07	12.33	12.34	12.33	0.01	12.33

Note:  
D<sub>1</sub>, D<sub>2</sub> and D<sub>3</sub> = Nozzle Diameter, measured different diameter. Tolerance = 0.0125mm  
D = maximum difference in any two measurements. Tolerance = 0.1mm  
Average = Average of D<sub>1</sub>, D<sub>2</sub> and D<sub>3</sub>.

Calibrated by:

  
Angelo V. Guevarra  
Team Leader

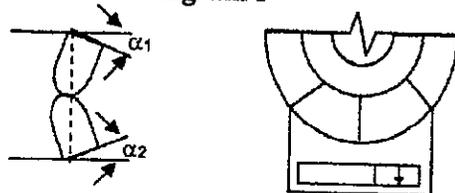
Checked by:

  
Maricon D. Nuñez  
QA/QC Manager

Pitot Number: GP-04A

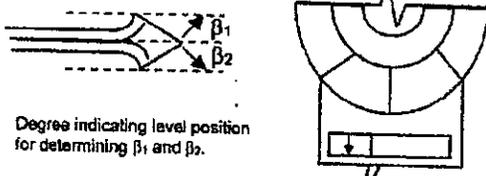
Date: January 22, 2020

**Diagram 1**



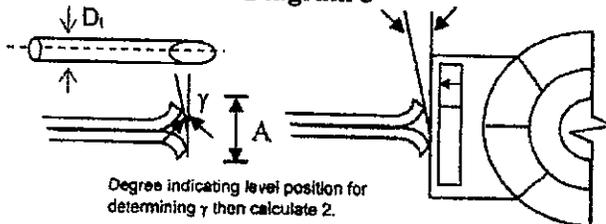
Degree indicating level position for determining  $\alpha_1$  and  $\alpha_2$ .

**Diagram 2**

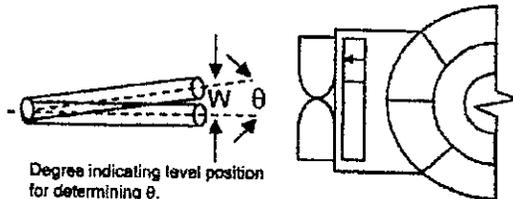


Degree indicating level position for determining  $\beta_1$  and  $\beta_2$ .

**Diagram 3**



Degree indicating level position for determining  $\gamma$  then calculate 2.



Degree indicating level position for determining  $\theta$ .

Level? =	YES
Obstructions? =	NO
Damaged? =	NO
<b>Diagram 1</b>	
$-10^\circ < \alpha_1 < +10^\circ =$	0°
$-10^\circ < \alpha_2 < +10^\circ =$	0°
<b>Diagram 2</b>	
$-5^\circ < \beta_1 < +5^\circ =$	2°
$-5^\circ < \beta_2 < +5^\circ =$	0°
<b>Diagram 3</b>	
$\gamma =$	0°
$\theta =$	0°
$A =$	2.34
$1.05 D_t < P_a < 1.5 D_t =$	1.17
$1.05 D_t < P_b < 1.5 D_t =$	1.17
$0.48 \text{ cm} \leq D_t \leq 0.95 =$	0.94
$A \tan \gamma < 0.32 \text{ cm} =$	0
$A \tan \theta < 0.08 \text{ cm} =$	0
$P_a = P_b =$	1.17

Comments: \_\_\_\_\_

The pitot tube/probe meets or exceeds all specifications criteria and/or applicable design features and is hereby assigned a pitot tube calibration factor of 0.84.

Calibrated by:

*[Signature]*  
Angelo V. Guevarra  
Team Leader

Reviewed by:

*[Signature]*  
Maricon D. Nunez  
QA/QC Manager



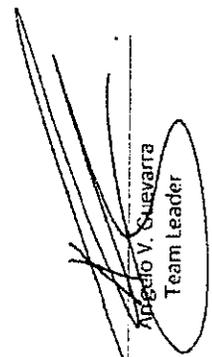
CERTIFICATE OF CALIBRATION  
GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
TEMPERATURE SENSOR CALIBRATION

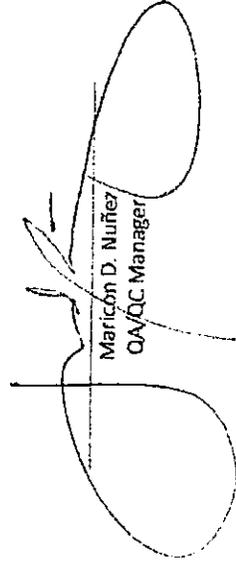
Thermocouple No. GP-04A Date: January 22, 2020  
Ambient Temperature: 30.0 °C Reference: PROBE TEMPERATURE METER

Reference Point Number	Source (Specify)	Reference Thermometer Temperature °C	Thermocouple Display Temperature °C	Absolute Temperature Difference %
1	COLD	1.5	1.2	0.1093
2	TOP	25.8	25.0	0.2677
3	HOT	101.2	99.5	0.4543

Criteria: *Percent difference between the Reference temperature and the Average Temperature can be only ±1.5% °K*

Equation: 
$$\frac{[(Ref. Temp. + 273) - (Temp. Reading + 273)] \times 100}{(Ref. Temp. + 273)}$$

  
Argeiro V. Sueyarra  
Team Leader

  
Maricón D. Nuñez  
QA/QC Manager



**CERTIFICATE OF CALIBRATION**  
**GREENTEK ENVIRONMENTAL ENGINEERING SERVICES**  
**DRY GAS METER 5 POINT CALIBRATION**

Meter Console Model: XC-572-OV  
 Meter Console ID Number: GMC-01  
 Dry Gas Meter Model: SK25EX  
 Dry Gas Meter Serial Number: 2344

Pressure Side Leak Check: OK  
 Vacuum Side Leak Check: OK

Date and Time of Calibration: 24-Jan-20 13:23H  
 Critical Orifice Model Number: ST 40-73  
 Theo. Critical Vacuum For Orifice: 14 in Hg  
 Barometric Pressure: 756.158 mmHg

**IMPORTANT!!!!**

\*\*For the individual dry gas meter calibration factor,  $Y_i$ , the allowed variation is 0.02 from the average value.  
 \*\*For the individual  $Dh@$  values, the orifice setting that equates to 21.2 lpm, the allowed variation is 0.2 in. (5.1mm) from the average value.  
 \*\*Acceptable range for the average  $Dh@$  value is  $46.7 \pm 6.4$  mmH<sub>2</sub>O (1.84  $\pm$  0.25 inH<sub>2</sub>O).

Run No.	Orifice ID No.	Dry Gas Meter Volume (m <sup>3</sup> )	Diff., V <sub>m</sub>	Dry Gas Meter Temp. T <sub>m</sub> (°C)	Ave °K	Amb. Temp. T <sub>amb</sub> °K	Time min.	Orifice Rdg. mmH <sub>2</sub> O	Pump Vac. in. Hg
1	ST40	Initial 385.8124 Final 385.8568	0.0444	Final 32 Initial 33	306	301.7	5.0	8.6	16
2	ST48	Initial 385.8630 Final 385.9392	0.0762	Final 32 Initial 32	305	301.6	6.0	17.2	16
3	ST55	Initial 385.9440 Final 386.0628	0.1188	Final 32 Initial 32	305	301.5	7.0	30.0	16
4	ST63	Initial 386.0690 Final 386.2466	0.1776	Final 33 Initial 32	306	301.7	8.0	50.0	16
5	ST73	Initial 386.2610 Final 386.5330	0.2720	Final 34 Initial 33	307	302.0	9.0	90.0	16

RESULTS									
Run No.	Orifice ID No.	K <sup>1</sup> Factor X 10 <sup>-4</sup>	Vmstd dscm	Vcrstd dscm	DGM Calib. Factor Y <sub>i</sub>	Variation (± 0.02)	Dh@ mmH <sub>2</sub> O	Variation (± 5.1)	
1	ST40	1.9891	0.0431	0.0433	1.0040	-0.004	50.3	-2.0	
2	ST48	2.8363	0.0742	0.0741	0.9986	0.001	49.6	-1.3	
3	ST55	3.7883	0.1158	0.1155	0.9971	0.003	48.6	-0.3	
4	ST63	4.9789	0.1732	0.1734	1.0012	-0.001	47.0	1.3	
5	ST73	6.7699	0.2654	0.2651	0.9989	0.001	46.0	2.3	

Average → 0.9999      Average → 48.300

I certify that the above Dry Gas Meter was calibrated in accordance with EPA Method 5, Paragraph 7.2 CFR 40, Part 60, using Critical Orifice as calibration standard. From these results, I assign a value for the following parameters:

$Y_i$  → 0.9999      &       $Dh@$  → 48.300 mmH<sub>2</sub>O

As the average value of the individual results.

Calibrated by:

ANGELO V. GUEVARRA  
 Team Leader

Noted by:

MARICON D. NUNEZ  
 QA/QC Manager



**GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
CRITICAL ORIFICE COEFFICIENT CALCULATION**

Dry Gas Meter Model Number : SK25EX  
 Dry Gas Meter Serial Number : 2344  
 Critical Orifice Model Number : ST 40-73  
 Critical Orifice Calibration Factor, Yc : 1.0000

Calibration Date and Time : 24-Jan-20 13:23H  
 Barometric Pressure : 754.380 in Hg  
 Theo. Critical Vacuum For Orifice : 14 in Hg  
 Leak Check : OK

Run No.	Orifice ID No.	Dry Gas Meter Volume (m <sup>3</sup> )	Dry Gas Meter Temp. T <sub>m</sub> (°C)	Amb. Temp. T <sub>amb</sub> (°C)	Time	Orifice Rdg.	Pump Vac.
		Initial	Final	Ave °K	min.	mmH <sub>2</sub> O	in. Hg
1	ST 40	384.3720	384.4160	301.0	5	8.40	16
2	ST 40	384.4176	384.4616	301.5	5	8.40	16
1	ST 48	384.4658	384.5412	302.0	6	16.8	16
2	ST 48	384.5430	384.6184	302.0	6	16.8	16
1	ST 55	384.6260	384.7436	303.0	7	30.0	16
2	ST 55	384.7520	384.8700	303.5	7	30.0	16
1	ST 63	384.8800	385.0568	304.0	8	48.0	16
2	ST 63	385.0600	385.2378	305.0	8	48.0	16
1	ST 73	385.2570	385.5276	305.0	9	90.0	16
2	ST 73	385.5340	385.8050	305.5	9	90.0	16

**RESULTS**

Run No.	Orifice ID No.	K' Factor X 10 <sup>-4</sup>	Average X 10 <sup>-4</sup>	Variation (±0.5%)
1	ST 40	1.9908	1.9891	-0.08%
2	ST 40	1.9875	1.9891	0.08%
1	ST 48	2.8358	2.8363	0.02%
2	ST 48	2.8367	2.8363	-0.02%
1	ST 55	3.7841	3.7883	0.11%
2	ST 55	3.7926	3.7883	-0.11%
1	ST 63	4.9718	4.9789	0.14%
2	ST 63	4.9860	4.9789	-0.14%
1	ST 73	6.7705	6.7699	-0.01%
2	ST 73	6.7694	6.7699	0.01%

**IMPORTANT !!!**  
 \*\*For valid results, the actual vacuum should be 1 to 2 in. Hg greater than the theoretical critical vacuum.  
 \*\*The average value for the K' FACTOR should not vary by more than ±0.5% from the individual results.  
 \*\*The times should not differ by more than 3 seconds for each run.  
 \*\*The unit for critical orifice coefficient is in m<sup>3</sup> K<sup>0.5</sup> / (mmHg\* min).

Calibrated by:   
 ANGELO V. GUEVARRA  
 Team Leader

Noted by:   
 MARICON D. NUNEZ  
 QA/QC Manager



**CERTIFICATE OF CALIBRATION**  
**GREENTEK ENVIRONMENTAL ENGINEERING SERVICES**  
**TEMPERATURE DISPLAY CALIBRATION**

<b>Meter Console No.:</b>	GMC - 01	<b>Operator:</b>	AVG
<b>Reference Calibration Make:</b>	-	<b>Pretest:</b>	Semi-Annually
<b>Model:</b>	XC - 572 - OV	<b>Posttest:</b>	Semi-Annually
<b>Serial No.:</b>	1703043	<b>Date:</b>	January 22, 2020

TC Channel ID	Reference Temp 1,°C	Temp. Reading 1,°C	Criteria	Criteria Met	Reference Temp 1,°C	Temp. Reading 1,°C	Criteria	Criteria Met
Probe	0	0	0	YES	50	51	-0.3096	YES
Filter	0	0	0	YES	50	51	-0.3096	YES
Exit	0	0	0	YES	50	51	-0.3096	YES
Stack	0	1	-0.3663	YES	50	51	-0.3096	YES
Stack	200	199	0.2114	YES	250	248	0.3824	YES

TC Channel ID	Reference Temp 1,°C	Temp. Reading 1,°C	Criteria	Criteria Met	Reference Temp 1,°C	Temp. Reading 1,°C	Criteria	Criteria Met
Probe	100	100	0	YES	150	149	0.2364	YES
Filter	100	100	0	YES	150	149	0.2364	YES
Exit	100	100	0	YES	150	149	0.2364	YES
Stack	100	101	-0.2681	YES	150	149	0.2364	YES
Stack	350	350	0	YES	450	449	0.1383	YES

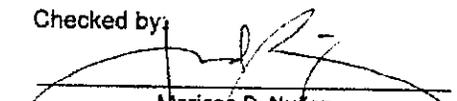
Criteria: *Percent difference between the Reference temperature and the Average Temperature can be only ±1.5% \*K*

Equation: 
$$\frac{[(Ref. Temp. + 273) - (Temp. Reading + 273)] \times 100}{(Ref. Temp. + 273)}$$

Calibrated by:

  
 Angelio Y. Guevarra  
 Team Leader

Checked by:

  
 Maricon D. Nunez  
 QA/QC Manager



**CERTIFICATE OF CALIBRATION**  
GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
BALANCE CALIBRATION

Date Calibrated: January 22, 2020

Instrument: Top Loading Balance

Brand: TANITA

Instrument ID: GTLB-01

Model No.: KD-321

**Environmental Conditions:**

Temperature (°C): 28.3 – 30.1

Relative Humidity (%): 35.4 – 36.6

Test Point	Reference Weights (g)	Trial 1 Reading (g)	Trial 2 Reading (g)	Difference < 0.5g (g)	Remarks
1	10	10.0	10.0	0	OK
2	20	20.0	20.0	0	OK
3	50	50.0	50.0	0	OK
4	100	99.9	99.9	0	OK
5	200	199.9	199.9	0	OK
6	400	399.5	399.5	0	OK
7	500	499.5	499.5	0	OK
8	700	699.5	699.5	0	OK
9	800	799.5	799.5	0	OK
10	900	899.5	899.5	0	OK

*Note. Trial 1 and Trial 2 shall be less than 0.5g difference. The instrument was left standby for a minimum of 30-mins before calibration. Reference weights used for the calibration of this instrument complied with ISO/IEC 17025 against NIST traceable reference standards and its co-equal standards.*

**QA/QC Check:**

Completeness:  Legibility:  Accuracy:  Specification  Reasonableness:

Calibrated by: ANGELO V. GUEVARRA  
Team Leader

Checked by: MARICOS D. JUNEZ  
QA/QC Manager

**APPENDIX F**

**Test Participants**

## TEST PROGRAM PARTICIPANTS

### BENGUET CORPORATION – ACUPAN CONTRACT MINING PROJECT

Ms. Jemimah R. Salayog - Pollution Control Officer &  
Facility Representative

### Greentek Environmental Engineering Services

Ms. Maricon D. Nuñez - QA/QC Manager  
Mr. Angelo V. Guevarra - Field Team Leader  
Mr. Arnel D. Montano - Field Technician  
Mr. Manny R. Cruz - Field Technician

### DENR Representative

Engr. Jefferson Lumerez - DENR EMB CAR

**APPENDIX G**

**Test Plan, Facility Permit and Certificate of Accreditation**

**ANNEX D**  
**CALIBRATION**



# JCG INDUSTRIAL TECHNOLOGIES

"Engineering Services and Supply of Environmental Equipment"

## HIGH VOLUME SAMPLER CALIBRATION STAPLEX TF1A-2

### GENERAL DATA

Calibration Date / Time : 25-Oct-2019 1400H Next Calibration Date : 26-Oct-2020 (see note)  
 Calibration Site : JCG Workshop Calibrated By : Joey C. Garinggan

### SAMPLER DATA

Sampler Brand / Model : Staplex / TF1A-2 Sampler ID No. : GHV-AQM-T1  
 Sampler Serial No. : 25255T Property ID No. : N/A

### CALIBRATOR DATA

Calibrator Brand / Model : TISCH / TE-5025A Calibrator Slope,  $m_1$  : 2.07557 (Based on Qstd)  
 Calibrator Serial No. : 3361 Calibrator Intercept,  $b_1$  : -0.05327 (Based on Qstd)  
 No. of Plates / Trials : 3 Correlation Coeff.,  $r_1$  : 0.99999 (Based on Qstd)

### CALIBRATION RUN

Actual Temp. & Pressure : 26.0 deg C 29.6 in Hg  
298.18 deg K 751.84 mm Hg

Reference Temp. & Pressure : 298 deg K 760 mm Hg

Run No.	I, Actual	I, Corrected	DH Actual, in H <sub>2</sub> O	Corrected	Qstd, m <sup>3</sup> /min	Qstd, cfm
#19	1.5	1.49	8.2	2.84	1.395	49.23
#7	1.2	1.19	3.9	1.96	0.970	34.24
#5	1.1	1.09	3.3	1.80	0.894	31.56

### RESULTS OF LINEAR REGRESSION

Correlation Coeff.,  $r_2$  : 0.9948 Sampler Slope,  $m_2$  : 0.7616  
 Sampler Intercept,  $b_2$  : 0.4298 Remarks : Passed II

### SAMPLER OPERATIONAL FLOW RATE

Flowmeter Reading at Clean Filter,  $I$  : 1 Qstd at Clean Filter : 0.739 scmm

### FOR SUBSEQUENT FLOW CALCULATIONS, USE

$$Qstd = \frac{1}{0.7616} \left( I_2 - 0.4298 \right); \text{scmm}$$

- Qstd = Sample flowrate at standard conditions, in scmm
- 0.7616 =  $m_2$ , the slope of sampler calibration
- 0.4298 =  $b_2$ , the intercept of sampler calibration
- $I$  = Average flowmeter reading
- $I_2$  = Corrected flow meter reading during sampling

$$I_2 = I \times \sqrt{\frac{P_3}{Pstd} \times \frac{Tstd}{T_3}}$$

### NOTES !!!!

\*\*\* The sampler should be calibrated (1) upon installation; (2) after 360 hours of usage; (3) after any motor maintenance, whichever of these comes first.

\*\*\* Sampler intercept  $b_2$ , slope  $m_2$  and correlation coefficient  $r_2$  is determined from least-squares linear regression method from the graph of Qstd cfm (x-axis) versus corrected flowmeter reading  $I$  (y-axis). The resulting  $r$  value should be greater than 0.99.

Calibrated By :

Joey C. Garinggan  
 OPERATIONS MANAGER

Noted By :

Joey C. Garinggan  
 OPERATIONS MANAGER



# JEG INDUSTRIAL TECHNOLOGIES

"Engineering Services and Supply of Environmental Equipment"

## HIGH VOLUME SAMPLER CALIBRATION STAPLEX TF1A-2

### CALIBRATION CURVE -- I Corrected vs. Qstd for

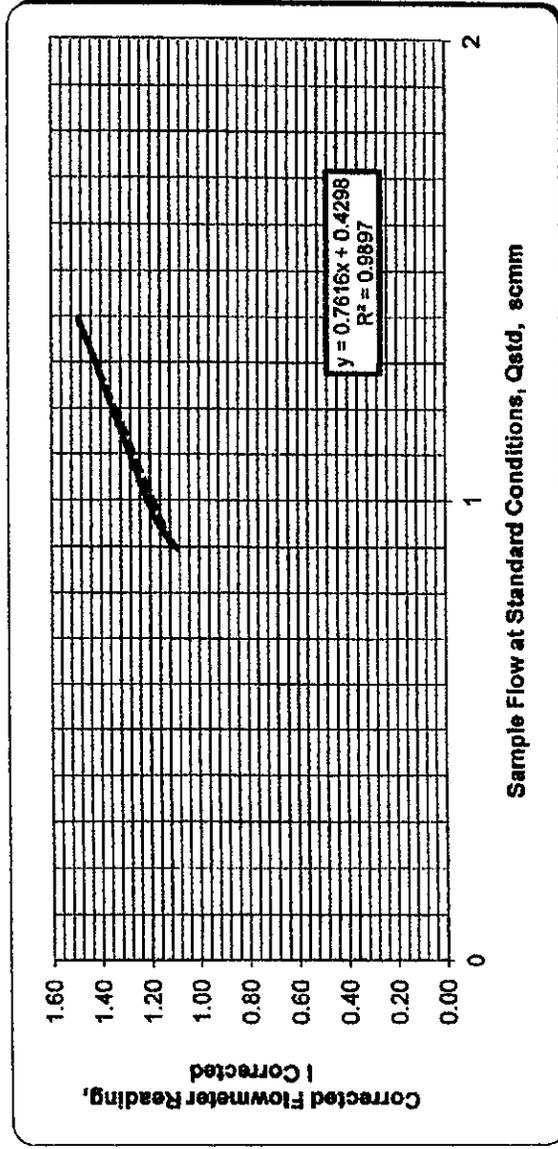
Calibration Date / Time : 25-Oct-2019 1400H  
 Calibration Site : JCG Workshop  
 Sampler Brand / Model : Staplex / TF1A-2  
 Sampler Serial No. : 25255T

Next Calibration Date : 25-Oct-2020  
 Calibrated By : Joey C. Garinggan  
 Sampler ID No. : GHV-AQM-TT

Qstd, scmm	I <sub>1</sub> corrected
1.40	1.49
0.97	1.19
0.89	1.09

r <sub>2</sub>	0.9948
m <sub>2</sub>	0.7616
b <sub>2</sub>	0.4298
Remarks	Passed II

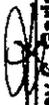
\*\* This graph is an additional reference only. Manufacturer's instruction suggests the calibration equation be used for the determination of Qstd during sampling



Calibrated By :

Noted By :

  
 Joey C. Garinggan  
 OPERATIONS MANAGER

  
 Joey C. Garinggan  
 OPERATIONS MANAGER



## SKC Certificate of Compliance Universal XR Sampler

This is to certify that the item listed below is in accordance with factory specifications. SKC test equipment is calibrated in accordance with ISO/IEC 17025 utilizing NIST and/or UKAS traceability standards.

Model Number 224-PCXR8 Serial Number A093037

Settings		Acceptance Criteria		✓
Flow ml/min	BP inches of water	Minimum ml/min	Maximum ml/min	
5000	0	5000	5000	✓
	10	4750	5250	✓
4000	0	4000	4000	✓
	20	3800	4200	✓
3000	0	3000	3000	✓
	35	2850	3150	✓
2500	0	2500	2500	✓
	40	2375	2625	✓
2000	0	2000	2000	✓
	20	1900	2100	✓
	40	1900	2100	✓
1000	0	1000	1000	✓
	20	950	1050	✓
	40	950	1050	✓

Check Points	✓
Set Regulator 20"	✓
Keyboard Check	✓
Flow Fault	✓

Technician # 339

*Scott Marshall*  
 Scott Marshall  
 Quality Assurance Administrator  
 ASQ CQM



# Measurement Systems

A Division of Switchtek Construction Corporation  
 4<sup>th</sup> Floor Northridge Plaza, Annex A, 12 Congressional Ave.,  
 Bahay Toro Quezon City, 1100, Philippines  
 Tel Nos. 3458-7694 / 8928-2860 / 8928-7769 Fax No. 8426-7565  
 Email Address: admin@switchtek.com.ph  
 www.switchtek.com.ph

Certificate No.:	400.01-3889-1.20	Calibration of	Sound Level Meter
Identification:	GREENTEK ENVIRONMENTAL ENGINEERING SERVICES		
Job:	SI	Test and Verification	
Est. No.:	32	Certificate of Calibration	
Date:	February 10, 2020	Intervals:	Cls
Category:	Calibration	Men	Hours
Cal. Officer:		2	1.0
		Total cost	Type
			Certificate

## CERTIFICATE OF CALIBRATION - SOUND LEVEL METER

This report of calibration shall document that the instrument herein was examined and tested in compliance with ISO/IEC 17025 against NIST traceable reference standards and its co-equal standards.

Issued To: GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Address: 2008 Angel Linao Street Malate, Manila

### UNIT UNDER TEST (UUT):

Instrument: Sound Level Meter  
 Brand: LUTRON  
 Model No: SL 4033 3D  
 Serial No: 143J5D1  
 Range: 30.0 to 130.0 dB  
 Graduation: 0.1 dB  
 ID Code: No record  
 Calibration Date: January 27, 2020  
 Calibration Due: January 26, 2021

### CALIBRATOR INFORMATION:

Instrument: Sound Level Calibrator  
 Brand: Lutron  
 Serial No: 1278820  
 Model No: SC-842  
 Calibration Due: May 2020  
 Traceability: IEC 60942 Type 1 A Standard  
 NIST and NPL

### Environmental Condition:

Condition: DRY/BASIC/NEUTRAL  
 Relative Humidity: 55.6 - 55.1011 HPA

Ambient Temp. (Deg C): 23.1 °C

### Calibration Method:

By comparative technique Standard Sound Generator was introduced to the unit under test at a constant value of 94.0 dB and at a uniform frequency of 1000 Hz. Data were gathered and tabulated. Procedures of test conform to the requirements of ID M-88 Guidelines IEC 60942 of the IEC and National Physical Laboratories.

During calibration the unit was found to have a standard error of  $\pm 0.00$  dB with a confidence level of not less than 95% uncertainty of measurement  $\pm 0.01$  dB. Calculations were taken using the Standard Deviation Formula.

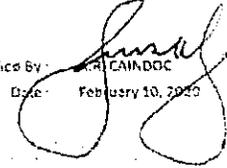
### Results:

TRIALS	REFERENCE READING (dB)	UNIT UNDER TEST READING (dB)		ERROR IN READING (dB)	STANDARD DEVIATION	REMARKS
		AS FOUND	AS LEFT			
1	94.0	94	94.0	0.00	0.0000	Pass
2	114.0	114	114.0	0.00	0.0000	Pass

### Remarks:

All data pertain only to the unit described therein in the body of text. This test result is not valid without test and signature (unpublished) and data on certificate.

Calibrated By:   
 Date: January 27, 2020

Certified By:   
 Date: February 10, 2020

**ANNEX E**  
**TEST PARTICIPANTS**



**GREENTEK**

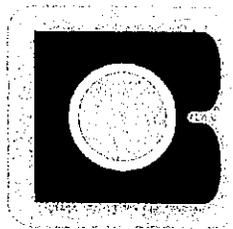
ENVIRONMENTAL  
ENGINEERING  
SERVICES

ANNEX "G"

# AMBIENT AIR QUALITY AND NOISE LEVEL MONITORING REPORT

*Reference No.: GEES-AQM-2002-016*

**Prepared for:**



**BENGUET CORPORATION**  
**ACUPAN CONTRACT MINING PROJECT**  
Balatoc, Virac, Itogon, Benguet

Sampling Date: February 29, 2020

Report Date: June 10, 2020

AMBIENT AIR QUALITY AND NOISE LEVEL MONITORING  
REPORT CERTIFICATION

TWO (2) STATIONS AREA TEST

***PARAMETERS***

TOTAL SUSPENDED PARTICULATE (TSP)  
SULFUR DIOXIDE (SO<sub>2</sub>)  
NITROGEN DIOXIDE (NO<sub>2</sub>)  
NOISE LEVEL MEASUREMENT

**BENGUET CORPORATION**  
**ACUPAN CONTRACT MINING PROJECT**  
Balatoc, Virac, Itogon, Benguet

The ambient sampling and noise level monitoring reported herein was performed by Mr. Manny R. Cruz, and Mr. Arnel D. Montano. The analysis of samples was conducted under the direction and supervision of accredited laboratories

I certify that the information contained in this report is authentic and accurate to the best of my knowledge.

Signed: .....

  
Cyril B. Hilisan  
QA/QC Manager

Date: JUNE 10, 2020

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Annex	A	Field Data
Annex	B	Laboratory Results
Annex	C	Photo Documentation
Annex	D	Calibration
Annex	E	Test Participants

## AMBIENT AIR QUALITY MONITORING REPORT

**COMPANY:** BENGUET CORPORATION  
ACUPAN CONTRACT MINING PROJECT

**ADDRESS:** Balatoc, Virac, Itogon, Benguet

### 1.0 INTRODUCTION

Pursuant to Section 12 of Republic Act 8749, **Greentek Environmental Engineering Services** was contracted by **Benguet Corporation – Acupan Contract Mining Project** to conduct ambient air sampling for two (2) stations within the vicinity of their facility as requirement for the environmental permit and partly for regular environmental monitoring program. On February 29, 2020, ambient air sampling for Total Suspended Particulate (TSP), Sulfur Dioxide (SO<sub>2</sub>), and Nitrogen Dioxide (NO<sub>2</sub>) were performed.

Along with this, noise level measurement was also conducted during the sampling program and the results are presented in a separate report.

### 2.0 SAMPLING METHODOLOGY

The DENR standard ambient sampling equipment and analytical procedures were use in the sampling activity. These equipment and procedures are specified below:

#### **Total Suspended Particulate Matter (TSP)**

Procedure: USEPA, 40 CFR 50, Appendix B  
Sampling Equipment: High Volume Sampler (1-Hour Air Sampler)  
Method of Analysis: Gravimetric Method

#### **Sulfur Dioxide (SO<sub>2</sub>)**

Procedure: USEPA, 40 CFR 50, Appendix A  
Sampling Equipment: Gas Bubbler Sampler (USEPA compliant)  
Method of Analysis: Pararosaniline Method

**Nitrogen Dioxide (NO<sub>2</sub>)**

Reference Procedure: Air Pollution Monitoring Manual, EMB-1994  
Sampling Equipment: Gas Bubbler Sampler (USEPA compliant)  
Method of Analysis: Colorimetric, Griess Saltzman

The SO<sub>2</sub> and NO<sub>2</sub> samples were preserved in an icebox while the TSP filters were placed in a clean envelope. The samples were transported to the laboratory for analysis.

**3.0 SAMPLING LOCATION**

There were two (2) ambient air sampling stations selected for sampling. The said stations are shown in the attached Photos (Annex C) and are briefly described as follows:

<b>Station</b>	<b>Location</b>	<b>OBSERVATION / ACTIVITY IN THE AREA DURING THE TIME OF SAMPLING</b>
1	Brgy. Balatoc, Virac, Itogon, Benguet <b>(Downwind)</b>	The sampling location is near Balatoc Road and Parking Area. The plant facility together with their 2 units scrubber were operational during sampling. There were various types of vehicle present in the sampling area during sampling.
2	Along Keymens Road <b>(Upwind)</b>	The sampling location is located in the Keymens Hill beside the waiting shed area. The plant facility was operational during sampling.

**4.0 SUMMARY OF AMBIENT AIR SAMPLING RESULTS**

The ambient air sampling results are presented below. All supporting field data, analytical reports and calibration records are provided as attachments.

**Table 1: Laboratory Analysis and Standard Results**

Stn.	Location	Date / Time Sampling	TSP ( $\mu\text{g} / \text{Nm}^3$ )	SO <sub>2</sub> ( $\mu\text{g} / \text{Nm}^3$ )	NO <sub>2</sub> ( $\mu\text{g} / \text{Nm}^3$ )
1	Brgy. Balatoc, Virac, Itogon, Benguet (Downwind)	29-Feb-2020 0900H-1000H	277.8	13.8	0.7
2	Along Keymens Road (Upwind)	29-Feb-2020 10118H-1118H	289.8	22.0	10.9
<b>DENR NAAQ Standards for 60 minutes sampling</b>			<b>300</b>	<b>340</b>	<b>260</b>

These data are measured to standardize the test results to 25°C and 760mmHg and for comparison purpose.

**Table 2: Meteorological Monitoring Results**

Station	Location (GPS)	Date / Time Sampling	Barometric Pressure. (inch Hg) Result Avg.	Ambient Temp.(°C) Result Avg.	% Relative Humidity Result Avg.	Wind Speed Avg. (m/s)
1	Brgy. Balatoc, Virac, Itogon, Benguet (Downwind)	29-Feb-2020 0900H-1000H	27.31	29.3	46.6	0.7
	N 16°21'32" E 120°39'28"					
2	Along Keymens Road (Upwind)	29-Feb-2020 10118H-1118H	27.21	31.0	35.7	0.9
	N 16°21'35" E 120°39'31"					

## **5.0 DISCUSSION OF RESULTS**

The US EPA “Quality Assurance Handbook for Air Pollution Measurement Systems, Environmental Management Bureau, Department of Environment and Natural Resources, Philippine Environmental Policies, Laws and Regulations hand book was used as a guide to achieve the quality assurance objectives of producing data that are complete, representative and of known precision and accuracy.

Above results of analysis are compared to the National Ambient Air Quality Standards (NAAQS) for Source Specific Air Pollutants from Industrial Operations. These standards are specified in the Implementing Rules and Regulations of the Philippine Clean Air Act of 1999.

During sampling last February 29, 2020, the weather in stations 1 and 2 was sunny. Stations 1 and 2 have a prevailing light to moderate wind blowing from Northwest to Southeast and Northeast to Southwest respectively. Thus, *the results of sampling indicate that TSP, SO<sub>2</sub>, and NO<sub>2</sub> concentrations are within the applicable CAA/IRR standard for 60 minutes sampling.*

## **NOISE LEVEL MONITORING REPORT**

**COMPANY:**           **BENGUET CORPORATION  
ACUPAN CONTRACT MINING PROJECT**

**ADDRESS:**           **Balatoc, Virac, Itogon, Benguet**

### **1.0 INTRODUCTION**

On February 29, 2020, daytime noise level monitoring was conducted within the premises of their facility located at the above address. Noise level measurement was performed in two (2) locations. The measurement was conducted as part of the facility's environmental monitoring program and permit requirements.

### **2.0 SAMPLING METHODOLOGY**

A precision type, digital sound level meter was used in noise measurement. The said instrument is a LUTRON sound level meter Model SL-4033SD. The sound level meter meets IEC 61672 Class 1 standard.

The sound level meter was calibrated at Switchtek Measurement Systems with an acoustical calibrator (Lutron Sound Level). The pre-test calibration was performed before measurement for each period where the sound level meter is adjusted to read the 114dB signal provided by the calibrator. Post-test calibration was performed after measurement of all the stations during a given period. Post-test calibration simply verifies that the decibel reading of the sound level meter has not varied by more than 1dB from the initial 114dB setting.

Noise measurement was performed at about 3 minutes per station after the 1-hour ambient sampling activity. Noise sampler was handheld at about thirty degrees (30°) from the plane directly pointing to the facility.

**3.0 SAMPLING LOCATIONS**

The noise measurement locations are shown in Annex C and all stations are within the Benguet Corporation – Acupan Contract Mining Project premises. There are two (2) sampling locations surrounding the facility.

Station	Noise Location	OBSERVATION / SOURCE OF NOISE DURING THE TIME OF MEASUREMENT
1	Brgy. Balatoc, Virac, Itogon, Benguet	The audible noise detected came from the vehicles that passed by near the sampling station during the time of measurement.
2	Along Keymens Road	The audible noise detected came from the vehicles that passed by near the sampling station during the time of measurement.

**4.0 SUMMARY OF RESULTS****Table 3: Noise Monitoring Results**

Location	Time	Median (dBA)	Category of the Area	DENR Standard (dBA)
Brgy. Balatoc, Virac, Itogon, Benguet	1006H-1010H	59.8	Class C	70
Along Keymens Road	1120H-1123H	68.5	Class C	70

**Division of 24-hour period**

Morning	-	(0500H to 0900H) 5:00 AM to 9:00 AM
Day Time	-	(0900H to 1800H) 9:00 AM to 6:00 PM
Evening	-	(1800H to 2200H) 6:00 PM to 10:00 PM
Night Time	-	(2200H to 0500H) 10:00 PM to 5:00 AM

**Table 4: Environmental Quality Standards for Noise in General Areas**

Category of the Area	Day Time (dBA)	Morning and Evening (dBA)	Night Time (dBA)
AA	50	45	40
A	55	50	45
B	65	60	55
C	70	65	60
D	75	70	65

**Description per Category:**

- Class AA A section or contiguous area which require quietness, such as area within 100 meters from school sites, nursery schools, hospital and special home for the aged.
- Class A A section or contiguous area which is primarily used for residential purposes.
- Class B A section or contiguous area which zoned or used as a commercial area.
- Class C A section primarily zoned or used as a light industrial area.
- Class D A section which is primarily reserved, zoned or used as a heavy industrial area.

**5.0 DISCUSSION OF RESULTS**

The DENR Environmental Quality Standards for Noise is based on Memorandum Circular No. 002 Series of 1980 of the National Pollution Control Commission. The noise was measured in “A” weighting network and “slow response” with different limits for various time of the day and area category. The location of Benguet Corporation – Acupan Contract Mining Project is contiguous area which is primarily zoned or used as a light industrial area (Class C) with DENR Daytime Noise Standard of 70dBA.

The results of noise level measurement show that *the noise levels in stations 1 and 2 are within the applicable DENR daytime limit of 70dBA*. The audible noise detected came from a machinery and social activities like kids playing near the sampling station.

**ANNEX A**  
**FIELD DATA**

**AMBIENT AIR SAMPLING LABORATORY REPORT**  
**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
**February 29, 2020**

GPS Location: N 16°21'32" E 120°39'28"

Station 1 (Downwind)	Brgy. Balatoc, Virac, Itogon, Benguet			Flowrate			Wind Speed m/s
				TSP m3/min	SO2 lpm	NO2 lpm	
Time	Pbar inHg	Amb. Temp. °C	RH%				
0900H-0910H	27.32	29.7	65.0	1.0	0.5	0.5	0.5
0910H-0920H	27.31	29.6	44.0	1.0	0.5	0.5	0.7
0920H-0930H	27.31	29.4	44.4	1.0	0.5	0.5	0.8
0930H-0940H	27.31	28.9	41.6	1.0	0.5	0.5	0.5
0940H-0950H	27.31	28.9	42.6	1.0	0.5	0.5	0.7
0950H-1000H	27.31	29.1	41.9	1.0	0.5	0.5	0.7
<b>Average</b>	<b>27.31</b>	<b>29.3</b>	<b>46.6</b>	<b>1.0</b>	<b>0.5</b>	<b>0.5</b>	<b>0.7</b>

GPS Location: N 16°21'35" E 120°39'31"

Station 2 (Upwind)	Along Keymens Road			Flowrate			Wind Speed m/s
				TSP m3/min	SO2 lpm	NO2 lpm	
Time	Pbar inHg	Amb. Temp. °C	RH%				
1018H-1028H	27.21	30.0	38.7	1.0	0.5	0.5	1.3
1028H-1038H	27.21	30.5	36.2	1.0	0.5	0.5	0.8
1038H-1048H	27.21	31.2	35.4	1.0	0.5	0.5	1.0
1048H-1058H	27.21	31.4	35.0	1.0	0.5	0.5	0.8
1058H-1108H	27.21	31.4	34.8	1.0	0.5	0.5	0.9
1108H-1118H	27.21	31.5	34.0	1.0	0.5	0.5	0.8
<b>Average</b>	<b>27.21</b>	<b>31.0</b>	<b>35.7</b>	<b>1.0</b>	<b>0.5</b>	<b>0.5</b>	<b>0.9</b>

**NOISE LEVEL MONITORING RESULTS**  
**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
**February 29, 2020**

Station 1	Brgy. Balatoc, Virac, Itogon, Benguet		
<i>Time of Sampling (1006H - 1010H)</i>			
59.8	59.2	59.6	59.7
57.9	58.9	59.0	59.1
59.2	59.8	59.2	59.8
59.8	59.7	59.7	59.8
59.9	59.8	59.8	59.9
59.9	59.8	59.8	59.8
59.8	59.7	59.9	59.8
<b>Median =</b>	<b>59.8</b>	<b>Average =</b>	<b>59.58</b>
<b>Minimum =</b>	<b>57.9</b>	<b>Maximum =</b>	<b>59.9</b>

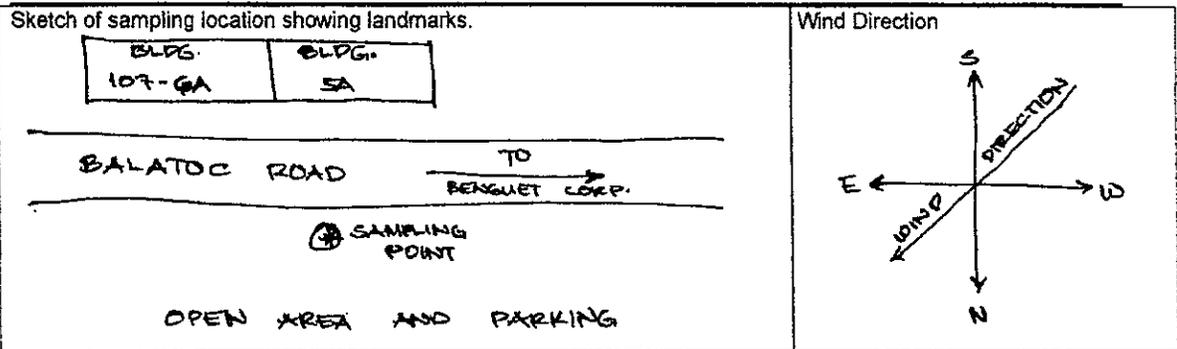
Station 2	Along Keymens Road		
<i>Time of Sampling (1120H - 1123H)</i>			
70.3	73.0	73.3	73.0
68.6	68.5	73.2	68.0
71.9	71.8	68.8	68.8
68.8	68.0	68.4	68.3
73.2	68.5	68.4	68.5
68.4	68.4	68.3	68.5
73.0	68.4	68.3	68.5
<b>Median =</b>	<b>68.5</b>	<b>Average =</b>	<b>69.75</b>
<b>Minimum =</b>	<b>68.0</b>	<b>Maximum =</b>	<b>73.3</b>

Name of Facility: BENGUET CORP. ACCUPAN CONTRACT MINING PROJECT  
 Facility Address: BALATOC ITOGON BENGUET  
 Facility Representative: LEONARD GUMTANG JR. Personnel: MRC, ADM

Station No.: 1 (DOWN WIND)  
 Specific Location: BRGY. BALATOC, VIRAC, ITOGON, BENGUET  
 Sampling Date: 2/29/2020 Coordinates: N 16° 21' 32" / E 130° 39' 38"  
 Filter ID: B19-216 Filter Weight: 2721.3

Time	Barometric Pressure inHg	Ambient Temp., °C	RH %	TSP Flow Rate m³/min	NO2 Flow Rate, lpm	SO2 Flow Rate, lpm	Weather Condition	Wind Direction	Wind Speed m/s
0900-0910	27.32	29.7	65.0	1.0	0.5	0.5	SUNNY	SW-NE	0.5
0910-0920	27.31	29.6	44.0	1.0	0.5	0.5	SUNNY	SW-NE	0.7
0920-0930	27.31	29.4	44.4	1.0	0.5	0.5	SUNNY	SW-NE	0.8
0930-0940	27.31	28.9	41.6	1.0	0.5	0.5	SUNNY	SW-NE	0.5
0940-0950	27.31	28.9	42.6	1.0	0.5	0.5	SUNNY	SW-NE	0.7
0950-1000	27.31	29.1	41.9	1.0	0.5	0.5	SUNNY	SW-NE	0.7

Description of the sampling location and observations: (use separate sheet if necessary)  
SAMPLING LOCATION IS NEAR BALATOC ROAD  
MINING IS OPERATIONAL DURING SAMPLING  
TWO UNITS SCRUBBER ARE OPERATIONAL DURING SAMPLING  
VARIOUS TYPES OF VEHICLES ARE PRESENT IN THE AREA DURING SAMPLING  
NEAR PARKING AREA



### Noise Level Monitoring

Station No.: 1 Sampling Date: 2/29/2020  
 Specific Location: BRGY. BALATOC, VIRAC, ITOGON BENGUET

Time	Noise Level (dB)				Noise Source / Observation
1006	59.8	59.2	59.6	59.7	→ NOISE CAME FROM PASSING VEHICLES
	57.9	58.9	59.0	59.1	
	59.2	59.8	59.2	59.8	
	59.8	59.7	59.7	59.8	
	59.9	59.8	59.8	59.9	
	59.9	59.8	59.8	59.8	
1010	59.8	59.7	59.9	59.8	



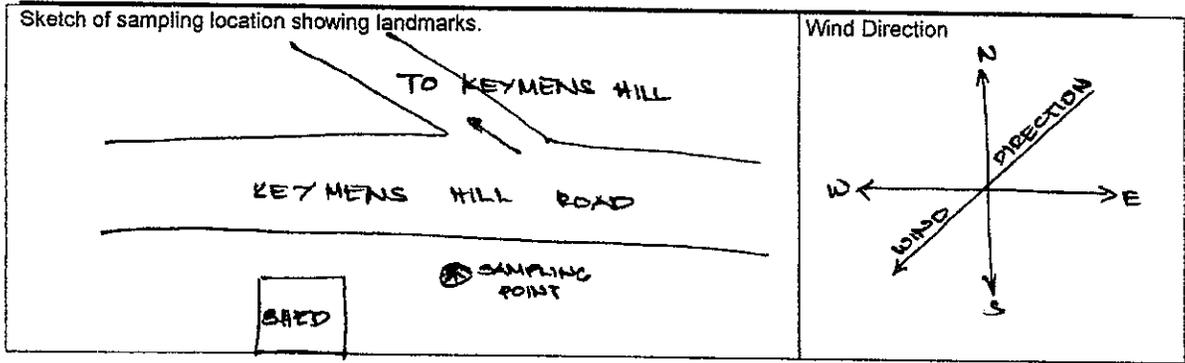
# AMBIENT AIR QUALITY AND NOISE LEVEL MONITORING

Name of Facility: BENQUET CORP. ACELUPAN CONTACT MINING PROJECT  
 Facility Address: BALATOC ITOGON BENQUET  
 Facility Representative: LEONARD GUNTANG JR. Personnel: MRC, ADM

Station No.: 2 (UPWIND)  
 Specific Location: ALONG KEYMENS ROAD  
 Sampling Date: 2/29/2020 Coordinates: N 16° 21' 35" / E 120° 39' 01"  
 Filter ID: B19-215 Filter Weight: 2718.9

Time	Barometric Pressure inHg	Ambient Temp., °C	RH %	TSP	NO2	SO2	Weather Condition	Wind Direction	Wind Speed m/s
				Flow Rate m³/min	Flow Rate, lpm	Flow Rate, lpm			
1018-1028	27.21	30.0	38.7	1.0	0.5	0.5	SUNNY	NE-SW	1.2
1028-1038	27.21	30.5	36.2	1.0	0.5	0.5	SUNNY	NE-SW	0.8
1038-1045	27.21	31.2	35.4	1.0	0.5	0.5	SUNNY	NE-SW	1.0
1048-1058	27.21	31.4	35.0	1.0	0.5	0.5	SUNNY	NE-SW	0.8
1058-1108	27.21	31.4	34.8	1.0	0.5	0.5	SUNNY	NE-SW	0.9
1108-1118	27.21	31.5	34.0	1.0	0.5	0.5	SUNNY	NE-SW	0.8

Description of the sampling location and observations: (use separate sheet if necessary)  
THE SAMPLING LOCATION IS LOCATED ALONG KEYMENS ROAD  
BESIDE THE WAITING SHED  
MINING IS OPERATIONAL DURING SAMPLING.



### Noise Level Monitoring

Station No.: 2 Sampling Date: 2/29/2020  
 Specific Location: ALONG KEYMENS ROAD

Time	Noise Level (dB)				Noise Source / Observation
1120	70.3	73.0	73.3	73.6	→ NOISE CAME FROM VEHICLES PASSING
	68.6	68.5	73.2	68.0	
	71.9	71.8	68.8	68.8	
	68.8	68.0	68.4	68.3	
	73.2	68.5	68.4	68.5	
	68.4	68.4	68.3	68.5	
1123	73.0	68.4	68.3	68.5	

**ANNEX B**  
**LABORATORY RESULTS**

**AMBIENT SAMPLING LABORATORY REPORT**  
**BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT**  
**February 29, 2020**

**Laboratory Data**

Station #	TSP ug	SO2 ug	NO2 ug
Station 1	15000	0.372	0.02
Station 2	15500	0.589	0.292

**Computation**

$$\text{TSP} = (\text{concentration-ug}) / ((\text{flowrate}-1.0) * (298 / (\text{Tm-ave.} + 273)) * ((\text{Pbar-ave.} * 25.4) / 760)) * 60$$

$$\text{SO2} = (\text{concentration-ug}) / ((\text{flowrate}-0.5/1000) * (298 / (\text{Tm-ave.} + 273)) * ((\text{Pbar-ave.} * 25.4) / 760)) * 60$$

$$\text{NO2} = (\text{concentration-ug}) / ((\text{flowrate}-0.5/1000) * (298 / (\text{Tm-ave.} + 273)) * ((\text{Pbar-ave.} * 25.4) / 760)) * 60$$

**Concentration at Standard Condition**

Station #	TSP ug/Ncm	SO2 ug/Ncm	NO2 ug/Ncm
Station 1	277.8	13.8	0.7
Station 2	289.8	22.0	10.9

## CERTIFICATE OF ANALYSIS

Client: **Benguet Corporation – Acupan Contract Mining Project**

Address: National Highway, Coronon, Sta. Cruz, Davao del Sur

Sample Description: Ambient Air

Date Sampled: February 29, 2020

Reference #: GLAS-2020-010

Date Analyzed: March 3, 2020

Sample Identification #: LAS-20-033 to LAS-20-034

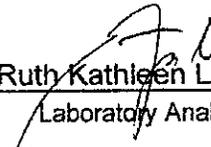
### RESULTS OF ANALYSIS

Station Number	Sample ID Number	Total Suspended Particulates, TSP ( $\mu\text{g}$ )
BCACMP-STN1	LAS-20-033	15,000
BCACMP-STN2	LAS-20-034	15,500

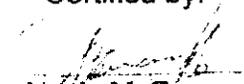
REMARKS:

- Method of Analysis used: Methods of Air Sampling and Analysis, Third Edition.  
Total Suspended Particulates - Gravimetric
- The result values shown are based upon the samples collected by Greentek Team submitted on March 2, 2020 only.

Prepared by:

  
Ruth Kathleen L. Tejada  
Laboratory Analyst

Certified by:

  
Alexis M. Fernando  
General Manager



# MACH UNION LABORATORY

duly registered under

## MACH UNION WATER LABORATORY, INC.

Mach Union Building., 335 Real Street, (formerly Alabang Zapote Rd.),  
Talon 3, 1740 Las Piñas City, Philippines  
Tel. No.: 553 8381 / 553 8382 / 553-8879 Fax No.: 553-8878  
Email: info@machunion.com • Website: www.machunion.com



PAB ACCREDITED  
TESTING LABORATORY  
PNS ISO/IEC 17025:2005  
LA-2012-2158

Recognized Department of Health (DOH) • Department of Environment & Natural Resources (DENR)

### Result of Analysis

Job Number: MU20009992      Laboratory Number: MU20009992-001      Date: 03/05/2020  
 Customer: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Address: 2430 Laura St., Pandacan, Manila

Project Name: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 Location: Balatoc, Virac, Itogon, Benguet  
 Date Sampled: 02/29/2020      Analyzed Date: 03/02/2020  
 Date Received: 03/02/2020  
 Sample Description: Air Ambient Sample in Absorbing Solution in 50mL HDPE

Analysis are based on sample (s) of: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Mach Union Water Laboratory, Inc. does not guarantee that sample(s) submitted is (are) representative of the whole bulk from where it/they was (were) taken. Reproduction of this report is not authorized except in full, without written approval of the laboratory.

Sample ID	Parameters	Method	Units	Result
BCACMP - STN1: DOWNWIND	Nitrogen dioxide	Griess Saltzman Method	ug	< 0.02
BCACMP - STN1: DOWNWIND	Sulfur dioxide	Pararosaniline Method	ug	0.372

Reference  
 Code of Federal Regulations Title 40 Parts 50 to 51. USA.1999  
 Selected Methods of Measuring Air Pollutants. WHO.1976.

\*\*Customer/s is/are given (7) days upon receipt of report to question any discrepancies (i.e. customer name & address, sample description, result, etc.)

This document has been signed by those names that appear on this report and are the authorized signatories.

Checked by

Certified by:

Noted by:

Katch U. Pagulayan, RCh  
 Chemist  
 PRC#: 0013681

Marisa T. Manalo, RCh  
 Supervising Chemist  
 PRC#: 0005465

Aladino M. Abulequia, ChE  
 Technical Manager



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Recognized Department of Health (DOH) • Department of Environment & Natural Resources (DENR)



PAB ACCREDITED  
TESTING LABORATORY  
PNS ISO/IEC 17025:2005  
LA-2012-2158

### Result of Analysis

Job Number: MU20009993      Laboratory Number: MU20009993-001      Date: 03/05/2020  
 Customer: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Address: 2430 Laura St., Pandacan, Manila

Project Name: BENGUET CORPORATION - ACUPAN CONTRACT MINING PROJECT  
 Location: Balatoc, Virac, Itogon, Benguet  
 Date Sampled: 02/29/2020 \*      Analyzed Date: 03/02/2020  
 Date Received: 03/02/2020  
 Sample Description: Air Ambient Sample in Absorbing Solution in 50mL HDPE

Analysis are based on sample (s) of: NCRMUL-000356 GREENTEK ENVIRONMENTAL ENGINEERING SERVICES  
 Mach Union Water Laboratory, Inc. does not guarantee that sample(s) submitted is (are) representative of the whole bulk from where it/they was (were) taken. Reproduction of this report is not authorized except in full, without written approval of the laboratory.

Sample ID	Parameters	Method	Units	Result
BCACMP - STN2: UPWIND	Nitrogen dioxide	Griess Saltzman Method	ug	0.292
BCACMP - STN2: UPWIND	Sulfur dioxide	Pararosaniline Method	ug	0.589

Reference  
 Code of Federal Regulations Title 40 Parts 50 to 51. USA.1999.  
 Selected Methods of Measuring Air Pollutants. WHO.1976

\*\*Customer/s is/are given (7) days upon receipt of report to question any discrepancies (i.e. customer name & address, sample description, result, etc.)

This document has been signed by those names that appear on this report and are the authorised signatories.

Checked by:

Marisa T. Mendo, RCh  
 Chemist  
 PRC#: 0013581

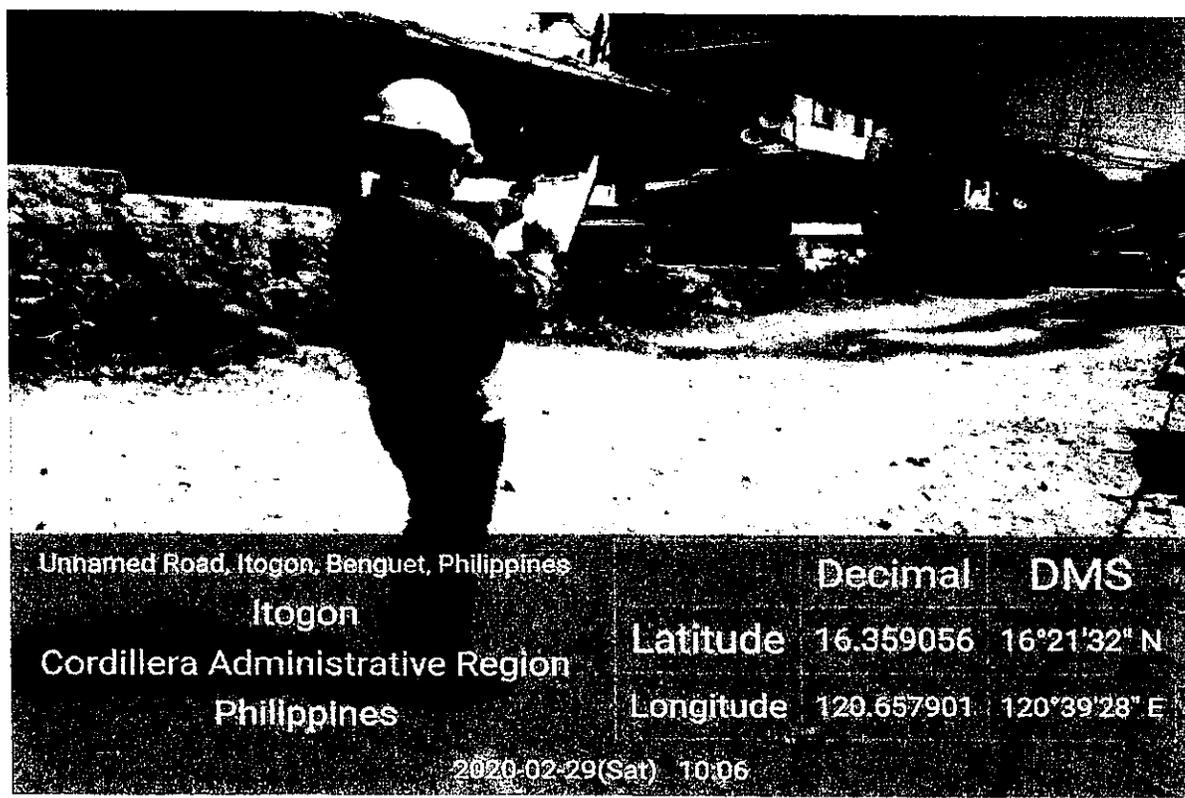
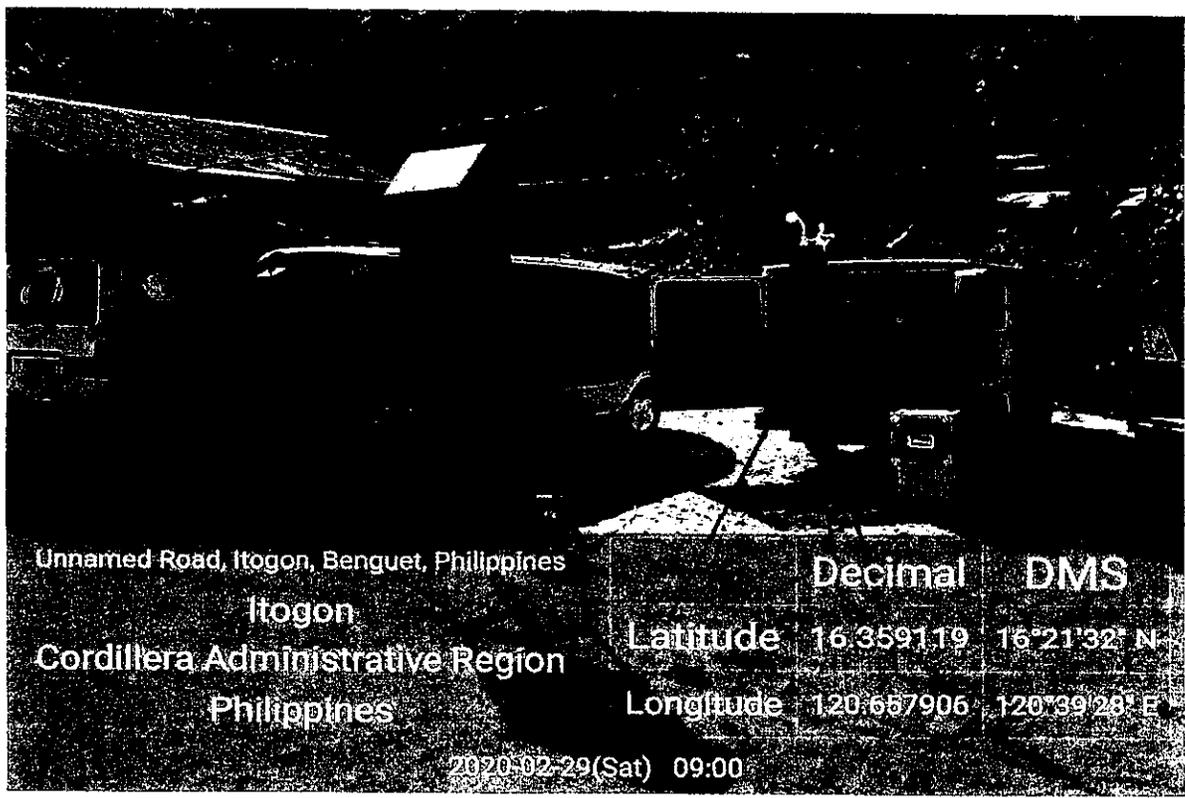
Certified by:

Marisa T. Mendo, RCh  
 Supervising Chemist  
 PRC#: 0005465

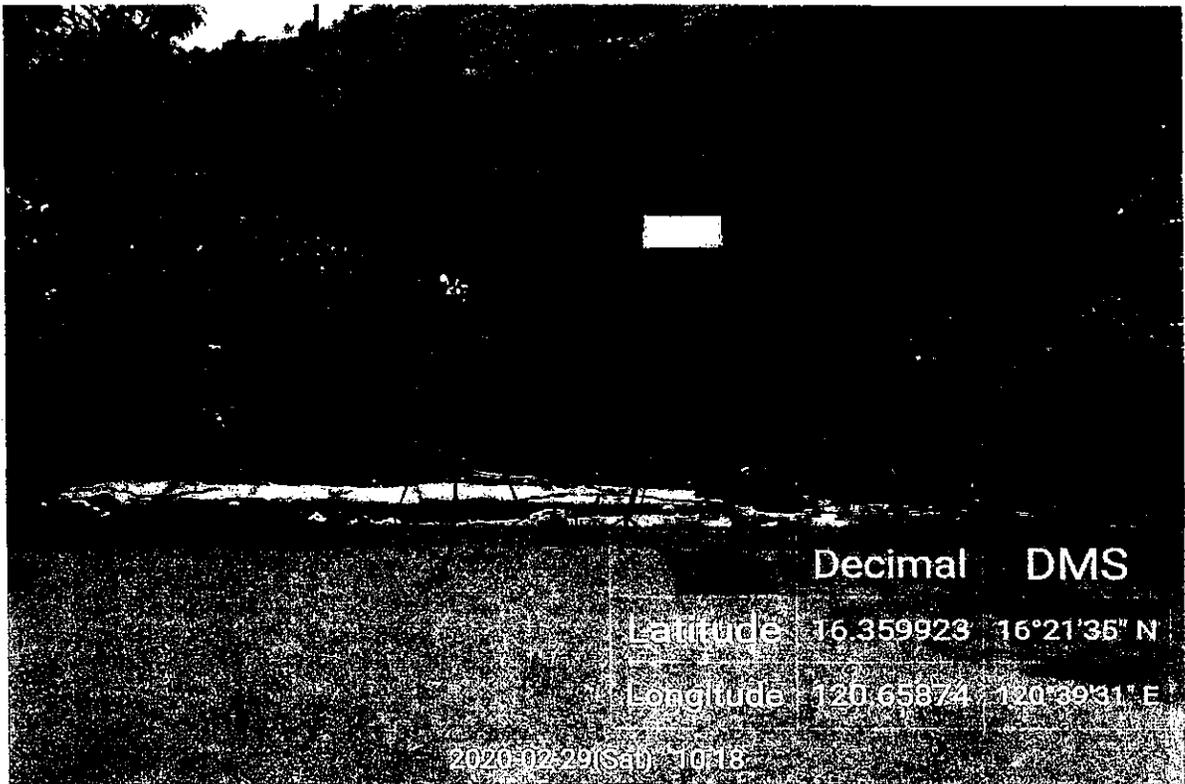
Noted by:

Aldine M. Abutolina, ChE  
 Technical Manager

**ANNEX C**  
**PHOTO DOCUMENTATION**

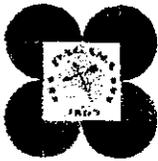


Station 1: Brgy. Balatoc, Virac, Itogon, Benguet (Downwind)



**Station 2: Along Keymens Road (Upwind)**

**ANNEX D**  
**CALIBRATION**



## CALIBRATION CERTIFICATE NO. 195

Series 2019

Type of instrument : Digital Barometer  
 Brand : Traceable  
 Serial Number : None  
 Owner : Greentek Environmental Engineering Services  
 Calibration date : September 17, 2019



This is to certify that the above Instrument was calibrated at the Instrument Research and Development Unit (IRDU) of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) of the Department of Science and Technology (DOST) with the following results:

Reference Pressure, inHg	Observed Pressure, inHg	Correction, inHg	Uncertainty, inHg ( $\pm$ )
30.13	29.91	+0.22	0.009
29.83	29.61	+0.22	0.009
29.53	29.32	+0.21	0.009
28.94	28.73	+0.21	0.009
28.35	28.14	+0.21	0.009

Note: Interpolate between different readings if necessary.  
 Required achievable measurement uncertainty: 0.004 inHg

**ENVIRONMENTAL CONDITIONS:**

Reference Temperature: (21.5  $\pm$ 1) °C      Relative Humidity: (63.7  $\pm$ 2) RH%      Pressure:(29.62 $\pm$ 0.2) inHg

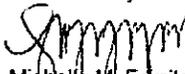
**UNCERTAINTY OF MEASUREMENT:**

The uncertainty stated has been calculated based on a standard uncertainty multiplied by a coverage factor  $k=2$  with confidence level of 95%.

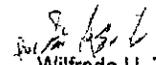
Reference Used:

Type	Serial Number	Calibration Date	Certificate Number	Issuing Lab/Traceability
PTB 330	1023	May 31, 2019	002 series 2019	PAGASA

Calibrated by:

  
 Michelle M. Familiaran  
 Science Research Technician I

Noted by:

  
 Wilfredo H. Tuazon  
 Weather Specialist II

*"tracking the sky...helping the country"*

Science Garden Compound, BIR Road, Brgy. Central, Quezon City,  
 Metro Manila, Philippines 1100  
 Postal Address: P.O. Box 3278 Manila

Tel. No. (832) 284 0800 (loc. 117)  
 Tel/Fax No. (832) 929 2121  
 Website: <http://bagong.pagasa.dost.gov.ph>



# JCG INDUSTRIAL TECHNOLOGIES

"Engineering Services and Supply of Environmental Equipment"

## HIGH VOLUME SAMPLER CALIBRATION STAPLEX TF1A-2

### GENERAL DATA

Calibration Date / Time : 25-Oct-2019 1400H Next Calibration Date : 25-Oct-2020 (see note)  
 Calibration Site : JCG Workshop Calibrated By : Joey C. Garinggan

### SAMPLER DATA

Sampler Brand / Model : Staplex / TF1A-2 Sampler ID No. : GHV-AQM-T1  
 Sampler Serial No. : 25255T Property ID No. : N/A

### CALIBRATOR DATA

Calibrator Brand / Model : TISCH / TE-5025A Calibrator Slope,  $m_1$  : 2.07557 (Based on Qstd)  
 Calibrator Serial No. : 3361 Calibrator Intercept,  $b_1$  : -0.05327 (Based on Qstd)  
 No. of Plates / Trials : 3 Correlation Coeff.,  $r_1$  : 0.99999 (Based on Qstd)

### CALIBRATION RUN

Actual Temp. & Pressure : 26.0 deg C 29.6 In Hg  
299.16 deg K 751.84 mm Hg

Reference Temp. & Pressure : 298 deg K 760 mm Hg

Run No.	I, Actual	I, Corrected	DH Actual, in H <sub>2</sub> O	Corrected	Qstd, m <sup>3</sup> /min	Qstd, cfm
#18	1.5	1.49	8.2	2.84	1.395	48.23
#7	1.2	1.19	3.9	1.96	0.970	34.24
#5	1.1	1.09	3.3	1.60	0.894	31.56

### RESULTS OF LINEAR REGRESSION

Correlation Coeff.,  $r_2$  : 0.9948 Sampler Slope,  $m_2$  : 0.7816  
 Sampler Intercept,  $b_2$  : 0.4298 Remarks : Passed II

### SAMPLER OPERATIONAL FLOW RATE

Flowmeter Reading at Clean Filter, I : 1 Qstd at Clean Filter : 0.739 scmm

### FOR SUBSEQUENT FLOW CALCULATIONS, USE

$$Q_{std} = \frac{1}{0.7816} \left( I_3 - 0.4298 \right) ; \text{scmm}$$

- Qstd = Sample flowrate at standard conditions, in scmm
- 0.7816 =  $m_2$ , the slope of sampler calibration
- 0.4298 =  $b_2$ , the intercept of sampler calibration
- I = Average flowmeter reading
- $I_3$  = Corrected flow meter reading during sampling

$$I_3 = I \times \sqrt{\frac{P_3}{P_{std}}} \times \frac{T_{std}}{T_3}$$

### NOTES !!!!

\*\*\* The sampler should be calibrated (1) upon installation; (2) after 360 hours of usage; (3) after any motor maintenance, whichever of these comes first.

\*\*\* Sampler intercept  $b_2$ , slope  $m_2$  and correlation coefficient  $r_2$  is determined from least-squares linear regression method from the graph of Qstd cfm (x-axis) versus corrected flowmeter reading I (y-axis). The resulting r value should be greater than 0.99.

Calibrated By :

Joey C. Garinggan  
OPERATIONS MANAGER

Noted By :

Joey C. Garinggan  
OPERATIONS MANAGER



## CALIBRATION CERTIFICATE NO. 195

Series 2019

Type of instrument : Digital Barometer  
Brand : Traceable  
Serial Number : None  
Owner : Greentek Environmental Engineering Services  
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Required achievable measurement uncertainty: 0.004 inHg

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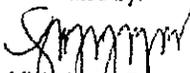
### UNCERTAINTY OF MEASUREMENT:

The uncertainty stated has been calculated based on a standard uncertainty multiplied by a coverage factor  $k=2$  with confidence level of 95%.

### Reference Used:

Type	Serial Number	Calibration Date	Certificate Number	Issuing Lab/Traceability
PTB 330	1023	May 31, 2019	002 series 2019	PAGASA

Calibrated by:

  
Michelle M. Familiaran  
Science Research Technician I

Noted by:

  
Wilfredo H. Tuazon  
Weather Specialist II

"tracking the sky...helping the country"

Science Garden Compound, BIR Road, Brgy. Central, Quezon City,  
Metro Manila, Philippines 1100  
Postal Address: P.O. Box 3278 Manila

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# JCG INDUSTRIAL TECHNOLOGIES

"Engineering Services and Supply of Environmental Equipment"

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 Sampler Serial No. : 25255T Property ID No. : N/A

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 Calibrator Serial No. : 3381 Calibrator Intercept,  $b_1$  : -0.05327 (Based on Qstd)  
 No. of Plates / Trials : 3 Correlation Coeff.,  $r_1$  : 0.99999 (Based on Qstd)

### CALIBRATION RUN

Actual Temp. & Pressure : 26.0 deg C 29.6 In Hg  
299.16 deg K 751.84 mm Hg

Reference Temp. & Pressure : 299 deg K 760 mm Hg

Run No.	I, Actual	I, Corrected	DH Actual, in H <sub>2</sub> O	Corrected	Qstd, m <sup>3</sup> /min	Qstd, cfm
#1	1.5	1.48	8.2	2.84	1.395	49.23
#2	1.2	1.19	3.9	1.96	0.970	34.24
#3	1.1	1.09	3.3	1.80	0.894	31.68

### RESULTS OF LINEAR REGRESSION

Correlation Coeff.,  $r_2$  : 0.9948 Sampler Slope,  $m_2$  : 0.7616  
 Sampler Intercept,  $b_2$  : 0.4298 Remarks : Passed !!

### SAMPLER OPERATIONAL FLOW RATE

Flowmeter Reading at Clean Filter, I : 1 Qstd at Clean Filter : 0.739 scmm

### FOR SUBSEQUENT FLOW CALCULATIONS, USE

$$Qstd = \frac{1}{0.7616} \left( I_2 - 0.4298 \right) ; \text{scmm}$$

- Qstd = Sample flowrate at standard conditions, in scmm
- 0.7616 =  $m_2$ , the slope of sampler calibration
- 0.4298 =  $b_2$ , the intercept of sampler calibration
- I = Average flowmeter reading
- $I_2$  = Corrected flow meter reading during sampling

$$I_2 = I \times \sqrt{\frac{P_3}{Pstd} \times \frac{Tstd}{T_3}}$$

### NOTES !!!

\*\*\* The sampler should be calibrated (1) upon installation; (2) after 360 hours of usage; (3) after any motor maintenance, whichever of these comes first.

\*\*\* Sampler intercept  $b_2$ , slope  $m_2$  and correlation coefficient  $r_2$  is determined from least-squares linear regression method from the graph of Qstd cfm (x-axis) versus corrected flowmeter reading I (y-axis). The resulting r value should be greater than 0.99.

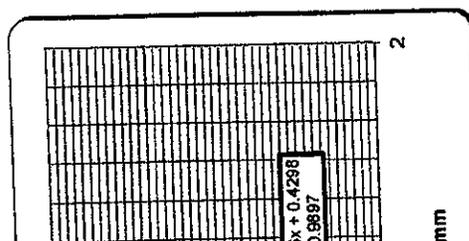
Calibrated By :

Joey C. Garinggan  
 OPERATIONS MANAGER

Noted By :

Joey C. Garinggan  
 OPERATIONS MANAGER

L-2020  
 J. Garinggan  
 AQM-T1



Joey C. Garinggan  
 OPERATIONS MANAGER



Republic of the Philippines  
 Department of Environment and Natural Resources  
**ENVIRONMENTAL MANAGEMENT BUREAU**  
 DENR Compound, Visayas Avenue, Diliman Quezon City 1116  
 Telephone Nos.: (632) 927-1517, 928-3725; Fax No.: (632) 920-2258  
 Website: <http://www.emb.gov.ph>

**ANNEX**

"H"

**TSD REGISTRATION CERTIFICATE**

Pursuant to Chapter 5 of DENR Administrative Order (DAO) 2013-22, the Implementing Rules and Regulations of Republic Act 6969, Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990, the applicant:

Company Name : **BENGUET CORPORATION – ACUPAN CONTRACT MINING PROJECT (Tailings Storage Facility No. 2)**  
 Facility Address : Balatoc, Itogon, Benguet

has submitted information to the satisfaction of the Environmental Management Bureau, Department of Environment and Natural Resources with regards to the Hazardous Wastes Treatment Storage and Disposal (TSD) facility registration requirements and is therefore assigned with the new *registration no.*:

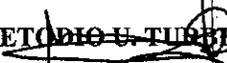
**M-TR-CAR-11-00013**

This hereby permits **Benguet Corporation – Acupan Contract Mining Project** to maintain/operate Treatment, Storage, and Disposal (TSD) Facility for the following wastes:

Category	Type(s) of Waste	Treatment Method
A	Wastes with cyanide (A101), acid wastes (B202, B203)	Detoxification

subject to the following conditions:

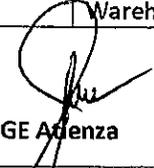
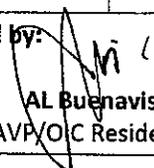
1. The TSD facility shall comply with all the requirements of R.A.6969, its Implementing Rules and Regulation and the Procedural Manual for Hazardous Wastes Management.
2. The TSD facility shall not exceed the capacity indicated in the Environmental Compliance Certificate (ECC). As such, the subject wastes shall be treated within six (6) months from the date of transport as indicated in the Hazardous Waste Manifest Form.
3. All residues generated shall be disposed of in a third party TSD Facility for further treatment or disposal.
4. Non-compliance to the above stipulations shall be subject to the penalty provisions as provided under Section 41 of DAO 92-29 and Chapter 11 of DAO 2013-22.
5. This certificate is valid for one (1) year from the approved date unless sooner revoked or suspended for cause by this Bureau. The application for renewal hereof should be filed with this Bureau at least one (1) month prior to the date of expiration.

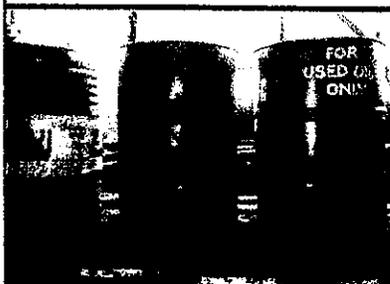
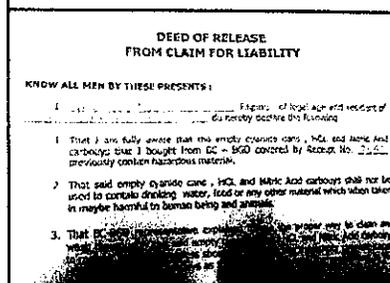
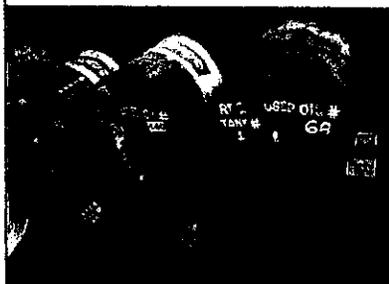
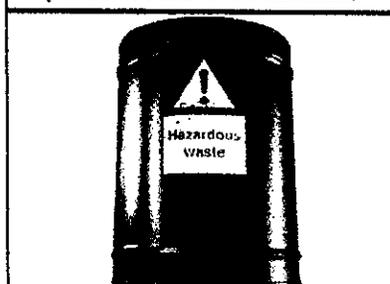
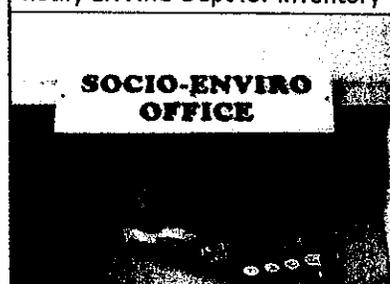
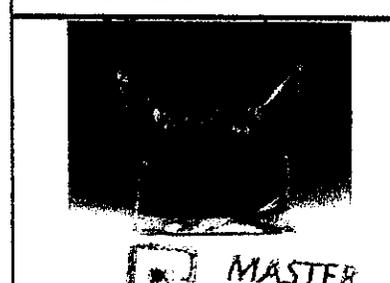
AUTHORIZED SIGNATURE :   
 AUTHORIZED NAME : **ENGR. METODIO U. TURBELLIA**  
 DESIGNATION : Director  
 DATE : AUG 15 2019

rtc/ggrs/pvc/tsd

Department of Environment and Natural Resources  
**ENVIRONMENTAL MANAGEMENT BUREAU**  
 Office of the Director

M-TR-CAR-11-00013  
  
 19.08.15\*16:25:32\*000010

Document Title	<b>EMS GUIDELINES</b>				
Process	Hazardous Waste Management (Used Oil, Oil and Grease Contaminated Items)				
Document Code	EMSG-07-A	Revision No.	00	Effective Date	Sepetember 15, 2015
Department	Mill, Mill Mechanical, Mine Mechanical, Motorpool, Warehouse, Enviro Department			Page Number	Page 1 of 1
Prepared by:	 GE Atienza		Reviewed by:	 AL Buenavista BGO – AVP/O/C Resident Manager	

USED OIL	Each department will assign designated storage area for used oil	USED OIL	Use tightly sealed and properly labeled containers	USED OIL	When full, notify ENVIRO Dept for proper inventory & documentation
					
USED OIL	Collected containers will be stored in a centralized temporary storage	USED OIL	Accumulated used oil will be sold to interested parties	USED OIL	A signed waiver will be issued to by the buyer to the company
					
USED OIL	Used oil from mill mechanical will be re-used	OIL-CONTAMINATED	All contaminated items will be disposed in hazardous trash bin	OIL-CONTAMINATED	When full, seal the container and notify ENVIRO Dept for inventory
					
OIL-CONTAMINATED	Collected containers will be stored in a centralized temporary storage	OIL-CONTAMINATED	Contact an EMB-accredited Treatment/Storage/Disposal Company	OIL-CONTAMINATED	Used spill kit materials are disposed in the hazardous trash bin
					

MASTER COPY



**ENVIRONMENTAL COMPLIANCE CERTIFICATE**  
CAR 1012 – 174 – 2110 (Amended)

The Department of Environment and Natural Resources (DENR) thru the Environmental Management Bureau – Cordillera Administrative Region (EMB-CAR) hereby grants this Environmental Compliance Certificate (ECC) for the **Acupan Contract Mining Project (ACMP)** of **Benguet Corporation** located at the former Balatoc Power Station Area, Virac, Itogon, Benguet, after complying with the Environmental Impact Assessment (EIA) requirements as prescribed in the promulgated guidelines implementing section 3 (b) of P.D. 1586.

This Certificate is further specified as follows:

**A. Scope:**

1. This Certificate is valid only for the abovesited project with a rated milling capacity not to exceed 300 dry metric tons per day (300 DMT/Day) and/or as described in the submitted documents.
2. This Certificate does not exempt the project from the requirements of other concerned agencies;

**B. Conditions:**

1. The development and operation of the project shall be in accordance with the plans and specifications described in the submitted documents. Any major modification and/or expansion shall be subject to the Environmental Impact Statement (EIS) System requirement;
2. The proponent shall cause the implementation of the Environmental Management Plan (EMP) and all other BC commitments described in the submitted EIA documents;
3. Tailings and other wastes generated from the operation of the plant shall be contained and disposed-off properly in the designated pollution control facility(ies) as described in the submitted EIA documents;
4. Pond/plant effluent discharges shall conform with the standards set forth under RA 9275 otherwise known as the Clean Water Act of the Philippines and its implementing Rules and Regulations;

5. Piezometer monitoring station(s) shall be installed along strategic area(s) at tailings pond nos. 1 and 2 (TP #1 & TP #2) to monitor phreatic level stability;
6. The legal requirements pursuant to RA 6969 also known as the Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990, RA 9275 or the Philippine Clean Water Act of 2004 and, RA 8749 or the Philippine Clean Air Act of 1999 shall be secured consistent to the operations of the plant. Compliance to said requirements shall be coordinated with the EMB-CAR;
7. Should there be a breakdown in the pollution control appurtenances and/or major damage(s) incurred, the proponent shall voluntary cease its operation until such time that said damages incurred shall be rehabilitated or restored. Further, the proponent shall immediately inform the EMB, DENR-CAR of said damages and of the remedial measures undertaken;
8. The proponent shall submit to EMB-CAR one (1) year prior to the final shutdown of the plant a comprehensive abandonment plan. In relation, the EMB shall first review and approve the environmental aspects/components of the plan consistent with EMB functions prior to implementation;
9. To oversee the compliance of the proponent with the ECC conditions, the proponent shall maintain the operation of the established Sectoral Monitoring Team including the Environmental Monitoring Fund (EMF) to cover all costs attendant to the said monitoring.
10. The project is subject to on-the-spot monitoring/inspection at any reasonable time by the EMB-CAR which may be in coordination with concerned groups.
11. The proponent shall cause the implementation of any undertaking which may be imposed by the EMB-CAR as a result of Technical Conference/s called relative hereof;
12. This Certificate supersedes the Environmental Compliance Certificate (ECC) NO. CAR 0211-144-120 issued the project on November 29, 2002.
13. This Certificate shall be deemed automatically expired if the project is not implemented within five (5) years from the date of issuance; and
14. Any transfer of project proprietorship or project name carries the same conditions in this ECC for which notification to the EMB-CAR shall be made by the proponent within fifteen (15) days from such transfer.

Non-compliance with any of the above stipulations will be sufficient cause for the suspension or cancellation of this Certificate, administrative sanctions against the office head and/or imposition of fine in the amount not to exceed Fifty Thousand Pesos (₱



50,000.00) for every violations thereof, at the discretion of the DENR (Section 9 of P. D. 1586).

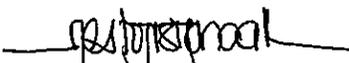
**C. Recommendations (for the consideration of the project proponent, the PMRB-Benguet/MGB-CAR and, other concerned agencies in the issuance of applicable permits/authorities):**

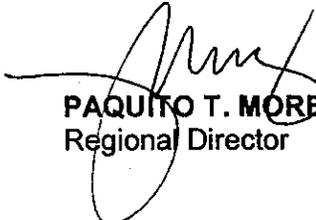
1. The recommendations cited in the Geotechnical Analysis of Dam and Review of the Hydrology for the Re-mining of Tailings from the BGO Tailings Ponds No. I, II, & III final report, where applicable, should be given preferential consideration under the requirements of the MGB-CAR;
2. Qualified local residents should be given priority employment during the development and operation of the project;
3. Construction works should be under the tight supervision of a technical personnel to ensure that standards and requirements of sound engineering, safety and health practices are strictly followed;
4. An emergency response and contingency plan in the event of failure of any of the project appurtenant facilities and/or during disaster/calamity; and
5. The appurtenant physical structures and equipment of the project, where applicable, are subject to the requirements of the National Building Code of the Philippines and the permitting requirements of MGB-CAR/LGU-concerned.

Issued this \_\_\_\_\_ day of 15 DEC 2010, Year Two Thousand Ten.

RECOMMENDING APPROVAL:

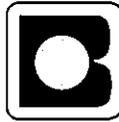
APPROVED:

  
**NESTOR M. DONAAL**  
Chief, EIA Division

  
**PAQUITO T. MORENO, JR.**  
Regional Director

Amendment of ECC Condition ₱ 1,200.00 O.R. No. \_\_\_\_\_ Date \_\_\_\_\_  
Legal Research Fee ₱ 240.00 O.R. No. \_\_\_\_\_ Date \_\_\_\_\_

**NOTE: NOT VALID WITHOUT SEAL**



Benguet Corporation  
Benguet District Operations

ANNEX

"K"

**SUMMARY OF REGULATORY COMPLIANCE – BENGUET  
GOLD OPERATION**

**I. SAFETY**

MONTHLY GENERAL ACCIDENT REPORT (MGAR - MGB Form No. 18-5)	Date of Submission	
	Monthly	BC-BGO
DENR Administrative Order No. 23, IRR of RA 7942 - to submit incident of NLTA, LTA (fatal/non-fatal).	January	2/14/2020
	February	3/13/2020
	March	4/14/2020
	April	5/13/2020
	May	6/11/2020
	June	7/14/2020
	July	8/14/2020
	August	9/15/2020
	September	10/15/2020
	October	11/16/2020
	November	12/15/2020
	December	1/15/2021
SAFETY & HEALTH PROGRAM QUARTERLY EXPENDITURES REPORT (DENR Administrative Order No. 2000-98, pursuant to Section 8 of RA 7942)	Quarterly	BC-BGO
	1 <sup>st</sup> Quarter	4/14/2020
	2 <sup>nd</sup> Quarter	7/14/2020
	3 <sup>rd</sup> Quarter	10/15/2020
	4 <sup>th</sup> Quarter	1/15/2021
CONDUCT OF EMERGENCY DRILLS WITH REPORT (at least four (4) drills within a year)	1 <sup>st</sup> Drill	Safety Drills were conducted on December 2, 3, 4, 7 & 9, 2020 upon health protocols restrictions was relaxed.
	2 <sup>nd</sup> Drill	
	3 <sup>rd</sup> Drill	
	4 <sup>th</sup> Drill -	
ANNUAL SAFETY & HEALTH PROGRAM (DAO 2000-98, Mine Safety and Health Standard)	Annual	BC-BGO
		Certificate of Approval (SHP 13-2020-CAR) issued on August 7, 2020



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<b>SAFETY AND HEALTH PERFORMANCE REPORTS - VERIFICATION OF SAFETY RECORDS</b>	<b>BC – BGO</b>	
	August 11, 2020	
<b>PERMANENT &amp; TEMPORARY SAFETY INSPECTOR'S PERMIT</b>  <i>RA 7942 and DAO Nos. 96-40 and 2000-98</i>	<b>PERMANENT SAFETY INSPECTOR'S PERMIT</b>	<b>TEMPORARY SAFETY INSPECTOR'S PERMIT</b>
	1. Abner Calub - Valid until January 20, 2023  2. PJF Abiva - Valid until January 15, 2023	1. Miller D. Emong – Valid until January 2, 2021  2. Gina Guindalos – Valid until February 2, 2021
<b>FIRE SAFETY INSPECTION CERTIFICATE</b>	Valid up to December 31, 2020	

## II. PROCUREMENT

<b>EXPLOSIVES CONSUMPTION REPORT</b>  <i>Section 270 of DAO No. 2010-21, IRR of RA 7942</i>	<b>Date of Submission/Valid Until/Expiry Date</b>	
	January	2/5/2020
	February	3/3/2020
	March	4/14/2020
	April	5/4/2020
	May	6/2/2020
	June	7/9/2020
	July	8/7/2020
	August	9/4/2020
	September	10/9/2020
	October	11/9/2020
	November	12/9/2020
	December	1/8/2021
<b>PERMIT TO PURCHASE and MOVE EXPLOSIVES</b>  <i>(valid within 60 days from the date permit is issued)</i>	January to February	12/16/2019 to 2/16/2020
	March to July	5/14/2020 to 7/14/2020
	August to October	8/24/2020 to 10/24/2020
	November to December	12/24/2020 to 2/24/2021
<b>PDEA LICENSE TO HANDLE CONTROLLED PRECURSORS AND ESSENTIAL CHEMICALS (CPECS)</b>	<b>Date Issued:</b> February 4, 2020 – <b>License valid until</b> February 6, 2021	
<b>LICENSE TO POSSESS EXPLOSIVES (PURCHASER'S</b>	<b>Date Issued:</b> January 29, 2020 - <b>Expiry Date:</b> January 10,	



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LICENSE)	2021
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### III. COMMUNITY RELATIONS

ASDMP MONTHLY MONITORING REPORT		Date of Submission/Approval
	January	1/30/2020
	February	2/29/2020
	March	3/21/2020
	April	4/27/2020
	May	5/23/2020
	June	6/22/2020
	July	7/31/2020
	August	9/4/2020
	September	10/23/2020
	October	12/7/2020
	November	1/4/2021
	December	1/4/2021
<b>ASDMP Quarter Accomplishment Report for 2020</b>  <i>DENR Administrative Order No. 2010-21</i>  <i>Note: to be submitted within fifteen (15) calendar days after the end of each quarter</i>	1 <sup>st</sup> Quarter	5/29/2020
	2 <sup>nd</sup> Quarter -	7/14/2020
	3 <sup>rd</sup> Quarter -	10/15/2020
	4 <sup>th</sup> Quarter -	1/15/2021
<b>Annual Social Development and Management Program Accomplishment Report of 2020</b>  <i>Chapter XIV of DENR Administrative Order No. 2010-21</i>  <i>1.5 % of the previous year's operating cost of the company and the remaining balance in the previous ASDMP</i>  <i>Note: to be submitted within thirty (30) calendar days after the end of each calendar year</i>	Submitted January 26, 2021	
<b>Annual Social Development</b>	- Submitted November 27, 2019	



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<b>and Management Program (ASDMP) for 2020</b>	- Approved August 20, 2020
<b>FIVE YEAR SOCIAL DEVELOPMENT MANAGEMENT PROGRAMS (SDMP) – 2016 to 2020</b>  <i>Chapter XIV of DAO 96-40, IRR of RA 7942 &amp; DAO 2010-21</i>	- Original Date of Submission 11/27/2015  - Submitted 3 <sup>rd</sup> . Five Year Revised SDMP (2016-2020) – 3/10/2016

#### IV. ENVIRONMENTAL PROTECTION AND ENHANCEMENT

		Date of Submission
<b>SELF COMPLIANCE MONITORING REPORT (SMR) &amp; COMPLIANCE MONITORING REPORT (CMR) FOR BC-BGO</b>  <i>DAO-2003-27</i>	1 <sup>st</sup> Quarter	5/21/2020 (ECQ consideration)
	2 <sup>nd</sup> Quarter	7/17/2020
	3 <sup>rd</sup> Quarter	10/15/2020
	4 <sup>th</sup> Quarter	1/15/2021
<b>NATIONAL GREENING PROGRAM ACCOMPLISHMENT</b>  <i>DENR Memorandum Circular No. 2012-01 - Monitor Number of Seedlings Planted and Re-Planted</i>	1 <sup>st</sup> Quarter	5/18/2020
	2 <sup>nd</sup> Quarter	7/14/2020
	3 <sup>rd</sup> Quarter	10/13/2020
	4 <sup>th</sup> Quarter	1/12/2021
<b>QUARTERLY ACCOMPLISHMENT REPORT AEPEP ANNUAL ENVIRONMENTAL PROTECTION AND ENHANCEMENT PROGRAM (BC-BGO)</b>  <i>DAO 2010-21, Section 270</i>	1 <sup>st</sup> Quarter	5/15/2020
	2 <sup>nd</sup> Quarter	7/14/2020
	3 <sup>rd</sup> Quarter	10/13/2020
	4 <sup>th</sup> Quarter -	1/15/2021
<b>COMPLIANCE MONITORING &amp; VALIDATION REPORT CMVR (BC ACMP)</b>  <i>Note: Submitted after presentation to MRFC</i>	1 <sup>st</sup> Quarter	6/30/2020
	2 <sup>nd</sup> Quarter	There was no monitoring due to the pandemic
	3 <sup>rd</sup> Quarter	10/13/2020
	4 <sup>th</sup> Quarter	1/13/2021
<b>SEMESTRAL REPORT ON MINE WASTES AND TAILINGS</b>	<b>BC – BGO</b>	



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SEC. 191 OF DENR ADMINISTRATIVE ORDER NO. 96-40	1 <sup>st</sup> Semester	August 6, 2020
	2 <sup>nd</sup> Semester	February 5, 2021
<b>SEMESTRAL REPORT ON MINING FOREST PROGRAM VALIDATION REPORT</b>  DAO No. 1989-22	1 <sup>st</sup> Semester -	July 14, 2020
	2 <sup>nd</sup> Semester -	January 12, 2021
<b>ANNUAL ENVIRONMENTAL PROTECTION AND ENCHANCEMENT PROGRAM (AEPEP) FOR THE CY 2020</b>  DENR Administrative Order No. 96- 40, IRR of RA 7942  - to be submitted within 30 days after the end of CY.	Submitted: November 29, 2019, Revised January 20, 2020	
<b>FIVE (5) YEARS ENVIRONMENT PROTECTION AND ENCHANCEMENT PROGRAM (EPEP)</b>  DAO 2010-21, Section 169	Submitted but no approval yet.	
<b>FINAL MINE REHABILITATION AND DECOMMISSIONING PROGRAM (FMRDP)</b> (DAO 2010-21, Section 187)	<b>BC - BGO</b>	
	Approved October 2, 2020	
<b>PERMITS</b>	<b>Date Renewed Permit/Expiry Date</b>	
TSF 2 Discharge Permit	<b>November 19, 2019 to November 19, 2020</b>	
Mine Mechanical Oil-Water Separator (5 years)	<b>July 20, 2022</b>	
Motorpool Oil-Water separator (5 years)	<b>July 20, 2022</b>	
Permit to Operate – Two (2) Units KVA Generator Sets (5 years)	<b>June 21, 2022</b>	
Permit to Operate - Refinery Acid Fume Scrubber (5 years)	<b>February 16, 2020</b>	
Permit to Operate - Cupellation Furnace with Lead Fume Scrubber	<b>January 26, 2022</b>	



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Assay Lab (5 years)	
Permit to Operate - Dust Collection System Assay Lab (5 years)	<b>February 12, 2024</b>
Permit to Operate - Ashing Facility (5 years)	<b>May 21, 2023</b>
Permit to Operate - Two (2) Units 25 KVA Generator Sets (5 years)	<b>June 21, 2022</b>

**V. MINING TENEMENT OBLIGATIONS / ELECTRICAL AND MECHANICAL**

<b>MONTHLY REPORT ON PRODUCTION, SALES, INVENTORY OF METALLIC MINERAL &amp; EMPLOYMENT DATA FOR GOLD</b>	<b>Month</b>	<b>Date of Submission</b>
<p><i>Chapter XXIX, Section 270 of DENR Administrative Order No. 96-40 of the Revised IRR of RA 7942</i></p> <p>- required to be submitted within 15 working days after the end of each calendar month.</p>	January	2/12/2020
	February	3/13/2020
	March	4/15/2020
	April	5/15/2020
	May	6/15/2020
	June	7/14/2020
	July	8/13/2020
	August	9/14/2020
	September	10/15/2020
	October	11/10/2020
	November	12/15/2020
	December	1/13/2021
<b>ENERGY COMSUMPTION REPORT</b>		<b>BC-BGO</b>
<p><i>Section 270, of DAO No. 2010-21 required to be submitted within 15 days after the end of each calendar quarter</i></p>	1 <sup>st</sup> Quarter	5/5/2020
	2 <sup>nd</sup> Quarter	7/14/2020
	3 <sup>rd</sup> Quarter	10/15/2020
	4 <sup>th</sup> Quarter	1/15/2021
<b>MONITORING REPORT ON MINING INVESTMENTS</b>		<b>BC-BGO</b>
<p><i>Section 270, of DAO No. 2010-21 required to be submitted within 15 days after the end of each calendar quarter</i></p>	1 <sup>st</sup> Quarter	5/5/2020
	2 <sup>nd</sup> Quarter	7/14/2020
	3 <sup>rd</sup> Quarter	10/15/2020
	4 <sup>th</sup> Quarter	1/15/2021
<b>INVENTORY OF FOREIGNERS FOR TECHNICAL &amp; SPECIALIZED WORK IN MINING</b>		<b>BC-BGO</b>
	1 <sup>st</sup> Quarter	5/5/2020
	2 <sup>nd</sup> Quarter	7/14/2020
	3 <sup>rd</sup> Quarter	10/15/2020



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<b>OPERATIONS</b>  <i>Section 270, of DAO No. 2010-21 required to be submitted within 15 days after the end of each calendar quarter</i>	4 <sup>th</sup> Quarter	1/15/2021
<b>ANNUAL REPORT ON TAXES, FEES &amp; ROYALTIES PAID &amp; WITHHELD BY THE YEAR 2020</b>  <i>IRR of RA 7942 – Required to be submitted within fifteen (15) days after the end of each calendar year</i>		<b>BC-BGO</b>  Submitted Unaudited Report – January 15, 2021
<b>ANNUAL MINERAL RESOURCES/RESERVE INVENTORY REPORT FOR THE YEAR 2020</b>  <i>Section 270 of DAO No. 2010-21, IRR of RA 7942 required to be submitted within two (2) months after the end of each calendar year</i>		<b>BC-BGO</b>  January 31, 2020
<b>INTEGRATED ANNUAL REPORT OF METALLIC MINERALS. NON-METALLIC MINERALS AND QUARRY RESOURCES FOR THE YEAR 2020</b>  <i>Section 270 of DAO No. 2010-21, IRR of RA 7942 required to be submitted within two (2) months after the end of each calendar year.</i>		<b>BC-BGO</b>  Unaudited Report Submitted – February 26, 2021
<b>ANNUAL LAND USE REPORT FOR THE CY 2020</b>  <i>In compliance with item “q” of Section 270 of DENR Administrative Order No. 2010-21 or the IRR of RA 7942 - Required to be submitted within sixty (60) calendar days after each calendar year</i>		<b>BC-BGO</b>  February 28, 2020
<b>ANNUAL EXPLORATION AND GEOLOGY REPORT FOR THE CY 2020</b>  <i>DENR Administrative Order No. 2010-09 in re: Providing for the Classification and Reporting Standards of Exploration Results, Mineral Resources, and Ore Reserves – to be submitted within thirty (30) days after the end of each calendar year.</i>		<b>BC-BGO</b>  January 15, 2021
<b>ELECTRICAL AND MECHANICAL PERMITS</b>		<b>Date Renewed Permit/Expiry Date</b>
<b>PERMIT TO OPERATE PRESSURE VESSELS – Locations of PV – 2000L, near lode shaft (BC-02), frontage of former new power plant (Bc-03), Main Transformer Substation Areas(BC-04), (BC-05), (BC-06), (BC-07), former Old Power Plant (BC-</b>		February 17 – 21, 2021



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19), & (BC-20). - Pursuant to RA 7942 as adopted by PSME Code.	
<b>CERTIFICATE OF ELECTRICAL INSPECTIONS FOR THE FF. BC ACMP ELECTRO-MECHANICAL EQUIPMENT:</b> - Pursuant to RA 7942 and to certify that the electrical installation works were inspected by the duly authorized representatives of MGB and has been found in good condition and in accordance with the requirements of RA 7920.	February 20, 2021
<b>Ball Mill 6 x 6 Circuit (BC-01)</b>	February 20, 2021
<b>Ball Mill 6 x 10 Circuit (BC-02)</b>	February 20, 2021
<b>Agitator Tanks – Batch Type Process (BC-03)</b>	February 20, 2021
<b>Waste Disposal Pumps (BC-04)</b>	February 20, 2021
<b>Electrowinning/Ashing (BC-05)</b>	February 20, 2021
<b>Ball Mill 7 x 10 Circuit Continuous Type (BC-06)</b>	February 20, 2021
<b>Agitator Tanks – Continuous Type (BC-07)</b>	February 20, 2021
<b>Air Compressors (BC-08)</b>	February 20, 2021
<b>DTS Pumps (BC-09)</b>	February 20, 2021
<b>Detoxification Circuit (BC-10)</b>	February 20, 2021
<b>Assay/Met Lab (BC-11)</b>	February 20, 2021
<b>Virac Water Pumps (BC-12)</b>	February 20, 2021
<b>Refinery Area (BC-13)</b>	February 20, 2021
<b>Air Compressors Mill Area (BC-14)</b>	February 20, 2021
<b>1300 Portal Underground Blower (BC-15)</b>	February 20, 2021
<b>1500 Portal Water Pump (BC-16)</b>	February 20, 2021
<b>Main Transformer Substation (BC-17)</b>	February 20, 2021
<b>2000L Lode Shaft Underground Substation</b>	February 20, 2021
<b>2000L Malouf Transformer Substation (BC-19)</b>	February 20, 2021
<b>9<sup>th</sup> Pump Shaft 2000L Transformer (BC-20)</b>	February 20, 2021
<b>Lode Shaft Transformer Substation, 1500L (BC-21)</b>	February 20, 2021
<b>1500L, Surface Substation (BC-22)</b>	February 20, 2021
<b>Batuang Phase 2 Transformer Station (BC-</b>	February 20, 2021



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23)	
Ashing Fume Scrubber (BC-24)	February 20, 2021
<b>RADIO STATION LICENSES &amp; RADIO STATION TEMPORARY PERMITS</b>	<ol style="list-style-type: none"> <li>1. THREE (3) Point to Point Stations REN 1 - 10/5/2020 to 10/4/2021</li> <li>2. seven (7) portable radio stations - 9/27/2020 to 9/26/2021</li> <li>3. private fixed wireless data network radio station - February 4, 2020 to February 3, 2021</li> <li>4. Two (2) portable radio stations - April 28, 2020 to April 27, 2021</li> </ol>
<b>RADIO OPERATOR CERTIFICATE</b>	BC Employees Licensed Radio Operators (18)
<b>BUSINESS PERMIT &amp; SANITARY PERMIT</b>	VALID UNTIL DECEMBER 31, 2020
<b>BC REAL PROPERTY TAXES &amp; BUSINESS TAX</b>	Duly Paid Quarterly Real Property Taxes from First Quarter to Fourth Quarter of 2020
<b>ORE TRANSPORT PERMIT (OTP)</b>	Obtained OTP from January 2020 to December 2020 – monthly & twice a month

## VI. MINE PLANNING

<b>QUARTERLY ACCOMPLISHMENT REPORT ON THE APPROVED 2020 ANNUAL WORK PROGRAM FOR BGO</b>		<b>Date of Submission/Approval</b>
	1 <sup>st</sup> Quarter	5/15/2020
	2 <sup>nd</sup> Quarter	7/16/2020
	3 <sup>rd</sup> Quarter	10/13/2020
4 <sup>th</sup> Quarter	1/15/2021	
<b>THREE-YEAR DEVELOPMENT/ UTILIZATION WORK PROGRAM 3YD/UWP (2019 to 2021)</b>	July 24, 2019	
DENR Administrative Order (DAO No. 2018-20)		



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<b>ANNUAL ACCOMPLISHMENT REPORT FOR CY 2020 – D/UWP</b>	January 15, 2021
<b>ANNUAL WORK PROGRAM FOR CY 2020</b>	

**VII. TRANSPORTATION/MOTORPOOL**

<b>MOTOR VEHICLE REGISTRATION</b>	<b>LTO REGISTERED FOR 2020</b> <ul style="list-style-type: none"> <li>- Passed Certificate of Emission Compliance</li> <li>- Valid Voluntary Emission Certificate</li> </ul>
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Balatoc, Virac, Itogon, Benguet  
INTERNAL MEMORANDUM

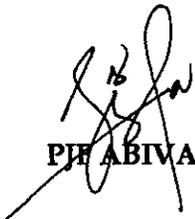
ANNEX "L"

DATE: 19 DECEMBER 2020	FROM: COVID19 TASK FORCE	TO: ALL CONCERNED
SUBJECT: MANDATORY WEARING OF FACE SHIELDS & FACE MASKS		REF NO.: PJFA-31-2020
CC: VBB/BC DEPARTMENT HEADS/SERVICE CONTRACTORS/FILE		

To further protect ourselves from the dreaded Corona virus disease (COVID-19), all BC employees, service contract employees, & visitors are hereby **REQUIRED** to wear **FACE SHIELDS** along with the following guidelines:

1. **SAFETY IN THE WORKPLACE:**  
Employees reporting for work are likewise required to wear face shields in their respective workplaces.
2. **FACE SHIELDS MUST COMPLETELY COVER THE FACE:**  
Face shields worn in workplaces must completely cover the sides and length of the face as prescribed by the World Health Organization (WHO). Visor-type face shield shall not be allowed as per DOLE.
3. **MAY BE REMOVED ACCORDING TO DEMANDS OF WORK:**  
The memorandum also stated that face shields may be removed according to the demands of the work or when the occupational safety and health of the employees so requires.
4. **WORN WITH A FACE MASK:**  
Face shields should be worn along with the prevailing necessity to wear face masks.
5. **NO FACE SHIELD, NO ENTRY:**  
Upon entering the Company premises, wearing of face shields will be strictly monitored by all Security personnel. The same is true for all BC offices as we are entitled not to entertain visitors who fail to comply.

Effective date: December 21, 2020

  
PJF ABIVA



Benguet Corporation  
Balatoc, Virac, Itogon, Benguet  
INTERNAL MEMORANDUM

DATE: 28 JANUARY 2021	FROM: SAFETY	TO: ALL CONCERNED
SUBJECT: DISTANCE EATING & PROHIBITION OF FOOD SHARING		
CC: BC DEPARTMENT HEADS/SERVICE CONTRACTORS/CONCESSIONAIRES/FILE		
REF NO.: PJFA-04-2021		

Sharing or partaking of the food together (*salu-salo*) as workmates is part of the Filipino culture. However, our current situation suggests that this activity must be ceased temporarily in order to mitigate (*or lessen*) the transmission of the COVID-19 virus within the working places of our Company.

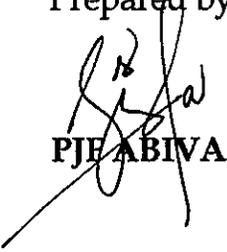
With that said, please refer to the following guidelines on **DISTANCE EATING & PROHIBITION OF FOOD SHARING**:

1. Eat in staggered meal breaks (*especially for employees working on straight time*).
2. If eating in groups can't be avoided, maintain a minimum 1-meter distance from each other.
3. Eating within your respective cubicles (*or workplaces*) is highly encouraged.
4. Bring your own eating utensils & wash them immediately after each use & properly dispose extra/leftover food into the garbage bin.
5. Bringing your own meals is highly encouraged.
6. Food sharing (*eating a common meal*) is strictly prohibited.
7. All food concessionaires are required to enforce the minimum health protocols such as the minimum 1-meter distancing for customers, sanitation of dining areas, wearing of PPE, & monitoring logbooks. Encourage take-out once all dining seats are occupied.

Any violation of the aforementioned guidelines will be subject to **DISCIPLINARY ACTION** with penalties based on the Company Conduct & Discipline Handbook & the Company Safety Manual.

Effective immediately upon approval.

Prepared by:

  
PJE ABIVA

Approved by:

  
VB BONGALOS, JR.



BenguetCorp

## INTERNAL MEMORANDUM

ANNEX

'M'

---

**DATE: 05 May 2020**                      **FROM: HRA**                      **TO: ALL EMPLOYEES**  
**SUBJECT: GUIDELINES OF WORKPLACE PREVENTION AND CONTROL OF COVID 19**  
**CC: File**

---

The following safety and health standards shall be implemented in BC premise aligned with the following objectives of the minimum health standards of the Department of Health to reduce transmission of COVID-19.

All employees are required to take basic preventive measures to avoid exposure to the COVID-19 virus and everyone is encouraged to stay healthy and practice these everyday actions:

1. Eat nutritious and well-cooked food;
2. Drink plenty of fluids and avoid alcoholic beverages
3. Increase the body's resistance by having adequate rest and at least eight (8) hours of sleep
4. Exercise regularly and take vitamins
5. Provide referrals for workers needing counselling or presenting with mental health concerns

**A. Prior to entrance in workplace, all employees (including visitors) shall:**

1. Wear face masks at all times and remove the same only when eating/drinking. Employers shall provide the appropriate face masks for employees. Should cloth masks be used, the washable type shall be worn but additional filter materials such as tissue papers inside the masks may be added;
2. Accomplish daily the health symptoms questionnaire and submit to guard or designated safety officer prior to entry;
3. Have their temperature checked and recorded in the health symptoms questionnaire. For any personnel with temperature higher than 37.5°C, even after a 5 minute rest, or if their response in the questionnaire needs further evaluation by the safety officer or health personnel, the person shall be isolated in the area identified by the company and not allowed to enter the premises. The isolation area should be well ventilated and disinfected frequently.
4. Regular disinfection of company vehicles.

**B. The following practices shall be done inside the work premise:**

1. All work areas and frequently handled objects such door knobs and handles, shall be cleaned and disinfected regularly, at least once very two (2) hours;
2. All washrooms and toilets shall have sufficient clean water and soap, employees are encouraged to wash their hands frequently and avoid touching their eyes, nose and mouth;
3. Sanitizers shall be made available in corridors, conference and areas where workers pass;

4. Employees, whether in office workstations or in the operation area, shall always practices physical distancing meaning at the minimum one (1) meter radius space (side, back and front) between employees.
5. Eating in communal areas is discouraged, however, employees may dine at the Pantry area provided that physical distancing is strictly practice. It is discouraged that employee engage in conversation with masks off during mealtimes. Pantry should be cleaned and disinfected regularly. It is also allowed to eat in individual work area, but **all wastes shall be disposed properly.**

### **C. Minimize Contact Rate**

1. Alternative work arrangements such working-hour shifts, work from home (WFH) where feasible and rotation basis;
2. Prolonged face to face interaction among employees are discouraged and masks shall be worn at all times and not removed. Meeting needing physical presence shall be kept to a minimum number of participants and with short duration. Video conferencing shall be utilized for lengthy discussions among workers.
3. Office tables should be arranged in order to maintain proper physical distancing. Barriers may be provided between tables;
4. Workstation layout should be designed to allow for unidirectional movement in aisles corridors or walkways;
5. To maintain physical distancing, number of people inside an enclosed space such as meeting room and hall shall be limited. Elevator use should be considered physical distancing and limit the number of persons in order to observe the 1-meter physical distancing;
6. Use of stairs should be encouraged subject to physical distancing requirements.

### **D. On Reducing the Risk of Infection from COVID-19**

1. In the event that a worker is suspected as having COVID-19;
  - The employee shall immediately proceed to the isolation area as designated in the workplace and never remove his/her mask.
  - Personnel attending to the employee should wear appropriate PPEs and if needed should require the transport of the affected employee to the nearest hospital. Company protocols for transport for transport for suspect COVID-19 cases and for PCR testing, should be in place including providing for ambulance conduction. Hospital will report to the DOH for COVID 19 suspect.
  - Workplace shall be decontaminated with appropriate disinfectant (e.g. chlorine bleaching solution and 1:100 phenol based disinfectant. After decontamination of the work area, work can resume after 24 hours. Employees present in the work area with the suspect COVID-19 worker shall go on 14 days home quarantine with specific instructions from the hospital /clinic staff on monitoring of symptoms and possible next steps. If suspect COVID 19 employee has negative result, co-workers may be allowed to report back to work.
2. In the event that an employee is sick or has fever but is not suspected to have COVID 19 (ex. Urinary infection, wound infection or any diseases not related to lungs or respiratory tract) the employer must advise the worker to take prudent measures to limit the spread of communicable diseases as follows:
  - Stay at home and keep away from work to avoid anxiety among co-workers.
  - Take adequate rest and take plenty of fluids
  - Practice personal hygiene to prevent spread of disease and
  - Seek appropriate medical care if there is persistent fever, when difficulty of breathing has started or when he/she becomes weak.

#### **E. Duties of Employers**

1. Provide the necessary company policies for the prevention and control of COVID 19 in consultation with employees. Advocacy and IEC programs should be taken from DOH, WHO and reliable sources of information on COVID 19.
2. Provide resources and materials needed to keep the employees healthy and the workplace safe, e.g., masks, soap, sanitizer, disinfectant, PPEs including COVID-19 testing kits, etc;
3. Designate the safety officer to monitor COVID 19 prevention and control measures such as physical distancing, wearing of masks, regular disinfection, compliance to thermal scanning and accomplishing health symptoms questionnaire
4. Enhance health insurance provision for worker
5. Where feasible, provide shuttle services and/or decent accommodation on near-site location to lessen travel and people movement
6. Enjoin the hiring from the local community (for minesite operations).

#### **F. Duties of Employees**

1. Comply with all workplace measures in the place for the prevention and control of COVID-19 such as frequent hand washing, wearing of masks, observe physical distancing
2. Observe proper respiratory etiquette;
3. Coughing and sneezing into tissue or into shirt sleeve if tissue is not available
4. Disposing used tissues properly
5. Disinfecting hands immediately after a cough or sneeze.

#### **G. COVID 19- Testing**

Employees who were tested negative for COVID 19 shall continue to work. They should be given appropriate advice and instruction once they develop any health complaints or symptoms. The company OSH personnel shall continue to monitor all workers.

#### **H. Most at Risk Employees and Vulnerable Groups**

Most "at risk" workers and vulnerable groups, or those 60 years old or of any age with comorbidities or pre-existing illness, such as hypertension, diabetes, cancer, or with immunocompromised health status; or with high-risk pregnancy are encouraged to do work from home. Employees are highly encouraged to allow these workers to do work from home arrangement. Work Agreements should be developed to detail the deliverables from these employees and there shall be no diminution in wages or benefits.

#### **I. Reporting of Illness / Diseases/ Injuries**

The employer shall provide the DOLE through its Regional Office copy furnished DOH, monthly reporting of illness, diseases and injuries utilizing the DOLE Work Accident/Illness Report Form (WA

This interim guideline shall take immediately, and your cooperation is highly encouraged. Please be guided accordingly.

  
RHODORA S. SONGAYAB  
HR Corporate Head

I. As per Company Conduct & Discipline Handbook (for BC employees)

LEGEND:	
1	Reprimand or Warning
2	1 to 5-day suspension
3	6-10-day suspension
4	Dismissal for cause

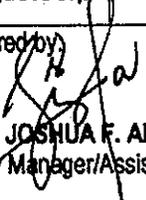
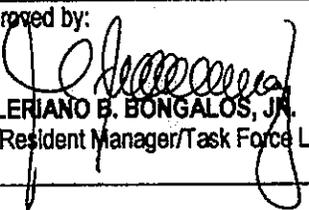
ANNEX "N"

Applicable Rules:

1. Contributing to unsanitary conditions or poor housekeeping.  
-e.g. momma spitting (or spitting in general), improper disposal of used PPE, etc.
2. Violating a safety rule or practice (of COVID protocols & other relevant rules stated under the Company Safety Manual)
3. Refusing to submit to authorized Security check.

II. As per Company Safety Manual (applicable to all)

RULE #	SAFETY RULE	PENALTY
1.a	Faithfully observing all rules and notices pertaining thereto.	Warning
1.f	Submitting himself to such physical examination as the employer or contractor may demand prior to and during employment and to vaccination or any other treatment recommended by the Company's physicians.	Warning
1.g	Following implicitly the instructions by the operating staff of the Company or Contractor and the Safety Department representatives.	Warning
4	An employee shall not enter areas known to be dangerous or pass through danger signals without proper authority. Such signals are placed for the workmen's protection and must be respected.	Discharge
6	An employee known to be afflicted with and infectious and/or communicable disease, which may jeopardize the health of other workmen shall not report to work or shall be allowed to work.	Warning
17	Every employee must make proper use of all safeguard, safety devices, and other appliances furnished for his protection or the protection of others, and shall obey all safety instructions pertaining to his work.	Discharge
18	An employee shall not interfere with, remove, displace, damage, or destroy any safety devices or other appliances furnished for his protection or the protection of others, or interfere with any method or process adopted to minimize hazards, unless he is ordered to do so by the management or his responsible boss.	Discharge
121	All contractors are required to know, understand, apply, and enforce all safety rules, regulations, and precautions pertaining to their work.	Discharge
122	All contractors/leadmen, or supervisors of men are responsible for the safety of their men.	Warning
125	A leadman/supervisor must take full responsibility in motivating his subordinates to perform his assigned work with efficiency, safety, and productivity.	Discharge
126	Supervisors and leadmen are responsible for the cleanliness, good housekeeping, and sanitary conditions of the working places under their supervision.	Discharge

 <b>BenguetCorp</b>	<b>BENGUET CORPORATION</b>	Document No : SAFETY-P001-2020
	<b>BC COVID-19 INTERNAL TASK FORCE</b>	Revision No. : 01
		Effective Date : December 1, 2020
		Page No. : 1 of 7
Prepared by:  <b>PAUL JOSHUA F. ABIVA</b> Safety Manager/Assistant Task Force Lead	Approved by:  <b>VALERIANO B. BONGALOS, JR.</b> VP-Resident Manager/Task Force Lead	

### I. OBJECTIVE

The BC Internal Task Force Committee is a Corona Virus Disease (COVID-19) emergency response team formed to implement the measures and procedures in the prevention, detection, and control of transmission of the disease in the workplace, including the containment or isolation of suspected or COVID-19 positive patients as soon as detected.

### II. MEMBERS & FUNCTIONS:

#	Assignment	Responsible
1	Task Force Lead	VBB/Officer-in-charge
2	Assistant Task Force Lead	PJFA
3	Detection	EDF
4	Policies and procedures and Containment & Internal Contact Tracing Team	Safety/Medical
5	Post-Containment Team	HRD/Camp Admin/Medical
6	Transportation	Motorpool
7	Community Information	ALC

### III. POLICIES, GUIDELINES, & PROCEDURES

1. The Committee formulates internal policies in consonance with existing mandates of the COVID-19 National or Local Inter-agency Task Force (IATF).
2. The Committee should be represented by **ALL DEPARTMENTS**. The Department representative should strictly enforce set guidelines, policies, and procedures to ensure uniform implementation across the operation.



**BENGUET CORPORATION**

**BC COVID-19 INTERNAL TASK FORCE**

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3. Upon the discovery of a confirmed (COVID-19) case amongst Benguet Corporation employees & its Service Contractors, the BC Internal Task Force shall perform the following tasks:

- a. Task Force Lead to convene the members and prepare action plan;
- b. The Nurse-on-duty shall:
  - i. Coordinate with the Municipal Health Office (MHO) (or other concerned agencies) of the case and immediate transfer of the patient.
  - ii. Inform the concerned immediate head if any employee has signs and symptoms of the deadly virus.
  - iii. Assign transportation (ambulance) and to monitor patients in coordination with the MHO.
  - iv. Provide temporary quarantine or isolation facility in camp, as needed.
- c. Community Relations shall update the committee on community-related activities including information dissemination, community assistance, etc.
- d. Camp Administration (CAD) shall maintain the designated quarantine facilities in camp. It is CAD's responsibility to coordinate with the Camp Emergency Task Force and camp residents for any COVID-19 related issues and concerns.
- e. Safety and HR to assist in providing necessary data for efficient internal contact tracing and work segmentation; &
- f. Safety and Emergency Response Team (ERT) to conduct disinfection in the accommodation or in the workplace where the concerned patient or suspected individual resides or works.

4. Any procedure stated hereof will complement the following guidelines:

- a. Existing National Government Directives/Issuances;
- b. Itogon Municipal Ordinances relative to the COVID-19 pandemic; &
- c. Barangay Ordinances relative to the COVID-19 pandemic.

**IV. PROCEDURE/S:**

Task No.	Activities	Detailed Task/s	In-charge
1	Detection, Discovery, & Endorsement	a. Escort employees with body temperatures of 38°C and above to the Company Clinic.	Security



**BENGUET CORPORATION**

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		<p>b. Inform MHO or vice versa &amp; concerned LGU.</p> <p>c. Enforce Quarantine Procedures:</p> <p>i. The suspected case must be subjected to a 5-day isolation and/or be transferred to the hospital or quarantine facility before being swabbed.</p> <p>ii. Employees tested must undergo quarantine until the test results are out.</p> <p>iii. The 14-day quarantine period includes the 5-day pre-swab isolation.</p> <p>d. Suspend biometrics timekeeping unless disinfectant/handwashing supply is sustained; HRD to issue a memo of the suspension.</p>	<p>ComRel/Nurse-on-duty</p> <p>Containment &amp; Internal Contact Tracing Team/Concerned Dept Head</p> <p>HRD</p>
2	Isolation of probable infected area/s	<p>a. Isolation of area/s where the confirmed COVID patient is frequently seen.</p> <p>b. Isolation &amp; Internal Contact Tracing Team will conduct tracing.</p>	<p>Safety/ERT</p> <p>Safety/ERT/Medical</p>
3	Contact Tracing	<p>a. Only direct contact of the positive case should be endorsed to MHO to prevent unnecessary isolation of</p>	



**BENGUET CORPORATION**

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		<p>personnel that would cause salary losses.</p> <p>b. The Contact Tracing Team should follow the World Health Organization (WHO) Contact Tracing guidelines, like but not limited to the following:</p> <p>i. Anyone within 1 meter of the COVID-19 patient for more than 15 minutes.</p> <p>ii. Direct physical contact with a COVID-19 patient.</p>	<p>Containment &amp; Internal Contact Tracing Team</p>
4	<p>Work Segmentation &amp; Contingency Plans</p>	<p>a. Identified offices/departments where the positive case stayed will be isolated for disinfection.</p> <p>b. Oversees the implementation of work segmentation.</p> <p>c. All departments to implement their respective Contingency plans in case of infection within their offices.</p> <p>d. All departments to plan the purchase of critical items in coordination with Procurement.</p>	<p>HRD</p> <p>HRD</p> <p>All Department Heads</p>
5	<p>Disinfection</p>	<p>a. Internal disinfection shall be done immediately after tracing whereabouts of the patient or suspected individual, otherwise, cordon the area.</p>	<p>Safety/ERT</p>



**BENGUET CORPORATION**

**BC COVID-19 INTERNAL TASK FORCE**

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		<p>b. Work area/s could be used at least two (2) hours after the disinfection activity.</p> <p>c. All Departments must continually disinfect their respective workplaces &amp; strictly observe all COVID-19 protocols after the disinfection activities.</p> <p>i. Offices – Each dept should assign personnel to sanitize frequently touched areas</p> <p>ii. Service vehicles – drivers and operators</p> <p>iii. Meeting or Conference Room – last meeting attendees</p> <p>iv. Bunk houses – Safety/CAD/MHO</p>	<p>All Department Heads</p> <p>All Department Heads</p>
6	Containment of suspected/infected individuals	<p>a. Suspected individuals may be isolated / quarantined in the designated Company Quarantine Facilities.</p> <p>b. Transport suspected individuals or patients confirmed positive in identified quarantine facilities.</p>	<p>Medical</p> <p>Motorpool</p>
7	Post-Quarantine/Isolation	<p>a. After being subjected to quarantine / isolation, the suspected / infected individuals will be discharged &amp; may return to work depending on</p>	



**BENGUET CORPORATION**

**BC COVID-19 INTERNAL TASK FORCE**

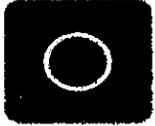
Document No : SAFETY-P001-2020

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		<p>the recommendation of the MHO.</p> <p>b. Upon release of the RT-PCR swab test results, employees with negative results may report to work. However, when the concerned employee exhibits signs &amp; symptoms despite being tested negative for COVID-19, he/she must undergo home quarantine until cleared by the Clinic or Physician.</p>	<p>Post-Containment Team</p>
8	<p>Enforcement of prevailing COVID-19 Protocols</p>	<p>a. Preventive measures should be implemented in all departments.</p> <p>b. Designate OICs &amp; prepare contingency plans.</p> <p>c. Implement protocol on returning workers coming from a higher risk classification (on leave more than 3 days)</p> <p>d. Virtual meetings are encouraged, if not applicable, meetings should be conducted in wide spaces or minimize the number of attendees.</p> <p>e. Face shield is required in close-contact pep talks</p> <p>f. Violation of the prevailing protocols, Safety Department</p>	<p>All Department Heads</p> <p>All Department Heads</p> <p>All Department Heads</p> <p>All Concerned</p> <p>All Concerned</p>



BenguetCorp

**BENGUET CORPORATION**

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		<p>memorandums, &amp; guidelines stated hereof shall be dealt with the corresponding penalties based on the Company Conduct &amp; Discipline Handbook &amp; the Company Safety Manual.</p>	<p>VBB/PJFA</p>
		<p>g. The Task Force Lead or the Safety Department shall be the authorized person to update, issue instructions, and communicate any COVID-19 related information.</p>	<p>VBB/PJFA</p>



Republic of the Philippines  
Department of Environment and Natural Resources  
**MINES AND GEOSCIENCES BUREAU**  
Cordillera Administrative Region  
80 Diego Silang St., Baguio City 2600  
Tel. No. 63 74 442 6392; Fax No. 63 74 304 2596; Website: [www.car.mgb.gov.ph](http://www.car.mgb.gov.ph)  
E-mail: [car@mgb.gov.ph](mailto:car@mgb.gov.ph); [car\\_mgb@yahoo.com](mailto:car_mgb@yahoo.com); [mgb.cordillera@gmail.com](mailto:mgb.cordillera@gmail.com)



**ANNEX "A"**

## CERTIFICATE OF APPROVAL

**SHP # 13 – 2020 - CAR**

The Mines and Geosciences Bureau-CAR, having evaluated and assessed the submitted CY 2020 Annual Safety and Health Program (ASHP) for **BENGUET CORPORATION - Acupan Contract Mining Project (BC-ACMP)**, located at Balatoc, Itogon, Benguet, hereby grants this **CERTIFICATE OF APPROVAL** after it was found to have substantially complied with DAO 2000-98, otherwise known as Mine Safety and Health Standard and the Suggested Guidelines in the preparation of the Safety and Health Program.

This Certificate is being issued subject to the pertinent provisions of the above DAO and to the following conditions:

1. This certificate is valid only for the activities stipulated in the approved 2019 Annual Safety and Health Program hereto attached as Annex "A" and made part hereof;
2. The amount of **Php 1,680,000.00** shall be spent for the year by the Company as specified in the approved ASHP;
3. The firm shall notify the **MGB-CAR** of any alteration/changes in the approved **ASHP**, provided that, the alterations and/or changes do not compromise the overall Safety and Health programs of the company;
4. Shall submit regularly all reportorial documents as provided for in DAO 2000-98; and
5. Additional conditions may be imposed to effectively implement the approved **ASHP** should the result of the monitoring by **MGB-CAR** or audits by the **MGB-CO** warrants.

**MGB-CAR-FO-MSESDD-MSHS-011-00 (09.05.17)**

**"MINING SHALL BE PRO-PEOPLE AND PRO-ENVIRONMENT  
IN SUSTAINING WEALTH CREATION AND IMPROVED QUALITY OF LIFE."**

Office of the Regional Director/Finance and Administrative Division – 63 74 442 6392; ICT – 63 74 661 7685; Geosciences Division/Laboratory Section 63 74 304 2500; Mine Management Division - 63 74 304 3068 (Monitoring and Technical Services Section/Mining Tenement Evaluation/Mineral Lands Survey Section); Mine Safety Environment and Social Development Section – 63 74 304 2595; Social Development Section/Environment Section 63 74 304 2530



Republic of the Philippines  
Department of Environment and Natural Resources  
**MINES AND GEOSCIENCES BUREAU**  
Cordillera Administrative Region

80 Diego Silang St., Baguio City 2600

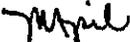
Tel. No. 63 74 442 6392; Fax No. 63 74 304 2596; Website: [www.car.mgb.gov.ph](http://www.car.mgb.gov.ph)

E-mail: [car@mgb.gov.ph](mailto:car@mgb.gov.ph); [car\\_mgb@yahoo.com](mailto:car_mgb@yahoo.com); [mgb.cordillera@gmail.com](mailto:mgb.cordillera@gmail.com)



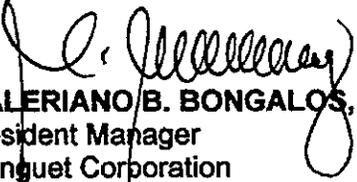
Non-compliance with the above conditions shall be ground for the cancellation, revocation or termination of this certificate or suffer the penalty prescribed in the Penal Provisions of RA 7942, the Philippine Mining Act of 1995.

Given this 7<sup>th</sup> day August 2020 at the Mines and Geosciences Bureau-CAR, Baguio City

  
**FAY W. APIL**  
OIC, Regional Director



**CONFORME:**

  
**VALERIANO B. BONGALOS, JR.**  
Resident Manager  
Benguet Corporation  
Balatoc, Itogon, Benguet

MGB-CAR-FO-MSESDD-MSHS-011-00 (09.05.17)

**"MINING SHALL BE PRO-PEOPLE AND PRO-ENVIRONMENT  
IN SUSTAINING WEALTH CREATION AND IMPROVED QUALITY OF LIFE."**

Office of the Regional Director/Finance and Administrative Division – 63 74 442 6392; ICT – 63 74 661 7685; Geosciences Division/Laboratory Section 63 74 304 2500; Mine Management Division - 63 74 304 3068 (Monitoring and Technical Services Section/Mining Tenement Evaluation/Mineral Lands Survey Section); Mine Safety Environment and Social Development Section – 63 74 304 2595; Social Development Section/Environment Section 63 74 304 2530



Republic of the Philippines  
 Department of Environment and Natural Resources  
**MINES AND GEOSCIENCES BUREAU**  
 Cordillera Administrative Region

ANNEX

"P"



**ANNUAL SOCIAL DEVELOPMENT AND MANAGEMENT PROGRAM  
 (ASDMP)**

**CERTIFICATE OF APPROVAL**

**No. 2020 - 05 - CAR**

The Mines and Geosciences Bureau-CAR, having evaluated the 2020 Annual Social Development and Management Program (ASDMP), hereby grants this Certificate of Approval to **BENGUET CORPORATION (BC)** for its **Acupan Contract Mining Project** located at **Barangay Virac, Municipality of Itogon Province of Benguet** under **Mining Patent No. PC-ACMP-002-CAR** after substantially complying with the requirements as mandated under DENR Administrative Order No. 2010 – 21. The project covers 3 host barangays namely: **Poblacion , Virac and Ampucao.**

This Certificate is being issued subject to the pertinent provisions of the abovementioned DAO and to the following conditions:

1. This Certificate is valid only for the Programs/Projects/Activities (P/P/As) stipulated in the submitted 2020 ASDMP;
2. The budget allocation for this ASDMP amounts to **Three Million Eight Hundred Thirty-Six Thousand Five Hundred Seventy pesos and 77/00 (Ph3,836,570.77)** which is equivalent to the 1.5% of the previous years' operating cost as per sworn statement submitted, and the remaining balance from the previous ASDMP, to implement the P/P/As stipulated in the Program which is broken down as follows:

2019 Projected Operating Cost (Php)	Basis of Allocation	Amount for 2020 ASDMP (Php)	Balance from previous ASDMP (Php)	Total Amount (Php)
255,771,384.45	(75%) Community Development	2,877,428.08	4,703,269.61	7,580,697.69
	(15%) Information, Education Campaign	575,485.61	1,268,271.70	1,843,757.31
	(10%) Development of Mining Technology and Geosciences	383,657.08	249,649.40	633,306.48
	<b>TOTAL</b>		<b>3,836,570.77</b>	<b>6,221,190.71</b>

*Handwritten signature*



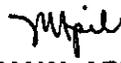
Republic of the Philippines  
Department of Environment and Natural Resources  
**MINES AND GEOSCIENCES BUREAU**  
Cordillera Administrative Region



3. The company shall submit a quarterly report of accomplishments within 15 calendar days after the end of each quarter and annual accomplishment report within 30 calendar days after the end of each calendar year to MGB RO, copy furnished the MGB Central Office (CO);
4. No re-alignment of the approved P/P/As shall be allowed unless approved by the MGB-RO;
5. Non-implementation of the approved ASDMP without justifiable reason/s is subject to the penal provision of DAO 2010-21; and
6. Additional conditions may be imposed to effectively and efficiently implement the approved SDMP should the results of monitoring by the MGB RO or audit by the MGB CO warrant them.

Non-compliance with the above conditions shall be sufficient ground for the cancellation, revocation or termination of this Certificate or suffer the penalty prescribed in the Penal Provisions of RA 7942, The Philippine Mining Act of 1995.

Given this 20<sup>th</sup> day of August 2020, at the Mines and Geosciences Bureau-CAR, Baguio City, Philippines.

  
**FAY W. APIL**  
OIC, Regional Director  
MGB-CAR

 Department of Environment and Natural Resources  
Mines and Geosciences Bureau  
Cordillera Administrative Region  
1301/1302/1303

082420-CAR-33814



Certificate of Approval

11:30 AM

08/24/2020

FILE

ANNEX

"Q"



25 January 2021

**MS. FAY W. APIL**  
OIC, Regional Director and Chairman  
Mines & Geosciences Bureau – CAR  
& BC – ACMP Mine Rehabilitation Fund Committee  
Diego Silang St., Baguio City

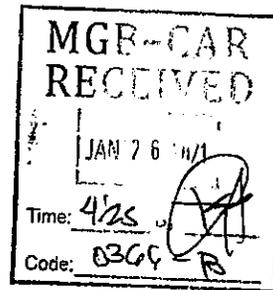
Dear Director Apil:

We are pleased to submit the attached *Annual Accomplishment Report relative to the Annual Environmental Protection and Enhancement Program (AEPEP) of Benguet Corporation – Acupan Contract Mining Project (BC-ACMP) for the Calendar Year 2020.*

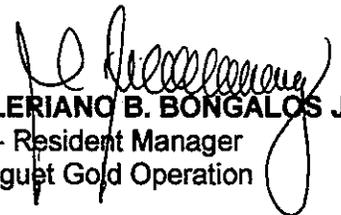
For your information and perusal.

Respectfully yours,

  
**JEMIMAH R. SALAYOG**  
MEPEO



Approved:

  
**VALERIANO B. BONGALOS Jr.**  
VP - Resident Manager  
Benguet Gold Operation



**CERTIFIED ISO 14001:2015 Environmental Management System**  
Balatoc, Itogon, Benguet  
PO Box 100 Baguio City, 2600 Philippines  
[www.benguetcorp.com](http://www.benguetcorp.com)