MMT COMPLIANCE MONITORING AND VALIDATION REPORT (CMVR) FORM FOR MINING INDUSTRIES

CORAL BAY NICKEL CORPORATION BRGY RIO TUBA, BATARAZA, PALAWAN

DATE OF COMPLIANCE MONITORIN	IG AND VALIDATION:	July 19-24, 2021			
MONITORING PERIOD COVERED:	January to June 202	1_Quarter/Semester Year:	1 st Semester 2021		

I. BASIC INFORMATION:

ECC Control No./Reference Code No.	:	ECC-CO-1806-0014
Date ECC Issued	:	December 20, 2018
Project Current Name	:	Hydrometallurgical Processing Plant Lines 1 and 2
Project Name in the ECC	:	Lines 1 and 2 of its (CBNC) Hydrometallurgical Processing Plant
		Project (CBNC Expansion Project)
Project Status		Commercial Operation
Geographical Coordinates of the Project	:	X: 80° 37′ 25″ E
		Y: 117° 21′ 42″ N
Proponent Name	:	Coral Bay Nickel Corporation
Proponent Contact Person/Position	:	Engr. Antonio O. Sanone/ MEPEO
Proponent Mailing Address	:	Coral Bay Nickel Corporation, Brgy. Rio Tuba, Bataraza, Palawan
Proponent Telephone No./Fax No.	:	(632) 548-7130/ (632) 548-7138
Proponent Email Address	:	a.o.sanone@smm.com.ph
MMT Contact Person/Position	:	Joel V. Balquiedra/Supervising Science Research Specialist
MMT Mailing Address	:	Mines and Geosciences Bureau, MIMAROPA Region
		1515 DENR Bldg., Roxas Blvd., Ermita, Manila
MMT Telephone No./Fax No.	:	+639088940858
MMT Email Address	:	Joel.balquiedra@mgb.gov.ph

II. EXECUTIVE SUMMARY

Paquiroments		Complied		Bemarks/ECC or EDED Condition#	
	Requirements	Yes	No	Remarks/ECC or EPEP Condition#	
Compliance with ECC Conditions/ Commitments	Validity	~		ECC-CO-1806-0014 issued December 20, 2018 superseded the issued ECC (ECC-CO-0701-002-3721) on February 01, 2007 including its amendment on February 15, 2008.	
	Project coverage/limits/components	~		Total production limit per year for Line 1 & 2 plants as per ECC Amendment on Production Capacity on December 20, 2018: 25,000 DMT Nickel/ year and 2,500 DMT Cobalt/ year Production data: January to June 2021 Mixed Sulfide: 16,965.6 DMT Ni: 9,918.6 DMT Co: 847.8 DMT	
	EMP and updates as deemed necessary	~		Same as approved AEPEP (AEPEP 2021 was approved by MGB MIMAROPA on 14 January 2021 with COA AEPEP No. 2021-01-MIMAROPA	
	Conduct of compliance and impact self- monitoring	✓		Environmental Monitoring activities per approved AEPEP are continuously being implemented. Pollution Control facilities are in continuous operations. Preparation of Compliance Monitoring Report (CMR) for January to June (1 st Semester 2021) on-going.	
	Regular reporting of Self-Monitoring Results by the Project Proponent	~		Submitted SMR for the 1 st and 2 nd Quarter 2021 to EMB MIMAROPA on	

			15 April 2021 and 15 July 2021 respectively thru online.
	Other sectoral requirements mandated by other agencies to be complied with	~	
Compliance with EPEP Commitments	Implementation of Environmental Impact Control Strategies	✓ 	Implementation of Environmental control measures/commitments included in the approved 2021 AEPEP are continuous
	Safety	~	The 2021 Annual Safety and Health Program for the project was approved by the MGB MIMAROPA Region on 17 February 2021 with COA No. SHP -2021 – MIMAROPA – 03Rev.
	Rehabilitation	√	Included in the approved 2021 AEPEP
Compliance with SDMP	Commitments	~	The 2021 Annual SDMP was approved by the DENR MGB MIMAROPA on February 4, 2020 with COA No. ASDMP # 2021-02-MIMAROPA (2 nd).
Complaints Management	Complaint receiving set-up	√	Complaint regarding mining operation, Environmental Laws, DENR Permits, SEP Clearance are included in the MMT functions
	Case investigation	✓	MMT conducts investigation
	Implementation of control measures	✓	
	Communication with the complainant/public	~	
	Complaint documentation	✓	
monitoring of the pro	d personnel are charged with the routine oject activities in terms of education, l experience of the environmental team	√	Engr. Antonio O. Sanone is the Head of MEPEO – Mine Environmental Protection and Enhancement Office.
Others, please specify			

III. PROCESS DOCUMENTATION OF ACTIVITIES UNDERTAKEN

Activities	Date Conducted	MMT Members Involved	Methodology/Other Remarks
Document Review of:			
- Compliance with ECC	19-24 July 2021		
Conditions/Commitments			
- Compliance with EPEP & SDMP	19-24 July 2021		
Commitments		All MMT	
- Compliance with DENR Permits	19-24 July 2021	members. Please	Conducted during the MMT
Conditionalities		see signatures	activities
- Compliance with SEP Clearance	19-24 July 2021	below.	
Conditionalities			
Site Validation – Ocular	19-24 July 2021		
Site Validation - Confirmatory Sampling (if	1-8 March 2021 (1 st	MMT Sampling	No sampling activities were
conducted)	quarter 2021 MMT	Team	conducted for the 2 nd quarter.
	sampling)		The 3 rd quarter sampling
			activities were conducted on
	Resampling activities		19-24 July 2021.
	for Cr ⁶⁺ was conducted on 15 March 2021.		

IV.COMPLIANCE MONITORING RESULTS AND DISCUSSIONS

A. Compliance to Project Location and Coverage Limits (as specified in ECC and/or EPEP)

Parameter	Specification (specify if in ECC or EPEP)	Wit Spe		Remarks - Description of Actual Implementation	
		Yes	No	Actual implementation	
Project Location (indicate geographic coordinates)	Hydrometallurgical Processing Plant Project (HPP) is located within the existing mine site and industrial complex of Rio Tuba Nickel Mining Corporation (RTNMC) in Brgy, Rio Tuba, Municipality of Bataraza, Province of Palawan, approximately centered at 80° 37' 25'' E latitude and 117° 21' 42'' N longitude.	•		Complied	
Project Area (ha)	36 hectares	√		Complied	
Capital Costs	Combined capital cost of Lines 1 & 2 of HPP is \$ 508 M. (Ref EPEP)	~		Complied	
Type of Minerals	Low-grade nickel ore that has a Nickel grade of about 0.1% and crushed limestone that is both supplied by RTNMC. UNICHAMP produces milk of lime for supply to CBNC.	✓		Complied	
Mining method(s)	The mining activities are conducted by the sister company, RTNMC that supplies low grade nickel ore and limestone requirements of the plant.	~		Complied	
Production	Total production limit per year for Line 1 & 2 plants as per ECC Capacity Amendment on December 20, 2018: 25,000 DMT Nickel and 2,500 DMT Cobalt	~		Production Output January- June 2021: Mixed Sulfide: 16,965.6 DMT Ni: 9,918.6 DMT Co: 847.8 DMT	
Mill/Processing Plant	The hydrometallurgical process involves the high-pressure acid leach of low grade ore and laterite and the reaction of the pregnant solution with H2S to produce Ni/Co mixed sulfides (MS). The process consists of seven (7) stages, namely ore preparation, high pressure acid leach, pre neutralization/ counter-current decantation, neutralization, Zn removal, sulfurization and final neutralization	~		Complied	
Mine Life	25 years	~			
Mineral Reserves/ Resources	Within the RTNMC's mining tenements, additional low grade nickeliferous materials, i.e. laterite, can be found. When underlying Saprolite is extracted, these materials are stripped and become available as feed material for the HPP. The future alternative ore sources will come from additional RTNMC production or other future Palawan mines. (ref. – EPEP)	✓			
Access/Transportation	The project site has available air and land transportation. A causeway and jetty at Coral Bay is used for shipping materials to/from the project site.	~			

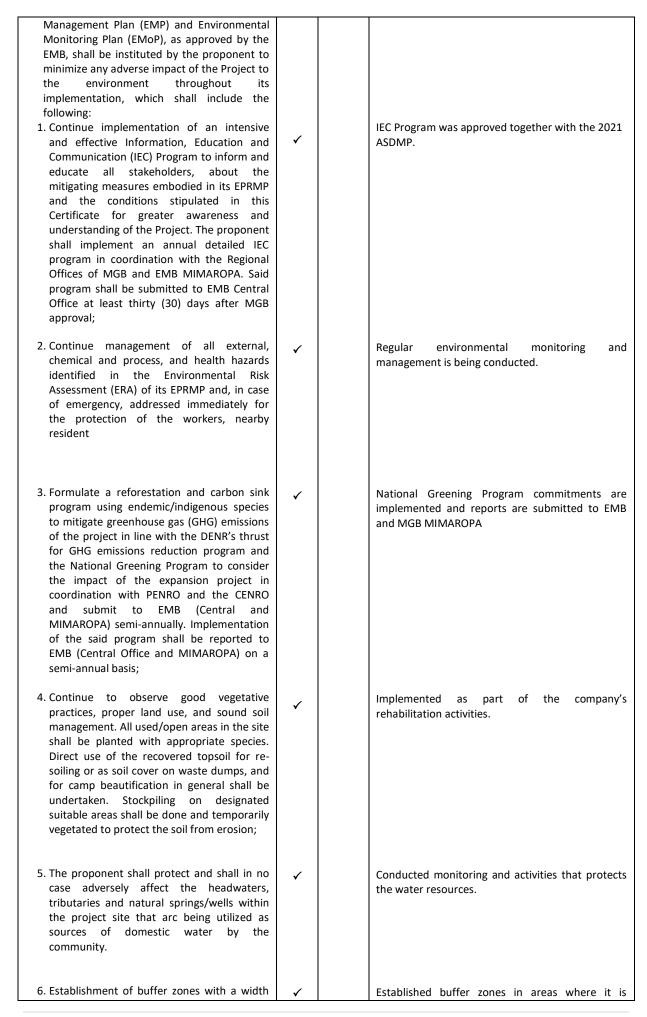
Power Supply	Two (2) coal fired boiler and two (2) steam turbine power plants with a total capacity of 22MW powered the HPP plant lines 1 & 2. two (2) units of Diesel Generators w/ a capacity of 1.5MW each for Line 1 and two (2) units of Diesel Generators with a capacity of 1.64MW each for line 2 serve as back-up power to the boilers		All Air Pollution Sources and Equipment are compliant with the regulatory parameters or emission standards set by EMB based on the annual emission stack testing conducted. As CBNC's initiative they installed Continuous Emission Monitoring System which monitors the Real-Time emission for NOx, SOx and CO. CBNC is exempted to the recently released Department Administrative Order 2017- 14 which requires company with CEMS to transmit data to EMB online data base information system because they are emitting less than 750 tons per year of any regulated pollutants.
Mineral Processing Equipment	 Ore preparation equipment Autoclave Flash tank Pre-Neutralization Tank CCD Thickener Neutralization tank Neutralization thickener Zn Removal tank ZnS filter Polishing Filter Sulfurization tank MS filter Polishing filter Final neutralization tanks Tailings Storage Facility (ref EPEP) 	~	All Processing Equipment are running in Normal Condition, no abnormalities observed.
Workforce	As of June 2021: 615 CBNC regular employees	~	Within Bataraza – 60.8% Other municipalities of Palawan – 25.5% Outside Palawan -13.7%
Development/Utilization Schedule	HPP Line 1 plant as constructed starting in 2002 and is in commercial operation in April 2005. HPP Line 2 construction began in 2007 and is in commercial operation in June 2009.	~	
Other Components			

B. Review & Validation of Proponent's Self-Monitoring Reports

B.1. Compliance to other ECC Conditions - ECC-CO-1806-0014

Directions: The MMT shall check documentary compliance of the Proponent to the conditions stipulated in the ECC.

ECC CONDITIONS		Complied?		
		Yes	No	Proof of Compliance/Remarks
I	. CONDITIONS			
	ENVIRONMENTAL MANAGEMENT All commitments, appropriate mitigating/enhancement measures and monitoring requirements contained in the EPRMP, particularly in the Environmental			



		1
of twenty (20) meters along the entire periphery of the project site and planted with appropriate species/dense vegetation cover to mitigate the adverse effect of its operation to the existing condition of the ecosystems in the area and to serve as noise, vibration and dust buffers;		feasible.
GENERAL CONDITIONS		
7. Continue compliance with the environmental management and protection requirements of the pertinent provisions of the Philippine Mining Act of 1995 (R.A. No. 7942) and its Revised Implementing Rules and Regulations (DAO No. 2010-21), as well as the pertinent provisions of the Memorandum of Agreement (MOA) between the EMB and MGB executed on 16 April 1998 such as the submission of the following:		
a. Environmental Protection and Enhancement Program (EPEP) integrating the Final Mine Rehabilitation and/or Decommissioning Plan FMR/DP);	*	EPEP for combined HPP 1 & 2 was submitted to MGB on May 8, 2009 while the FMRDP was submitted last August 27, 2009. COA No. 063- 2004-04A received on December 14, 2009. Revised EPEP and FMRDP for the company's Expansion Project were approved last November 4, 2020.
b. Social Development and Management Program (SDMP);	*	SDMP for 2019-2023 was approved last May 14, 2019 with COA no. SDMP 4-MGB MIMAROPA-2019-03. The 2021 Annual SDMP was approved by the DENR MGB MIMAROPA on February 4, 2020 with COA No. ASDMP # 2021-02-MIMAROPA (2 nd).
c. Contingent Liability and Rehabilitation Fund (CLRF) and Environmental Trust Fund (ETF); and	✓	Deposited in DBP Trust Account
d. Mine Rehabilitation Fund Committee (MRFC) and Multipartite Monitoring Team (MMT);	~	MMT and MRFC were created and organized which conduct regular monitoring and meeting.
 Installation of a continuous hydrogen sulfide (H2S) monitoring and results shall be included in the CMR; 	~	Installed 82 H2S monitoring and the results were reported in CMR
 A coastal resource management program (CRMP) shall be submitted to EMB Central Office copy furnished the EMB MIMAROPA within six (6) months upon receipt of this Certificate; 	×	CRMP was submitted to EMB Central Office last June 28, 2019
 Updated Emergency Response Plan (ERP) to include an off-site emergency plan based on APELL (Awareness and Preparedness for Emergency at the Local Level); 	*	2020 ERPP was submitted on November 19, 2019 and approved on December 9, 2019.
 That its contractors and subcontractors properly comply with the relevant conditions of this Certificate; 	*	The contractors and sub-contractors of CBNC are required to comply with ECC conditions.

 Submission of a Compliance Monitoring Report thru EMB Central Office Online (CMR Online) System and copy furnished EMB MIMAROPA on a semi-annual basis together with report on Social Development and Management. 		On-going preparation of Compliance Monitoring Report (CMR) for 1 st Semester 2021.
II. RESTRICTIONS		
 No other activities shall be undertaken other than what were stipulated in the EPRMP documents. Any expansion or modification of the Project beyond the project description or any change in the activity shall be subject to a new EIA study; and 	*	Complied.
 In case of transfer of ownership, the same conditions and restrictions shall apply to the transferee or grantee who shall notify the EMB Central Office in writing within fifteen (15) working days from such transfer 		No transfer of ownership yet.
III. RECOMMENDATIONS TO CONCERNED GOVERNMENT AGENCIES		
 Proponent shall to comply with the following: a. Sanitation Code of the Philippines b. Labor Code of the Philippines including occupational health and safety standards for all mining activities and provide PPEs for the workers c. Building Code of the Philippines 	¥	Complied.
 Proper storm drainage canal, concrete culverts, and other flood control measures shall be provided to adequately receive and channel the silt-laden runoff from the nearby bodies of water. 	~	Complied. Silt control facilities/infrastructures are established.
 Proponent shall implement Solid Waste Management System. 	~	Complied. SWM system is being implemented.
 Proponent shall ensure that the noise from the operation shall not disturb the community especially at night 	~	Complied. Noise complaint monitoring system is in place.
5. Secure tree cutting permit, (if necessary).		Not applicable as of the moment.
 Secure clearances/permits relevant to mine processing activities: i.e. compliance with DENR Memorandum Order 99-32 (Policy Guidelines and Standards for Mine Wastes and Mill Tailings Management) as amended; 		Not applicable as of the moment.
7. Epidemiological study and health surveillance activities in the host communities, secondary and indirect impact communities to be conducted; and Baseline health data/information on biomarkers of exposure among the host communities, secondary and indirect impact communities be conducted, including monitoring (e.g. sulfhemoglobin and methemoglobin) among potentially- exposed workers in the plant and health surveillance study (ies), results of which shall be disseminated to the concerned rural health units.		Epidemiological Study to be continued from previous study initiated by the DOH/PSCOT with final report submitted last April 12, 2013. The next phase of the study which includes Health and Environmental Assessment is intended to be funded and carried-out by the DOH but haven't done so as of date. The company (CBNC) intends to conduct the study on its own.

Q In the revision of CDMD the rest		To be conducted in accordination with MCD
 In the revision of SDMP, the present SDMP performance be reviewed and experts on sociology, mining economics and skills training and livelihood be employed in order to come up with a 		To be conducted in coordination with MGB.
more socially oriented SDMP with expected long-term benefits.		
IV. ENVIRONMENTAL PLANNING RECOMMENDATIONS FOR THE PROPONENT		
9. Institutional linkages and collaborative agreements to be initiated and formalized with appropriate entities as regards radiation protection program and, in case of acute toxic emergencies, arrangement be made with the poison center or other hospitals.	*	Linkage with PNRI is continuous. Radioactive Material License is valid and is renewed annually. Training on Safety in the Use of Nuclear Equipment and Devices or Radiation Safety Course – Sealed Sources in Industrial Devices was conducted yearly for selected CBNC staff by PNRI at the CBNC plant site since September 2007. The recent training was conducted last February 27 to March 1, 2019. With regards to acute toxic emergencies, CBNC will be coordinating with the National Poison Management and Control Center, University of the Philippines – College of Medicine, Philippine General Hospital. CBNC was referred to PGH due to the distance and inaccessibility of the Batangas Regional Hospital from CBNC which makes it impractical to have linkage with the Regional
10. Proponent shall give priority employment to qualified local residents. Adequate public information for jobs available to local residents in the affected areas shall be provided.	✓	Hospital for Poison Capability. Employment priorities were given to qualified local residents. As of December 2020, CBNC has 615 regular employees. 60.8% of its employees are from the Municipality of Bataraza while 25.5% are from other municipalities of Palawan, the remaining 13.7% are from outside Palawan
		CBNC Contractors and Sub-contractors are also encouraged to prioritize employment of qualified local residents.
 Host a website that will provide information on the physical, social and economic impacts of the project, including compliance to its various commitments stipulated in the EPRMP and implementation of IEC Program. 	~	Updated website with URL <u>https://cbnc.ph</u> was created last May 2019.
 12. Allocate 0.1 of one percent (1%) of the value of the generated electricity for the development of the host and neighboring communities, provided that, if any other agency of government is currently imposing, or shall, in the future impose, this allocation, such shall be deemed compliance with this provision. Value of electricity production shall be based on the actual cost of generation 	~	Additional fund for development of Barangay LGU of Rio Tuba was allocated annually based on 0.1 percent of CBNC's electricity generation cost. For 2020, PHP 697,969 was provided to BLGU Rio Tuba.
13. Proponent shall commission an independent third-party auditor to undertake an environmental audit. The result of the third party environmental audit, including the auditing of risks and hazards of the project and geotechnical review of TSF shall be submitted to EMB and the MGB.		For compliance. To be conducted.
14. Coordinate with the DENR, Coastal and Marine Management Office (CMMO) and	~	Coastal Resource Assessment Reports are submitted annually to EMB, EMB-MIMAROPA,

the DA, Bureau of Fisheries and Aquatic Resources (BFAR) in the rehabilitation of mangroves and sea grasses found affected by any infrastructure development relative to the port facilities. MGB-MIMAROPA, PCSD and BFAR-MIMAROPA. Coastal Resource Assessment Activity conducted on April 17-22, 2021.

Mangrove planting and conservation is conducted at Nagoya Beach.

B.2. Compliance to Impact Management Commitments in EIA Report & EPEP

Directions: The MMT shall check compliance of the Proponent to the commitments made in the EMP.

		Mitigating Measures/Contro	l Strategies	Effective					
Project Impacts		Planned	Field Findings and Observations	Yes	No	Recommendations			
Plant	I. O	PERATIONS OF POLLUTION CONTROL FAC	ILITIES (PCF)						
Operation	Α.	PCF Operated by concerned department		,		1			
		1. Operations of Final Neutralization	Continuously undertaken	√		Maintain this activity			
		Plant (Line 1 & Line 2) to treat							
		acidic waste slurry, continuous							
		activity.							
		2. Operations of Electrostatic	Continuously undertaken	~		Maintain this activity			
		Precipitator (Line 1 & Line 2) to							
		control fly ash emissions, continuous activity.							
			Continuously undertaken	~		Maintain this activity			
		3. Operations of H2S Scrubbers (Line	Continuously undertaken	v		Maintain this activity			
		1, Line 2, and Back-up Scrubber) to control H2S gas emissions,							
		continuous activity.							
		4. Operations of HPAL Scrubber	Continuously undertaken	~		Maintain this activity			
		(Line 1 & Line 2) to control acid	continuousiy undertaken						
		mist from exhaust used steam,							
		continuous activity.							
	В.	PCF Operated by EMQCS							
		1. TSF-2 Operations: tailings	Continuously undertaken	√		Maintain this activity			
		deposition, decant tower	•						
		operations, supernatant discharge							
		& dam integrity monitoring,							
		continuous activity.							
	II. N	Aonitoring of air, water, flora, fauna, and	coastal/marine resources						
	A. Government inspection/monitoring								
		1. Multi-partite Monitoring Team	Scheduled on Jul 18-25,		Х	Conduct the remaining			
		(MMT) validation, inspection, and	delayed due to CoViD-19			MMT activities for CY 2021.			
		sampling, quarterly activity.	pandemic.						
		2. EMB Validation, quarterly activity	Separate validation as per		х	Coordinate with EMB on			
			DAO 2015-17. No scheduled validation for 1Q to 2Q			the schedule of this activity.			
			2021."			activity.			
		3. Mine Rehabilitation Fund	2nd Qtr meeting to be		Х	Conduct the remaining			
		Committee (MRFC) meeting,	scheduled right after Jul 18-			MRFC activities for CY 2021			
		quarterly activity	25 MMT inspection & validation						
		4. PEZA Audit for Safety,	Accomplished on March 22-	~		Continue to conduct PEZA			
		Environment, Building,	26, 2021			audits			
		Mechanical & Electrical							
		Inspection, annual activity	Assessmentials and the table 40.45	~		Continue to any durat that			
		 Mechanical & Electrical Installations (Permit to Operate) 	Accomplished on July 12-15, 2021	v		Continue to conduct this activity			
		Inspection, semi-annual activity							
		6. Integrated Safety and Health,	Accomplished on May 19-	√		Continue to conduct this			
		Environment and Social	24, 2021			activity			

Project		Mitigating Measures/Contro	ol Strategies	Effe	ctive	
Project Impacts		Planned	Field Findings and Observations	Yes	No	Recommendations
	(IS	velopment and Management HES) Audit, semi-annual tivity				
	7. Mineral Processing Permit (MPP) Audit, semi-annual activity		Accomplished on March 8- 10, 2021	~		Continue to conduct this activity
	B. Environ	mental Self-Monitoring				
	1. Wa	ater Sampling				
	a.	Monthly Water Sampling In- house, monthly activity	Accomplished monthly.	~		Continue to conduct this activity
	b.	Monthly Water Sampling Ostrea, monthly activity	Accomplished monthly.	~		Continue to conduct this activity
	с.	Biochemical Oxygen Demand (BOD) Sampling, monthly activity	Conducted on GP-28 Lecheate, Lower Togpon, and Lower Kinurong Siltation Ponds. Accomplished monthly except for Jan, Feb & May due to CJ4 flight unavailability		X	Continue to conduct this activity. When quarantine or movement restrictions are allowed.
	d.	Bacteriological Sampling of Drinking Water, monthly activity	Accomplished monthly.	1		Continue to conduct this activity
	e.	Legionella Sampling, monthly activity	No sampling was done to prevent the employee from being exposed to CoViD-19 at St Luke's Hospital		x	Continue to conduct this activity. When quarantine or movement restrictions are allowed.
	2. Air	Sampling				
	a.	TSP/PM10 for HPP (1 hour), monthly activity	Accomplished monthly.	~		Continue to conduct this activity
	b.	TSP/PM10 for Community (1hour), monthly activity	Accomplished monthly.	~		Continue to conduct this activity
	С.	TSP/PM10 for Community (24hour), annual activity	Removed per new EPEP			
	d.	NOx & SOx (1 hour), monthly activity	Accomplished monthly.	~		Continue to conduct this activity
	e.	NOx & SOx (24 hours), annual activity	Removed per new EPEP, will not proceed as per advised by BTA Feb 17, 2021			
	f.	Acid Mist Inside Plant site (1 hour), monthly activity	Accomplished monthly.	~		Continue to conduct this activity
	3. Mo	onitoring from External Providers				
	a.	Calibration of Water, Air & Gas Sampling Instruments, annual activity	Scheduled in August 2021			
	b.	Cylinder Gas Audit of CEMS, annual activity	Scheduled in September 2021.			
	C.	Stack Sampling, semi-annual activity	Scheduled on July 25-31, 2021			
	d.	Coal Ash Sampling and Analysis, semi-annual activity	Accomplished on March 23, 2021	~		Continue to conduct this activity
	e.	Fish Tissue Analysis, semi- annual activity	Accomplished on March 22- 27, 2021	~		Continue to conduct this activity
	f.	Coastal Resources Assessment, annual activity	Accomplished on April 17- 22, 2021	~		Continue to conduct this activity
	g.	Flora & Fauna Monitoring, annual activity	Fauna: accomplished on June 14-20, 2021; Flora: accomplished on June 21-26, 2021	1		Continue to conduct this activity

	Mitigating Measures/Contro	l Strategies	Effe	ctive	
Project Impacts	Planned	Field Findings and Observations	Yes	No	Recommendations
	h. Coastal Resources Management Program Implementation, continuous activity	Accomplished on February 5, 2021. Data consolidation and meetings only, workshop, and other activities didn't push thru due to CoViD-19 restrictions		x	Continue to conduct this activity. When quarantine or movement restrictions are allowed.
	i. Carbon Sink Program (Identification of Area to be Adopted and MOA w/ DENR), continuous activity	Accomplished on February 5, 2021. Data consolidation and meetings only, workshop, and other activities didn't push thru due to CoViD-19 restrictions		x	Continue to conduct this activity. When quarantine or movement restrictions are allowed.
	j. ISO Surveillance Audit, semi- annual activity	Accomplished on May 10 - 14, 2021. Nonconformity - 0; OFIs - 15; Good points - 73	√		Continue to conduct this activity
	C. Bio-indicator Projects	•			•
	a. Fish pen at West Side of Causeway, daily activity	Accomplished daily. Maintain live fish at Causeway	√		Continue to conduct this activity
	b. Fish stock enhancement at Lower Kinurong, weekly activity	The boat is finished and available to be used. Activities were delayed due to CoViD-19 restrictions, will resume in the 3rd quarter		x	Continue to conduct this activity. When quarantine or movement restrictions are allowed.
	c. Culture of Butterfly at TSF-1, daily activity.	Continuous propagation of butterfly at TSF-1.	~		Continue to conduct this activity
	d. Seaweeds and/or seagrass meadow enhancement, daily activity	In progress, delayed due to CoViD-19 restrictions, will resume this 3rd quarter		х	Continue to conduct this activity. When quarantine or movement restrictions are allowed.
	e. Records of Bee Colonies found inside Plant site Premises, quarterly activity	Accomplished on Jan. 27, Mar. 9, and May 21, 2021. Bees were observed at Line 2 Genset Bldg, Utilities Line 2, and Dorm D	√		Continue to conduct this activity
	III. Solid/Industrial Waste Management:	ł			
	3.1 Gathering and disposal of solid waste (non-hazardous) waste at HPP complex, daily activity	Accomplished daily.	√		Continue to practice proper solid/industrial wastes disposal and management
	3.2 Transport and disposal of hazardous waste to treater in Manila, less than 6 months interval activity	Accomplished on Feb. 9 and May 5, 2021	1		Continue to practice proper hazardous wastes treatment and management
	3.3 Operations of Categorical Sanitary Landfill at GP-28, continuous activity	Continuously accomplished	1		Continue the proper operation of the categorized sanitary landfill
	IV. Mine Rehabilitation & Reforestation		•		
	4.1 Enhancement and protection of rehabilitated areas, 170 hectares	Continuous for the 170 hectares rehabilitated areas	-		Continue the enhancement and improvement of rehabilitated areas
	4.2 Grass planting (TSF-3 Motorpool Slope and TSF-2 South Dam Slope, 2 hectares	1 hectare at TSF-2 South Dam Slope was accomplished (50%)		x	Maintain the grass plantation. To ensure survival, planting is scheduled in the rainy season which is 2H of the year.
	4.3 Buffer zone establishment of TSF3 and Pier site, 3 hectares (6,666 seedlings per hectare planting density) was	0.5 hectares were planted at TSF-3 Buffer Zone (17%)		х	Accelerate this activity to catch up with the plan for CY 2021. To ensure

Droject	Mitigating Measures/Contro	ol Strategies	Effe	ctive	
Project Impacts	Planned	Field Findings and Observations	Yes	No	Recommendations
	targeted				survival, planting is scheduled in the rainy season which is 2H of the year. Only planted a few during the dry season so that watering and maintenance can be done effectively.
	4.4 Enhancement and replanting of rehabilitated areas, 25,000 seedlings planted	10,693 was accomplished (43%)		х	Accelerate this activity to catch up with the plan for CY 2021. To conduct planting in the 2H of the year or rainy season to accomplish the remaining target.
	4.5 TSF2- Rock Quarry Rehabilitation, 1 hectare (4,444 seedlings per hectare planting density)	Grass planting is to be done this July for biomass production			
	 4.6 Plant nursery operations and management: 4.6.1 Propagate 50,000 forest tree seedlings; 4.6.2 Propagate 5,000 Fruit tree seedlings; and 4.6.3 Propagate 15,000 ornamental plants 	 33,143 forest tree seedlings propagated (66%); 288 fruit tree seedlings propagated (6%); No ornamental plant propagated; and Data for consolidation next quarter 		x	Accelerate this activity to catch up with the plan for CY 2021. This is an on-track accomplishment against the target because most of the plant seedlings propagation shall be fully blasted in the rainy season.
	4.7 Clonal laboratory operations and management, continuous activity	Continuously accomplished	~		Continue to conduct this activity
	4.8 Maintenance and improvement of TSF1 rehabilitation IEC area, 4 hectares	Continuous maintenance and improvement for the 4 hectares IEC area in TSF1, improved eco-trail handrail	√		Continue to conduct this activity
	4.9 Establishment of new Bamboo Plantation area, 1 area	20 ha (204 culms per ha.) was established at the Northeast side of TSF-3 to enhance buffer zone, RTNMC tenement, Total of 4,084 bamboo culms planted.	V		Maintain and monitor the planted bamboos to ensure their growth and survival
	4.10 Maintenance and protection of previous bamboo plantation area, 12 hectares	6 hectares (50%) was accomplished at the TSF-1 bamboo plantation	~		Maintain and monitor the planted bamboos to ensure their growth and survival
	4.11 Mangrove Reforestation, 15 hectares (2,500 per ha. Planting density)	10 hectares was accomplished (67%), 25,000 mangrove propagules were planted at So. Bongkol- bongkol	~		Maintain and monitor the planted mangroves to ensure their growth and survival
	4.12 Bamboo Growth Performance on Dried Tailings Soil Study	1-year activity, on process	~		Continue this activity
	V. Coastal Resources Protection and Enhance		1 2		1
	5.1 Compensatory rehabilitation of coral reefs including a program for monitoring and protection of marine resources, continuous activity	Regular coordination with PAMB, other activities suspended due to CoViD restrictions	~		Continue this activity

C. REHABILITATION ACTIVITIES

MINING FOREST PROGRAM

Validation Report

(From July 2020 to June 2021)

I.	NAME OF COMPANY	<u>:</u>	CORAL BAY NICKEL CORPORATION
			HYDROMETALLURGICAL PROCESSING PLANT
	Location	:	<u>RIO TUBA, BATARAZA, PALAWAN</u>
	Tenement No.	:	<u>N/A</u>
	Year Mining Forest was Initiated	:	<u>2007</u>

II. ACCOMPLISHMENTS:

A. DEVELOPMENT PLANS:

/√/ Long-Range Plan:

Approved EPEP and FMR/DP Rehabilitation works at Coral Bay Nickel Corp. Bu Engr. Briccio T. Abela (Ref.no. EMQCS-04-2015-11)

/√/ Annual Plan(Attach photocopy(ies).)2020 and 2021 AEPEP

B. NURSERY OPERATIONS:

/✓/ Own Nursery // Joint Ventu	re /√/ Acq	uired from Other Sources
Name of Nursery	Area (m²)	Capacity (No. of Seedlings Produced)*
CBNC EMQCS Nursery at TSF-2	10,000	100,000
Satellite Nursery at TSF-1 (with several components)	1,200	10,000
Community Nurseries (Wildlings of Native Trees)	400	30,000

Seedling Inventory for the Year

	No. of S	eedlings		No. of Seedlin	gs Out-Planted	No. of	
Previous Stocks	Produced	Acquired	Total	Planted for the Year	Replanted for the Year	seedlings donated	Balance in Stocks
35,943	175,482		69,704	103,427	2,070	8,273	61,712

<u>Note:</u> *-Re-planting activities were conducted at TSF-3 buffer and ancillaries, and mangrove at SitioBongkol-bongkol *No monitoring of survival rate for latest plantation at the time of validation, survival rate shall be adjusted upon monitoring

C. EXTENT OF PLANTED AREAS(ha)WITHIN PROJECT FACILITY

Total Area Planted to Date		:	163.54 ha
Previous Plantations		:	161 ha
New Plantations or Expansion (TSF3)	:	2.54 ha	
(Attach a reforestation map of scale 1:25,000 sl plantations or expansions.)	howing di	stinctly the	previous plantations from the new

C1. EXTENT OF PLANTED AREAS(ha) OUTSIDE PROJECT FACILITY

Total Area Planted to Date		:	459.18 ha
Previous Plantations		:	433.68 ha
New Plantations or Expansion (Mangrove)	:	25.50 ha	
(Attach a reforestation map of scale 1:25,000 sho	wing dist	inctly the	previous plantations from the new
plantations or expansions.)			

C2. EXTENT OF PLANTED AREAS(ha) USING FORAGE SPECIES

Total Area Planted to Date		:	103 ha		
Previous Plantations		:	103 ha		
New Plantations or Expansion	(TSF2 Slope)	:	3 ha		
*3 hectares' accomplishment is enhancement and enrichment only.					
(Attach a reforestation map of scale 1:25,000 showing distinctly the previous plantations from the new					
plantations or expansions.)					

C3. EXTENT OF PLANTED AREAS(ha) USING BAMBOO SPECIES

Total Area Planted to Date	:	3 2 ha
Previous Plantations	:	2 ha
New Plantations or Expansion	(TSF1 & TSF3 Buffer area):	30 ha
(Attach a reforestation map of scale 1	2:25,000 showing distinctly the	e previous plantations from the new
plantations or expansions.)		

NGP Accomplishment:

Year	Reforestation Establishment (ha.)	Donation (ha.) (No. Seedlings donated/500= No. of Hectares)	Total (ha.)			
2011	10.71		10.71			
2012	46.15		46.15			
2013	415.51		415.51			
	Grand Total 272.37					

Note: NGP for mine sector is only from 2011-2013 based on MGB Memorandum Order 2012-01.

Donated seedlings under NGP

Year	No. of Seedlings	Remarks
2014	3,942	
2015	1,089	
2016	1,136	
2017	8,116	
2018	6,334	
2019	8,910	
2020	8,020	
2021		
Total	37,547	

A. DISTURBED AREAS(ha)

1. Areas directly affected by the operations

(Itemize all areas in a separate sheet.)

	Are	ea (ha)		Are	ea (ha)	
	Total	Rehab		Total	Rehab	
A.HPP Complex and Vicinity	44	6	G.TSF-2 Unsuitable Stockpile	20	20	
B.Coal Ash Pit	9		H.TSF-3 Unsuitable Stockpile	22		
C.TSF No.1	85	85	I. Water Storage	28	4	
D.TSF No.2	189	19	J. Sanitary Landfill	4	2	
E.TSF No.3	122	2.54	K. Port Area and Causeway	28	3	
F.TSF No.2 Borrow Area	32	22				
Total					163.54	
Total Remaining Disturbed					419	

2. Environmental Incidence Resulting to Damages

	Yes	Area Affected (ha)	No
a. Tailings dam failure			✓
b. Waste dump failure			✓
c. Shrinkage/subsidence			✓
d. Induced slides			✓
e. Others (specify)			~
Total			

(Note: Exclude areas that were previously rehabilitated.

B. MAINTENANCE AND PROTECTION

1. Plantation Activities Within Project Area

	Plantation Category								
		New							
Aspect	Old		Re	cent		1 - 4 4	Total	Grand	
	JD17- JD18- JD19- JJ18 JJ19 JJ20 Sub-Total	Latest JD20-JJ21	(Recent + Latest)	Total					
No. of Seedlings Planted	289,561	32,586	32,275	28,023	95 <i>,</i> 884	40,927	136,811	426,372	
No. of Seedlings Replanted	37,298	3,173	904	765	4,842	870	5,712	43,010	
No. of Surviving Plants	252,263	29,413	34,371	27,258	91,042	40,057	131,099	383,362	
Survival Rate (%)	88.59	91.13	87.75	97.34	95.19	97.92	95.99	90.84	

*The data was adjusted based on the new matrix summary

*Data of plantation activities within project area and outside project area was separated

	Plantation Category								
	New								
Aspect	Old		Re	cent		Latest	Total	Grand	
		JD17- JJ18	JD18- JJ19	JD19- JJ20	Sub-Total	JD20-JJ21	(Recent + Latest)	Total	
No. of Seedlings Planted	250,971	60,000	31,300	0	91,300	62,500	153,800	404,771	
No. of Seedlings Replanted	0	0	0	0	0	1,200	1,200	1,200	
No. of Surviving Plants	250,971	60,000	31,300	0	91,300	61,300	152,600	403,571	
Survival Rate (%)	90	90	90		90	88	89	89.7	

2. Plantation Activities on Outside Project Area (Mangrove and Terrestrial)

Note: For old plantation, consider four (4)-year old growth and above.

For recent plantation, consider one (1)-year to three (3)-year old growth.

For latest plantation, consider those for the periods July-Dec. of the previous year and/or Jan.-June of the current year.

3. No. of Persons Involved

a.	No. of company foresters	:	2
b.	No. of deputized forest guards (or DENROs)	:	3

- c. No. of reforestation personnel
- d. No. of local residents involved (community involvement) : 6 families

4. Vigorousness : / / Highly Vigorous /√/ Vigorous

70

5. Maintenance and Protection

	Yes	No	Coverage (ha)
Control of forest fires by establishment and construction of firebreaks/fire tower	~		85
Brushing/Weeding/Mulching/Pruning	~		85
Fertilizer/Lime/pesticide/Chemical application	✓		140
Water spraying	✓		30
Control of forest pest and diseases	✓		1
Patrol work	✓		183
Forest law enforcement	✓		183
Others (please specify)	N/A		

C. OTHER ENVIRONMENTAL FACTORS

1. Species Diversity

Tree Species	Spacing
Pagsahingin	2 x
Magmaman	2.4

Tree Species	Spacing (m x m)	Tree Species	Spacing (m x m)
Pagsahingin	2 x 2	Linatog	2 x 2
Magmaman	2 x 2	Talisay Gubat	2 x 2
Marangub	2 x 2	Padipadi	2 x 2
Patangis	2 x 2	Bagaay	2 x 2
Maglabungaw	2 x 2	Malaboho	2 x 2
Palawan lanete	2 x 2	Magsumbiling	2 x 2
Malakatmon	2 x 2	Mabalod	2 x 2
Pasi	2 x 2	Katampas	2 x 2
Palawan Dita	2 x 2	Kanomay	2 x 2
Dins	2 x 2	Kamuning	2 x 2
Bunog	2 x 2	Kandis	2 x 2
Malabunga	2 x 2	Handadarag	2 x 2
Balinad	2 x 2	Gangad-gangad	2 x 2
Syzygium	2 x 2	Alagaw	2 x 2
Bulong eta	2 x 2	Alupag	2 x 2
Palawan Cherry	2 x 2	Anagas	2 x 2
Palawan Amayan	2 x 2	Palinlin	2 x 2
Palawan Mangkono	2 x 2	Banato	2 x 2
Bangkal	2 x 2	Bakaw-bakaw	2 x 2
Kakawate	2 x 2	Balinag	2 x 2
Ipil-ipil	2 x 2	Buga	2 x 2
Mahogany	2 x 2	Tongkat-ali	2 x 2
Palawan Agoho	2 x 2	Apitong	2 x 2
Odling	2 x 2	Lomarau	2 x 2
Fire tree	2 x 2	Baris	2 x 2
Malugai	2 x 2	Amugis	2 x 2
Narra	2 x 2	Manggis	2 x 2
Palumarya	2 x 2	Malakalumpang	2 x 2
Yemani	2 x 2	Aripa	2 x 2
Batino	2 x 2	Kamagong	2 x 2
Rhizophora sp.	2 x 2	Marapisa	2 x 2

2. Research/Studies on reforestation conducted:

Is there any research/study on reforestation conducted?

None

/✔/ (Attach copy(ies).)//

- Journal of plants in CBNC Tailings Storage Facility No.1 Arboretum (Continuous)
- Forest Replication for the purpose of biodiversity Enrichment of the Decommissioned Tailings Dam (Continuous)
- Arboretum (Continuous)
- Clonal Propagation (Continuous)
- 3. IEC on reforestation:

Is there any IEC activities (in the form of publication, public dissemination, lectures, etc.) initiated for the Community?

/<u>√</u>/Yes // None

Mangrove Conference; The Chronickel (Official Newspaper of CBNC); IEC presentations during mine tours, environmental exhibits, distribution of printed IEC materials (flyers, brochures, etc.). (Attach photocopy/ies of publication and other IEC papers.)

4. Services to the Community

Is there any reforestation assistance extended by the Company to the Community during the period under review?

/<u>√</u>/Yes // None

If yes, enumerate and specify the kind and value of assistance extended. If assistance was by seedling donation, specify how many seedlings were donated.

Kind of Community Assistance	Value of Assistasnce	
1. Give Livelihood by purchasing	Php. 120,000 worth of seedlings/Wildlings for the	
wildlings/seedlings from IP's at SitioBohoy, Ocayan,	year 2020 & 2021	
Bataraza, Palawan		
2. Seedlings and Donation and Joint	Tree Donations 3,938 seedlings	
tree planting with local People Organization, Private		
Companies, and University Student		
	Other plants donation 4,335 seedlings	
3. Engage in community by	Php. 175,000 worth of seedlings planted for the	
purchasing and planting of 37,500 rhizophora spp.	year 2020 & 2021	

- 5. Other Conservation Measures
 - a. Is there any reforestation assistance extended by the Company to the Community during this period under review?
 Yes, See table above.
 - b. Landscaping of mine and/or plant site surroundings?
 Yes <u>√</u> Area <u>0.002</u> has. No
 - c. Use of vines and grasses for initial rehabilitation? Yes <u>√</u> Area <u>170</u> has. No ____

Specify type/kind of vines/grasses:<u>Humidicola, Stylosanthes, Centro, Wild Sugar cane</u>,

d. Establishment of herbal and ornamental garden:

Yes <u>✓</u> Area: Ornamental Garden <u>0.075</u> <u>Herbal Garden 0.09</u>

6. Wildlife and Faunal Migration:

Is there an actual sighting of wildlife/fauna in the reforestation area during validation?

	Common Name / Description
Crested Goshawk	Yellow throated leaf bird
Common lora	Olive backed sunbird
Lovely Sunbird	ZittingCisticola
Blue-eared Kingfisher	Glossy Swiftlet
Palawan Bulbul	White vented Shama
Brown-throated sunbird	Slender biled crow
Paddy field Pipet	Wandering whistling Duck
Asian-glossy Starling	Pygmy flowerpecker
Pale spider hunter	Ashy Drongo
Grey Heron	White bellied woodpecker
White Breasted wood	Pied Imperial Pigeon
Swallow	Grey Pigeon
Little Heron	Little Egret
Plantive cuckoo	Crested Lizard
Nicobar Pideon	Painted Bronzeback
Large-tailed Nightjar	little Spiderhunter
Greater Coucal	Eastern Reef Egret
Oriental Dwarf Kingfisher	King Quail
Common emerald dove	Palawan Flycatcher
Zebra Dove	Palawan Narrow-disked Gecko
Oriental Pranticol	Palawan Mangrove Snake
Hill Myna	North Philippine Temple Pitviper
White-bellied Sea Eagle	Philippine Toad
Pacific Swallow	Blue-headed Raquettail
Black-naped Monarch	Palawan Flower Pecker
Sulphur-bellied Bulbul	Black-chinned Fruit Dove
Shrenk's bittern	Black-headed Bulbul

Fauna species documented based on the fauna assessment 2020

FINDINGS/OBSERVATIONS:

1. Continuous production of native forest trees thru clonal and seedlings/wildlings propagation.

2. Rehabilitated mined-out areas were maintained and protected as evidenced of high survival rate including bamboo plantation and mangrove rehabilitation areas.

- 3. Involvement/participation of community residents/ people's organization in the
 - A. seedlings production
 - B. bamboo plantation establishment and
 - C. mangrove area rehabilitation

4. Continuous maintenance and improvement of TSF1rehabilitation and eco-trail, and introduction of other conservation measuresincluding planting of vines/grasses in sloping areas to prevent soil erosion/landslide.

5. Establishment of bamboo plantation was successfully down during community lockdown of barangay Rio Tuba, including construction of water pond and fire lanes for the purpose fire emergency use.

RECOMMENDATIONS:

1. Sustain/Continue the good practices, initiatives and strategies in the implementation of different

programs/projects/activities as per approved AEPEP.

2. Continue the planned activities affected by COVID 19 Pandemic-Lockdown.

3. Provide additional water pond considering that the plantation is fire prone area.

NATIONAL GREENING PROGRAM Validation Report

(For 2nd Quarter CY 2021)

NAME OF COMPANY I. : CORAL BAY NICKEL CORPORATION HYDROMETALLURGICAL PROCESSSING PLANT Location : Rio Tuba, Bataraza, Palawan Tenement No. : N/A Year Mining Forest was Initiated:2011

ACCOMPLISHMENTS: н.

D.	DEVELOPMENT PLANS:	
	/✓/ Long-Range Plan:	Approved EPEP and FMR/DP
		Rehabilitation works at Coral Bay Nickel Corp.
		Bu Engr. Briccio T. Abela (Ref.no. EMQCS-04-2015

/√/ Annual Plan (Attach photocopy(ies).)

E. NURSERY OPERATIONS:

/✓/ Own Nursery // Joint Ventu	re / <u>/</u> √/ Acq	uired from Other Sources
Name of Nursery	Area (m²)	Capacity (No. of Seedlings Produced)*
CBNC EMQCS Nursery at TSF-2	10,000	100,000
Satellite Nursery at TSF-1 (with several components)	1,200	10,000
Community Nurseries (Wildlings of Native Trees)	400	30,000

2020 and 2021 AEPEP

Seedling Inventory for the Year

No. of Seedlings				No. of Seedlings Out-Planted		No. of	Balance in	
Previous Stocks	Produced	Acquired	Total	Planted for Replanted for the Year the Year		seedlings donated	Stocks	
35,943	108,036	N/A	143,979	41680	1970	2674	62,057	

	No. of Seedlings Out-Planted							
Fruit/Forest Tree Species	Plar	Planted for the Year		Re-planted for the Year		e Year	Balance in Stock	
	2011-19	2020	2021	2011-19	2020	2021		
Forest tree species								
(Within Project Area)	225,995	23,613	980	41,157	865	250	62,057	
Agro Forestry (TSF-1)	151,372	16,487	4,400	448	0	0	0	
Nipa and/or Mangrove	253,058	37,500	25,000	75	0	1,200	0	
Terrestrial (Outside								
Project Area)	63,713	0	3,343	0	0	520	0	
Jathropa	13,889	0	0	0	0	0	0	
Total	708,027	77,600	33,723	41,680	865	1,970	62,057	

Remarks: *Data was adjusted based on revised new matrix summary.

Note: *For the list of species planted please see attachment 1.

Aspect	2011-18	2019	2020	2021	Total
New Plantations:					
TSF-1 Rehabilitation	85				85
Forest trees (Within Project Area)	69.23	4	2.54		75.77
Grasses and Vines	18.73	7.5	3	1	30.24
Jathropa	4				4
Nipa and/or Mangrove	51.18	12.5	15	10	88.68
Agroforestry (Outside Project Area)	359.8			.50	360.3
Bamboo Plantation		2	10	20	32.06
Total Area Planted	587.94	26	30.61	31.5	676.05

F. EXTENT OF PLANTED AREAS(ha)

(Attach a reforestation map of scale 1:25,000 showing distinctly the previous plantations from the new plantations or expansions.)

G. DISTURBED AREAS(ha)

- 4. Areas directly affected by the operations
 - (Itemize all areas in a separate sheet.)

	Area (ha)			Are	ea (ha)
	Total	Rehab		Total	Rehab
A.HPP Complex and Vicinity	44	6	G.TSF-2 Unsuitable Stockpile	20	20
B.Coal Ash Pit	9		H.TSF-3 Unsuitable Stockpile	22	
C.TSF No.1	85	85	I. Water Storage	28	4
D.TSF No.2	189	19	J. Sanitary Landfill	4	2
E.TSF No.3	122	2.54	K. Port Area and Causeway	28	3
F.TSF No.2 Borrow Area	32	22			
		Total		583	163.54
	Total Remaining Disturbed				

5. Environmental Incidence Resulting to Damages

	Yes	Area Affected (ha)	No
a. Tailings dam failure			✓
b. Waste dump failure			✓
c. Shrinkage/subsidence			✓
d. Induced slides			✓
e. Others (specify)			✓
Total			

(Note: Exclude areas that were previously rehabilitated.

H. MAINTENANCE AND PROTECTION

1. Plantation Activities

Aspect		Total		
	Old	Recent	Latest	
No. of Seedlings	510,573	187,184	103,427	801,184
Planted				
No. of Seedlings	35,445	4,842	2,070	42,357
Replanted				
No. of Surviving	475,128	182,342	101,357	758,827
Plants				
Survival (%)	93 %	97 %	98 %	94 %

Note: For old plantation, consider four (4)-year old growth and above.

For recent plantation, consider one (1)-year to three (3)-year old growth.

For latest plantation, consider those for the periods July-Dec. of the previous year and/or Jan.-June of the current year.

3. No. of Persons Involved

a.	No. of company foresters	2
b.	No. of deputized forest guards (or DENROs)	3
c.	No. of reforestation personnel	61
d.	No. of local residents involved (community involvement)	60

4. Vigorousness : / / Highly Vigorous /√/ Vigorous

^{5.} Maintenance and Protection

	Yes	No	Coverage (ha)
Control of forest fires by establishment and construction of firebreaks/fire tower	~		85
Brushing/Weeding/Mulching/Pruning	✓		85
Fertilizer/Lime/pesticide/Chemical application	✓		140
Water spraying	✓		30
Control of forest pest and diseases	✓		1
Patrol work	✓		183
Forest law enforcement	✓		183
Others (please specify)	N/A		

I. OTHER ENVIRONMENTAL FACTORS

1.	Species	Diversity
----	---------	-----------

Tree Species	Spacing (m x m)	Tree Species	Spacing (m x m)
Pagsahingin	2 x 2	Linatog	2 x 2
Magmaman	2 x 2	TalisayGubat	2 x 2
Marangub	2 x 2	Padipadi	2 x 2
Patangis	2 x 2	Вадаау	2 x 2
Maglabungaw	2 x 2	Malaboho	2 x 2
Palawan lanete	2 x 2	Magsumbiling	2 x 2
Malakatmon	2 x 2	Mabalod	2 x 2
Pasi	2 x 2	Katampas	2 x 2
Palawan Dita	2 x 2	Kanomay	2 x 2
Dins	2 x 2	Kamuning	2 x 2
Bunog	2 x 2	Kandis	2 x 2
Malabunga	2 x 2	Handadarag	2 x 2
Balinad	2 x 2	Gangad-gangad	2 x 2
Syzygium	2 x 2	Alagaw	2 x 2
Bulong eta	2 x 2	Alupag	2 x 2
Palawan Cherry	2 x 2	Anagas	2 x 2
Palawan Amayan	2 x 2	Palinlin	2 x 2
Palawan Mangkono	2 x 2	Banato	2 x 2
Bangkal	2 x 2	Bakaw-bakaw	2 x 2
Kakawate	2 x 2	Balinag	2 x 2
Ipil-ipil	2 x 2	Buga	2 x 2
Mahogany	2 x 2	Tongkat-ali	2 x 2
Palawan Agoho	2 x 2	Apitong	2 x 2
Odling	2 x 2	Lomarau	2 x 2
Fire tree	2 x 2	Baris	2 x 2
Malugai	2 x 2	Amugis	2 x 2
Narra	2 x 2	Manggis	2 x 2

Palumarya	2 x 2	Malakalumpang	2 x 2
Yemani	2 x 2	Aripa	2 x 2
Batino	2 x 2	Kamagong	2 x 2
Rhizophora sp.	2 x 2	Marapisa	2 x 2

7. Research/Studies on reforestation conducted:

Is there any research/study on reforestation conducted?

/✓/ (Attach copy(ies).)/ / None

- Journal of plants in CBNC Tailings Storage Facility No.1 Arboretum (Continuous)
- Forest Replication for the purpose of biodiversity Enrichment of the Decommissioned Tailings Dam (Continuous)
- Arboretum (Continuous)
- Clonal Propagation (Continuous)
- 8. IEC on reforestation:

Is there any IEC activities (in the form of publication, public dissemination, lectures, etc.) initiated for the Community?

/<u>√</u>/Yes // None

Mangrove Conference; The Chronickel (Official Newspaper of CBNC); IEC presentations during mine tours, environmental exhibits, distribution of printed IEC materials (flyers, brochures, etc.). (Attach photocopy/ies of publication and other IEC papers.)

9. Services to the Community

Is there any reforestation assistance extended by the Company to the Community during the period under review?

/ <u>√</u> / Yes	11	None
------------------	----	------

If yes, enumerate and specify the kind and value of assistance extended. If assistance was by seedling donation, specify how many seedlings were donated.

Kind of Community Assistance	Value of Assistasnce
6. Give Livelihood by purchasing	Php. 120,000 worth of seedlings/Wildlings for the
wildlings/seedlings from IP's at SitioBohoy, Ocayan,	year 2020 & 2021
Bataraza, Palawan	
7. Seedlings and Donation and Joint	Tree Donations 3,938 seedlings
tree planting with local People Organization, Private	
Companies, and University Student	
	Other plants donation 4,335 seedlings
8. Engage in community by	Php. 175,000 worth of seedlings planted for the
purchasing and planting of 37,500 rhizophora spp.	year 2020 & 2021

10. Other Conservation Measures

- a. Is there any reforestation assistance extended by the Company to the Community during this period under review?
 Yes, See table above.
- b.Landscaping of mine and/or plant site surroundings?Yes _✓___Area 0.002has.No
- c. Use of vines and grasses for initial rehabilitation? Yes <u>√</u> Area <u>170</u> has. No ___

Specify type/kind of vines/grasses: Humidicola, Stylosanthes, Centro, Wild Sugar cane,

d. Establishment of herbal and ornamental garden:

Yes <u>✓</u> Area: Ornamental Garden <u>0.075</u> <u>Herbal Garden 0.09</u>

11. Wildlife and Faunal Migration:

Is there an actual sighting of wildlife/fauna in the reforestation area during validation?

	Common Name / Description
Crested Goshawk	Yellow throated leaf bird
Common lora	Olive backed sunbird
Lovely Sunbird	ZittingCisticola
Blue-eared Kingfisher	Glossy Swiftlet
Palawan Bulbul	White vented Shama
Brown-throated sunbird	Slender biled crow
Paddy field Pipet	Wandering whistling Duck
Asian-glossy Starling	Pygmy flowerpecker
Pale spider hunter	Ashy Drongo
Grey Heron	White bellied woodpecker
White Breasted wood	Pied Imperial Pigeon
Swallow	Grey Pigeon
Little Heron	Little Egret
Plantive cuckoo	Crested Lizard
Nicobar Pideon	Painted Bronzeback
Large-tailed Nightjar	little Spiderhunter
Greater Coucal	Eastern Reef Egret
Oriental Dwarf Kingfisher	King Quail
Common emerald dove	Palawan Flycatcher
Zebra Dove	Palawan Narrow-disked Gecko
Oriental Pranticol	Palawan Mangrove Snake
Hill Myna	North Philippine Temple Pitviper
White-bellied Sea Eagle	Philippine Toad
Pacific Swallow	Blue-headed Raquettail
Black-naped Monarch	Palawan Flower Pecker
Sulphur-bellied Bulbul	Black-chinned Fruit Dove
Shrenk's bittern	Black-headed Bulbul

Fauna species documented based on the fauna assessment 2020

FINDINGS/OBSERVATIONS:

1. Continuous production of seedlings thru clonal and wildlings propagation

2. Established rehabilitation areas were maintained and protected as evidenced of high survival rate including bamboo plantation and mangrove rehabilitation areas

3. Involvement/participation of community in the seedlings production, bamboo plantation establishment and mangrove area rehabilitation

4. Continuous maintenance and improvement of TSF1 and introduction of other conservation measures including planting of vines/grasses in sloping areas to prevent soil erosion/landslide

RECOMMENDATIONS:

1. Sustain/Continue the good practices, initiatives and strategies in the implementation of different programs/projects/activities as per approved AEPEP

D. AIR QUALITY IMPACT ASSESSMENT

			Location 1:	Upper Kin		EQPL		
Parameter	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Limit (DENR Int'l Stds)	Remarks
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
1. TSP (μG/Ncm)				42.4			300	Passed
Date/time of sam	pling: MMT	Sampling Ma	rch 3, 2021;8:35 /	AM – 9:35 AM				
Weather and win	d direction:							

		Sampling	Location 2:	Та	agpisa Area					
		F	Result							
Parameter	In S	MR	MMT Confirmatory Sampling (explain necessity		Red Flag	Action	Limit (DENR	Remarks		
			in box below)				Int'l Stds)			
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21						
1. TSP (μG/Ncm)				34			300	Passed		
Date/time of sa	mpling: MMT	Sampling Ma	rch 3, 2021; 10:00	AM – 11:00 A	M					
Weather and wind direction: Sunny										
Explanation of v	vhy confirmat	ory sampling	was conducted fo	r specific para	meter in the	sampling st	ation:			

		Re	sult		EQPL			
Parameter	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Limit (DENR Int'IStds)	Remarks
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
1. TSP (μG/Ncm)				37.4			300	within the criteria
Date/time of san	npling: MMT S	ampling Marc	h 5, 2021; 145	53 H – 1553 H				
Weather and wir	nd direction:							
Explanation of w	hy confirmato	ory sampling w	as conducted	for specific pa	rameter in th	e sampling s	tation:	

E. NOXIOUS GAS QUALITY IMPACT ASSESSMENT

		Sampling L	ocation 1:	Up	per Kinurong						
		Re	sult			EQPL					
Parameter	arameter In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Limit (DENR Int'l Stds)	Remarks			
	Current	Previous	Current	Previous							
	2Q21	1Q21	2Q21	1Q21							
NO ₂ , μg/Sm ³				<0.03			260	Passed			
SO ₂ , μg/Sm ³				0.46			340	Passed			
Date/time of sar	Date/time of sampling: MMT Sampling March 3, 2021										
Weather and wind direction:											
Explanation of w	hy confirmato	ory sampling w	as conducted	for specific pa	rameter in th	e sampling s	tation:				

		Sampling Lo	ocation 2:		Tagpisa Dike			
		Re	sult					
Parameter	In S	MR	MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Limit (DENR Int'l Stds)	Remarks
	Current	Previous	Current	Previous				
	2Q21	1Q21	2Q21	1Q21				
NO ₂				<0.03			260	Passed
SO ₂				0.43			340	Passed
Date/time of sar	npling: MMT S	Sampling Marc	h 3, 2021					
Weather and wi	nd direction:							
Explanation of w	hy confirmato	ory sampling w	as conducted	for specific pa	rameter in th	e sampling s	tation:	
Regular MMT Sa	mpling Activi	ty						

		Sampling Lo	ocation 3:	Bulan	jao Golf Cour	se				
		Res	sult			EQPL				
Parameter	In S	MR	MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Limit (DENR Int'l Stds)	Remarks		
	Current	Previous	Current	Previous						
	2Q21	1Q21	2Q21	1Q21						
NO ₂				<0.03			260	Passed		
SO ₂				0.39			340	Passed		
Date/time of san	npling: MMT S	Sampling Marc	h 3, 2021							
Weather and wind direction:										
Explanation of w	hy confirmato	ory sampling w	as conducted	for specific pa	rameter in th	e sampling s	tation:			
Regular MMT Sa	mpling Activi	ty								

• EQPL-Environmental Quality Performance Level

- Alert of Red Flag-early warning
- Action Level-point where management measures must be employed to reverse deterioration to pre-impact or optimum environmental quality
- Limit Level-regulated threshold of pollutant (standard that must not be exceeded)

Overall Air Quality Impact Assessment All results are within the standards.

F. WATER QUALITY IMPACT ASSESSMENT

*Note: Confirmatory Sampling (re-sampling activities) were conducted due to exceedances on the amount of Chromium Hexavalent (Cr^{6+}) present in the water samples collected during the 1st quarter 2021 MMT sampling activities. Results indicated in the following tables for Cr^{6+} of Stations 4-7 are based on the laboratory results of the confirmatory sampling (re-sampling activities) c/o Ostrea Mineral Laboratories, Inc.

		Sampling L	ocation 1A:	Ibe	nan Intake D	am		
		Res			EQPL			
	In SMR			MMT Confirmatory			Water	
			Sampling (explain		Red Flag		Quality	
Parameter			necessity in box below)			Action	Criteria	Remarks
	Current	Previous	Current	Previous	Ū		(DAO	
	2Q21	1Q21	2Q21	1Q21			2016-08)	
							Class C	
рН				7.57			6.5 – 9.0	Within the criteria
TSS, mg/L				1			80	Within the criteria
Cr +6, mg/L				<0.01			0.02	Within the criteria
Cd, mg/L				<0.003			0.005	Within the criteria
Fe, mg/L				<0.02			1.5	Within the criteria
Ni, mg/L				<0.02			0.2	Within the criteria
Pb, mg/L				<0.01			0.05	Within the criteria

Mn, mg/L				<0.003			0.02	Within the criteria			
As, mg/L				<0.0007			0.02	Within the criteria			
Date/time of sampling: MMT Sampling – March 4, 2021;1041 H											
Weather and w	Weather and wind direction: Sunny										
Explanation of v	Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station:										

	1							
		Res	sult			EQPL		
			MMT Cor	nfirmatory			Water	
	In S	SMR	Sampling (explain				Quality	
Parameter			necessity in	i box below)	Red Flag	Action	Criteria	Remarks
	Current	Previous	Current	Previous	Neuriag	Action	(DAO	
							2016-08)	
	2Q21	1Q21	2Q21	1Q21			Class C	
рН				7.70			6.5-9.0	
TSS, mg/L				16			100	within the criteria
As, mg/L				<0.0007			0.04	within the criteria
Cd, mg/L				<0.003			0.01	within the criteria
Pb, mg/L				<0.01			0.1	within the criteria
Mn, mg/L				<0.003			4	within the criteria
Ni, mg/L				<0.02			0.3	within the criteria
Cr ⁶⁺ , mg/L				<0.01			0.1	within the criteria
BOD (mg/L)								
Oil and								
Grease								
Date/time of sa	mpling: MMT	Sampling Marc	ch 4, 2021;120	7 H				
Weather and w	ind direction:	Sunny						
Explanation of v	why confirmate	ory sampling w	as conducted	for specific par	rameter in th	e sampling st	ation:	

Sampling Location 4: Lower Kinurong Siltation Pond Discharge

		Res	sult			EQPL		
Parameter	in S	SMR	Sampling	nfirmatory g (explain n box below)	Ded Flee	Action	Water Quality Criteria	Remarks
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21	Red Flag	Action	(DAO 2016-08) Class C	
рН				8.16			6.5-9.0	within the criteria
TSS, mg/L				4			100	within the criteria
As, mg/L				<0.0007			0.04	within the criteria
Cd, mg/L				<0.003			0.01	within the criteria
Pb, mg/L				<0.01			0.1	within the criteria
Mn, mg/L				0.081			4	within the criteria
Ni, mg/L				0.03			0.3	within the criteria
Cr ⁶⁺ , mg/L				<0.01			0.1	within the criteria
Date/time of sa	mpling: MMT	Sampling Marc	ch 4, 2021 ;111	LO H				•
Weather and w	ind direction:	Sunny						
Explanation of v	why confirmat	ory sampling w	as conducted	for specific par	rameter in th	e sampling st	tation:	

Sampling Location 5: Lower Togpon Siltation Pond Discharge

		Re	sult		EQPL				
Parameter	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Water Quality Criteria	Remarks	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21	- Red Flag	Action	(DAO 2016-08) Class C		
рН				7.66			6.5-9.0	within the criteria	
TSS, mg/L				6			100	within the criteria	
As, mg/L				<0.0007			0.04	within the criteria	
Cd, mg/L				<0.003			0.01	within the criteria	
Pb, mg/L				<0.01			0.1	within the criteria	
Mn, mg/L				< 0.003			4	within the criteria	
Ni, mg/L				<0.02			0.3	within the criteria	
Cr ⁶⁺ , mg/L				0.07			0.1	within the criteria	
Date/time of sa	mpling: MMT	Sampling Marc	ch 4, 2021 ;123	32 H			1	•	
Weather and wi	ind direction:	Sunny							
Explanation of v	why confirmat	ory sampling w	vas conducted	for specific pa	rameter in th	e sampling st	ation:		

Sampling Location 6: <u>Confluence of S4 and S5 (Confluence of Togpon-Kinurong Siltation Pond Discharge)</u>

Sampling Location 7: Downstream of Confluence, 500 m from S6

		Res	sult			EQPL		
Parameter	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Water Quality Criteria	Remarks
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21			(DAO 2016-08) Class C	
рН				7.72			6.5-9.0	within the criteria
TSS, mg/L				3			100	within the criteria
As, mg/L				<0.0007			0.04	within the criteria
Cd, mg/L				<0.003			0.01	within the criteria
Pb, mg/L				<0.01			0.1	within the criteria
Mn, mg/L				<0.003			4	within the criteria
Ni, mg/L				<0.02			0.3	within the criteria
Cr ⁶⁺ , mg/L				0.07			0.1	within the criteria
Date/time of sa	mpling: MMT	Sampling Marc	h 4, 2021;122	7 H				
Weather and wi	ind direction:	Sunny						
Explanation of v	vhy confirmat	ory sampling w	vas conducted	for specific pa	rameter in th	e sampling st	tation:	

Sampling Location E - Emuent: Supernatant water sampling Port at Causeway (CBNC Emuent)	Sampling Location E - Effluent:	Supernatant Water Sampling Port at Causeway (CBNC Effluent)
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		Res	sult		EQPL			
Parameter	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	DENR Standard (DAO	Remarks
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21			2016-09) Class C	
рН	2021	1021	2021				6.5 – 9.5	Within the Criteria
рп				8.08			0.5 - 9.5	
TSS, mg/L				9			100	Within the Criteria
Cr +6, mg/L				0.01			0.1	Within the Criteria
Cd, mg/L				<0.003			0.01	Within the Criteria
Fe, mg/L				1.07			7.5	Within the Criteria
Ni, mg/L				<0.02			0.3	Within the Criteria
Pb, mg/L				<0.01			0.1	Within the Criteria
Mn, mg/L				0.361			4	Within the Criteria

63 <0.005	200	Within the Criteria
<0.005		
	0.04	Within the Criteria
0.054	1.5	Within the Criteria
<0.0004	0.004	Within the Criteria
<0.0002	0.2	Within the Criteria
1; 1404 H)	· · ·	
cted for specific parameter in the	e sampling station:	
	<0.0004 <0.0002 1; 1404 H)	<0.0004

Sampling Location 12: Coral Bay (Receiving Water Body of CBNC Effluent)

		Res	sult		EQPL			
Parameter	In S	MR	MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Water Quality Criteria	Remarks
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21			(DAO 2016-08) Class SC	
рН				7.93			6.5-8.5	within the criteria
TSS, mg/L				1			100	within the criteria
As, mg/L				<0.0007			0.04	within the criteria
Cd, mg/L				<0.003			0.01	within the criteria
Fe, mg/L				<0.02			7.5	within the criteria
Pb, mg/L				<0.01			0.1	within the criteria
Mn, mg/L				<0.003			4	within the criteria
Ni, mg/L				<0.02			0.3	within the criteria
Cr ⁶⁺ , mg/L				<0.01			0.1	within the criteria
Date/time of sa	mpling: MMT	Sampling (Mar	ch 4, 2021; 13	38 H)			1	
Weather and wi	ind direction: S	Sunny						
Explanation of v	why confirmate	ory sampling w	as conducted	for specific pa	rameter in th	e sampling st	ation:	

- EQPL-Environmental Quality Performance Level
 - o Alert of Red Flag-early warning
 - Action Level-point where management measures must be employed to reverse deterioration to pre-impact or optimum environmental quality
 - o Limit Level-regulated threshold of pollutant (standard that must not be exceeded)

Overall Water Quality Impact Assessment
All results are within the standards.

G. Compliance with good practices in Solid and Hazardous Waste Management (Directions: The MMT shall indicate its observations on how solid waste is handed, stored, disposed.,)

	E	CC/EPEP Comm	itments	Adequate?	Remarks (as of July
Type of Waste	Handling	Storage	Disposal	Yes No	1, 2021)
I101 – Used Oil	Collected Stored in H		Hauled and treated	✓	34.56 tons currently
	thru oil-	THWSF with	by DENR accredited		stored in THWSF.
	water	compartments,	haulers and		
	separators	adequate	treaters (Clean Leaf		Note: All Hazardous
	and	ventilation,	International		Waste listed are properly
	contained	signage, and	Corporation)		contained and stored at
	in steel	fire hydrants.			CBNC's storage facility at
	drums				its plant complex at Rio
			Per submitted		Tuba Bataraza , Palawan
			report and		while awaiting for
			Certificate of		transport to treater. All

				1	
			Treatment/Final		containers are with
			Disposal, 66.6 tons		pictograms in
			were hauled and		compliance to Globally
			treated this		Harmonized System
			semester.		mandate.
l104 – Oil-			Per submitted	✓	5.12 tons currently
Contaminated Rugs			report and		stored
_			Certificate of		
			Treatment/Final		
			Disposal, 8.58 tons		
			were hauled and		
			treated this		
			semester.		
I104 – Used Oil			semester.	\checkmark	0.45 tons currently
Filters					stored
D407 – Busted			Per submitted	\checkmark	0.20 tons currently
					stored
Fluorescent Lamps			report and Certificate of		stored
			Treatment/Final		
			Disposal, 0.24 tons		
			were hauled and		
			treated this		
			semester.		
D407 – Busted CFL				~	0.04 tons currently
Bulbs			Den subscitted	\checkmark	stored
B299 – Used Filter			Per submitted	•	6.87 tons currently
Cloth			report and		stored
			Certificate of		
			Treatment/Final		
			Disposal, 17.93		
			tons were hauled		
			and treated this		
			semester.		
M506 – Defective			Per submitted	✓	0.50 tons currently
computers,			report and		stored
monitors, printers			Certificate of		
			Treatment/Final		
			Disposal, 0.5 tons		
			were hauled and		
			treated this		
			semester.		
D406 – Used Lead-				✓	1.20 tons currently
Acid Batteries					stored
C399 – Other Alkali			Per submitted	✓	
wastes			report and		
			Certificate of		
			Treatment/Final		
			Disposal, 2.1 tons		
			were hauled and		
			treated this		
C200 Anian Desine			semester.	✓	
C399 – Anion Resins				•	0.90 tons currently stored
Residual Wastes	Color-	Company-hired	Garbage dumped	\checkmark	Reported a total of 1,284
	coded	trucks pick up	to the landfill is		metric tons of solid
	trash	the non-	covered with soil		wastes generated and
	cans/bins	hazardous	regularly.		collected from CBNC HPP
	were	residual wastes			Complex & Contractors
					for the semester.
	distributed	and disposed			ior the semester.
1	ot ot		1	1	1
	at strategic	to GP-28, the			
	location	designated			
	location within the	designated landfill which			
	location within the CBNC HPP	designated landfill which was a formerly			
	location within the	designated landfill which			

	proper label for sorting.				
Recyclable		MRF		√	Worn-out plastic pallets were recovered and sold to recyclers.
Biodegradable	Compost pit			✓	
Hospital/Medical	Regular hauling by authorized personnel	Waste vault	Vault	✓	

H. Compliance with good practices in Chemical Safety Management (for those companies using/producing Chemicals listed in EMB's PCL & CCO List)

		Adequate	?* (Put/lf Ac	lequate)	
Chemicals in PCL and CCO	Risk Management	Training	Handling	Emergency Preparedness	Remarks
N/A					

I. Complaints Verifications and Management

Date Filed		Filed Wh	Nature of	Resolutions	
	DENR	Company	Complaint	Made	
None					