

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

RIO TUBA NICKEL SILICATE ORE PROJECT BARANGAY RIO TUBA, BATARAZA, PALAWAN RIO TUBA NICKEL MINING CORPORATION

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

I. BASIC INFORMATION

A. Nickel Silicate Ore Project.

ECC Control No./Reference Code No.	ECC-CO-1312-0043
Date ECC Issued	09 March 2015
MPSA Control No./Reference Code No.	114-98-IV
Date MPSA Issued	04 June 1998
Project Current Name	Rio Tuba Nickel Laterite Project
Project Name in the ECC	Rio Tuba Beneficiated Nickel Silicate Ore Expansion (Production/Extraction Output) Project
Project Status	Commercial Operation
Geographical Coordinates of the Project	X: 8°32'55"-8°37'38" Y: 117°26'08"-117°21'24"
Proponent Name	Rio Tuba Nickel Mining Corporation
Proponent Contact Person/Position	Engr. Rommel L. Cruz/Vice-President for Operations/Cynthia E. Rosero – Resident Mine Manager
Proponent Mailing Address	29 th Floor, NAC Tower, 32 nd Street, Bonifacio Global City, Taguig City
Proponent Telephone No./Fax No.	Telephone No.: 7879-601; Fax No.: 8128-826/ Contact No. +963178104686
Proponent Email Address	rommel.cruz@nickelasia.com / cynthia.rosero@rtn.nickelasia.com
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 OF COMPLIANCE

Requirements		Complied		Remarks/ECC or EPEP Condition#
		Yes	No	
Compliance with ECC Conditions/Commitments	Validity	✓		RTNMC applied for ECC on its proposed Rio Tuba Nickel Mining Project (AMA-IVB-144A) located at Barangays Rio Tuba, Ocayan and Taratak. ECC-CO-1906-0015 was granted to the company on August 22, 2019 although actual mining operation in the MPSA No. 114-98-IV-Amended I is yet to commence as RTNMC is still securing all necessary

				and relevant permits from other government agencies. Accordingly, actual mining operation of the company is still within the initial 990 hectares under MPSA No. 114-98-IVB.
	Project coverage/limits/components	✓		Included in the ECC
	EMP and updates as deemed necessary	✓		A 2010 revised EPEP was submitted to MGB MIMAROPA for the project. Updates are reflected in the submission of the Annual EPEP. AEPEP 2021 was approved by MGB MIMAROPA on 04 February 2021 with COA No. 2021-02-MIMAROPA
	Conduct of Compliance and Impact Self-Monitoring	✓		Various mitigating measures stipulated in the AEPEP 2021 for impacts on air, water and noise are continuously being implemented. In-house monitoring for impacts on air, water and noise are regularly conducted. Samples are collected monthly for analysis of third party (DENR recognized) laboratory. All results of the ambient and effluent monitoring are within DENR standards. Preparation of Compliance Monitoring Report (CMR) for January to June (1 st Semester 2021) is on-going and will be submitted thru online to EMB MIMAROPA on or before 30 July 2021.
	Regular reporting of Self-Monitoring Results by the Project Proponent	✓		The 1 st and 2 nd quarter SMRs were submitted thru online to EMB MIMAROPA on 15 April 2021 and 15 July 2021 respectively.
	Other sectoral requirements mandated by other agencies to be complied with	✓		Renewals of permits were secured during the first semester. These include Mayor's Permits for RTNMC facilities and other permits specified in the ECC-CO-1312-0043 - Part III. Condition 1,2,3,4,5,6,7,8
Compliance with EPEP Commitments	Implementation of Environmental Impact Control Strategies	✓		Implementation of Environmental control measures/commitments included in the approved 2021 AEPEP are continuous. RTNMC is ISO 14001:2015 (Environmental Management System) certified valid from 17 May 2019 to 16 May 2022.
	Safety	✓		The 2021 Annual Safety and Health Program for the project were approved by the MGB MIMAROPA Region on 16 December 2020 with COA No. SHP - 2021 – MIMAROPA – 05.
	Rehabilitation			Mining Rehabilitation and Reforestation Program is included in the activities of approved 2021 AEPEP.
Compliance with SDMP Commitments		✓		The 2021 Annual Social Development and Management Program for the project was approved by MGB MIMAROPA with COA No. ASDMP #

			2021-03-MIMAROPA (4 th). SDMP activities are continuously being implemented.
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	✓	
Accountability- qualified personnel are charged with the routine monitoring of the project activities in terms of education, training, knowledge and experience of the environmental team		✓	The company has a MEPEO which oversees two (2) sections - the Pollution Control Section and the Mine Rehabilitation and Reforestation Section. Both sections are composed of technically competent personnel with the inclusion of accredited Pollution Control Officers, licensed foresters and engineers.
Others, please specify			

III. PROCESS DOCUMENTATION OF ACTIVITIES UNDERTAKEN

Activities	Date Conducted	MMT Members Involved	Methodology/Other Remarks
Document Review of:			
• Compliance with ECC Conditions/Commitments	19-24 July 2021	All MMT members. Please see signatures below.	Conducted during the MMT activities
• Compliance with EPEP & SDMP Commitments	19-24 July 2021		
• Compliance with DENR Permits Conditionalities	19-24 July 2021		
• Compliance with SEP Clearance Conditionalities	19-24 July 2021		
Site Validation – Ocular	19-24 July 2021		
Site Validation - Confirmatory Sampling (if conducted)	1-8 March 2021 (<i>1st quarter 2021 MMT sampling</i>) <i>Resampling activities for Cr⁶⁺ was conducted on 15 March 2021.</i>	MMT Sampling Team	No sampling activities were conducted for the 2 nd quarter. The 3 rd quarter sampling activities were conducted on 19-24 July 2021.

IV. COMPLIANCE MONITORING RESULTS AND DISCUSSIONS

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

A.1. Nickel Laterite Project

Parameter	Specification (specify if in ECC or EPEP)	Within Specs?		Remarks - Description of Actual Implementation
		Yes	No	
Project Location (indicate geographic coordinates)	X: 8°32'55"-8°37'38" Y: 117°26'08"-117°21'24"	✓		
Project Area (ha)	5,625 hectares	✓		990 has.-total MPSA Area
Capital Costs	P3.628B	✓		
Type of Minerals	Laterite	✓		
Mining method(s)	Surface Mining	✓		
Production	Production capacity of 10.0 Million WMT of saprolite ores and 5.0 Million WMT of limonite	✓		Ore Production: 2,630,323.50 WMT Milled/Processed Ore: 2,953,447.75 WMT
Mill/Processing Plant	N/A			
Mine Life	Year 2023	✓		
Mineral Reserves/ Resources	46,495,000 WMT	✓		
Access/Transportation	Private plane or ship; Land transportation	✓		
Power Supply	From CBNC 22-megawatt coal-fired power plant; 75KW cat and 132 KW Olympian generator sets for Pier site	✓		
Mining Equipment	Production equipment includes dump trucks, bulldozers, track excavators and loaders, wheel loaders, and drills.	✓		
Workforce	As of June 30, 2021 RTNMC has 473 regular employees	✓		66.2% of RTNMC's regular employees are from the Municipality of Bataraza and 21.6% are from other municipalities within Palawan while the remaining 12.2% are from Metro Manila and other provinces.
Development/Utilization Schedule	Mine life until year 2023	✓		
Other Components				

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

B.1. Compliance to other ECC Conditions – Nickel Laterite Ore Project (ECC-CO-1312-0043)

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

ECC Conditions	Complied?		Proof of Compliance/Remarks
	Yes	No	
<p>A. This Certificate shall cover the existing and proposed Rio Tuba Beneficiated Nickel Silicate Ore Expansion (Production/Extraction Output) Project with a maximum annual extraction rate of 4.0 Million WMT of saprolite ores and 6.0 Million WMT of limonite; and annual production capacity of 3.0 Million WMT of saprolite ores and 5.0 Million WMT of limonite within the 990 hectares of MPSA-114-98-IV.</p> <p>The Project shall consist of the following major components:</p> <p>A.1. 61-hectares Pier Stockyard; and</p> <p>A.2. Mining facilities and equipment (town site infrastructure, mine and plant site facilities, fuel storage, RTNMC domestic water system and other facilities).</p>	✓		<p>Ore Production: 2,630,323.50 WMT Milled/Processed Ore: 2,953,447.75 WMT</p>
<p>I. CONDITIONS</p> <p>ENVIRONMENTAL MANAGEMENT</p> <p>All commitments, appropriate mitigating/enhancement measures and monitoring requirements contained in the EPRMP, particularly in the Environmental Management and Monitoring Plans (EMMoPs), as approved by the EMB, shall be instituted to minimize any adverse impact of the Project to the environment throughout its implementation, including among others the following:</p> <p>1. Observance of good vegetative practices, proper land use, sound soil and water management, and proper waste management throughout the Project implementation, which include:</p> <p>a. Limiting the clearing of vegetation within the planned areas to be mined and conducting re-vegetation/reforestation on idle land areas in the site with endemic species to provide carbon sink and restore biodiversity;</p> <p>b. Strict implementation of effective engineering measures to stabilize and control erosion of the affected side slopes of the roads and nearby gullies, creeks, rivers and settling ponds within the Project site;</p>	<p>✓</p> <p>✓</p> <p>✓</p>		<p>AEPEP 2021 was approved by MGB MIMAROPA Region on February 4, 2021 with COA No. 2021-02-MIMAROPA.</p> <p>All activities in the submitted AEPEP are generally being implemented.</p> <p>No newly opened areas during the period. No rehabilitation activities conducted for the 1st semester of 2021. Maintenance activities for established rehab areas are regularly conducted.</p> <p>Slope stabilization and put-up of boulder toes at stockpiles are being practiced. Good/defined drainage systems for the open pit were established and continuously being maintained. Five siltation ponds including series of Silt Containment Sumps (SCS) were being maintained.</p>

<p>c. Using the recovered topsoil and overburden materials for re-soiling or as soil cover for rehabilitation of the mined-out areas, waste dumps, and other disturbed areas, as well as for landscaping of designated suitable areas. Stockpiling should be maintained at not more than three(3) meters high and stabilized by vegetation to protect it from erosion;</p> <p>d. Proper stockpiling and disposal of the overburden and waste materials generated from the mining operations, silt materials scooped-out from the settling ponds, and other solid waste in permanent, stabilized areas away from any water body and drainage systems, and maintaining them in safe and non-polluting conditions;</p>	<p>✓</p> <p>✓</p>	<p>Overburden materials and top soils were collected and will be used as matting in the rehabilitation of mined-out areas. The materials are also being used in the maintenance of Sanitary Landfill.</p> <p>Overburden, solid waste and other waste materials are stored, disposed and managed accordingly. A total of 178.22 metric tons of solid wastes was produced for 1st semester 2021. Silt recovery is being practiced. Reported a total of 38,735 cubic meters silt materials dredged from siltation ponds, SCS and canals for 1st semester 2021.</p>
<p>2. Implementation of an intensive and effective Information, Education and Communication (IEC) Program to inform and educate all stakeholders, particularly the local residents, about the Project, its impacts, the corresponding mitigating measures, as embodied in the EPRMP and the conditions stipulated in this Certificate for greater awareness, understanding and sustained acceptance of the Project. The proponent shall implement an annual detailed IEC program in coordination with the Mines and Geosciences Bureau (MGB) Region IVB and EMB Region IVB;</p>	<p>✓</p>	<p>Continuous IEC activities are being conducted still with regulated number of audiences and participants in conformance with Covid-19 prevention measures. The company continuously carries-out information drive activities relative to environmental awareness.</p> <p>Conducted Environmental Orientation to a total of 29 newly hired RTNMC employees and contractors; Accommodated a total of 197 visitors for 1st semester 2021.</p> <p>1st Quarter 2021. Covers the celebration of World Wildlife Day, International Day of Forests, World Water Day and Philippine Water Week.</p> <p>2nd Quarter 2021. Covers the facilitation of #RTN2021MOO Virtual Pub Quiz re: ocean and marine environment thru a virtual quiz platform called Ahaslides joined by 17 participants aged 15 to 18 years old on May 29, 2021 and #RTN2021 Poster Making Contest wherein a total of 40 entries highlighting the theme for this year's celebration of Month of the Ocean were submitted, winners were announced during the World Oceans Day on June 8, 2021, conduct of tree planting activities on June 5, 2021 in celebration of World Environment Day and on June 25, 2021 (Philippine Arbor Day) which also kick started the "Adopt-a-Forest Program" of the company wherein departments/sections are assigned with a rehabilitation area for adoption for care and maintenance.</p> <p>Note: The Company also utilized Social Media Platforms to provide information and/or updates re: its operations, significant activities and accomplishments. Significant updates re: Environment, Safety and Health and Social Development Projects/Programs/Activities are regularly posted. RTN stories were also published online thru Palawan News which significantly helps in disseminating information</p>

			re: the company and its impact to the community and the environment.
3. Implementation of climate change initiatives including reforestation (may include available areas outside the MPSA) to mitigate greenhouse gas (GHG) emissions of the Project in line with the DENR's thrust for GHG emission reduction programs. The program shall be done in coordination with CENRO having jurisdiction over the area and submitted to EMB CO sixty (60) days upon receipt of this certificate;	✓		RTNMC is continuously working on minimizing its Carbon Footprint through: <ul style="list-style-type: none"> a. Efficient use of energy and resources; b. Progressive rehabilitation within its mined-out area with a total of 196.64 hectares; c. Establishment and maintenance of 659.27 hectares plantations through the National Greening Program; d. Continuous monitoring of GHG emissions vis-à-vis sequestration capacity
4. The proponent shall conduct socio-economic impact study one year prior to submission of new SDMP;	✓		The Social Impact Assessment (SIA) was conducted in 2018.
5. The Proponent shall undertake 100% forest inventory of all forested portions/patches and every five (5) years thereafter, the results of which shall be submitted to the EMB;	✓		The conduct of timber inventory was already completed in March 2019 and the Timber Inventory Report was already submitted and received by EMB CO, EMB MIMAROPA and MGB MIMAROPA last 16 September 2019.
6. A Watershed Management Plan shall be prepared in coordination with the DENR Regional Units and submitted to the FMB for review and endorsed to the Office of the Undersecretary for Environment and Programs Development for approval. A status report on the implementation of the same including an inventory of each tree species shall be submitted every year thereafter.	✓		The Company is setting up for the updating and revision of the initially prepared Watershed Management Plan in 2021. A copy of the existing WMP was already resubmitted to DENR MIMAROPA thru CENRO Brooke's Point and PENRO Palawan for appropriate review on 22 November 2018. Possible revision will be done in coordination with agencies concerned.
7. The proponent shall continue to monitor the aquatic biota of all surface water resources in the area;	✓		The 2021 Aquatic Resource Assessment was conducted by Gaia South Inc. on 8-12 January 2021.
GENERAL CONDITIONS			
8. The mining operation shall conform with the provisions of RA 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990), RA 8749 (Philippine Clean Air Act of 1999), RA 9003 (Ecological Solid Waste Management Act of 2000), and RA 9275 (Philippine Clean Water Act of 2004);	✓		Provisions of the applicable laws and regulations were complied.
9. The proponent shall comply with the environmental management and protection requirements of the pertinent provisions of the Philippine Mining Act of 1995 (RA 7942 and its Consolidated Implementing Rules and Regulations (DAO 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, but not limited to, the following: <ul style="list-style-type: none"> a. Submission of a revised Environmental Protection and Enhancement Program (EPEP) integrating the Final Mine Rehabilitation and/or Decommissioning Plan (FMR/DP) 	✓		The revised FMRDP was submitted to MGB MIMAROPA on 17 May 2013 and was approved on August 2016. The EPEP integrating the AMA-IVB-144A and the existing MPSA 114-98-IV was submitted to MGB MIMAROPA on 11 February

<p>b. Setting up of a Contingent Liability and Rehabilitation Fund (CLRF) and Environment Trust Fund (ETF);</p> <p>c. Maintain the Mine Environmental Protection and Enhancement Office (MEPEO) to competently handle the environment-related aspect of the Project. In addition to the monitoring requirements as prescribed under the rules and regulations of the Philippine EIS System, the MEPEO shall also monitor the actual Project impacts vis-à-vis the predicted impacts and management measures identify in the EPRMP including the regular submission of Compliance Monitoring Report (CMR) in accordance with the prescribed format;</p> <p>d. Continuance of a Mine Rehabilitation Fund Committee (MRFC) and a Multipartite Monitoring Team (MMT). A local DOH representative shall be included as member in the MMT;</p> <p>e. Submission of a Social Development and Management Program (SDMP) to the MGB Region IVB for approval, prior to Project implementation. The EMB shall be furnished with the SDMP within thirty (30) days from its approval;</p> <p>f. Continuance of a Community Relations Officer (CRO);</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>		<p>2019.</p> <p>CLRF and ETF are established and maintained. All mandatory fund lodgings were secured per submitted bank statement (as of 30 June 2021).</p> <p>EnP Janice M. Tupas is the designated MEPEO of RTNMC. The company has accredited Pollution Control Officers and trained Environmental Assistants under the Pollution Control Section and registered Forester in the Mine Rehabilitation and Reforestation Section.</p> <p>Recent MMT Validation 4th Quarter: 01 – 08 March 2021 1st and 2nd Quarter: 19-24 July 2021</p> <p>Recent MRFC Meeting via zoom – 25 March 2021 There are fifteen (15) MMT members being maintained including a representative from DOH and religious sector.</p> <p>The 2021 Annual SDMP was approved by MGB MIMAROPA with COA No. ASDMP # 2021-03-MIMAROPA (4th).</p> <p>Mr. Reynaldo M. Dela Rosa is the Community Relations Officer (CRO).</p>
<p>10. The proponent shall ensure that its contractors and subcontractors properly comply with the relevant conditions of this Certificate;</p>	<p>✓</p>		<p>Complied and maintained.</p>
<p>11. The proponent shall protect the headwaters and natural springs/wells within the Project site that are being utilized as sources of potable water by the community. Should the development activities affect the headwaters and natural springs/wells, the proponent shall immediately provide alternative sources of potable water to the affected community.</p>	<p>✓</p>		<p>Complied and maintained.</p>
<p>II. RESTRICTIONS</p> <p>12. Open pit or surface mining method, without blasting, shall be utilized in ore extraction;</p> <p>13. Transfer of ownership of the project carries the same conditions and restrictions for which written notification must be made by herein grantee to EMB within fifteen (15) days from such transfer.</p>	<p>✓</p> <p>✓</p>		<p>Complied and maintained.</p> <p>No transfer of ownership yet.</p>

III. OTHER REGULATORY REQUIREMENTS		
1. Compliance with the Sanitation Code of the Philippines	✓	Certificate of Potability for drinking water supply is annually secured and renewed. Certificate issued by the Municipal Health Office (MHO) on 22 December 2020 and is valid for one (1) year.
2. Compliance with the Labor Code of the Philippines	✓	Complied and maintained.
3. Compliance with the Building Code of the Philippines	✓	Building Permits were secured and valid.
4. Provision of proper storm drainage canal, concrete culverts, and other flood control measures to adequately receiving bodies of water	✓	Storm drainage canal, concrete culverts, and other flood control measures are generally well-maintained. Five (5) silt containment ponds and sixteen (16) active silt collector sumps in place. Discharge Station was concreted and improved.
5. Securing of water permit for the allocation of water supply	✓	NWRB Water Permit No. 159 was issued on 16 June 1975. Annual payment of dues is facilitated regularly.
6. Implementation of a detailed Traffic Management Plan	✓	Traffic Management at main haulage road is handled by LGU Rio Tuba and assisted by the Admin and Safety Office specifically the Safety and Security at Macadam Road. RTNMC is also providing logistics for the Traffic Management Program. RTNMC and CBNC worked on expansion and improvement of haulage road by concreting all 4 lanes of Macadam Road.
7. Implementation of Solid Waste Management System	✓	Waste segregation, recycling and retrieval within the RTNMC Mine Site are being managed by RTNMC. The Operation of Sanitary Landfill is also being managed by the Company in coordination with the CBNC. Materials Recovery Facility was also established and an Integrated Waste Management Program for RTNMC controlled areas is in practice.
8. Securing of tree cutting permit	✓	A Special Tree Cutting and Earth-balling Permit (STCEP) was issued by DENR on 3 May 2021 with certificate No. RIVB-15-2021 for its Umawi operation.
IV. ENVIRONMENTAL PLANNING RECOMMENDATIONS FOR THE PROPONENT		
9. Priority of employment be given to qualified local residents. Adequate public information for jobs available to local residents in the affected areas needs to be provided.	✓	Complied. As of 30 June 2021, 66.2% of RTNMC's regular employees are from the Municipality of Bataraza and 21.6% are from other municipalities within Palawan while the remaining 12.2% are from Metro Manila and other provinces.
10. An independent third party auditor be commissioned to undertake an environmental audit, including a continuing study on the effects of the Project on the health of the workers and affected residents, particularly women and children. The result of the third party environmental audit, including the auditing of risks and hazards of the Project, shall be submitted to EMB and the MGB, while the result of the continuing health study shall be submitted, every	✓	The Environmental Audit was conducted by the Gaia South, Inc. last 12-15 September 2019. Per presented document (receiving copy), hard copy of the report was already submitted and received by MGB on 3 March 2021. Copy of which was also submitted to EMB. The Environmental Health Impact Assessment (EHIA) on the other hand was conducted on 22-27 October 2019.

two (2) years, to the Department of Health (DOH).			
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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.

Project Impacts	Mitigating Measures/Control Strategies		Effective		Recommendation
	Planned	Field Findings and Observations	Yes	No	
Mining Operation	1. LAND RESOURCES				
	1.1 Backfilling & Reshaping of Mined-out Areas	RTNMC reportedly spent PHP 1,408,000.00 (92% of budget) but no physical accomplishment??		X	Adhere to the planned schedule of activities.
	To backfill and reshape 20,000 cu.m. with an annual budget of PHP1,525,000.00 at P16, P7 & I23.				
	1.2 Revegetation of Mined-out Areas	RTNMC reportedly spent PHP 6,227,580.00 (37% of budget) at the Eco-tourism area, which corresponds to only 4% of the physical target.		X	Accelerate this activity to catch up with the plan for CY 2021.
	To revegetate 5 hectares in 1 project area with an annual budget of PHP16, 809,000.00.				
	1.3 Maintenance/Enhancement of rehabilitated areas within MPSA	RTNMC was able to maintain/enhance 62 hectares of rehabilitated areas which is equivalent to 32% of its target. RTNMC spent PHP1, 114,130.00 (36% of the budget).		X	Accelerate this activity to catch up with the plan for CY 2021.
	To maintain/enhance 196.44 hectares of rehabilitated areas within MPSA with an annual budget of PHP3,078,000.00				
	1.4 Reforestation-of areas outside MPSA (New Plantation - NGP/Buffer zone)	RTNMC reportedly spent PHP553, 610.00 (29% of the budget) but with no physical accomplishment??		X	Accelerate this activity to catch up with the plan for CY 2021.
	To reforest 55.3 hectares outside of MPSA with an annual budget of PHP1,932.000.00				
	1.5 Maintenance/Enhancement of established Reforested/NGP Areas	RTNMC was able to maintain/enhance 53 hectares (100% of the target) of coffee plantation and 210 hectares (37% of the target) of NGP areas and reportedly spent a total of PHP343,740.00 (20% of the budget)		X	Accelerate this activity to catch up with the plan for CY 2021.
	To maintain/enhance 53 hectares of coffee plantation and 562.83 hectares of NGP areas with an annual budget of PHP1, 758,000.00.				
	1.6 Nursery Operation: In-house seedling production	No clonal project was established (0% of the target) but produced 168		X	Accelerate this activity to catch up with the plan for CY 2021.

Project Impacts	Mitigating Measures/Control Strategies		Effective		Recommendation
	Planned	Field Findings and Observations	Yes	No	
	To establish 1 clonal project at the Central Nursery to produce 2,500 cloned seedlings with an annual budget of PHP2,901,000.00	cloned seedlings (7% of the target). RTNMC spent PHP162,000.00 (6% of the budget)			
	1.7 Nursery Operation: Out-sourced seedling production	RTNMC was only able to outsource 2,445 seedlings (1% of the target) but already spent PHP1,040,000.00 (40% of the budget)		X	Accelerate this activity to catch up with the plan for CY 2021.
	To outsource 200,000 seedlings with an annual budget of PHP2, 600,000.00.				
	1.8 Nursery Operation: Organic Fertilizer Production	RTNMC was able to conduct 1 organic fertilizer production project (50% of the target) for PHP370, 100.00 (76% of the budget).	✓		Continue to conduct the organic fertilizer production projects.
	To conduct 2 organic fertilizer production projects with an annual budget of PHP490,000.00				
	1.9 Establishment & Maintenance of Stockpile & Slope Greening	No new area was established (0% of the target) but 5 hectares were maintained for PHP866,620.00 (66% of the budget).		X	Accelerate this activity to catch up with the plan for CY 2021.
	To establish 3 hectares of new and maintain 10 hectares of the stockpile and slope greening for an annual budget of PHP1,304,000.00.				
	1.10 Repair and Maintenance of envi-structures view decks, parks, nurseries, road maintenance)	RTNMC already spent PHP356,280.00 (158% of the budget) but only accomplish 25% of the target.		X	Accelerate this activity to catch up with the plan for CY 2021.
	To repair and maintain 1 envi-structure for an annual budget of PHP225,000.00.				
	2. WATER RESOURCE AND QUALITY				
	2.1 Maintenance of Siltation Ponds/Silt Collector Sumps	RTNMC was able to maintain 2 projects but has only dredged 53,430 cu.m. (26% of the target) at a cost of PHP3,175,000.00 (20% of the budget).		X	Accelerate this activity to catch up with the plan for CY 2021.
	To maintain 2 siltation ponds/silt collector sumps and dredge 203,000 cu.m. of silt materials with an annual budget of PHP15,830,000.00.				
	2.2 Maintenance of Canals	No accomplishment (0% of the target) but reported spent PHP44,280.00 (3% of the budget).		X	Accelerate this activity to catch up with the plan for CY 2021.
	To maintain 13,000 linear meters of drainage system with an annual budget of PHP1,317,000.00.				
	2.3 Waste Water Treatment Facility (WWTF) operation and maintenance	14 WWTF (100% of the target) with a cost only PHP253,490.00 (32% of the budget)	✓		Continue to practice proper wastes water treatment and management.
	To maintain and operate 14 WWTF with an annual budget of PHP788,000.00.				
	2.4 Solid Waste Management	RTNMC was able to recycle	✓		Continue the proper solid

Project Impacts	Mitigating Measures/Control Strategies		Effective		Recommendation
	Planned	Field Findings and Observations	Yes	No	
	To recycle 50% of solid waste produced with an annual budget of PHP1,907,000.00	84% (168% of the target) of solid wastes produced with a cost of only PHP937,710.00 (49% of the budget).			waste management.
	2.5 Hazardous Waste Management	RTNMC was able to treat 71% (100% of the target) of hazardous wastes produced at a cost of only PHP188,600.00 (43% of the budget).	✓		Continue the proper hazardous wastes treatment and handling.
	To treat 70% of hazardous waste products with an annual budget of PHP436,000.00.				
	2.6 Water Quality Monitoring	RTNMC was able to conduct 6 effluent, 4 potability sampling, and 1 Aquatic resource assessment with a cost of only PHP970,870.00 (29% of the budget).	✓		Continue the water quality monitoring.
	To conduct 12 effluent sampling and 4 potability sampling with an annual budget of PHP3,295,000.00 in 1 project area.				
	2.7 Repair and Maintenance of Environmental Structures (Settling ponds, Dikes, Canals)	No accomplishment for this activity.		X	Adhere to the planned schedule of activities.
	To conduct 1 repair and maintenance of envi-structure with an annual budget of PHP1,335,000.00.				
	3. NOISE AND VIBRATION				
	3.1 Noise and Vibration Level Monitoring	RTNMC was able to conduct 6 (50% of the target) monitoring with a cost of only PHP534,200.00 (36% of the budget).	✓		Continue to conduct noise and vibration level monitoring.
	To conduct 12 noise and vibration monitoring with an annual budget of PHP1,493,000.00.				
	4. AIR QUALITY				
	4.1 Dust Control-Road Watering	RTNMC was able to conduct 8 km (57% of the target) of dust control road watering for PHP1,262,370.00 (87% of the budget).	✓		Continue the road watering as a dust control measure.
	To conduct 14 km of road watering with an annual budget of PHP1,444,000.00				
	4.2 Dust Control-Street Sweeping	RTNMC was able to conduct 7 km of street sweeping at a cost of PHP2,177,760.00 (56% of the budget).	✓		Continue the street sweeping activity as a dust control measure
	To conduct 7 km of street sweeping with an annual budget of PHP3,891,000.00.				
	4.3 Air Quality Monitoring	RTNMC was able to conduct 6 air sampling (50% of the target) and 6 CO2 monitoring (50% of the target) for only PHP276,650.00 (10% of the budget)	✓		Continue the regular air quality monitoring.
	To conduct 12 air sampling and 12 CO2 monitoring with an annual budget of PHP2,909,000.00				
	5. CONSERVATION VALUES				
	5.1 Environmental Awareness	RTNMC was able to reach	✓		Continue to spread

Project Impacts	Mitigating Measures/Control Strategies		Effective		Recommendation
	Planned	Field Findings and Observations	Yes	No	
	To reach 500 individuals with an annual budget of PHP697,000.00.	355 (71% of the target) for only PHP37,000.00 (37% of the budget).			environmental awareness.
	5.2 Coral Reef Related Activities	No accomplishment but already spent PHP8,000.00 (14% of the budget)		X	Adhere to the planned schedule of activities.
	To conduct 1 coral reef-related activity (Continuation of coral gardening) with an annual budget of PHP59,000.00.				
	5.3 Biodiversity Conservation	Was able to conduct two 2 biodiversity conservation projects (50% of the target) for only PHP32,810.00 (2% of the budget)	✓		Continue to conduct biodiversity projects.
	To conduct 4 biodiversity conservation projects (Arboretum, Ursula, BAP & WMP) with an annual budget of PHP2,154,000.00				
	5.4 Mangrove Rehabilitation	RTNMC was able to rehabilitate 22 hectares (52%) of mangrove area for only PHP107,730.00 (21% of the budget)	✓		Continue to rehabilitate mangrove areas.
	To rehabilitate 42 hectares of mangrove area with an annual budget of PHP512,000.00				
6. ENVIRONMENTAL RESEARCH					
	6.1 Various Studies	No accomplishment (0% of the target) but already spent PHP200,000.00 (29% of the budget).		X	Accelerate this activity to catch up with the plan for CY 2021.
	To conduct 1 study with an annual budget of PHP700,000.00.				
7. OTHERS (E.G. TRAINING/WORKSHOPS/ CONFERENCES/LINKAGES/ MMT/MRFC ETC.)					
	7.1 MMT Validation & Inspection; MRFC Meetings	Only 2 MMT and MRFC activities (25% of the target) were conducted due to the restriction brought by the COVID-19 pandemic. RTNMC spent PHP203,810.00 (9% of the budget) for these activities.		X	Conduct the remaining MMT and MRFC activities for CY 2021
	To conduct 8 MMT and MRFC activities with an annual budget of PHP2,388,000.00				
	7.2 Other Inspection Audits; Training and Linkages	Only 2 inspections audits/training and linkages (25% of the target) was conducted for PHP739,040.00 (19% of the budget)	✓		Conduct the remaining Inspection Audits; Training and Linkages
	To conduct 8 inspection audits, training, and linkages with an annual budget of PHP3,803,000.00				
	7.3 General Monitoring		✓		Continue the conduct of MPP validation
8. OTHER FINDINGS, OBSERVATIONS AND RECOMMENDATIONS					
	8.1				

C. REHABILITATION**MINING FOREST PROGRAM (MFP)
Validation Report****(JANUARY 2021 TO JUNE 2021)****MPSA-114-98-IVB**

I. NAME OF COMPANY : Rio Tuba Nickel Mining Corporation
 Location : Rio Tuba, Bataraza, Palawan
 Year MFP was Initiated : 1998

II. ACCOMPLISHMENTS:

A. DEVELOPMENT PLANS: ☐ Long-Range Plan ☒ Annual Plan
 (Attach photocopy(ies))

B. NURSERY OPERATIONS:
☒ Own Nursery ☐ Joint Venture ☐ Acquired from Other Sources

Name of Nursery	Area (m ²)	Capacity (No. of Seedlings Produced)*
RTN Central Nursery (EEI area)	10,000	200,000 - 250,000
Mangingidong Satellite Nursery (MP-O17)	10,000	200,000 - 250,000

*At least 1-ft plantable size

Seedling Inventory for the 1st Semester 2021

No. of Seedlings			No. of Seedlings Out-Planted/Disposal					Balance in Stock
Previous Stock	Produced	Total	Planted	Replanted	Enrichment	Donation	Mortality	
203,581	2,445	206,028	750 ^a	2,942	14,338 ^b	1,250	4,260	182,490

^aNote: Planted **grass** at P-17 (Slope)^bNote: The breakdown of the enrichment activities are as follows: Grasses/vines at slope areas and landscaping activities (4,731); Forest/Fruit Trees at Rehabilitated Areas (8,727); Forest trees at Reforestation Areas-Outside MPSA (880)**C. EXTENT OF PLANTED AREAS (ha)****NGP****REHAB****TOTAL**

Total Area Planted to Date : 659.27has 196.64 has 855.91has
 Previous Plantations : 659.27has 196.64 has 855.91has
 New Plantations or Expansions : 0 has 0 has 0 has

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

NGP Accomplishment:

Year	Reforestation Establishment (ha.)	Donation (ha.) (No. Seedlings donated/500= No. of Hectares)	Total
2011			No available data
2012	216.6		216.6
2013	346.23		346.23
2016-2018	53.00		53.00
2018-2019	43.44		43.44
Grand Total			659.27

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	55,500	
2015	1,180	
2016	15,789	
2017	1,060	
2018	4,253	
2019	13,213	
2020	10,648	
2021 (1 st Semester)	1,250	Donated to MENRO-Bataraza and Private individuals
TOTAL	102,893	

D. DISTURBED AREAS (ha)

1. Areas directly affected by the operations

(Itemize all areas in a separate sheet.)

Particulars	Area (has)
1. Inactive Tenement Area/s (Untouched)	3,355.41
2. Rehabilitated/Reforested as of December 31, 2019	196.64
3. Active Tenement Area/s	66.83
4. Ancillary (including CBNC and UMPI)	919.56
Total	4,538.44

2. Environmental Incidence Resulting to Damages

	Yes	Area Affected (ha)	No
a. Tailing's dam failure			X
b. Waste dump failure			X
c. Shrinkage/subsidence			X
d. Induced slides			X
e. Others (specify)			X
T o t a l			

(Note: Exclude areas that were previously rehabilitated.)

E. MAINTENANCE AND PROTECTION

1. Plantation Activities

17. Plantation Activities	Plantation Category							
	Old (<JJ18)	New						Total
		Recent			Latest			
		JD18-JJ19	JD19-JJ20	Sub-Total	JD20	JJ21	Sub-Total	
No. of seedlings planted	1,124,297	111,907	73,011	1,309,215	100,144	9,541 ^e	109,685	1,418,900
No. of sdlns/ trees re-planted	184,133	4,681	4,951	193,765	3,913	2,942	6,855	200,620
No. of surviving trees	940,164	107,226	68,060	1,115,450	96,231	6,599	102,830	1,218,280
Survival rate	84.52%	95.58%	93.01%	85.82%	95.86%	74.08%	95.53%	86.37%

^eNote: The figure reflected herein refers to enrichment planting and not new plantation. Out of 9,541 seedlings, 814 are fostered trees by RTN employees in relation to the Foster-A-Tree, Make-A-Legacy Program of the Company.

(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.

2. No. of Persons Involved

- No. of Company Forester: One (1)
- No. of Forestry Technician: Two (2)
- No. of DENRO: Four (4)
- No. of rehabilitation/reforestation helper: 21 (16 Males; 5 Females)
- No. of local residents involved (community involvement): 30 personnel (Consisting of the following contractors: Jedith Seedling Grower and Trading by Ms. Jedith T. Paalan, Rio Tuba Mangrove Ecosystem Developers Inc. by Ms. Haula D. Acob)
- Mine operation for backfilling & land preparation

3. Maintenance and Protection

Maintenance and Protection (Rehabilitation Areas)	Yes	No	Coverage (ha)
Control of forest fires by establishment and construction of fireline/firebreaks/fire towers		√	
Brushing/weeding/mulching/pruning (MP-P16, M15, GP-J24, H20, H21)	√		25.1
Fertilizer/lime/pesticide/chemical application (GP-J24, MP-P16, M15, GP-H20, H21 Slope Greening Area)	√		23.8
Water spraying at Rehab areas (GP-J24, K-24, I-23, GP-4, MP-P16, M15)	√		27.4
Control of forest pests and diseases		√	No indication of pests & diseases
Patrol work (all rehabilitation areas)	√		196.64
Forest law enforcement (all rehabilitation areas)	√		196.64
Others (Soil Amelioration, MP-M15)	√		0.2

Maintenance and Protection (Reforestation Areas)	Yes	No	Coverage (ha)
Control of forest fires by establishment and construction of fireline/firebreaks/fire towers	√		Maintenance of fire line at So. Tagpisa Coffee Plantation
Brushing/weeding/mulching/pruning (Coffee Plantation, Fuelwood)	√		63.0
Fertilizer/lime/pesticide/chemical application (Coffee Plantation, Fuelwood)	√		63.0
Water spraying (Coffee Plantations)	√		53.0
Control of forest pests and diseases		√	No indication of pests & diseases
Patrol work (all reforestation areas)	√		659.27
Forest law enforcement (all reforestation areas)	√		659.27

F. OTHER ENVIRONMENTAL FACTORS

1. Species Diversity

Tree Species Diversity			
Tree Species	Spacing (m x m)	Tree Species	Spacing (m x m)
Narra	Pioneer Species 2m x 2m	Kalumpang	For replacement/ enrichment (2mx2m)
Ipil		Malakatmon	
Amugis		Palawan Apitong	
Malakatmon		Bignay	
Batino		Sampalok	
Kupang		Bitao	
Tongkat Ali		Bolong eta	
Palawan Ago		Palomaria	
Bamboo		Paringring	
Badak		Marangob	
Marang		Pal. Mancono	
Rambutan	Putian/Amayan		
Bignay	Arupag		
Kalamansi	Manglas		
Durian	Duhat		
Langka	Makopa		
Lanzones	Kurisom		
Kastanyas	Bunog		
Guava	Pamitoyen		
Bamboo	For replacement/ enrichment (2mx2m)	Ipil	
Udling		Amugis	
Grass Species/Vines/Shrubs/Ornamental (slope and stockpile greening, cover plants, Landscaping)			
Grass Species	Spacing (ft x ft)	Grass Species	Spacing (ft x ft)
Langkawas	1.0 x 1.0	Pandan	1.0 x 1.0
Tikog-Tikog		Fern Species	
Tea Plant		Batbat	

2. Research/Studies on reforestation conducted:

Is there any research/study on reforestation conducted?

/_/_/ (Attach copy(ies).) /N/ None

Only maintenance and continuous monitoring of the growth and survival of species planted at the Demo plot.

3. IEC on reforestation:

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

Yes

(Attach photocopy/ies of publication and other IEC papers.)

- IEC in the form of interactive discussions and mine tour around the mine site, rehabilitation, and reforestation areas are continuously done to RTN employees, various local and international interested parties visiting the site. For the period, the Department had recorded 259 individuals that visited in the Company's mine rehabilitation and reforestation areas, including Sec. Harry Roque & Party, SIBOL Representatives, Provincial and Municipal Assessor's Office, and GAIA South, Inc. Table below shows the list of visitors for the period:

Date of Visit	Visitors	Number of Visitors
1/8/2021	GAIA South, Inc	6
1/22/2021	Sec. Harry Roque and Party	53
1/30/2021	Contractor (Tagala)	6
2/10/2021	Provincial Assessor's Office	13
3/17/2021	SIBOL TEAM	3
3/19/2021	RTN Employees (Women's Day and Environment Celebration)	78
3/23/2021	VIRLO (Contractor)	9
3/25/2021	IMI	2
3/27/2021	VIRLO (Contractor)	2
4/6/2021	CIVIC	5
4/7/2021	Newly hired employees	5
6/5/2021	RTN Employees (World Environment Day)	30
6/25/2021	RTN Employees (Philippine Arbor Day)	47
TOTAL		259

4. Services to the Community

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

• **Community-based Reforestation Program:**

Objective: The reforestation program seeks to empower local communities through getting involved in the reforestation activities by using their indigenous knowledge in identification and selection of local plants to ensure endemism, planting activity, care and protection activities of the plantations.

Target: The program prioritizes the services of the local community especially the IP groups through a contract and project-based system for the principal activities of the rehabilitation from seedlings production to care and maintenance activities of the plantations.

Status: The Company tapped the services of two (2) local plant producers for the propagation of planting materials to be used in rehabilitation and reforestation activities; for enrichment activities of the previously rehabilitated areas; and for greening of slopes and stockpiles. Moreover, the Company solely and directly employs IPs, in which 20-30% is women, through project-based system for the site preparation, planting, landscaping of the mined-out rehabilitation areas and the development of aqua-agro-forestry farm.

• **"Foster-A-Tree, Make-A-Legacy":**

Objective: To involve all RTN stakeholders in the seedling nurturing activity by rearing indigenous and/or local fruit and forest tree species.

Target: Each employee has to rear and donate the following numbers of fruit and forest tree seedlings: minimum of 20 seedlings for RTN regular employee; minimum of 10 seedlings for RTN non-regular employee; and minimum of 5 seedlings for every employee of RTN stakeholders (i.e., contractors). The seedlings will be planted in mined-out rehabilitation areas and other sparsely vegetated areas within Bataraza, in partnership with Local Government Unit.

Status: The planting of fostered seedlings commenced on the 25th of June in celebration of Philippine Arbor Day wherein 814 nurtured seedlings were planted/enriched in Mangingidong rehabilitation area, particularly in Blocks M15, M16 and O15.

- **“Adopt-A-Forest Project”:**

Objective: The program aims to increase awareness and encourage everyone’s moral responsibility to nature through actual involvement in the rehabilitation activities of the Company.

Target: Each Department/Office of RTN has adopted rehabilitated area for them to care and maintain. The care and maintenance activities include enrichment planting, watering, fertilizer application, and soil cultivation and amelioration.

Status: The launching of the program was conducted on June 25, 2021 in celebration of Philippine Arbor Day and complement with the “Foster-A-Tree, Make-A-Legacy” through enrichment planting of 814 various forest and fruit tree species.

- **Seedlings Donation**

Objective: To provide support in the greening program of different government agencies/offices, NGO’s, schools/academes, and various groups through seedlings donations.

Target: RTN will continue to donate seedlings as support to the greening program particularly in the Province of Palawan. Seedling donations, however, will be extended nationwide, if needed and possible.

Status: From CY 2014 to date, a total of 102,893 various seedlings were donated to government agencies/offices, NGO’s, schools/academes, and various groups and entities all over the Province. Moreover, 1,100 local forest (i.e., Agoho, Mancono, Kupang) trees were donated to MENRO-Bataraza and used in the tree planting activity during the 57th Founding Anniversary of Bataraza last January 2021.

- **Coffee Plantation:**

Objective: Create an ecologically and economically sustainable agriculture industry through establishment of community-based Liberica Coffee Plantation.

Target: To provide livelihood opportunities to stakeholders by turning-over the management of plantation to organized cooperative whose members are locals of Rio Tuba.

Status: Currently, the 53.0 hectares of coffee plantation located at Sitios of Racob and Tagpisa, Ocayan, Bataraza, Palawan is being managed and maintained by the Company. Care and protection activities are regularly performed to ensure the survival and production of the plantation. About 12% percent of coffee trees have bear fruit this season that resulted to a harvest of 3.8 tons coffee cherries or 68% increase of production compared to 2.253 tons production last year. Yield is expected to increase in the subsequent years due to higher percentage of coffee trees that will be matured and eventually bear fruits.

- **Edible Landscaping Contest:**

Objective: The contest aims productivity of idle areas and promote conservation by planting local and native fruit-bearing and forest tree species; help improve the ecosystem by creating habitats for faunal species especially avifauna and pollinators; and foster a creative community in which people can contribute their skills and share knowledge/ideas.

Target: This year’s version of Edible Landscaping Contest is Bataraza-wide that will feature community gardening in each barangay. Primary crops that will be planted in the garden are perennial crops such as fruit and forest trees at minimum of 250 seedlings per entry.

Status: The contest was launched last May 2021 via Facebook and registration will run until the 15th of July 2021.

- **Mangrove Project:**

Objective: The Mangrove Protection and Maintenance Project of RTNMC aims to engage the community (PO’s) concerning protection and conservation of mangrove ecosystem and also to have an alternative source of income by propagating and planting mangrove species diverting from their previous charcoal making and trading activities.

Target: The Company will continuously care and maintain the 43.44 hectares of mangrove area located at So. Bongkol-Bongkol (11 has), So. Kinurong (10 has), So. Bukid-Bukid (21 has) and Igang-Igang (1.44 has) by replanting, enrichment and patrolling.

Status: Re-planted 2,600 of mangrove seedlings in So. Bukid-Bukid area last January 2021. The MMT members also conducted a visit in the mangrove plantation during the 4th Quarter MMT Validation last March 2021.

- **Bamboo Plantation**

Objective: To establish bamboo plantation in compliance with EO 879.

Target: The Company committed to establish 55.3 hectares bamboo plantation in So. Tagpisa.

Status: A composite of 12.0 hectares bamboo plantation located within and outside tenement area has already established as part of rehabilitation and reforestation activities. Further, the delineation of 55.3 hectares proposed plantation was completed as reflected in Attachment 2.

5. Other Conservation Measures

a. Landscaping of mine and/or plant site surroundings?

Yes ☒ Area has. No

Landscaping works were conducted in Piersite by planting 880 Udling seedlings, Macadam Roadside by planting various ornamental flowers (i.e., Pandakaki, Baho-Baho), Tanawan Area by creating a selfie area and gardens (Puso ng Mina, Blue Ternate Garden).

b. Use of vines and grasses for planting/rehabilitation?

Yes ☒ Area has. No

Enrichment planting of 5,531 grass and shrubs species (e.i. Ferns, Banana Sucker, *Langkawas*, *Tikog-Tikog*) in rehabilitated and slope areas located in Mangingidong rehabilitation area particularly in Blocks M15, N15, P16 and P17.

c. Re-Establishment of Clonal Nursery?

Yes ☒ Area: GP-4 No

Macro-propagation thru cuttings of native tree species with no available source of seeds/seedlings. For the period, 840 cuttings of different tree species (Doro, Bakawang Gubat, Palawan Dita, Kahoy Dalaga, Ironwood) were produced. However, only 20 % or 168 seedlings (Palawan Dita, Kahoy Dalaga and Ironwood) are showing a high probability to survive. Factors such as lack of technical knowledge and skills in the technology and no suitable equipment are believed to be the reason of high mortality.

d. Establishment of Drip Irrigation System?

Yes ☒ Area: 1.5 has. No

e. Establishment of Demo Plot?

Yes ☒ Area: 1.0 ha No.

Demo plot of the Trace Elements Accumulating Metallophytes (TEAM) research is continuously being maintained by conducting brushing/stripping, and weeding activities.

f. Trainings Attended on Rehabilitation/Reforestation?

Yes ☒ No

1. Forestry Technicians of MRRS attended the Learning Event on the Establishments of Bamboo Plantation in Mining Areas Webinar on March 11-12, 2021.
2. JBC attended the Bamboo Treatment Furniture Webinar on June 29, 2021.

g. Application of fertilizers?

Yes ☒ No

RTN utilizes the following natural soil conditioner to augment the quality of soil in its mined-out rehabilitation areas:

- a. Chicken dung – 2,051 sacks
- b. STP sludge – ≈1.0 cubic meter

- c. Vermi compost – 0.82 tons
- d. Humus – 40 sacks
- e. Coco Peat – 35 sacks

h. Development/production of coconet for slope stabilization

Yes ☒ No ☐

The Company is currently establishing a Coconet Production Facility with an initial capacity to produce at least 500 rolls of 1 x 10-meter Coconet which will be utilized for slope stabilization and erosion control. This development is also to capacitate the company in preparation for the final decommissioning and rehabilitation of areas initially disturbed for mining activities. The Facility will be comprised of major machines such as decorticator, twining and weaving machine. As the first process of the coconet production, decortication is currently a work in progress wherein approximately 500 kilograms of coco coir was produced as of June 2021. Coco coir is the main material being used in coconet-making.

6. Wildlife and Faunal Migration:

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

Yes ☒

No ☐

Some of the fauna species observed within the reforestation and rehabilitation areas are various species of birds, snakes, and monkey among others. See Attachment 3 for the photo documentation of the observed flora and fauna in mined-out rehabilitation.

FINDINGS/OBSERVATIONS:

1. Continuous production/propagation of seedlings contracted to local plant producers
2. Rehabilitated mined-out areas were maintained and protected as evidenced of high survival rate including bamboo plantation and mangrove rehabilitation areas
3. Involvement/employment of indigenous people in the mined-out rehabilitation activities and engagement of people's organization in the rehabilitation of mangrove areas
4. Involvement of RTN employees and other stakeholders in the seedling production (donation of indigenous and fruit trees) and care and maintenance of the rehabilitated areas
5. Continuous maintenance and improvement of GP4, Mangingidong-Tanawan, Golden Park, Coffee plantation 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
2. Continue the implementation of planned activities affected by COVID 19 Pandemic

**NATIONAL GREENING PROGRAM (NGP)
Validation Report**

(For 2nd Quarter Cy 2021)

MPSA-114-98-IVB

I. NAME OF COMPANY : Rio Tuba Nickel Mining Corporation
Location : Rio Tuba, Bataraza, Palawan
Year MFP was Initiated : 1998

II. ACCOMPLISHMENTS:

G. DEVELOPMENT PLANS: ☐ Long-Range Plan ☒ Annual Plan
(Attach photocopy(ies))

H. NURSERY OPERATIONS:
☒ Own Nursery ☐ Joint Venture ☐ Acquired from Other Sources

Name of Nursery	Area (m ²)	Capacity (No. of Seedlings Produced)*
Reforestation Nursery (Central Nursery)	10,000	200,000 - 250,000
Mangingidong Nursery	10,000	200,000 - 250,000

*At least 1-ft plantable size

Seedling Inventory for the 2nd Quarter 2021

No. of Seedlings			No. of Seedlings Out-Planted/Disposal					Balance in Stock
Previous Stock	Produced	Total	Planted	Replanted	Enrichment	Donation	Mortality	
187,721	360	188,081	750 ^a	-	^b 2,049	150	2,642	182,490

^aNote: Planted at mined-out rehabilitation area

^bNote: Breakdown of enrichment: Enriched at reforestation area (880), mined-out rehabilitation (1,169)

I. EXTENT OF PLANTED AREAS (ha) for mangrove

Total Area Planted to Date : 43.63
Previous Plantations : 43.63
New Plantations or Expansion :
(Attach a reforestation map of scale 1:25,000 showing distinctly the previous plantations from the new plantations or expansions.)

J. DISTURBED AREAS (ha)

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

Particulars	Area (has)
1. Inactive Tenement Area/s (Untouched)	3,355.41
2. Rehabilitated/Reforested as of December 31, 2019	196.64

3. Active Tenement Area/s	66.83
4. Ancillary (including CBNC and UMPI)	919.56
Total	4,538.44

2. Environmental Incidence Resulting to Damages

	Yes	Area Affected (ha)	No
a. Tailing's dam failure			X
b. Waste dump failure			X
c. Shrinkage/subsidence			X
d. Induced slides			X
e. Others (specify)			X
T o t a l			

(Note: Exclude areas that were previously rehabilitated.)

K. MAINTENANCE AND PROTECTION

1. Plantation Activities

1.	Plantation Activities							
	Old (<JJ18)	Plantation Category						
		New						
		Recent			Latest			Total
		JD18-JJ19	JD19-JJ20	Sub-Total	JD20	JJ21	Sub-Total	
No. of seedlings planted	1,124,297	111,907	73,011	1,309,215	100,144	9,541 ^e	109,685	1,418,900
No. of sdlngs/ trees re-planted	184,133	4,681	4,951	193,765	3,913	2,942	6,855	200,620
No. of surviving trees	940,164	107,226	68,060	1,115,450	96,231	6,599	102,830	1,218,280
Survival rate	84.52%	95.58%	93.01%	85.82%	95.86%	74.08%	95.53%	86.37%

^eNote: The figure reflected herein refers to enrichment planting and not new plantation. Out of 1,215 seedlings, 814 are fostered trees by RTN employees in relation to the Foster-A-Tree, Make-A-Legacy Program of the Company.

(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.

4. No. of Persons Involved

- a) No. of Company Forester: One (1)
- b) No. of Forestry Technician: Two (2)
- c) No. of DENRO: Four (4)
- d) No. of rehabilitation/reforestation helper: 21 (16 Males; 5 Females)
- e) No. of local residents involved (community involvement): 30 personnel (Consisting of the following contractors: Jedith Seedling Grower and Trading by Ms. Jedith T. Paalan, Rio Tuba Mangrove Ecosystem Developers Inc. by Ms. Haula D. Acob)

5. Vigorousness: /√/ Highly Vigorous // Vigorous

6. Maintenance and Protection

Maintenance and Protection (Reforestation Areas)	Yes	No	Coverage (ha)
Patrol work (all reforestation areas)	✓		659.27
Forest law enforcement (all reforestation areas)	✓		659.27
Others (please specify)			

L. OTHER ENVIRONMENTAL FACTORS

1. Species Diversity

Tree Species	Spacing (m x m)	Tree Species	Spacing (m x m)
Narra	Pioneer Species 5m x 5m	Marang	For replacement/ enrichment (2.5mx2.5m)
Ipil		Rambutan	
Amugis		Kasoy	
Batino		Kastanyas	
Kupang		Sampalok	
Kalumpang		Lanzones	
Tongkat Ali		Langka	
Mangrove (Bakawang lalaki, Bakawang babae)	2m x 2m	Guava	
Bamboo (Tinik, Bayog, Giant bamboo & Buho/bolo)	5m x 5m/ 7m x 7m	Bignay	
		Durian	
Liberica coffee	3m x 3m	Duhat	
		Makopa	

7. Research/Studies on reforestation conducted:

Is there any research/study on reforestation conducted?

/_/ (Attach copy(ies).) /✓/ None

Only maintenance and continuous monitoring of the growth and survival of species planted at the Demo plot.

8. IEC on reforestation:

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

(Attach photocopy/ies of publication and other IEC papers.)

- IEC in the form of interactive discussions and mine tour around the mine site, rehabilitation, and reforestation areas are continuously done to RTN employees, various local and international interested parties visiting the site. For the period, the Department had recorded 87 individuals that visited in the Company's mine rehabilitation and reforestation areas, including CIVIC, newly hired and RTN employees. Table below shows the list of visitors for the period:

Date of Visit	Visitors	Number of Visitors
4/6/2021	CIVIC	5
4/7/2021	Newly hired employees	5
6/5/2021	RTN Employees (World Environment Day)	30
6/25/2021	RTN Employees (Philippine Arbor Day)	47
TOTAL		87

9. Services to the Community

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

- **Community-based Reforestation Program:**

Objective: The reforestation program seeks to empower local communities through getting involved in the reforestation activities by using their indigenous knowledge in identification and selection of local plants to ensure endemism, planting activity, care and protection activities of the plantations.

Target: The program prioritizes the services of the local community especially the IP groups through a contract and project-based system for the principal activities of the rehabilitation from seedlings production to care and maintenance activities of the plantations.

Status: The Company tapped the services of two (2) local plant producers for the propagation of planting materials to be used in rehabilitation and reforestation activities; for enrichment activities of the previously rehabilitated areas; and for greening of slopes and stockpiles. Moreover, the Company solely and directly employs IPs, in which 20-30% is women, through project-based system for the site preparation, planting, landscaping of the mined-out rehabilitation areas and the development of aqua-agro-forestry farm.

- **“Foster-A-Tree, Make-A-Legacy”:**

Objective: To involve all RTN stakeholders in the seedling nurturing activity by rearing indigenous and/or local fruit and forest tree species.

Target: Each employee has to rear and donate the following numbers of fruit and forest tree seedlings: minimum of 20 seedlings for RTN regular employee; minimum of 10 seedlings for RTN non-regular employee; and minimum of 5 seedlings for every employee of RTN stakeholders (i.e., contractors). The seedlings will be planted in mined-out rehabilitation areas and other sparsely vegetated areas within Bataraza, in partnership with Local Government Unit.

Status: The planting of fostered seedlings commenced on the 25th of June in celebration of Philippine Arbor Day wherein 814 nurtured seedlings were planted/enriched in Mangingidong rehabilitation area, particularly in Blocks M15, M16 and O15.

- **“Adopt-A-Forest Project”:**

Objective: The program aims to increase awareness and encourage everyone’s moral responsibility to nature through actual involvement in the rehabilitation activities of the Company.

Target: Each Department/Office of RTN has adopted rehabilitated area for them to care and maintain. The care and maintenance activities include enrichment planting, watering, fertilizer application, and soil cultivation and amelioration.

Status: The launching of the program was conducted on June 25, 2021 in celebration of Philippine Arbor Day and complement with the “Foster-A-Tree, Make-A-Legacy” through enrichment planting of 814 various forest and fruit tree species.

- **Seedlings Donation**

Objective: To provide support in the greening program of different government agencies/offices, NGO’s, schools/academes, and various groups through seedlings donations.

Target: RTN will continue to donate seedlings as support to the greening program particularly in the Province of Palawan. Seedling donations, however, will be extended nationwide, if needed and possible.

Status: From CY 2014 to date, a total of 102,893 various seedlings were donated to government agencies/offices, NGO’s, schools/academes, and various groups and entities all over the Province.

- **Coffee Plantation:**

Objective: Create an ecologically and economically sustainable agriculture industry through establishment of community-based Liberica Coffee Plantation.

Target: To provide livelihood opportunities to stakeholders by turning-over the management of plantation to organized cooperative whose members are locals of Rio Tuba.

Status: Currently, the 53.0 hectares of coffee plantation located at Sitios of Racob and Tagpisa, Ocayan, Bataraza, Palawan is being managed and maintained by the Company. Care and protection activities are regularly performed to ensure the survival and production of the plantation. About 12% percent of coffee trees have bear fruit this season that resulted to a harvest of 3.8 tons coffee cherries or 68%

increase of production compared to 2.253 tons production last year. Yield is expected to increase in the subsequent years due to higher percentage of coffee trees that will be matured and eventually bear fruits.

- **Edible Landscaping Contest:**

Objective: The contest aims productivity of idle areas and promote conservation by planting local and native fruit-bearing and forest tree species; help improve the ecosystem by creating habitats for faunal species especially avifauna and pollinators; and foster a creative community in which people can contribute their skills and share knowledge/ideas.

Target: This year's version of Edible Landscaping Contest is Bataraza-wide that will feature community gardening in each barangay. Primary crops that will be planted in the garden are perennial crops such as fruit and forest trees at minimum of 250 seedlings per entry.

Status: The contest was launched last May 2021 via Facebook and registration will run until the 15th of July 2021.

- **Mangrove Project:**

Objective: The Mangrove Protection and Maintenance Project of RTNMC aims to engage the community (PO's) concerning protection and conservation of mangrove ecosystem and also to have an alternative source of income by propagating and planting mangrove species diverting from their previous charcoal making and trading activities.

Target: The Company will continuously care and maintain the 43.44 hectares of mangrove area located at So. Bongkol-Bongkol (11 has), So. Kinurong (10 has), So. Bukid-Bukid (21 has) and Igang-Igang (1.63 has) by replanting, enrichment and patrolling.

Status: Plantation monitoring/patrolling was conducted this period to protect our mangrove plantation from logging/destruction activity.

- **Bamboo Plantation**

Objective: To establish bamboo plantation in compliance with EO 879.

Target: The Company committed to establish 55.3 hectares bamboo plantation in So.Tagpisa.

Status: A composite of 12.0 hectares bamboo plantation located within and outside tenement area has already established as part of rehabilitation and reforestation activities. Further, the delineation of 55.3 hectares proposed plantation was completed as reflected in Attachment 2.

10. Other Conservation Measures

a. Landscaping of mine and/or plant site surroundings?

Yes ☒ Area has. No

Landscaping works were conducted in Piersite by planting 880 Udling seedlings, Macadam Roadside by planting various ornamental flowers (i.e., Pandakaki, Baho-Baho).

b. Use of vines and grasses for planting/rehabilitation?

Yes ☒ Area has. No

Enrichment planting of 818 grass and shrubs species (e.i. Ferns, Banana Sucker, *Langkawas*, *Batbat*, *Tikog*) in rehabilitated and slope areas located in Mangingidong rehabilitation area particularly in Blocks M15, N15, P16 and P17.

c. Establishment of Drip Irrigation System?

Yes ☒ Area: 1.5 has. No

d. Establishment of Demo Plot?

Yes ☒ Area: 1.0 ha No.

Demo plot of the Trace Elements Accumulating Metallophytes (TEAM) research is continuously being maintained by conducting brushing/stripping, and weeding activities.

- e. Trainings Attended on Rehabilitation/Reforestation?
Yes ☒ No ☐

1. JBC attended the Bamboo Treatment Furniture Webinar on June 29, 2021.

- f. Application of fertilizers?
Yes ☒ No ☐

RTN utilizes the following natural soil conditioner to augment the quality of soil in its mined-out rehabilitation areas:

- a. Chicken dung – 2,051 sacks
- b. STP sludge – ≈1.0 cubic meter
- c. Vermi compost – 0.82 tons
- d. Humus – 40 sacks
- e. Coco Peat – 35 sacks

- g. Development/production of coconet for slope stabilization
Yes ☒ No ☐

The Company is currently establishing a Coconet Production Facility with an initial capacity to produce at least 500 rolls of 1 x 10-meter Coconet which will be utilized for slope stabilization and erosion control. This development is also to capacitate the company in preparation for the final decommissioning and rehabilitation of areas initially disturbed for mining activities. The Facility will be comprised of major machines such as decorticator, twining and weaving machine. As the first process of the coconet production, decortication is currently a work in progress wherein approximately 500 kilograms of coco coir was produced as of June 2021. Coco coir is the main material being used in coconet-making.

11. Wildlife and Faunal Migration:

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

Yes ☒

No ☐

Some of the fauna species observed within the reforestation and rehabilitation areas are various species of birds, snakes, and monkey among others. See Attachment 3 for the photo documentation of the observed flora and fauna in mined-out rehabilitation.

FINDINGS/OBSERVATIONS:

1. Continuous production/propagation of seedlings contracted to local plant producers
2. Rehabilitated mined-out areas were maintained and protected as evidenced of high survival rate including bamboo plantation and mangrove rehabilitation areas
3. Involvement/employment of indigenous people in the mined-out rehabilitation activities and engagement of people's organization in the rehabilitation of mangrove areas
4. Involvement of RTN employees and other stakeholders in the seedling production (donation of indigenous and fruit trees) and care and maintenance of the rehabilitated areas
5. Continuous maintenance and improvement of GP4, Mangingidong-Tanawan, Golden Park, Coffee plantation 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.
2. Continue the implementation of planned activities affected by the COVID-19 Pandemic.
3. Fast track the execution of contract for the bamboo plantation establishment

D. AIR QUALITY IMPACT ASSESSMENT

Sampling Location 1: Pier Stockyard A

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Limit (DENR Int'l Stds)	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
1. TSP (µG/Ncm)				56			300	Passed
Date/time of sampling: MMT Sampling March 3, 2021; 3:15 PM – 4:15 PM								
Weather and wind direction: Sunny								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station: MMT Regular Sampling								

Sampling Location 2: RTN Oval

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Limit (DENR Int'l Stds)	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
1. TSP (µG/Ncm)				0			230	Passed
Date/time of sampling: MMT Sampling March 5, 2021; 1:23 PM – 2:23 PM								
Weather and wind direction: Sunny								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station: MMT Regular Sampling								

Sampling Location 3: Upper Kinurong

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Limit (DENR Int'l Stds)	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
1. TSP (µG/Ncm)				42.4			300	Passed
Date/time of sampling: MMT Sampling March 3, 2021; 1453 H – 1553 H								
Weather and wind direction:								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station: MMT Regular Sampling								

Sampling Location 5: Tagpisa Area

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Limit (DENR Int'l Stds)	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
1. TSP (µG/Ncm)				34			300	Passed
Date/time of sampling: MMT Sampling March 3, 2021; 10:00 AM – 11:00 AM								
Weather and wind direction: Sunny								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station: MMT Regular Sampling								

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

E. WATER QUALITY IMPACT ASSESSMENT

**Note: Confirmatory Sampling (re-sampling activities) were conducted due to exceedances on the amount of Chromium Hexavalent (Cr⁶⁺) present in the water samples collected during the 1st quarter 2021 MMT sampling activities in certain stations. Results indicated in the following tables for Cr⁶⁺ of Stations 4-7 are based on the laboratory results of the confirmatory sampling (re-sampling activities) c/o Ostrea Mineral Laboratories, Inc.*

Sampling Location 1: Upper Tagpisa (RTNMC Control Station)

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Water Quality Criteria (DAO 2016-08) Class C	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
pH				7.11			6.5-9.0	within the criteria
TSS, mg/L				2			80	within the criteria
As, mg/L				<0.0007			0.02	within the criteria
Cd, mg/L				<0.003			0.005	within the criteria
Pb, mg/L				<0.01			0.05	within the criteria
Mn, mg/L				<0.003			0.02	within the criteria
Ni, mg/L				0.08			0.2	within the criteria
Cr ⁶⁺ , mg/L				0.01			0.02	within the criteria
Date/time of sampling: MMT Sampling March 4, 2021;1013 H								
Weather and wind direction: Sunny								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station:								

Sampling Location 4: Lower Kinurong Siltation Pond Discharge

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Water Quality Criteria (DAO 2016-08) Class C	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
pH				7.70			6.5-9.0	within the criteria
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
Date/time of sampling: MMT Sampling March 4, 2021;1207 H								
Weather and wind direction: Sunny								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station:								

Sampling Location 5: Lower Togpon Siltation Pond Discharge

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Water Quality Criteria (DAO 2016-08) Class C	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
pH				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 sampling: MMT Sampling March 4, 2021 ;1110 H								
Weather and wind direction: Sunny								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station:								

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Sampling Location 6: **Confluence of S4 and S5 (Confluence of Togpon-Kinurong Siltation Pond Discharge)**

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Water Quality Criteria (DAO 2016-08) Class C	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
pH				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 sampling: MMT Sampling March 4, 2021 ;1232 H								
Weather and wind direction: Sunny								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station:								

Sampling Location 7: **RTNMC Effluent**

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Water Quality Criteria (DAO 2016-08) Class C	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
pH				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 sampling: MMT Sampling March 4, 2021;1227 H								
Weather and wind direction: Sunny								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station:								

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Sampling Location 8: **Rio Tuba Tributary (Receiving Water Body of RTNMC Effluent)**

Parameter	Result				EQPL			Remarks
	In SMR		MMT Confirmatory Sampling (explain necessity in box below)		Red Flag	Action	Water Quality Criteria (DAO 2016-08) Class SC	
	Current 2Q21	Previous 1Q21	Current 2Q21	Previous 1Q21				
pH				8.32			6.5-8.5	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				<0.01			0.1	within the criteria
Date/time of sampling: MMT Sampling March 4, 2021;1317 H								
Weather and wind direction: Sunny								
Explanation of why confirmatory sampling was conducted for specific parameter in the sampling station:								

- 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 Water Quality Impact Assessment:
All monitoring results are within the standards

F. 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.)

Type of Waste	ECC/EPEP Commitments			Adequate?		Remarks
	Handling	Storage	Disposal	Yes	No	
I101 – Used oil	Collected thru oil-water separators and contained in steel drums with proper label.	Stored in THWSF with compartments, adequate ventilation, signage, oil spill kit and fire hydrants.	Hauled and treated by DENR accredited haulers and treaters Per presented Certificate of Treatment/Final Disposal, 113.6 tons were hauled and treated this semester.	✓		As of end of June 2021, 31.84 MT currently stored in THWSF.
I102 – Vegetable				✓		0.3 MT currently stored in

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Oil including Sludge						THWSF.
I104 – Oil-contaminated Rags	Contained in steel drums with proper label	Stored in THWSF with compartments, adequate ventilation, signage, oil spill kit, and fire hydrants.	Per presented Certificate of Treatment/Final Disposal, 14.392 tons were hauled and treated this semester.	✓		8.084 MT currently stored in THWSF.
D406 – Used Lead Acid Batteries (Lead compounds)	Contained in steel drums with proper label	Stored in THWSF with compartments, adequate ventilation, signage, oil spill kit, and fire hydrants.	Per presented Certificate of Treatment/Final Disposal, 15.486 tons were hauled and treated this semester.	✓		13.2885 MT currently stored in THWSF.
D407 – Busted fluorescent lamps (mercury and mercury compounds)	Contained in wooden crate with proper label	Stored in THWSF with compartments, adequate ventilation, signage, oil spill kit, and fire hydrants.	Per presented Certificate of Treatment/Final Disposal, 0.5225 tons were hauled and treated this semester.	✓		0.4155 MT currently stored in THWSF.
F699-Paint Residue (other mixed)			Per presented Certificate of Treatment/Final Disposal, 0.23 tons were hauled and treated this semester.	✓		1.33 MT currently stored in THWSF.
M506-Waste Electronics				✓		2.68 MT currently stored in THWSF
J201-Containers			Per presented Certificate of Treatment/Final Disposal, 0.6655 tons were hauled and treated this semester.	✓		0.0756 MT currently stored in THWSF.
M501-Clinical Waste				✓		0.0045 MT currently stored in THWSF.
Residual wastes	Color-coded trash cans/bins were distributed at the mine, plant and town sites with proper label for solid	Garbage trucks and compactors pick up the garbage and dump to GP-28, the designated sanitary landfill (SLF) which is a	Garbage dump to the SLF are covered with soil twice a week.	✓		Total volume of residual wastes generated for the 1 st semester 2021 is 42.56 MT. NO PLASTIC policy is continuously being implemented to minimize unnecessary plastic generation.

	waste sorting.	mined-out pit of RTNMC.				
Recyclable		Other recyclable materials are recovered and diverted from waste stream through an MRF located at the SLF		✓		Total volume of recyclables generated for the 1 st semester 2021 is 100.4 MT.
Biodegradable		Biodegradable wastes are stored in the Composting Facility		✓		Total volume of biodegradable wastes generated for the 1 st semester 2021 is 35.26 MT. There is a designated area in the SLF intended for Biodegradable wastes.
Hospital/Medical	Regular hauling by authorized personnel	Waste vault	Vault	✓		The hospital wastes are stored and/or disposed once a week and/or depending on amount of waste generated in the septic vault inside the Landfill area.

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

Chemicals in PCL and CCO	Adequate?* (Put/If Adequate)				Remark
	Risk Management	Training	Handling	Emergency Preparedness	
L404 - PCB/Non-PCB Equipment (3 units PCB Equipment w/ unknown weight; 0.245 MT PCB) Contaminated Equipment and 1.15 MT Non-PCB Equipment*	Adequate	Adequate	Adequate	Adequate	*Based on updated PCB Inventory.

H. Complaints Verifications and Management

Date Filed	Filed Where? (pls. check)				Nature of Complaint	Resolutions Made
	DENR	Company	MMT	Others, Specify		
None						