3RD QUARTER MMT CMDC VALIDATION

4TH Quarter Air, Noise, and Water Sampling

TORONTO NICKEL MINING PROJECT Brgy. San Isidro (Bato-Bato), Narra, Palawan

Sampling Team Members

EMB - MIMAROPA

PEMU, PALAWAN:SupEMS Mercedita B. Almorfe REGIONAL OFFICE: Geologist Niño Jefferson L. Rojas

MENRO Narra: SEMS Shiel Nalda

CMDC Representatives: PCO Monica Alaska and company

OUTLINE

ENVIRONMENTAL LAWS

- I. R.A. No. 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990)
- II. R.A. No. 9003 (Ecological Solid Waste Management of 2000)
- III. R.A. No. 9275 (Philippine Clean Water Act of 2004) Water Sampling Activities
- IV. R.A. No. 8749 (Philippine Clean Air Act of 1999) Air and Noise Sampling Activities



Republic Act No. 6969

Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990



R.A. 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990)



Department of Environment and Natural Resources ENVIRONMENTA, MANACOMENT BUREAU Region 48 PENRO Compound, Rays, Suqui, Calapan City, Oriental Mindoro, Satellite Office, dith Floor DENR by the Bay Bildg, 1515 Rosas Bilvd, Enviros, Manila Bildg, 1515 Rosas Bilvd, Enviros, Manila Telephone Rosi (20) 535-97-86 Website: http://minaroga.emb.gov.ph/

Republic of the Philippines

HAZARDOUS WASTE GENERATOR REGISTRATION CERTIFICATE

Pursuant to Chapter 3 of DENR Administrative Order (DAO) No. 2013-22, the Implementing Rules and Regulations of Republic Act (RA) 6969, this Certificate is issued to:

Name of Establishment : CITINICKEL MINES AND DEVELOPMENT CORPORATION (CMDC)-TORONTO NICKEL MINING PROJECT

Facility Address : KILOMETER 108, BATO-BATO, NARRA, PALAWAN

You are hereby assigned with the new on-line registration na

OL-GR-R4B-53-010505

This certifies that the above-named Hazardous Wastes Generator generates the following types of wastes:

Waste Class	Waste Number
Lead compounds	D406
Mercury and mercury compounds	D407
Grease wastes	H802
Used industrial oil including sludge	1101
Oil-contaminated Materials	1104
Containers previously containing toxic chemical substances	J201
Pathological or infectious wastes	M501
Pharmaceuticals and drugs	M503
Waste electrical and electronic equipment (WEEE)	M506

- The above-named HW Generator shall comply with all the requirements of R.A. 6969 and its implementing Rules and Regulations particularly DAO 2013-22: Revised Procedures and Standards for the Management of Hazardous Wastes (Revising DAO 2004-36).
- Submission of the online self monitoring report shall be made within fifteen (15) days after the end of every reporting period.
- Please refer to this assigned registration number for every transaction related to the online Hazardous Waste Management System.
- Non-compliance to the above stipulations shall be subjected to the penalty provisions as provided under Section 41 of DAO 1992-29 and Chapter 11 of DAO 2013-22.



This is a computer generated certificate. To verify the authenticity of this file, kindly scan the generated QR Code using your QR Code scanner / reader or visit the HWMS website for details.









R.A. 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990)



HAZARDOUS WASTE GENERATOR REGISTRATION CERTIFICATE

Pursuant to Chapter 3 of DENR Administrative Order (DAO) No. 2013-22, the Implementing Rules and Regulations of Republic Act (RA) 6969, this Certificate is issued to:

Name of Establishment : CITINICKEL MINES AND DEVELOPMENT CORPORATION (CMDC)-TORONTO-NICKEL MINING PROJECT

Facility Address : KILOMETER 108, BATO-BATO, NARRA, PALAWAN

You are hereby assigned with the new on-line registration na

OL-GR-R4B-53-010505

This certifies that the above-named Hazardous Wastes Generator generates the following types of wastes:

Waste Class	Waste Number
Lead compounds	D406
Mercury and mercury compounds	D407
Grease wastes	H802
Used industrial oil including sludge	1101
Oil-contaminated Materials	1104
Containers previously containing toxic chemical substances	J201
Pathological or infectious wastes	M501
Pharmaceuticals and drugs	M503
Waste electrical and electronic equipment (WEEE)	M506

- The above-named HW Generator shall comply with all the requirements of R.A 6969 and its implementing Rules and Regulations particularly DAO 2013-22: Revised Procedures and Standards for the Management of Hazardous Wastes (Revising DAO 2004-36).
- Submission of the online self monitoring report shall be made within fifteen (15) days after the end of every reporting period.
- Please refer to this assigned registration number for every transaction related to the online Hazardous Waste Management System.
- Non-compliance to the above stipulations shall be subjected to the penalty provisions as provided under Section 41 of DAO 1992-29 and Chapter 11 of DAO 2013-22.



This is a computer generated certificate. To verify the authenticity of this file. kindly scan the generated QR Code using your QR Code scanner / reader on which the WMM weblate for details.

Month 1	New Oil, Chain	Confirmer	ULAB": Piece	lichastic , and Methic Tone		Waste Electrical and Electronic Equipment, ke
Renaining	149	182	412	26.254 .26	599	46
January	4	0	0	0	0	0
February March	4	0	32	0	0	0
Anil	8	0	0	0	0	0
Moy	8	0	30	0	0	0
June	16	i	0	0	0	5
July	6	0	17		5	õ
August	12	0	11	0	33	0
Septembe Detober		0	10	0	0	0
November		00	07	0	0	0
Describe		~	t	0	0	0
TOTAL		1	Ica	17. 344. 26	577	
UL	9 of the ful d ail - 139 d AD - 380 P cd Lead Ac	en t	mpty chen	na March 20. Ap noted Walts 9.50 H rical Carlainers - 1	ed w.area :	35

GENERAL RECOMMENDATIONS

 Continue the assistance to the contractors in complying with the applicable environmental laws (e.g., registration for ID as Hazardous Waste Generator.)



Republic Act No. 9003

Ecological Solid Waste Management of 2000



R.A. 9003 (Ecological Solid Waste Management of 2000)

Storage Bins within the TNMP Campus



Materials Recovery Facility (MRF)



Residual Containment Area (RCA)



FINDINGS AND OBSERVATIONS

 The present facility of the company for residual wastes generation called as Residual Containment Area (RCA - old dump truck) may not fully accommodate the generation of the residual wastes of the company if prolongs its use.

GENERAL RECOMMENDATIONS

 Tie up with the LGU Narra via Memorandum of Agreement (MOA) in utilizing portion of the Municipal Landfill to accommodate the residual wastes of the Company. Coordinate closely with the Office of the MENRO pertaining to the drafting of a MOA for the terms and conditions.



Republic Act No. 9275

Philippine Clean Water Act of 2004



R.A. 9275 (Philippine Clean Water Act of 2004)

Discharge Permits

Republic of the Philippines



Date: Mar 01, 2021

Renewal

WA STEWATER DISCHARGE PERMIT

Pursuant to Section 14. Article 2. of the RA 9275 otherwise known as the "Philippine Clean Water Act of 2004", this permit is hereby granted to Caroline L. Tandhayloitin bkel Mines And Development Corporation with office address at South National Highway, Bato Bato, Nama, Palawan for its establishment:

С	tinickel Mines And Development Corporation	South National Highway Balo-bato NARRA
т	N No. 245-745-964-001	
1.		Project and the permitholder shall discharge to the
	final discharge point of Admin Siltation Pond with	a capacity of 46,514 cubic meters.
2.	The permit holder shall ensure that discharge rate	of the effluent from the Admin Situation Pond shall not
	exceed its design rate capacity and shall comply v	with the following standard:

Parameter	Standard	Parameter	Standard
рН	6.0 - 9.0	Total Suspended Solids	85mg/L
Mangarese	2 mgL	Arsenic	0.02 mg/L
Cadmium	0.006 mg/L	Lead	0.02 mg/L
Nickel	0.2 mg/L		

* Reference for efficient perimeters DAO 2018-05; PSIC Code - 07294

3. That the maximum effluent generation reused for process operation, agricultural purposes (watering of plants, trees, and other vegetation), environmental mitigation (i.e. road watering/sprinkling) and cleaning of facilities shall be submitted at this Office within thirty (30) days upon receipt hereof.

4. Submit Sel\$Monitoring (SMR) based on the following schedule:

Quarter	Coverage	Submission	Quarter	Coverage	Submission
First	Jan-Mar	1-15 Apr.	Third	Jul-Sep.	1-15 Oct.
Second	Apr-Jun.	1-15 Jul.	Forth	Oct-Dec.	1-15 Jan.

- 5. The permit holder shall include effluent analysis on the parameters listed in condition no. 2 of this permit, conducted by Third Party Laboratory duly recognized by EMB, in every submission of the SMR.
- 6. All water consumption shall be measured and recorded on a daily basis. An effective flow-metering device(s) shall be installed for this purpose.
- 7. The permit holder shall maintain the accessible sampling port for water sampling adjuity of the WTF.
- 8. The permit holder shall maintain the flow-measuring device at influent and effuent sides of its WTF. A monitoring log book shall be maintained and kept at all times. It shall be made available to DENR-EMB and/or its duly-authorized representative(s).
- 9. Submit certificate or any documentary proof of desiting of the WTF.



This is a computer generated get ficate. To yet fy the authenticity of this file. Kindly scan the generated QR Code using your QR Code scanner insider or visit the OFMS website for details.



Region IV-B 'ENRO Compound, Brox Supul, Calapan Oly, Oriental Mindoro ette Office, 6h Poor DENR by the Bay Bidg., 1515 Roses Byd. Ermita, Manta TelNo (02) 538-97-86

Date: Sep 07, 2022

WA STEWATER DISCHARGE PERMIT

Pursuant to Section 14, Article 2, of the RA 9275 otherwise known as the "Philippine Clean Water Act of 2004", this permit is hereby granted to Citin lokel Mines And Development Corporation with office address at South National Highway, Bato-Bato, Narra, Palawan for its establishment:

Citinickel Mines And Development Corporation - South National Highway Balo-bato NARRA To ronto Nickel Mining Project

TIN No. 245-745-964-001

This permit is issued to the Toronip Nickel Mining Project and the permit holder shall discharge to the final discharge point of Pier Yard Siltation Pond with a capacity of 55.019 cubic meters.

2. The permit holder shall ensure that discharge rate of the effluent from the Pier Yard Siltation Pond shall not exceed its design rate capacity and shall comply with the following standard:

Parameter	Standard	Parameter	Standard
рH	6.0-9.0	Arsenic	0.04 mg/L
Mangarese	4 mgL	Load	0.1 mg/L
Cadmium	0.01mg/L	Total Suspended Solids	100 mg/L
Nickel	0.3 mg/L		

Reference for efficient persenters DAO 2018-08 AND DAO 2021-19. PSIC Code-0729

Submit Wastewater Discharge Permit Application for you rother outfail/outlet within thirty (30) days upon receipt hereof, if any,

Submit Self-Monitoring (SMR) based on the following schedule:

	Quarter	Coverage	Submission	Quarter	Coverage	Submission
1	" First	Jan-Mar	1-15 Apr.	* Third	Jul-Sep.	1-15 Oct.
	* Second	Apr-Jun.	1-15 Jul.	* Fourth	Oct-Dec.	1-15 Jan.

"Include Detificate of Treatment for any effluent discharged to any receiving water body or land - In every submission of the SMR

- 5. The cernit holder shall include effluent analysis on the parameters listed in condition no. 2 of this permit, conducted by Third Party Laboratory duly recognized by EMB, in every submission of the SMR.
- 6. All water consumption shall be measured and recorded on a daily basis. An effective flow-metering device(s) shall be installed for this purpose.
- 7. The permit holder shall maintain the flow-measuring device at influent and effuent sides of its sittation pond. A monitoring log book shall be maintained and kept at all times, it shall be made available to DENR-EMB and/or its duly-authorized representative(s).
- 8. Submit certificate or any documentary proof of desiting of the WTF.



This is a computer generated outlicate. To welly the authenticity of this file. Kindl scan the generated GR Code using your GR Code scanner/neder or visit the OFM website for details.

Page 1 of 1 Republic of the Philippines Department of Environmental and Natural Resources ENVIRON MENTAL MANAGEMENT BUREAU Region IV-B FENRO Compound, Bray, Subul, Calapan City, Oriental Mindoro and the Office, 6th Floor DENRIby the Bay Bidg, 1515 Roses Bidd, Emila Mella Tel No. (02) 538-97-86 Pormit No : DB-R48-22-04999 Date: Jul 15, 2022 Renewal

WA STEWATER DISCHARGE PERMIT

Pursuant to Section 14, Article 2, of the RA 9275 diherwise known as the "Philippine Clean Water Act of 2004" this normit is hereby granted to **Citiblekei Mines and Development Composition** with diffee address at 10th Floor Ore Central Building, 9th Ave. Cor. 31st Street, Bgc, FortBonifacio, Taguig City, Bato-Bato, Narra, Polawan for its establishment:

Citin lokel Mines And Development Corporation - South National Highway (kilometer 108) Bato-bato To ronto Nickel Mining Project NARRA

TIN No. 245 745 964 001

Page 1 of 2

Renewal

Permit No: DP-848-72-06862

- final discharge point of Bailten Sitation Pond with a capacity of 91,813.00 cubic meters.
- 2. The parmit holder shall ensure that discharge rate of the affluent from the Baltian Siltation Fond shall not exceed its design rate capacity and shall comply with the following standard:

Parameter	Standard	Parameter	Standard
рH	60-90	Arsenic	0.04 mg/L
Manganese	4mg/L	Lead	0.1 mg/L
Cadmium	0.01 mg/L	Total Suspended Solids	100 mg/L
Nickel	0.3 mg/L		

*Belevence for efficient persense or DAO201608 and DAO2021-19: PSC Quide-07294

3. Submit Wastewater Discharp e Permit Application for your other outfall/outlet within thirty (30) days upon receipt hereof, if any.

4. Submit Self-Monitoring (SMR) based on the following schedule:

Quarter	Coverage	Submission	Quarter	Coverage	Submission
* First	Jan-Mar	1-15 Apr.	* Third	Jul-Sep.	1-15 Oct.
* Second	Apr-Jun.	1-15 Jul.	* Fourth	Oct-Dec.	1-15 Jan.

" Include Certificate of Treatment for any efficient discharged to any receiving water body or land in every submission of the SUR

- 5. The permit holder shall include effluent analysis on the parameters listed in condition no. 2 of this permit, conducted by Third Party Laboratory duly recognized by EMB, in every submission of the SMR.
- 6. All water consumption shall be measured and recorded on a daily basis. An effective flow-metering device(s) shall be installed for this purpose.
- 7. The permit holder shall maintain the flow-measuring device at influent and effluent sides of its WTF. A monitoring log book shall be maintained and kept at all times. It shall be made available to DENR-EMB antilor its duly-authorized corresentative(s)



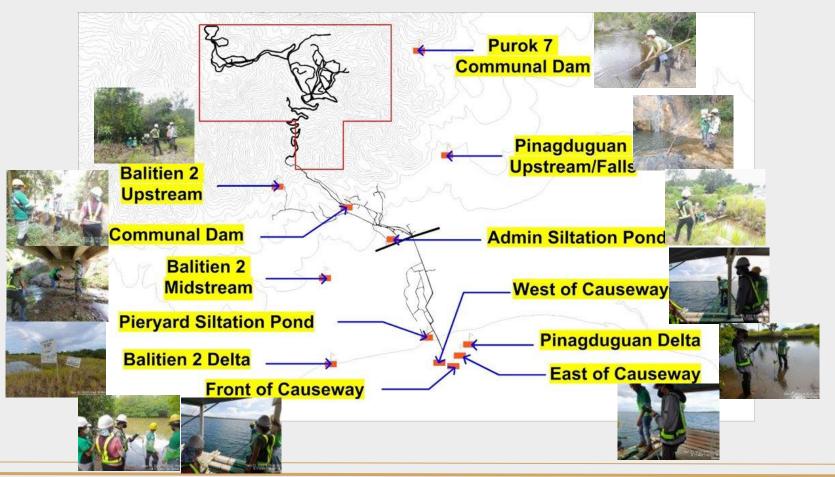
This is a computer perioded certificate. To verify the authenticity of this file, kin scan the generated QR Code using your QR Code scanner/reader or visit the OP website for details.

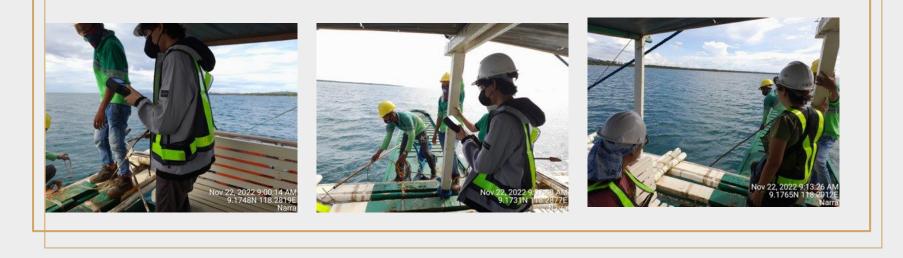
Balitien SP

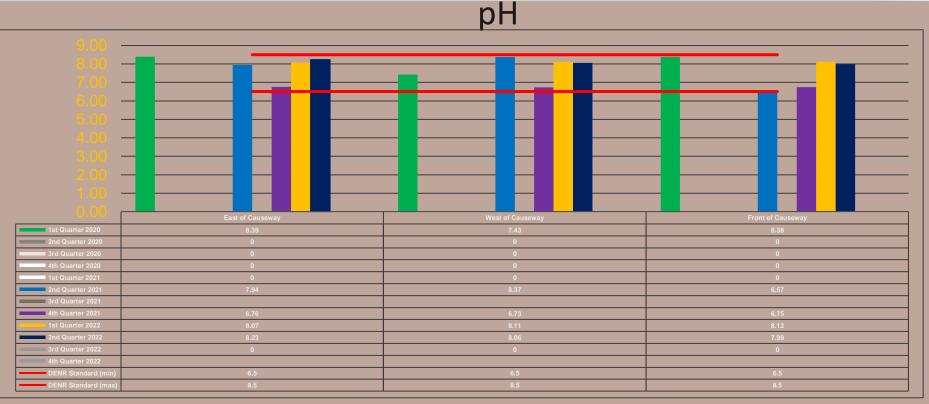




WATER SAMPLING STATIONS







*No reading with 2nd Quarter 2020 and 1st Quarter 2021 due to defective sampler

**Unable to conduct sampling on 3rd Quarter 2022 due to gale condition

Suspended Solids

90.00			
80.00			
70.00			
60.00			
50.00			
40.00			
30.00			
20.00			
10.00			
0.00			
	East of Causeway	West of Causeway	Front of Causeway
1st Quarter 2020	2.50	5.00	Front of Causeway 13.00 7
1st Quarter 2020			13.00
1st Quarter 2020 2nd Quarter 2020	2.50 17	5.00 12	13.00 7
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020	2.50 17	5.00 12 15	13.00 7 8
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021	2.50 17 11 4	5.00 12 15 18	13.00 7 8 25
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021	2.50 17 11 4 19	5.00 12 15 18 2.38	13.00 7 8 25 17
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021	2.50 17 11 4 19	5.00 12 15 18 2.38	13.00 7 8 25 17
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2022	2.50 17 11 4 19 2.38	5.00 12 15 18 2.38 2.38 4 24	13.00 7 8 25 17 9 3 21
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 1st Quarter 2021 3rd Quarter 2021 3rd Quarter 2022 2nd Quarter 2022 2nd Quarter 2022 2nd Quarter 2022	2.50 17 11 4 19 2.38 4.3	5.00 12 15 18 2.38 2.38 4 4 24 2.38	13.00 7 8 25 17 9 3
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 3rd Quarter 2022 2nd Quarter 2022 2nd Quarter 2022 2nd Quarter 2022 3rd Quarter 2022 3rd Quarter 2022	2.50 17 11 4 19 2.38 4.3	5.00 12 15 18 2.38 2.38 4 24	13.00 7 8 25 17 9 3 21
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 1st Quarter 2021 3rd Quarter 2021 3rd Quarter 2022 2nd Quarter 2022 2nd Quarter 2022 2nd Quarter 2022	2.50 17 11 4 19 2.38 4.3 3 4.3 3 4	5.00 12 15 18 2.38 2.38 4 4 24 2.38	13.00 7 8 25 17 9 3 21 2.5

Arsenic

	East of Causeway	West of Causeway	Front of Causeway
1st Quarter 2020	0.008	0.008	0.008
2nd Quarter 2020	0.008	0.008	0.008
3rd Quarter 2020	0.008	0.008	0.008
4th Quarter 2020	0.008	0.008	0.008
1st Quarter 2021	0.008	0.008	0.008
2nd Quarter 2021	0.005	0.005	0.005
3rd Quarter 2021			
4th Quarter 2021	0.005	0.005	0.005
1st Quarter 2022	0.005 0.005	0.005	0.005
1st Quarter 2022 2nd Quarter 2022 3rd Quarter 2022	0.005	0.005	0.005
1st Quarter 2022 2nd Quarter 2022	0.005 0.005	0.005 0.005	0.005 0.005

Cadmium

0.000	East of Causeway	West of Causeway	Front of Causeway
1st Quarter 2020	0.001	0.001	0.001
2nd Quarter 2020	0.001	0.001	0.001
3rd Quarter 2020	0.001	0.001	0.001
4th Quarter 2020	0.001	0.001	0.001
1st Quarter 2021	0.001	0.001	0.001
2nd Quarter 2021	0.001	0.001	0.001
3rd Quarter 2021			
4th Quarter 2021	0.001	0.001	0.001
1st Quarter 2022	0.001	0.001	0.001
2nd Quarter 2022	0.001	0.001	0.001
3rd Quarter 2022	0.001	0.001	0.001
4th Quarter 2022			
DENR Standard	0.005		0.005

Lead

0.01

0.000				
0.000	East of Causeway	West of Causeway	Front of Causeway	
1st Quarter 2020	0.005	0.005	0.005	
2nd Quarter 2020	0.005	0.005	0.005	
3rd Quarter 2020	0.005	0.005	0.005	
4th Quarter 2020	0.005	0.005	0.005	
1st Quarter 2021	0.005	0.005	0.005	
2nd Quarter 2021	0.005	0.005	0.005	
3rd Quarter 2021				
4th Quarter 2021	0.005	0.005	0.005	
1st Quarter 2022	0.005	0.005	0.005	
2nd Quarter 2022	0.005	0.005	0.005	
3rd Quarter 2022	0.005	0.005	0.005	
4th Quarter 2022				
DENR Standard	0.05	0.05	0.05	

Manganese

0.450			
0.400			
0 350			
0.350 0.300			
0.250			
0.200			
0.150 ·			
0.150			
0.100 ·			
0.050			
0.000.0			
	East of Causeway	West of Causeway	Front of Causeway
1st Quarter 2020	0.003	0.003	0.003
2nd Quarter 2020	0.003	0.003	0.003
3rd Quarter 2020	0.004	0.003	0.003
4th Quarter 2020	0.003	0.004	0.005

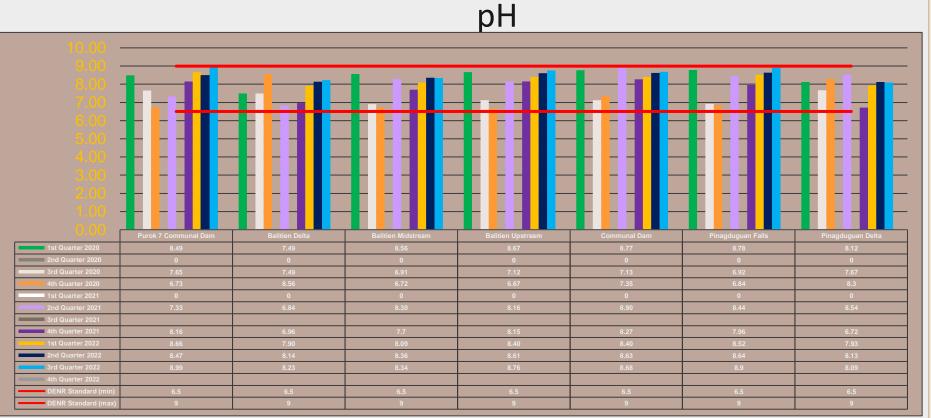
4th Quarter 2020	0.003	0.004	0.005
1st Quarter 2021	0.006	0.004	0.006
2nd Quarter 2021	0.007	0.003	0.006
3rd Quarter 2021			
4th Quarter 2021	0.003	0.003	0.004
1st Quarter 2022	0.005	0.004	0.004
2nd Quarter 2022	0.003	0.003	0.003
3rd Quarter 2022	0.004	0.003	0.003
4th Quarter 2022			
DENR Standard	0.4	0.4	0.4

MARINE SAMPLING STATIONS Nickel

0.070			
0.060			
0.000			
0.050			
0.040			
0.030			
0.020			
0.010			
0.000	East of Causeway	West of Causeway	Front of Causeway
1st Quarter 2020	0.003	0.003	0.003
2nd Quarter 2020			
Zhu Quartei 2020	0.003	0.003	0.003
3rd Quarter 2020	0.003 0.003	0.003 0.003	0.003
3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021	0.003	0.003 0.003 0.003	0.003
3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021	0.003 0.003	0.003 0.003	0.003 0.008
3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021	0.003 0.003 0.003	0.003 0.003 0.003 0.003	0.003 0.008 0.003
3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 4th Quarter 2021	0.003 0.003 0.003 0.003 0.003	0.003 0.003 0.003 0.003 0.003	0.003 0.008 0.003 0.003 0.003
3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2021 1st Quarter 2021 1st Quarter 2021 4th Quarter 2021 1st Quarter 2021	0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.003 0.008 0.003 0.003 0.003 0.003 0.003
3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2021 1st Quarter 2021 2nd Quarter 2021 4th Quarter 2022 2nd Quarter 2022 2nd Quarter 2022	0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.003 0.008 0.003 0.003 0.003 0.003 0.003 0.003
3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2021 4th Quarter 2022 2nd Quarter 2022	0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.003 0.008 0.003 0.003 0.003 0.003 0.003
3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2021 1st Quarter 2022 2nd Quarter 2022	0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.003 0.008 0.003 0.003 0.003 0.003 0.003 0.003







*No reading with 2nd Quarter 2020 and 1st Quarter 2021 due to defective sampler **For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

AMBIENT SAMPLING STATIONS

Suspended Solids

90.00							
80.00 -							
70.00							
60.00							
50.00							
40.00							
30.00							
20 .00 ·							
10.00							
<mark>ر 00.0</mark>	Purok 7 Communal Dam	Balitien Delta	Balitien Midstream	Balitien Upstream	Communal Dam	Pinagduguan Falls	Pinagduguan Delta
1st Quarter 2020	2.50	7.00	5.00	2.50	2.50	2.50	7.00
2nd Quarter 2020	2.38	5.5	0	5	2.38	2.38	0
3rd Quarter 2020	2.38	7	11	4	2.38	2.38	14
4th Quarter 2020	2.38	2.5	21	2.38	3	2.38	2.38
1st Quarter 2021	2.38	19	21	2.38	2.38	2.38	9
2nd Quarter 2021	2.38	59	15	2.38	3.3	2.38	2.38
3rd Quarter 2021							
4th Quarter 2021	2.38	14	3	2.38	3.3	2.38	2.38
1st Quarter 2022	2.38	15	35	2.38	2.5	2.38	16
2nd Quarter 2022	2.5	20	19	2.38	2.38	2.38	3.5
3rd Quarter 2022	2.38	10	15	3	3	2.38	5
4th Quarter 2022							
DENR Standard	80	80	80	80	80	80	80

Arsenic

0.025							
0.020							
0.015							
0.010							
0.005						1	1
0.000							
1st Quarter 2020	Purok 7 Communal Dam 0.008	Balitien Delta 0.008	Balitien Midstream 0.008	Balitien Upstream 0.008	Communal Dam 0.008	Pinagduguan Falls 0.008	Pinagduguan Delta 0.008
2nd Quarter 2020	0.008	0.008	0.000	0.008	0.008	0.008	0.008
3rd Quarter 2020	0.008	0.008	0.008	0.008	0.008	0.008	0.008
4th Quarter 2020	0.008	0.008	0.008	0.008	0.008	0.008	0.008
1st Quarter 2021	0.008	0.008	0.008	0.008	0.008	0.008	0.008
2nd Quarter 2021	0.005	0.005	0.005	0.005	0.005	0.005	0.005
3rd Quarter 2021							
4th Quarter 2021	0.005	0.005	0.005	0.005	0.005	0.005	0.005
1st Quarter 2022	0.005	0.005	0.005	0.005	0.005	0.005	0.005
2nd Quarter 2022	0.005	0.005	0.005	0.005	0.005	0.005	0.005
3rd Quarter 2022	0.005	0.005	0.005	0.005	0.005	0.005	0.005
4th Quarter 2022							
DENR Standard	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Cadmium

0.006							
0.005							
0.004							
0.003 ·							
0.002							
0.001							
0.000	Purok 7 Communal Dam	Balitien Delta	Balitien Midstream	Balitien Upstream	Communal Dam	Pinagduguan Falls	Pinagduguan Delta
1st Quarter 2020	0.001	0.001	0.001	0.001	0.001	0.001	0.001
2nd Quarter 2020	0.001	0.001	0	0.001	0.001	0.001	0.001
3rd Quarter 2020	0.001	0.001	0.001	0.001	0.001	0.001	0.001
4th Quarter 2020	0.001	0.001	0.001	0.001	0.001	0.001	0.001
1st Quarter 2021	0.001	0.001	0.001	0.001	0.001	0.001	0.001
2nd Quarter 2021	0.001	0.001	0.001	0.001	0.001	0.001	0.001
3rd Quarter 2021							
4th Quarter 2021	0.001	0.001	0.001	0.001	0.001	0.001	0.001
1st Quarter 2022	0.001	0.001	0.001	0.001	0.001	0.001	0.001
2nd Quarter 2022	0.001	0.001	0.001	0.001	0.001	0.001	0.001
3rd Quarter 2022	0.001	0.001	0.001	0.001	0.001	0.001	0.001
4th Quarter 2022							
DENR Standard	0.005		0.005	0.005	0.005	0.005	0.005

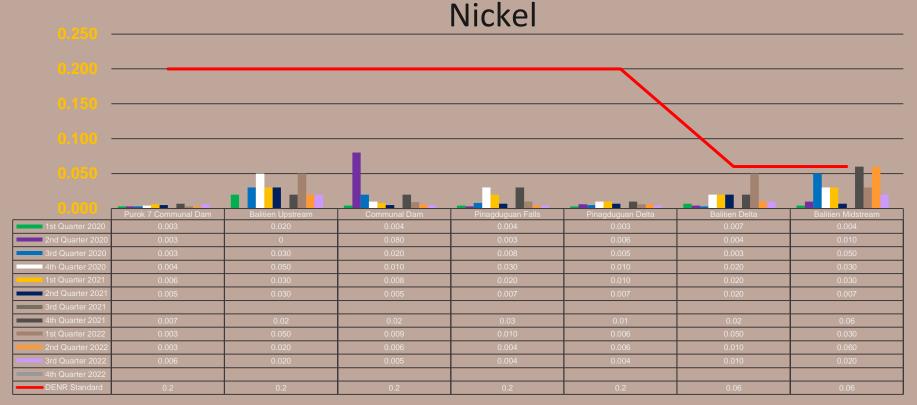
Lead

0.01

0.000	Purok 7 Communal Dam	Balitien Delta	Balitien Midstream	Balitien Upstream	Communal Dam	Pinagduguan Falls	Pinagduguan Delta
1st Quarter 2020	0.005	0.005	0.005	0.005	0.005	0.005	0.005
2nd Quarter 2020	0.005	0.005	0	0.005	0.005	0.005	0.005
3rd Quarter 2020	0.005	0.005	0.005	0.005	0.005	0.005	0.005
4th Quarter 2020	0.005	0.005	0.005	0.005	0.005	0.005	0.005
1st Quarter 2021	0.005	0.005	0.005	0.005	0.005	0.005	0.005
2nd Quarter 2021	0.005	0.005	0.005	0.005	0.005	0.005	0.005
3rd Quarter 2021							
4th Quarter 2021	0.005	0.005	0.005	0.005	0.005	0.005	0.005
1st Quarter 2022	0.005	0.005	0.005	0.005	0.005	0.005	0.005
2nd Quarter 2022	0.005	0.005	0.005	0.005	0.005	0.005	0.005
3rd Quarter 2022	0.005	0.005	0.005	0.005	0.005	0.005	0.005
4th Quarter 2022							
DENR Standard	0.05	0.05	0.05	0.05	0.05	0.05	0.05

	Manganese									
			1410	ingaries						
					/					
0.000	Purok 7 Communal Dam	Balitien Midstream	Balitien Upstream	Communal Dam	Pinagduguan Falls	Pinagduguan Delta	Balitien Delta			
1st Quarter 2020	0.004	0.10	0.003	0.008	0.008	0.10	0.03			
2nd Quarter 2020	0.003	0	0.04	0.003	0.01	0.05	0.03			
3rd Quarter 2020	0.009	0.06	0.01	0.02	0.01	0.005	0.06			
4th Quarter 2020	0.003	0.09	0.005	0.06	0.01	0.09	0.1			
1st Quarter 2021	0.003	0.09	0.003	0.01	0.01	0.2	0.1			
2nd Quarter 2021	0.007	0.1	0.003	0.01	0.01	0.1	0.02			
3rd Quarter 2021										
4th Quarter 2021	0.003	0.01	0.004	0.01	0.009	0.03	0.07			
1st Quarter 2022	0.003	0.1	0.005	0.01	0.009	0.1	0.1			
2nd Quarter 2022	0.005	0.07	0.003	0.004	0.009	0.04	0.07			
3rd Quarter 2022	0.003	0.09	0.003	0.005	0.008	0.06	0.09			
4th Quarter 2022										
DENR Standard	0.2	0.2	0.2	0.2	0.2	0.4	0.4			

*CLASS SC Standards for Balitien Delta and Balitien Midstream, Class C Standard on other sampling stations **For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

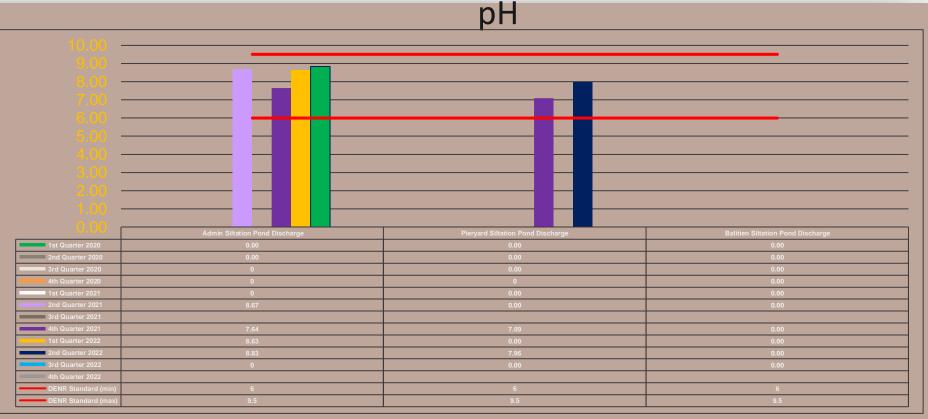


*CLASS SC Standards for Balitien Delta and Balitien Midstream, Class C Standard on other sampling stations **For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter



Balitien Siltation Pond





Total Suspended Solids (TSP)

0.00	Admin Siltation Pond Discharge	Pieryard Siltation Pond Discharge	Balitien Siltation Pond Discharge
1st Quarter 2020	0.00	0.00	0.00
2nd Quarter 2020	0.00	0.00	0.00
3rd Quarter 2020	0	0.00	0.00
4th Quarter 2020	0	0	0.00
1st Quarter 2021	0	0.00	0.00
2nd Quarter 2021	0	0.00	0.00
3rd Quarter 2021			
4th Quarter 2021	0	0	0
1st Quarter 2022	0	0.00	0.00
2nd Quarter 2022	0	0	0.00
3rd Quarter 2022	0	0.00	0.00
4th Quarter 2022			
DENR Standard	80	80	80

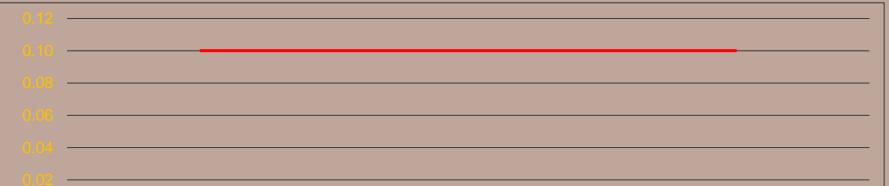
Arsenic

	Admin Situation Road Discharge	Pierrard Siltation Pond Discharge	Balitian Silitation Band Discharge	
0.00	Admin Siltation Pond Discharge	Pieryard Siltation Pond Discharge	Balitien Siltation Pond Discharge	
0.00	0.00	0.00	0.00	
0.00				
0.00 1st Quarter 2020 2nd Quarter 2020	0.00 0.00	0.00	0.00	
0.00 1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020	0.00 0.00 0.008	0.00 0.00 0.00	0.00 0.00 0.00	
C.OO 1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021	0.00 0.00 0.008 0.008	0.00 0.00 0.00 0.00 0.008	0.00 0.00 0.00 0.00	
C.OO 1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021	0.00 0.00 0.008 0.008 0.008 0.008	0.00 0.00 0.00 0.008 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 3rd Quarter 2021 4th Quarter 2021	0.00 0.00 0.008 0.008 0.008 0.005 0.005	0.00 0.00 0.00 0.008 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2022	0.00 0.00 0.008 0.008 0.008 0.005 	0.00 0.00 0.00 0.008 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	
0.000 1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 3rd Quarter 2021 1st Quarter 2021 1st Quarter 2022 2nd Quarter 2022	0.00 0.00 0.008 0.008 0.008 0.005 0.005 0.005 0.005 0.005	0.00 0.00 0.00 0.008 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	
C.OO 1st Quarter 2020 2rd Quarter 2020 3rd Quarter 2020 4th Quarter 2021 2rd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2022 2rd Quarter 2022 2rd Quarter 2022 2rd Quarter 2022	0.00 0.00 0.008 0.008 0.008 0.005 	0.00 0.00 0.00 0.008 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	
C.OO 1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 3rd Quarter 2021 1st Quarter 2021 1st Quarter 2022 2nd Quarter 2022	0.00 0.00 0.008 0.008 0.008 0.005 0.005 0.005 0.005 0.005	0.00 0.00 0.00 0.008 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	

Cadmium

0.00			
	Admin Siltation Pond Discharge	Piervard Siltation Pond Discharge	Balitien Siltation Pond Discharge
1st Quarter 2020	Admin Siltation Pond Discharge 0.00	Pieryard Siltation Pond Discharge 0.00	Balitien Siltation Pond Discharge 0.00
1st Quarter 2020 2nd Quarter 2020	0.00	0.00	0.00
1st Quarter 2020 2nd Quarter 2020 3rd Quarter 2020			
2nd Quarter 2020	0.00	0.00	0.00
2nd Quarter 2020 3rd Quarter 2020	0.00 0.00 0.001	0.00 0.00 0.00	0.00 0.00 0.00 0.00
2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020	0.00 0.00 0.001 0.001	0.00 0.00 0.00 0.00	0.00 0.00 0.00
2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021	0.00 0.00 0.001 0.001 0.001 0.001	0.00 0.00 0.00 0.001 0.001	0.00 0.00 0.00 0.00 0.00
2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021	0.00 0.00 0.001 0.001 0.001 0.001	0.00 0.00 0.00 0.001 0.001	0.00 0.00 0.00 0.00 0.00
2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2020 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021	0.00 0.00 0.001 0.001 0.001 0.001 0.001	0.00 0.00 0.00 0.001 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2021 2nd Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2022 2nd Quarter 2022	0.00 0.00 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2021 1st Quarter 2021 3rd Quarter 2021 3rd Quarter 2021 1st Quarter 2021 1st Quarter 2021 3rd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 3rd Quarter 2021 1st Quarter 2022 2nd Quarter 2022 3rd Quarter 2022 3rd Quarter 2022	0.00 0.00 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	0.00 0.00 0.00 0.001 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
2nd Quarter 2020 3rd Quarter 2020 4th Quarter 2021 1st Quarter 2021 2nd Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2021 4th Quarter 2021 3rd Quarter 2021 4th Quarter 2021 4th Quarter 2021 3rd Quarter 2021 4th Quarter 2021 1st Quarter 2021 1st Quarter 2022 2nd Quarter 2022	0.00 0.00 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0

Lead



0.00	Admin Siltation Pond Discharge	Pieryard Siltation Pond Discharge	Balitien Siltation Pond Discharge
1st Quarter 2020	0.00	0.00	0.00
2nd Quarter 2020	0.00	0.00	0.00
3rd Quarter 2020	0.005	0.00	0.00
4th Quarter 2020	0.005	0.005	0.00
1st Quarter 2021	0.005	0.00	0.00
2nd Quarter 2021	0.005	0.00	0.00
3rd Quarter 2021			
4th Quarter 2021	0.005	0.005	0.005
1st Quarter 2022	0.005	0.00	0.00
2nd Quarter 2022	0.005	0.005	0.00
3rd Quarter 2022	0.005	0.00	0.00
4th Quarter 2022			
DENR Standard	0.1	0.1	0.1

Manganese

2.50	
2.00	
1.50	
1.00	
0.50	

0.00	Admin Siltation Pond Discharge	Pieryard Siltation Pond Discharge	Balitien Siltation Pond Discharge
1st Quarter 2020	0.00	0.00	0.00
2nd Quarter 2020	0.00	0.00	0.00
3rd Quarter 2020	0.01	0.00	0.00
4th Quarter 2020	0.05	0.02	0.00
1st Quarter 2021	0.02	0.00	0.00
2nd Quarter 2021	0.01	0.00	0.00
3rd Quarter 2021			
4th Quarter 2021	0.04	0.03	0.01
1st Quarter 2022	0.02	0.00	0.00
2nd Quarter 2022	0.02	0.04	0.00
3rd Quarter 2022	0.03	0.00	0.00
4th Quarter 2022			
DENR Standard	2	2	2

EFFLUENT SAMPLING STATIONS

Nickel

0.00	Admin Siltation Pond Discharge	Pieryard Siltation Pond Discharge	Balitien Siltation Pond Discharge
4-4 0.000	0.00	0.00	0.00

0.00	Admin Siltation Pond Discharge	Pieryard Siltation Pond Discharge	Balitien Siltation Pond Discharge		
1st Quarter 2020	0.00	0.00	0.00		
2nd Quarter 2020	0.00	0.00	0.00		
3rd Quarter 2020	0.02	0.00	0.00		
4th Quarter 2020	0.04	0.04	0.00		
1st Quarter 2021	0.03	0.00	0.00		
2nd Quarter 2021	0.03	0.00	0.00		
3rd Quarter 2021					
4th Quarter 2021	0.08	0.06	0.01		
1st Quarter 2022	0.02	0.00	0.00		
2nd Quarter 2022	0.04	0.05	0.00		
3rd Quarter 2022	0.04	0.00	0.00		
4th Quarter 2022					
DENR Standard	1	1	1		

*No Discharge observed during Sampling Activity **For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

EFFLUENT SAMPLING STATIONS

Oil and Grease



*No Discharge observed during Sampling Activity **For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

 Human fecal coliform was observed in the water sampling station No. 6 (Balitien 2 -Midstream)



 Water sampling station No. 12 (Pieryard Siltation Pond) is observed to be with discharge this sampling activity which in the last MMT has none. This is a sampling station where discharge permit is being secured.



- The discharge permit applications for the septic tanks and fuel depots are now being prepared by the company thru its PCO while completing the supporting documents leading to online application.
- Station No. 13 (Balitien Siltation Pond) is repeatedly observed with no discharge due to the rerouting from the source of wastewater to station no. 8 (communal dam). However, at the moment, the company has no plan of abandoning this station to serve as further catchment pond of the wastewater.



- Released of laboratory results for air and water samples are observed to be perennially delayed which are provided to the Sampling Group already near the schedule of MRFC.
- The present facility of the company for residual wastes generation called as Residual Containment Area (RCA - 2 old dump trucks) may not fully accommodate the generation of the residual wastes of the company if prolongs its use.

GENERAL RECOMMENDATIONS

- Continue promptness of compliances to the existing environmental laws covered by the project.
- Water and Air Samples are assumed immediately brought to the third-party laboratory immediately after the execution of the activity. It is expected that the corresponding results can be released as soon as possible preferably 3-5 days before the schedule of the MRFC is set to have an ample time to prepare a more presentable power point presentation, thus avoiding a "hurry" mode in the preparation of the report for MRFC.

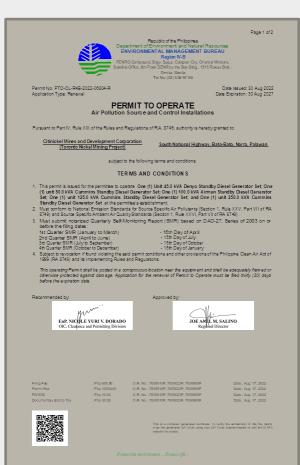


Republic Act No. 8749

Philippine Clean Air Act of 1999

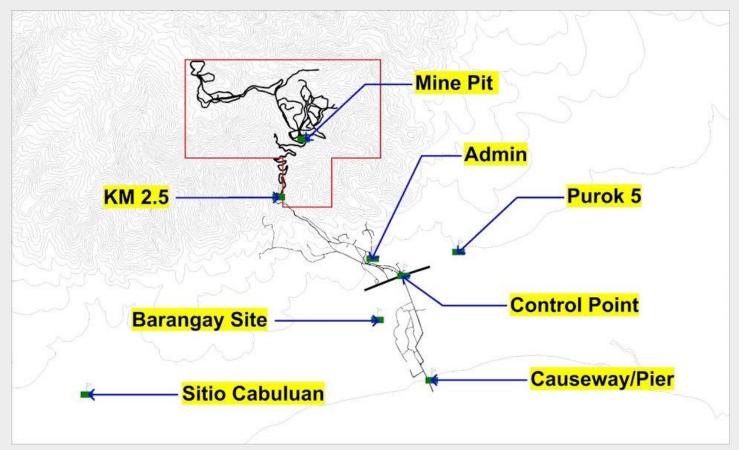


R.A. 8749 (Philippine Clean Air Act of 1999)





NOISE AND AIR SAMPLING STATIONS



NOISE AND AIR SAMPLING





Control Point



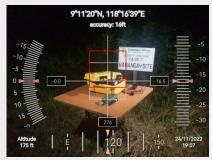
Mine Pit





NOISE AND AIR SAMPLING

Barangay Site



Sitio Cabuluan



AIR SAMPLING STATIONS

Total Suspended Particles (TSP) & PM10

350												
300												
200												
200												
150	iO											
100												
50			-									
	all the second second											
U	Purok 5	Admin	Control Point	Causeway/Pier	Mine pit	Kilometer 2.5	Barangay Site	Sitio Cabuluan				
1st Quarter 2020	22	33	40	56	25.00	2	21	51				
2nd Quarter 2020	28	55	20	7	26	28	45	4				
3rd Quarter 2020	17	6	8	17	85	120	17	9				
4th Quarter 2020	7	3	2	17	13	2	3	2				
1st Quarter 2021	3	1	10	12	9	16	80	21				
2nd Quarter 2021	7	7	7	7	7	7	7	7				
3rd Quarter 2021												
4th Quarter 2021	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07				
1st Quarter 2022	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07				
2nd Quarter 2022	0.96	0.07	0.07	0.07	1.63	0.07	0.07	0.55				
3rd Quarter 2022	9	86	34	193	43	162	156	145				
4th Quarter 2022	19	127	6	11	17	11	6	11				
DENR Standard (TSP)	300	300	300	300	300	300	300	300				
DENR Standard PM10	200	200	200	200	200	200	200	200				

*FEBRUARY 2020 TO FEBRUARY 2021 – TSP / JULY 2021 TO PRESENT – PM10
**For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

NOISE SAMPLING STATIONS



*FEBRUARY 2020 TO FEBRUARY 2021 – TSP / JULY 2021 TO PRESENT – PM10 **For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

REMARKS

• During the ambient air sampling, the activities are hampered by the on-and-off rain shower, hence, some of the sampling hour were not completed based on the prescribed one (1) hour period.

THANK YOU