

3RD QUARTER MMT CMDC VALIDATION

4TH Quarter Air, Noise and Water Sampling

PULOT NICKEL MINING PROJECT

Brgy. Punang/Pulot Interior/Labog, Sofronio Española, Palawan

Sampling Team:

EMB MIMAROPA Region

PEMU Palawan – SEMS Zosima D. Jampit

Regional Office – Geologist Niño Jefferson L. Rojas

PHO: Nelso C. Virgo

LGU: Jessie Galang

Daniel Boston

CMDC Representatives: Nalma A. Asmad 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

01

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

01

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



01

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



FINDINGS AND OBSERVATIONS

The two (2) contractors for this project (Canipaan Earth Resources Inc. (CERI) and Ireah Trading Corporation (ITC) already have an accredited PCO. Online applications for HWG ID are now on going with the company's assistance.

GENERAL RECOMMENDATIONS

Continue promptness of compliances to existing environmental laws covered by the project.

Continue the assistance to the contractors in complying applicable environmental laws.

02

R.A. No. 9003 (Ecological Solid Waste Management of 2000)

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



FINDINGS AND OBSERVATIONS

The company is still using the old admin building as temporary RCA while the MOA with the concerned LGU-Espanola is still on process.

03

R.A. No. 9275 (Philippine Clean Water Act of 2004)

R.A. No. 9275 (Philippine Clean Water Act of 2004)

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Date: Sep-07, 2022

Permit No.: DP-R4B-22-06858

*Renewal***WASTEWATER 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 **Criticaltek Mines And Development Corporation** with office address at Bgy. Pulut Interior, Punung And Labog Sofronio Española, Punang, Sofronio Española, Palawan for its establishment.

Criticaltek Mines And Development Corporation-pulut Nickel Mining Project	Bgy. Pulut Interior, Punung And Labog Sofronio Española, Punang Punang SCS/FROND ESPAÑOLA
TIN No. 245-745-964-000	

- This permit is issued to the Pulut Nickel Mining Project and the permit holder shall discharge to the final discharge point of the Tagusao Sitation Pond System with capacity of 220,000 cubic meters.
- The permit holder shall ensure that discharge rate of the effluent from the Tagusao Sitation Pond shall not exceed its design rate capacity and shall comply with the following standard:

Parameter	Standard	Parameter	Standard
pH	6.0-9.5	Arsenic	0.04 mg/L
Manganese	4 mg/L	Lead	0.1 mg/L
Cadmium	0.01 mg/L	Total Suspended Solids	100 mg/L
Nickel	0.3 mg/L		

*Reference for effluent parameters: DAO 2016-08 and DAO 2021-10. PSC Code: 07394

- Submit Wastewater Discharge Permit Application for your other outfall/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
* 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 effluent discharged to any receiving water body or land in every submission of the SMR

- 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.
- All water consumption shall be measured and recorded on a daily basis. An effective flow-metering device(s) shall be installed for this purpose.
- 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 and/or its duly-authorized representative(s).



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Protect the environment... Pinang (B)...

Page 1 of 2



Date: Sep 13, 2022

Permit No.: DP-R4B-22-07127

*Renewal***WASTEWATER 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 **Criticaltek Mines And Development Corporation (paul Sitation Pond Discharge)** with office address at Barangay Pulut Interior (paul I), Punung And Labog, Sofronio Española, Palawan for its establishment:

Criticaltek Mines And Development Corporation-pmp (paul Sitation Pond Discharge)	Barangay Pulut Interior (paul I), Punung And Labog, Sofronio Española, Palawan Punang SOFRONIO ESPAÑOLA
TIN No. 245-745-964-000	

- The discharge rate of the effluent shall not exceed the 200, 4000 m³/day design capacity of the Wastewater Treatment Facility (WTF) (Paul Sitation Pond) and shall comply with the following standard:

Parameter	Standard	Parameter	Standard
pH	6.0-9.0	Arsenic	0.04 mg/L
Manganese	4 mg/L	Lead	0.1 mg/L
Cadmium	0.01 mg/L	Total Suspended Solids	100 mg/L
Nickel	0.3 mg/L		

*Reference for effluent parameters: DAO 2016-08 and DAO 2021-10. PSC Code: 07394

- Submit Wastewater Discharge Permit Application for your other outfall/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
* 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 effluent discharged to any receiving water body or land in every submission of the SMR

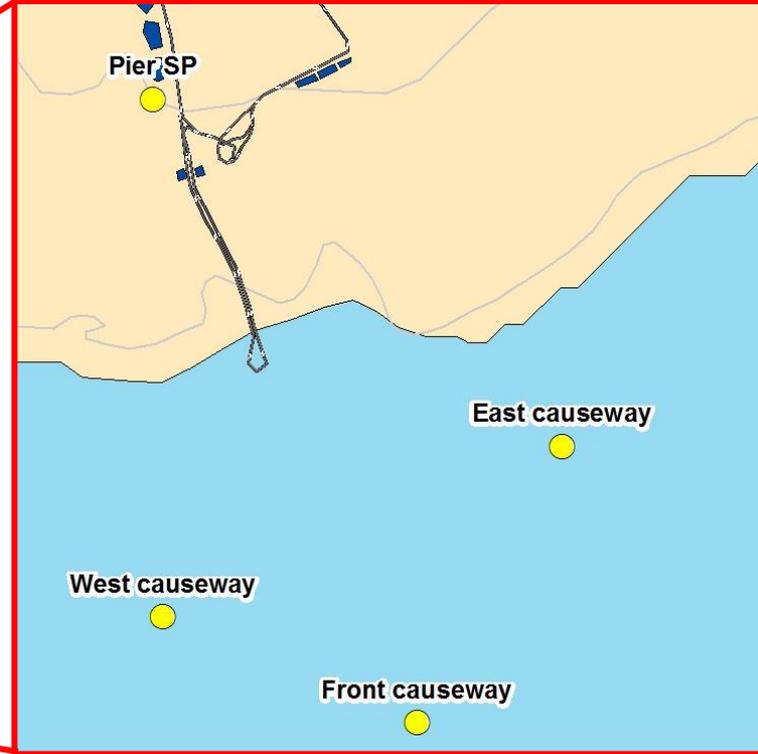
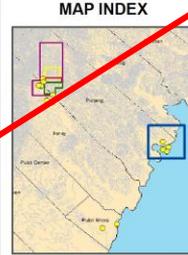
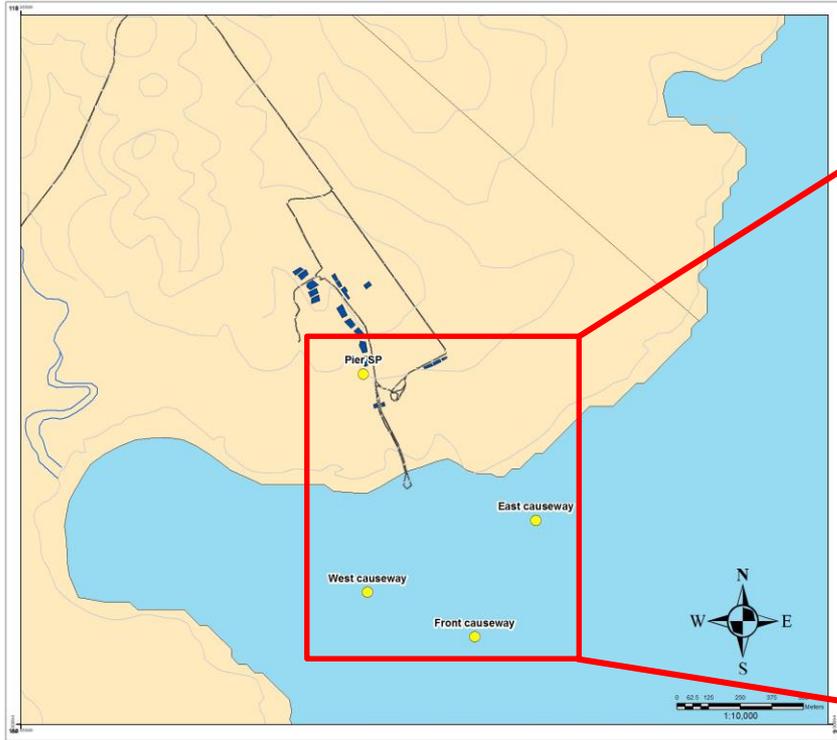
- The permit holder shall include effluent analysis on the parameters listed in condition no. 1 of this permit, conducted by Third Party Laboratory duly recognized by EMB, in every submission of the SMR.
- All water consumption shall be measured and recorded on a daily basis. An effective flow-metering device(s) shall be installed for this purpose.
- 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 and/or its duly-authorized representative(s).
- Submit certificate or any documentary proof of desilting of the WTF.



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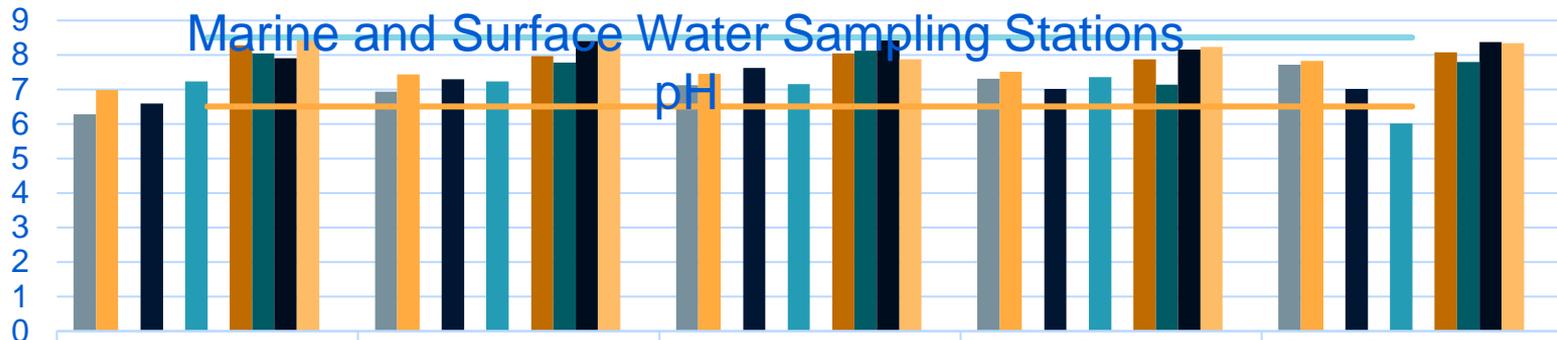
Pier Site Water Sampling Stations



MARINE WATER SAMPLING



Marine and Surface Water Sampling Stations



	East Causeway	Front Causeway	West Causeway	Pulot River Delta (Surface)	Pulot River Bridge (Surface)
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1Q2020	6.28	6.94	7.12	7.31	7.71
2Q2020	6.98	7.44	7.45	7.51	7.82
3Q2020	0	0	0	0	0
4Q2020	6.6	7.29	7.63	7.02	7.01
1Q2021	0	0	0	0	0
2Q2021	7.24	7.24	7.16	7.36	6.02
3Q2021	0	0	0	0	0
4Q2021	8.28	7.97	8.05	7.88	8.08
1Q2022	8.05	7.78	8.13	7.14	7.8
2Q2022	7.9	8.4	8.44	8.15	8.38
3Q2022	8.45	8.49	7.87	8.23	8.34
4Q2022					
DENR Standard (min)	6.5	6.5	6.5	6.5	6.5
DENR Standard (max)	8.5	8.5	8.5	8.5	8.5

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

mg/L

Marine and Surface Water Sampling Stations

Arsenic

0.025
0.02
0.015
0.01
0.005
0

	East Causeway	Front Causeway	West Causeway	Pulot River Delta (Surface)	Pulot River Bridge (Surface)
1Q2020	0.008	0.008	0.008	0.008	0.008
2Q2020	0.008	0.008	0.008	0.008	0.008
3Q2020	0.008	0.008	0.008	0.008	0.008
4Q2020	0.008	0.008	0.008	0.008	0.008
1Q2021	0.008	0.008	0.008	0.008	0.008
2Q2021	0.005	0.005	0.005	0.005	0.005
3Q2021	0	0	0	0	0
4Q2021	0.005	0.005	0.005	0.005	0.005
1Q2022	0.005	0.005	0.005	0.005	0.005
2Q2022	0.005	0.005	0.005	0.005	0.005
3Q2022	0.005	0.005	0.005	0.005	0.005
4Q2022					
DENR Standard	0.02	0.02	0.02	0.02	0.02

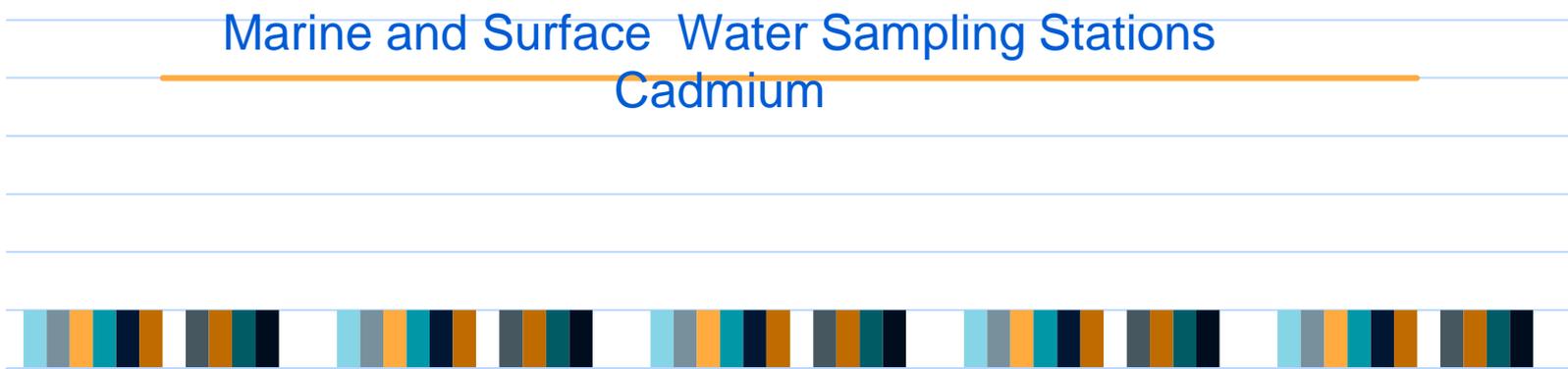
*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Marine and Surface Water Sampling Stations

Cadmium

mg/L

0.006
0.005
0.004
0.003
0.002
0.001
0



	East Causeway	Front Causeway	West Causeway	Pulot River Delta (Surface)	Pulot River Bridge (Surface)
1Q2020	0.001	0.001	0.001	0.001	0.001
2Q2020	0.001	0.001	0.001	0.001	0.001
3Q2020	0.001	0.001	0.001	0.001	0.001
4Q2020	0.001	0.001	0.001	0.001	0.001
1Q2021	0.001	0.001	0.001	0.001	0.001
2Q2021	0.001	0.001	0.001	0.001	0.001
3Q2021	0	0	0	0	0
4Q2021	0.001	0.001	0.001	0.001	0.001
1Q2022	0.001	0.001	0.001	0.001	0.001
2Q2022	0.001	0.001	0.001	0.001	0.001
3Q2022	0.001	0.001	0.001	0.001	0.001
4Q2022					
DENR Standard	0.005	0.005	0.005	0.005	0.005

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Marine and Surface Water Sampling Stations

mg/L

Lead

0.06
0.05
0.04
0.03
0.02
0.01
0

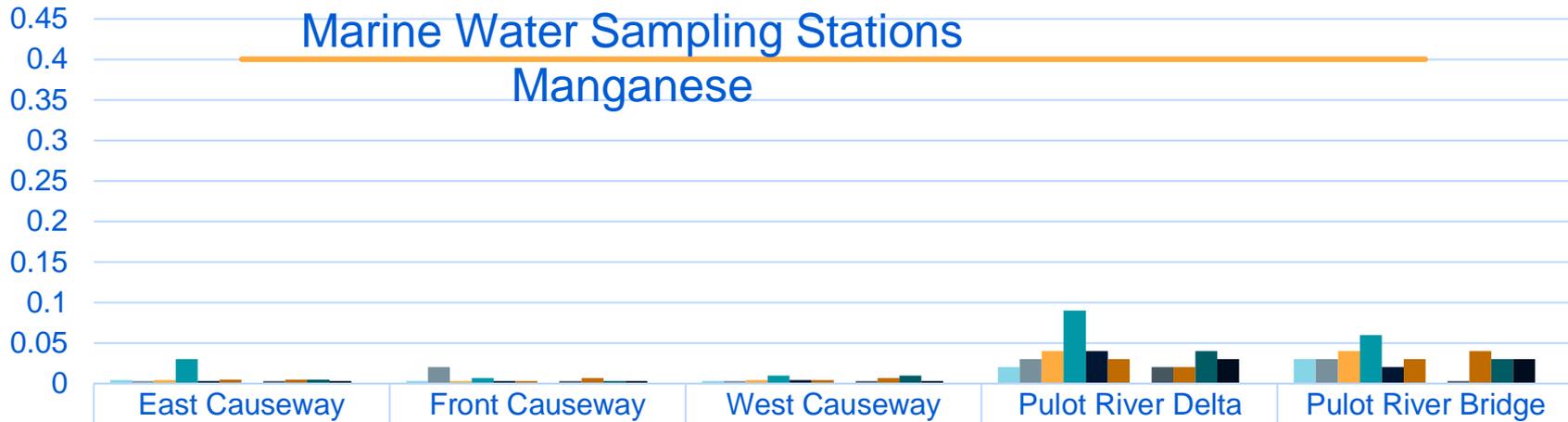


	East Causeway	Front Causeway	West Causeway	Pulot River Delta (Surface)	Pulot River Bridge (Surface)
1Q2020	0.005	0.005	0.005	0.005	0.005
2Q2020	0.005	0.005	0.005	0.005	0.005
3Q2020	0.005	0.005	0.005	0.005	0.005
4Q2020	0.005	0.005	0.005	0.005	0.005
1Q2021	0.005	0.005	0.005	0.005	0.005
2Q2021	0.005	0.005	0.005	0.005	0.005
3Q2021	0	0	0	0	0
4Q2021	0.005	0.005	0.005	0.005	0.005
1Q2022	0.005	0.005	0.005	0.005	0.005
2Q2022	0.005	0.005	0.005	0.005	0.005
3Q2022	0.005	0.005	0.005	0.005	0.005
4Q2022					
DENR Standard	0.05	0.05	0.05	0.05	0.05

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Marine Water Sampling Stations

Manganese



**For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter*

Marine and Surface Water Sampling Stations

mg/L

Nickel

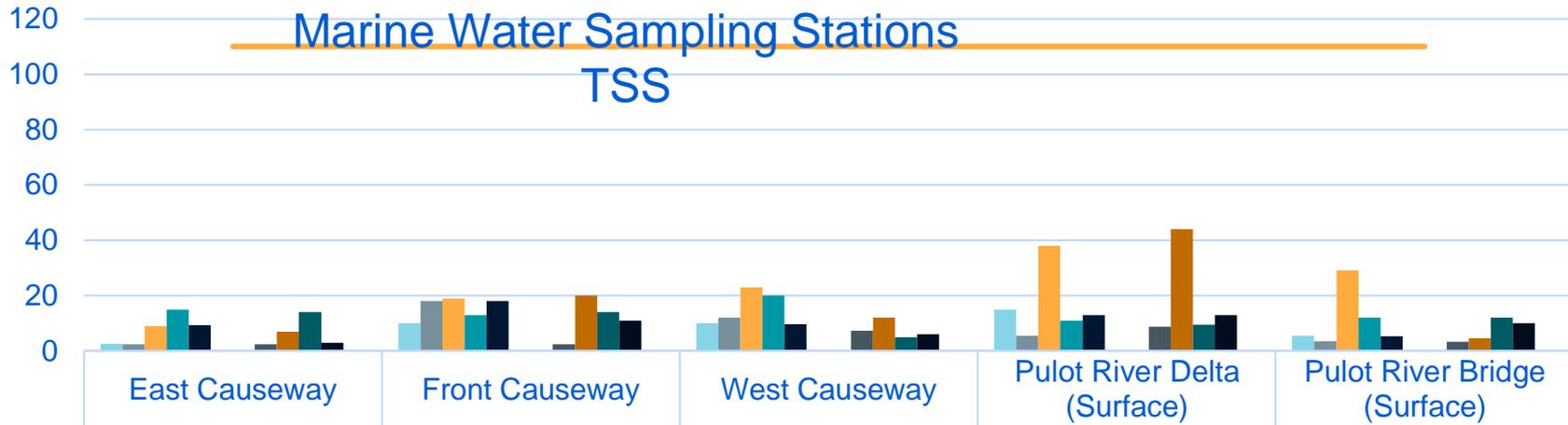
1.2
1
0.8
0.6
0.4
0.2
0

	East Causeway	Front Causeway	West Causeway	Pulot River Delta	Pulot River Bridge
1Q2020	0.003	0.003	0.003	0.003	0.003
2Q2020	0.003	0.003	0.003	0.003	0.003
3Q2020	0.003	0.003	0.003	0.01	0.01
4Q2020	0.003	0.003	0.003	0.01	0.04
1Q2021	0.003	0.003	0.003	0.003	0.009
2Q2021	0.003	0.003	0.003	0.003	0.003
3Q2021	0	0	0	0	0
4Q2021	0.003	0.003	0.003	0.003	0.003
1Q2022	0.003	0.003	0.003	0.003	0.003
2Q2022	0.003	0.003	0.003	0.003	0.007
3Q2022	0.003	0.003	0.003	0.003	0.003
4Q2022					
DENR Standard	1	1	1	1	1

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Marine Water Sampling Stations

TSS



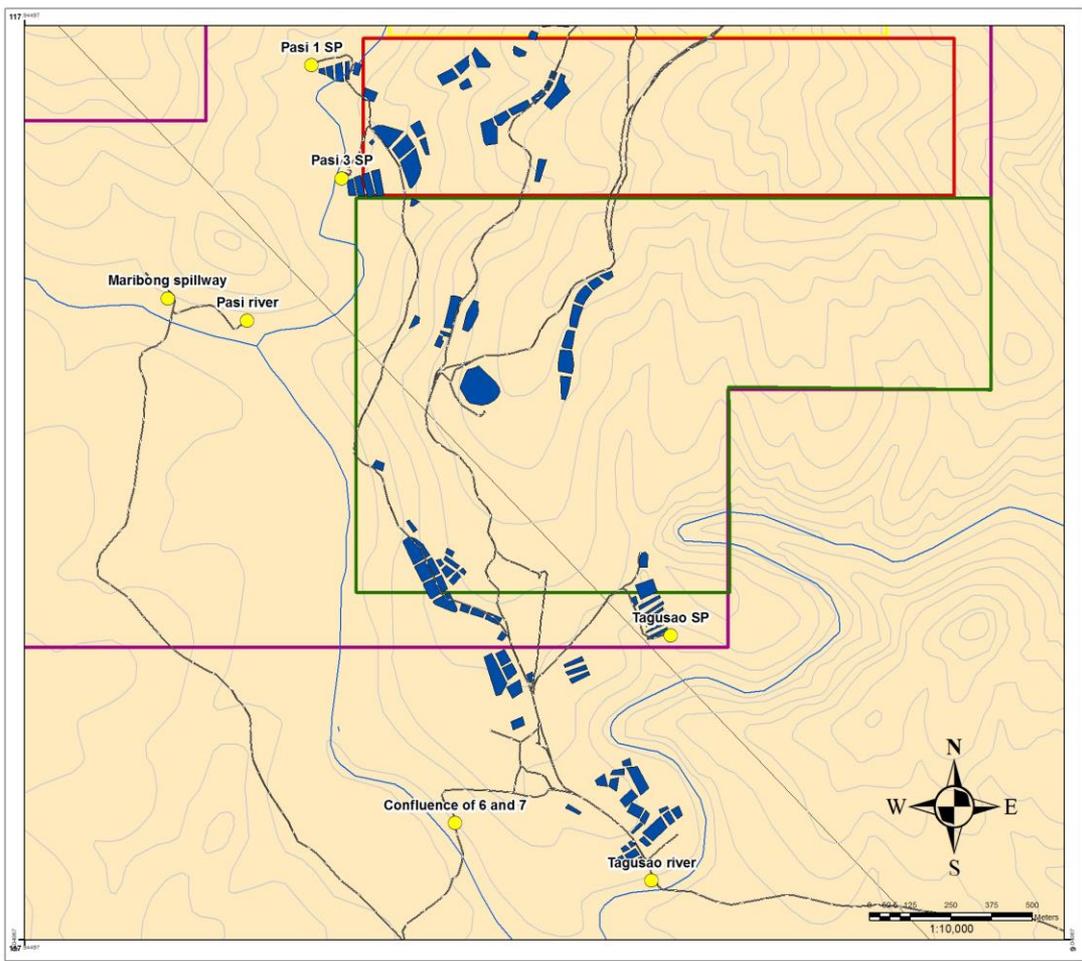
	East Causeway	Front Causeway	West Causeway	Pulot River Delta (Surface)	Pulot River Bridge (Surface)
1Q2020	2.5	10	10	15	5.5
2Q2020	2.38	18	12	5.5	3.5
3Q2020	9	19	23	38	29
4Q2020	15	13	20	11	12
1Q2021	9.3	18	9.7	13	5.3
2Q2021	0	0	0	0	0
3Q2021	0	0	0	0	0
4Q2021	2.38	2.38	7.3	8.7	3.3
1Q2022	7	20	12	44	4.5
2Q2022	14	14	5	9.5	12
3Q2022	3	11	6	13	10
4Q2022					
DENR Standard	110	110	110	110	110

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

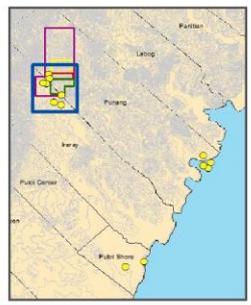
AMBIENT WATER SAMPLING



Mine Pit Water Sampling Stations



MAP INDEX



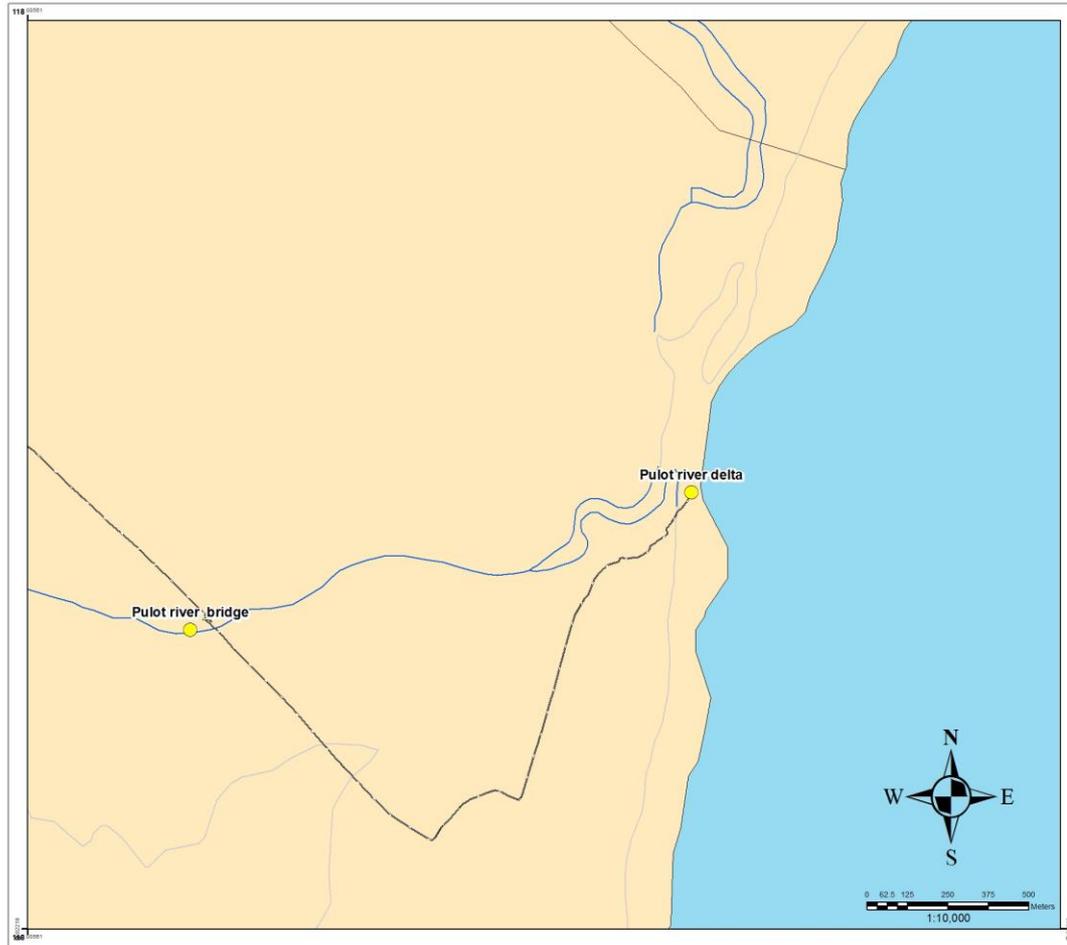
Legend

- Water Sampling Station
- Road network 20210203
- wgs_palriver05
- Siltponds_LuzPhil
- Mining Block- A
- Mining Block- B
- Mining Block- C
- PNMP MPSA
- Contours_LuzPhil_exported_polyline
- Palawan

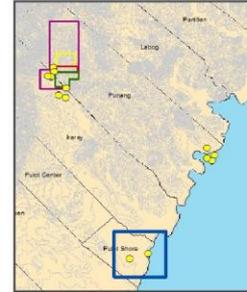


Map No: 2021-008	WATER SAMPLING STATIONS (MINE PIT)
Date: 10 MAR 2021	
Prepared by: GTF	
Checked by: JBC	
Approved by: JMUJr.	
Coordinate System: GCS Luzon 1911	
Datum: Luzon 1911	
Units: Degree	

Pulot Shore Water Sampling Stations



MAP INDEX



Legend

- Water Sampling Station
- Road network 20210203
- wgs_palriver05
- Siltponds_LuzPhil
- Mining Block- A
- Mining Block- B
- Mining Block- C
- PNMP MPSA
- Contours_LuzPhil_exported_polyline
- Palawan

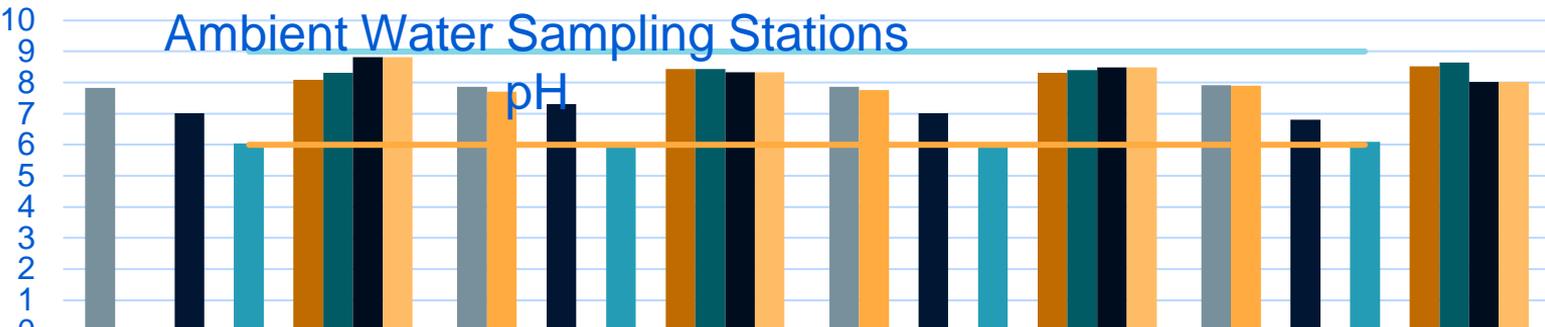


Citinickel Mines
INCORPORATED CORPORATION
P.O. BOX 10000, MARIKINA CITY
RIZAL, PHILIPPINES



Map No: 2021-007 Date: 10 MAR 2021 Prepared by: GT Checked by: JMC Approved by: JMMJr	WATER SAMPLING STATIONS (PULOT SHORE)
Coordinate System: GCS Luzon 1911 Datum: Luzon 1911 Units: Degree	

Ambient Water Sampling Stations



	Maribong Spillway	Pasi River	Confluence of Station 6 and 7	Tagusao River
1Q2020	7.82	7.86	7.87	7.91
2Q2020	0	7.7	7.76	7.89
3Q2020	0	0	0	0
4Q2020	7.02	7.3	7.01	6.8
1Q2021	0	0	0	0
2Q2021	6.05	6.07	6.06	6.09
3Q2021	0	0	0	0
4Q2021	8.08	8.44	8.32	8.52
1Q2022	8.31	8.43	8.4	8.64
2Q2022	8.82	8.34	8.48	8.02
3Q2022	8.82	8.34	8.48	8.02
DENR Standard (min)	6	6	6	6
DENR Standard (max)	9	9	9	9
4Q2022				

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Ambient Water Sampling Stations

Arsenic

mg/L

0.025

0.02

0.015

0.01

0.005

0

Maribong Spillway

Pasi River

Confluence of Station 6
and 7

Tagusao River

1Q2020

0.008

0.008

0.008

0.008

2Q2020

0

0.008

0.008

0.008

3Q2020

0.008

0.008

0.008

0.008

4Q2020

0.008

0.008

0.008

0.008

1Q2021

0.008

0.008

0.008

0.008

2Q2021

0.005

0.005

0.005

0.005

3Q2021

0

0

0

0

4Q2021

0.005

0.005

0.005

0.005

1Q2022

0.005

0.005

0.005

0.005

2Q2022

0.005

0.005

0.005

0.005

3Q2022

0.005

0.005

0.005

0.005

4Q2022

DENR Standard

0.02

0.02

0.02

0.02

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Ambient Water Sampling Stations

mg/L

Cadmium

0.025

0.02

0.015

0.01

0.005

0

Maribong Spillway

Pasi River

Confluence of Station 6
and 7

Tagusao River

1Q2020

0.001

0.001

0.001

0.001

2Q2020

0.001

0.001

0.001

3Q2020

0.001

0.001

0.001

0.001

4Q2020

0.001

0.001

0.001

0.001

1Q2021

0.001

0.001

0.001

0.001

2Q2021

0.001

0.001

0.001

0.001

3Q2021

0

0

0

0

4Q2021

0.001

0.001

0.001

0.001

1Q2022

0.001

0.001

0.001

0.001

2Q2022

0.001

0.001

0.001

0.001

3Q2022

0.001

0.001

0.001

0.001

4Q2022

0.001

0.001

0.001

0.001

DENR Standard

0.02

0.02

0.02

0.02

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Ambient Water Sampling Stations

mg/L

Lead

0.12
0.1
0.08
0.06
0.04
0.02
0

	Maribong Spillway	Pasi River	Confluence of Station 6 and 7	Tagusao River
1Q2020	0.005	0.005	0.005	0.005
2Q2020	0	0.005	0.005	0.005
3Q2020	0.005	0.005	0.005	0.005
4Q2020	0.005	0.005	0.005	0.005
1Q2021	0.005	0.005	0.005	0.005
2Q2021	0.005	0.005	0.005	0.005
3Q2021	0	0	0	0
4Q2021	0.005	0.005	0.005	0.005
1Q2022	0.005	0.005	0.005	0.005
2Q2022	0.005	0.005	0.005	0.005
3Q2022	0.005	0.005	0.005	0.005
4Q2022				
DENR Standard	0.1	0.1	0.1	0.1

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Ambient Water Sampling Stations

Manganese

2.5
2
1.5
1
0.5
0

	Maribong Spillway	Pasi River	Confluence of Station 6 and 7	Tagusao River
1Q2020	0.008	0.006	0.006	0.02
2Q2020	0	0.01	0.004	0.01
3Q2020	0.009	0.009	0.007	0.02
4Q2020	0.006	0.009	0.01	0.01
1Q2021	0.009	0.007	0.004	0.01
2Q2021	0.006	0.007	0.04	0.03
3Q2021	0	0	0	0
4Q2021	0.004	0.006	0.006	0.004
1Q2022	0.04	0.04	0.01	0.008
2Q2022	0.007	0.01	0.02	0.01
3Q2022	0.006	0.02	0.009	0.02
4Q2022				
DENR Standard	2	2	2	2

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

mg/L

1.2
1
0.8
0.6
0.4
0.2
0

Ambient Water Sampling Stations

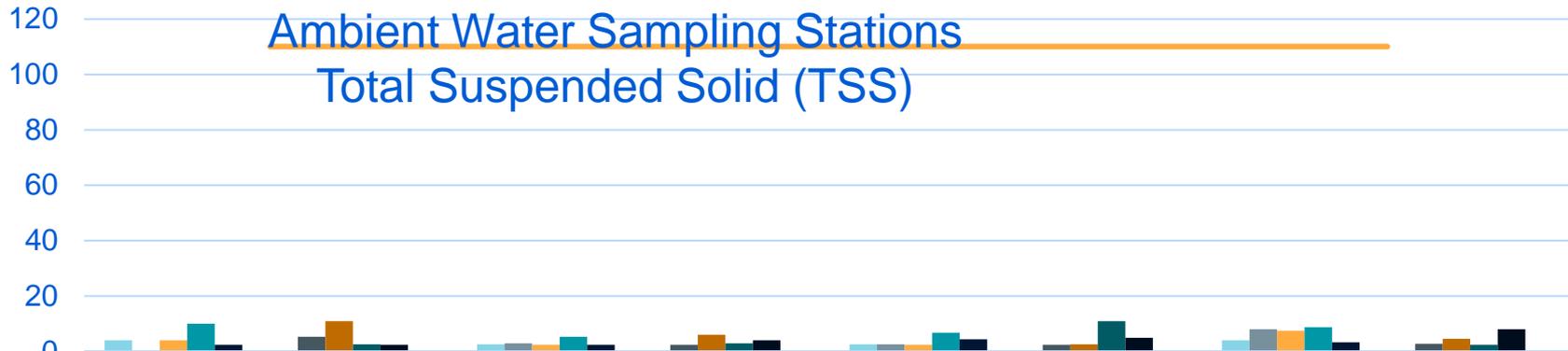
Nickel

	Maribong Spillway	Pasi River	Confluence of Station 6 and 7	Tagusao River
1Q2020	0.003	0.003	0.003	0.004
2Q2020	0	0.003	0.003	0.004
3Q2020	0.003	0.003	0.003	0.008
4Q2020	0.005	0.01	0.01	0.01
1Q2021	0.003	0.004	0.003	0.008
2Q2021	0.003	0.003	0.003	0.004
3Q2021	0	0	0	0
4Q2021	0.003	0.003	0.003	0.005
1Q2022	0.004	0.003	0.003	0.003
2Q2022	0.003	0.033	0.005	0.004
3Q2022	0.003	0.003	0.003	0.005
4Q2022				
DENR Standard	1	1	1	1

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Ambient Water Sampling Stations

Total Suspended Solid (TSS)



	Maribong Spillway	Pasi River	Confluence of Station 6 and 7	Tagusao River
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1Q2020	4	2.5	2.5	4
2Q2020	0	3	2.5	8
3Q2020	4	2.38	2.38	7.5
4Q2020	10	5.3	6.7	8.7
1Q2021	2.38	2.38	4.3	3.3
2Q2021	0	0	0	0
3Q2021	0	0	0	0
4Q2021	5.3	2.38	2.38	2.7
1Q2022	11	6	2.5	4.5
2Q2022	2.5	3	11	2.38
3Q2022	2.38	4	5	8
4Q2022				
DENR Standard	110	110	110	110

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

EFFLUENT WATER SAMPLING



Effluent Water Sampling Stations

pH

10
9
8
7
6
5
4
3
2
1
0

	Tagusao Siltation Pond	Stockyard Siltation Pond
1Q2020	0	0
2Q2020	0	0
3Q2020	0	0
4Q2020	0	0
1Q2021	0	0
2Q2021	0	0
3Q2021	0	0
4Q2021	0	0
1Q2022	0	0
2Q2022	0	0
3Q2022	0	0
4Q2022		
DENR Standard (min)	6	6
DENR Standard (max)	9	9

**No reading on 4th Quarter 2021, 4th Quarter 2021, and 2nd Quarter 2022 due to defective sampler*

***For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter*

Effluent Water Sampling Stations

Arsenic

mg/L

0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0

Tagusao Siltation Pond

Stockyard Siltation Pond

1Q2020

0

0

2Q2020

0

0

3Q2020

0

0

4Q2020

0.008

0

1Q2021

0

0

2Q2021

0

0

3Q2021

0

0

4Q2021

0.005

0

1Q2022

0

0

2Q2022

0

0.005

3Q2022

0

0

4Q2022

0

0

DENR Standard

0.04

0.04

*No reading with 4th Quarter 2020 and 2021 due to defective sampler

**For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Effluent Water Sampling Stations

mg/L

Cadmium

0.012
0.01
0.008
0.006
0.004
0.002
0

	Tagusao Siltation Pond	Stockyard Siltation Pond
1Q2020	0	0
2Q2020	0	0
3Q2020	0	0
4Q2020	0.001	0
1Q2021	0	0
2Q2021	0	0
3Q2021	0	0
4Q2021	0.001	0
1Q2022	0	0
2Q2022	0	0.001
3Q2022	0	0
4Q2022		
DENR Standard	0.01	0.01

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Effluent Water Sampling Stations

mg/L

Lead

0.12
0.1
0.08
0.06
0.04
0.02
0

Tagusao Siltation Pond

Stockyard Siltation Pond

1Q2020	0	0
2Q2020	0	0
3Q2020	0	0
4Q2020	0.005	0
1Q2021	0	0
2Q2021	0	0
3Q2021	0	0
4Q2021	0.005	0
1Q2022	0	0
2Q2022	0	0.005
3Q2022	0	0
4Q2022		
DENR Standard	0.1	0.1

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Effluent Water Sampling Stations

Manganese

mg/L

2.5
2
1.5
1
0.5
0

	Tagusao Siltation Pond	Stockyard Siltation Pond
1Q2020	0	0
2Q2020	0	0
3Q2020	0	0
4Q2020	0.02	0
1Q2021	0	0
2Q2021	0	0
3Q2021	0	0
4Q2021	0.04	0
1Q2022	0	0
2Q2022	0	0.08
3Q2022	0	0
4Q2022		
DENR Standard	2	2

Effluent Water Sampling Stations

Nickel

mg/L

1.2
1
0.8
0.6
0.4
0.2
0

	Tagusao Siltation Pond	Stockyard Siltation Pond
1Q2020	0	0
2Q2020	0	0
3Q2020	0	0
4Q2020	0.02	0
1Q2021	0	0
2Q2021	0	0
3Q2021	0	0
4Q2021	0.01	0
1Q2022	0	0
2Q2022	0	0.02
3Q2022	0	
4Q2022		
DENR Standard	1	1

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

mg/L

Effluent Water Sampling Stations Total Suspended Solid (TSS)

120
100
80
60
40
20
0

	Tagusao Siltation Pond	Stockyard Siltation Pond
1Q2020	0	0
2Q2020	0	0
3Q2020	0	0
4Q2020	0	0
1Q2021	0	0
2Q2021	0	0
3Q2021	0	0
4Q2021	2.38	0
1Q2022	0	0
2Q2022	0	20
3Q2022	0	0
4Q2022		
DENR Standard	100	100

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

Effluent Water Sampling Stations

mg/L

Oil and Grease

6
5
4
3
2
1
0

Tagusao Siltation Pond

Stockyard Siltation Pond

- 1Q2020
- 2Q2020
- 3Q2020
- 4Q2020
- 1Q2021
- 2Q2021
- 3Q2021
- 4Q2021
- 1Q2022
- 2Q2022
- 3Q2022
- 4Q2022
- DENR Standard

	Tagusao Siltation Pond	Stockyard Siltation Pond
1Q2020	0	0
2Q2020	0	0
3Q2020	0	0
4Q2020	0	0
1Q2021	0	0
2Q2021	0	0
3Q2021	0	0
4Q2021	1.7	0
1Q2022	0	0
2Q2022	0	1.6
3Q2022	0	0
4Q2022		
DENR Standard	5	5

*For CY 2021, MMT was conducted on February, July and November. Hence, no data on 3rd Quarter

FINDINGS AND OBSERVATIONS

It was reported previously that the Company has nine (9) water sampling stations for ambient and four (4) water sampling stations for effluent. However, during this monitoring, it was found out that there are **two (2) unit series of Siltation Ponds (currently known as PASI 4 and Tagusao Siltation Pond 1) located down the Minesite, and Old Admin Building and CERL Compound/Motor Pool, respectively, with a new compartment.** Out of these six (6) effluent stations, currently, four (4) sampling stations (**Pasi 1 and Pasi 3**) stations are observed to be **no discharge**.



FINDINGS AND OBSERVATIONS

The seven (7) air ambient sampling stations and nine (9) water ambient sampling stations still have no appropriate signages.

During the water sampling activity, the water checker provides a reading before being submerged in water particularly in pH parameter which may indicate that the checker needs an update calibration. Accordingly, the water checker will be sent to the calibration center after the MMT.

Some portions of the mining access road are muddy, and no proper bund wall was observed that seems unsafe and may cause discoloration of water bodies.

Portions of the active mining area (Block C) and proposed waste dump area in the mine site have **no** perimeter drainage canal and bund wall connecting to the established Pit Bottom Pond where rainwater might encroach down to the creeks that might later result to its water discoloration.



FINDINGS AND OBSERVATIONS

The company is accordingly now engaged with the third party for environmental biodiversity audit.

GENERAL RECOMMENDATIONS

The company is accordingly now engaged with the third party for environmental biodiversity audit , **it is recommended that coastal resources audit or study be also included.**

GENERAL RECOMMENDATIONS

Continue promptness of compliances to existing environmental laws covered by the project.

The proponent is advised to secure a Discharge Permit for the oil-and-water separator facilities.

Establishment of drainage canal/bund wall in the active mining area that is connected to the established Pit Bottom Pond.

GENERAL RECOMMENDATIONS

Observe regular equipment calibration

Recommending of regular fixing of bund walls and scraping in the access road.

The company is encouraged to apply coco net materials in the highly erodible areas to temporarily hold soil during rainy season.

04

R.A. No. 8749 (Philippine Clean Air Act of 1999)

04 R.A. No. 8749 (Philippine Clean Air Act of 1999)



Republic of the Philippines
Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU
Region IV-B
PENRO Compound, Brgy. Zambales City, Oriental Mindoro
Sanitary Office, 6th Floor DENR by the Bay Bldg., 1515 Roxas Blvd.,
Cristina, Manila
Tel No. (02) 536 97 96

Permit No: PTD-OL-R4B-2022-03959-R
Application Type: Renewal

Date Issued: 02 Jun 2022
Date Expiration: 02 Jun 2027

PERMIT TO OPERATE Air Pollution Source and Control Installations

Pursuant to Part IV, Rule XXX of the Rules and Regulations of R.A. 8749, authority is hereby granted to:

CITINICKEL MINES AND DEVELOPMENT CORPORATION - PULOY NICKEL MINING PROJECT
CITINICKEL MINES AND DEVELOPMENT CORPORATION - PULOY NICKEL MINING PROJECT
South Road National Highway, Punaang, Sofronio
Española, Palawan

subject to the following terms and conditions:

TERMS AND CONDITIONS

- The permit is issued for the permittee to operate One (1) Unit 125.0 kVA Nippon Diesel Generator Set and One (1) Unit 100.0 kVA Aikman Generator Set at the permittee's establishment.
- Must conform to National Emission Standards for Source Specific Air Pollutants (Section 1, Rule XXV, Part VII of RA 8749) and Source Specific Ambient Air Quality Standards (Section 1, Rule XXVI, Part VIII of RA 8749).
- Must submit notarized Quarterly Self-Monitoring Report (SMR) based on DAO-27, Series of 2003 on or before the filing dates:
 - 1st Quarter SMR (January to March) - 15th Day of April
 - 2nd Quarter SMR (April to June) - 15th Day of July
 - 3rd Quarter SMR (July to September) - 15th Day of October
 - 4th Quarter SMR (October to December) - 15th Day of January
- Subject to revocation if found violating the said permit conditions and other provisions of the Philippine Clean Air Act of 1999 (RA 8749) and its Implementing Rules and Regulations.

This operating Permit shall be posted in a conspicuous location near the equipment set and shall be adequately framed or otherwise protected against damage. Application for the renewal of Permit to Operate must be filed thirty (30) days before the expiration date.

Recommended by:

Engr. NICKLE YURI V. DORADO
CEC, Compliance and Permitting Division

Approved by:

JOE ANIL M. SALENO
Regional Director

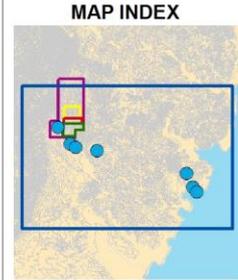
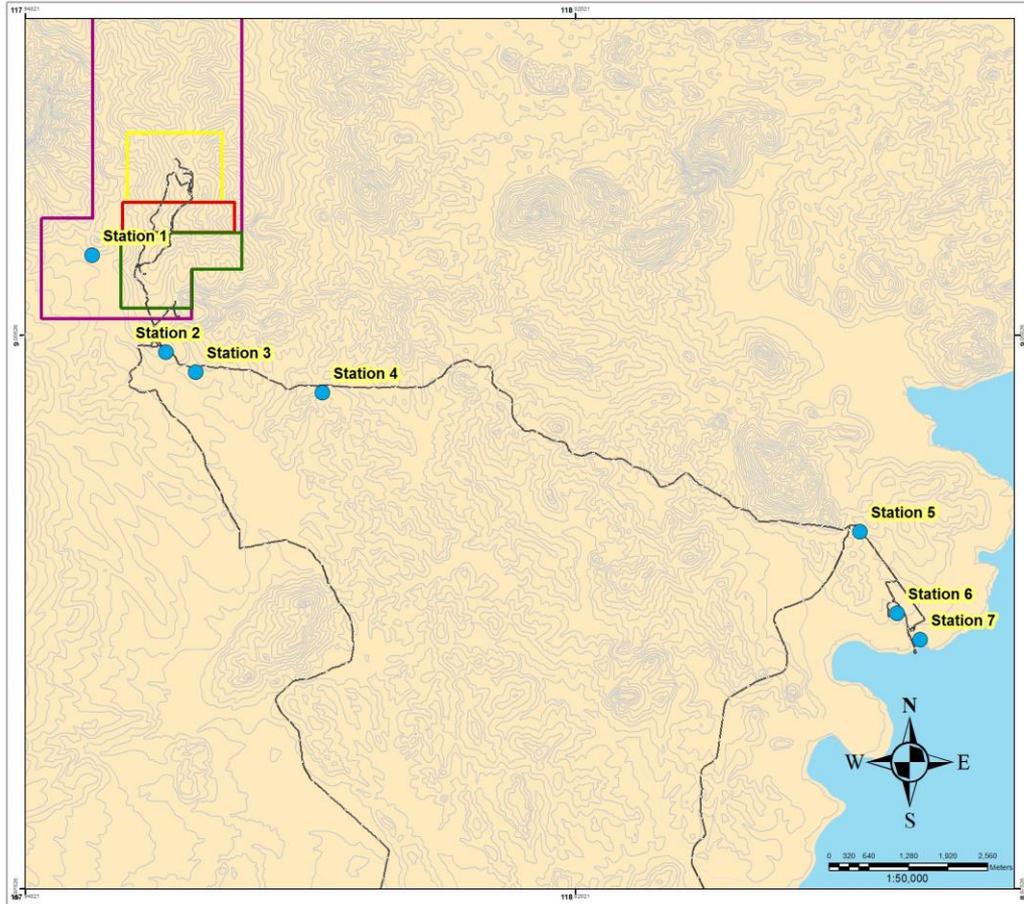
Filing Fee	Php 603.00	O.R. No.: 7858415 F	Date: 13 May 2022
Permit Fee	Php 6030.00	O.R. No.: 7858415 F	Date: 13 May 2022
PD/ISS	Php 10.00	O.R. No.: 7858415 F	Date: 13 May 2022
Documentary Stamp Tax	Php 30.00	O.R. No.: 7858415 F	Date: 13 May 2022



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Noise and Ambient Air Quality Sampling Stations



Legend

- Air Sampling Station
- Road network 20210203
- Mining Block - A
- Mining Block - B
- Mining Block - C
- PNMP MPSA
- Contours_20m
- Palawan

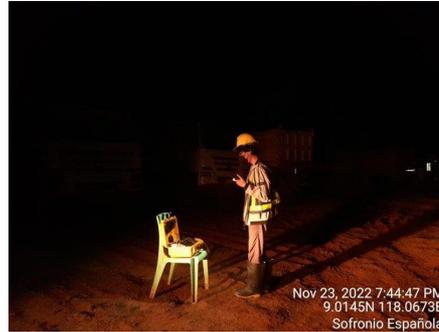


Map No: 2021-001	Air Sampling Stations
Date: 06 FEB 2021	
Prepared by: GJT	Checked by: JBC
Approved by: JMUJr	Coordinate System: GCS Luzon 1911 Datum: Luzon 1911 Units: Degree

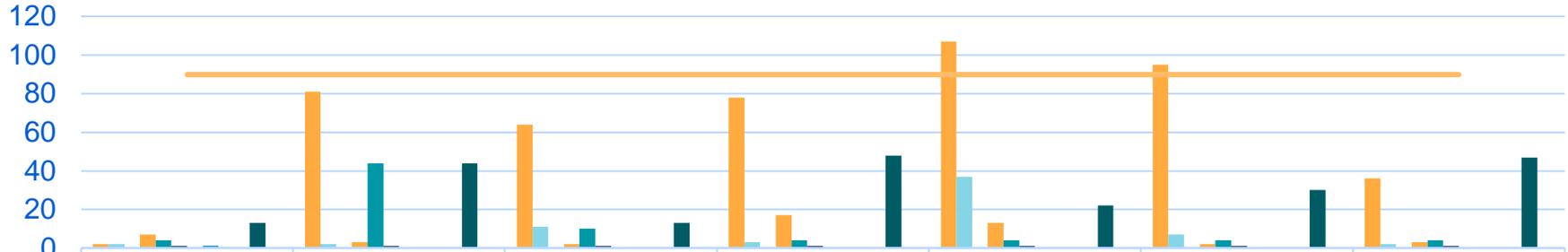
NOISE AND AMBIENT AIR SAMPLING



NOISE SAMPLING



Noise Quality Sampling



	Maribong Basketball Court	Old Admin Compound	Mike Valdez	Singkab	Highway Crossing	IPM Area	Causeway Sampling Stand
1Q2020	2	81	64	78	107	95	36
2Q2020	2	2	11	3	37	7	2
3Q2020							
4Q2020	7	3	2	17	13	2	3
1Q2021	4	44	10	4	4	4	4
2Q2021	1	1	1	1	1	1	1
3Q2021							
4Q2021	1.2	0.007	0.007	0.026	0.007	0.007	0.007
1Q2022	0.07	0.07	0.07	0.07	0.21	0.07	0.07
2Q2022	0.18	0.006	0.006	0.006	0.006	0.169	0.006
3Q2022	13	44	13	48	22	30	47
4Q2022							
Standard	90	90	90	90	90	90	90

FINDINGS AND OBSERVATIONS

The seven (7) air ambient sampling stations and nine (9) water ambient sampling stations still have no appropriate signages.

GENERAL RECOMMENDATIONS

The proponent is advised to secure Permit to Operate for fuel depot in compliance with MC 2020-17, DAO 2000-81 of RA 8749 within one (1) year from this Monitoring period.

Reiterating to install signages in every sampling stations even during the activity, if always missing when being left. (use a "**removeable**" signage).

THANK YOU