

ENVIRONMENTAL MMT VALIDATION REPORT

RIO TUBA NICKEL MINING CORPORATION PROJECT

RIO TUBA NICKEL SILICATE ORE PROJECT

BARANGAY RIO TUBA, BATARAZA, PALAWAN
3rd Quarter 2022

November 22-24, 2022



PD 1586

ENVIRONMENTAL COMPLIANCE CERTIFICATE

- Environmental Compliance Certificate No.
 - ECC-CO-1312-0043
- March 9, 2015

PERMIT TO OPERATE No. - **PTO-OL-R4B-2022-07637-R**
Date Issued: September 21, 2022

DISCHARGE PERMIT No. - **DP-OL-R4B-22-02600**
Date issued : May 5, 2022

Hazardous Waste ID No. - **OL-GR-R4B-53-002354**
Date issued : August 30, 2020

- **THE PROJECT COMPLIED ALL THE CONDITIONS
STIPULATED IN THE ISSUED ECC.**

AIR QUALITY MANAGEMENT

RA 8749 - PHILIPPINE CLEAN AIR ACT

Permit to Operate

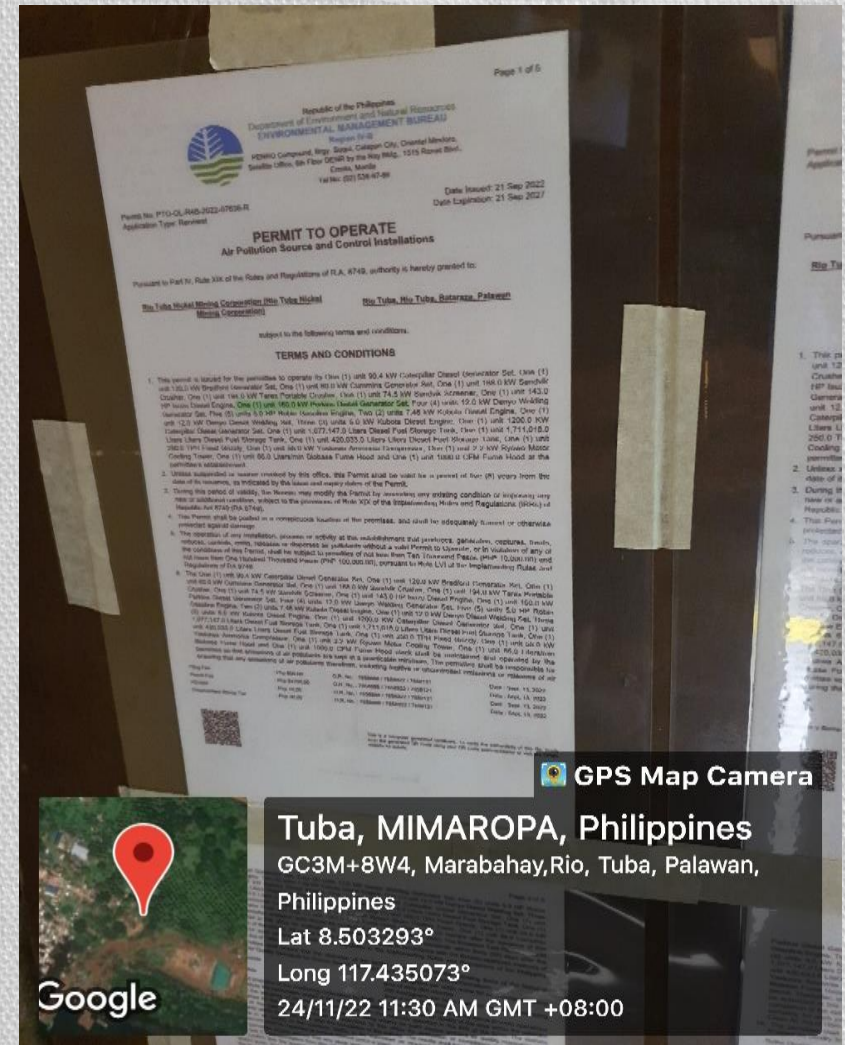
Permit No.: PTO-OL-R4B-2022-07637-R

Date Issued: September 21, 2022

Covers all the APSI/APCF

Remarks/Recommendation:

- Valid until September 20,2027
- Generator sets from Pier Power House was operational and Main Power house has no operation during the inspection. Regular monitoring and maintenance.



AIR QUALITY MANAGEMENT



1,250 KW Caterpillar Generator Set

SOLID WASTE MANAGEMENT

RA 9003 – Ecological Solid Waste Mgt.

Materials Recovery Facility

Functional Materials Recovery Facility was observed.

Remarks/Recommendation:

Continue implementation of Solid Waste Management Plan and good housekeeping.



HAZARDOUS WASTE MANAGEMENT

RA 6969

Hazardous Waste Storage Facility

Hazardous Waste ID No.

OL-GR-R4B-53-002354

Adequate management of hazardous wastes at the storage area of RTNMC. Appropriate safety signs and labelling requirements observed and provisions of oil spill kits and biodispersants.

Remarks/Recommendation:

Continue implementation of proper hazardous waste management.

HAZWASTE INVENTORY (in MT)			
	SEPTEMBER	OCTOBER GENERATED	AS OF NOV. 01
CLINICAL WASTE	0.011	0	0.011
ULABS	10.16478	0.9656	11.13044
BFLs	0.0675	0	0.0675
Paint Residue	0.026	0	0.026
Used-oil	21.44	4.8	26.24
Oil-Contain Matls	1.6495	0.356	2.0055
Contain Containers	0.0203	0.0267	0.047
PCB / Non-PCB Eqt.	1.395	0	1.395
WEEE	2.68	0	2.68
Veg. Oil (inc Sludge)	0.1	0	0.1
TOTAL	37.55408	6.14836	43.70244



GPS Map Camera
Rio Tuba, MIMAROPA, Philippines
Unnamed Road, Rio Tuba, Palawan, Philippines
Lat 8.558623°
Long 117.432538°
24/11/22 10:47 AM GMT +08:00

HAZARDOUS WASTE MANAGEMENT

RA 6969

I101 (Used oil), I104 (oil-contaminated materials), J201 (containers previously containing toxic chem) and F699 (other mixed) were transported on September 14-27, 2022 by Genetron International Marketing.

24 Hazardous Waste Manifest were issued.

Remarks/Recommendation

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▪

Submit copies of Certificate of Treatment upon issuance by Genetron Int'l Marketing.



Republic of the Philippines
Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU
Region 4B
PENRO Compound, Brgy. Suqui, Calapan City, Oriental Mindoro, Satellite Office, 6th Floor DENR by the Bay Bldg., 1515 Roxas Blvd., Ermita, Manila
Telephone Nos: (02) 536-97-86
Website: <http://mimaropa.emb.gov.ph/>

HAZARDOUS WASTE MANIFEST

Hazardous Waste Generator's Name : **RIO TUBA NICKEL MINING CORPORATION**

Registration Number : OL-GR-R4B-53-002354

Generator Address : MINE COMPLEX, RIO TUBA, BATARAZA, PALAWAN

OL-PTT-R3-14-034498

M-R4B-2022-09-181225

Transport Date : September 27, 2022

Waste Class and Waste Number	
Waste Code & Description	Quantity (metric tonnes)
Used industrial oil including sludge (I101)	5

Special Handling Information :
None

Transporter Type : **LAND ONLY**

Transporter			
Company / Transporter ID	Plate Number	Type	Driver Name
GENETRON INTERNATIONAL MARKETING OL-TP-R3-14-000004	CAZ2531	TRACTOR HEAD	LILAND GUZMAN

Destination:

TSD Facility's Name : GENETRON INTERNATIONAL MARKETING

Registration Number : OL-TR-R3-14-000031

Facility Address : 425 TUBAW STREET, SULLUCAN, ANGAT, BULACAN

Manifest Conditions:

1. This Hazardous Waste Manifest Form is strictly for the use of **RIO TUBA NICKEL MINING CORPORATION**
2. That the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transport, according to the applicable regulations, wastes shall be handled by trained personnel only.
3. That the personnel involved in the transport shall make available the approved Permit to Transport (PTT) and manifest form including the emergency and contingency equipment in case of accidents and/or spills.
4. That the online Hazardous Waste Manifest Form shall be prepared for every transport. The geo tagged photographs of actual loading and unloading of hazardous wastes shall be attached in the online Hazardous Waste Manifest Form.
5. Non-compliance to the above stipulations shall subjected to the penalty provisions as provided under Section 41 of DAO 1992-29 and Chapter 11 of DAO 2013-22.

Protect the environment... Protect life...

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Registration Number : OL-GR-R4B-53-002354

Generator Address : MINE COMPLEX, RIO TUBA, BATARAZA, PALAWAN

OL-PTT-R3-14-034498

M-R4B-2022-09-181228

Transport Date : September 27, 2022

Waste Class and Waste Number	
Waste Code & Description	Quantity (metric tonnes)
Used industrial oil including sludge (I101)	2.8
Vegetable oil including sludge (I102)	0.2
Other mixed (F699)	1.5945

Special Handling Information :
None

Transporter Type : **LAND ONLY**

Transporter			
Company / Transporter ID	Plate Number	Type	Driver Name
GENETRON INTERNATIONAL MARKETING OL-TP-R3-14-000004	CAZ2531	TRACTOR HEAD	LILAND GUZMAN

Destination:

TSD Facility's Name : GENETRON INTERNATIONAL MARKETING

Registration Number : OL-TR-R3-14-000031

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HAZARDOUS WASTE MANAGEMENT RA 6969



Hazardous Waste Storage Facility

WATER QUALITY MANAGEMENT RA 9275- PHILIPPINE CLEAN WATER ACT

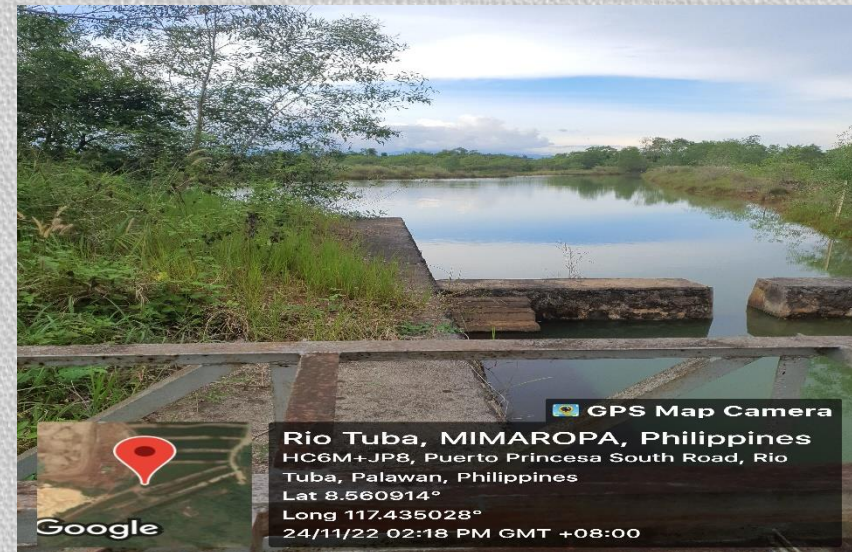
Tagpisa Siltation Pond

Tagpisa Siltation Pond with an area of 56.66 hectares and with total volume capacity of 298, 297.00 cubic meters was observed during the monitoring

A Site Dev't. Plan was installed in the area.

Remarks/Recommendation:

- Regular monitoring and maintenance of siltation pond including drainage canals.



WATER QUALITY MANAGEMENT

RA 9275- PHILIPPINE CLEAN WATER ACT

UPPER TOGPON SILTATION POND

Upper Togpon Siltation Pond with an area of 9.0 hectares and with total volume capacity of 433,175.00 cubic meters was observed during the monitoring and discharges to Lower Togpon.

Remarks/Recommendation:

- Regular monitoring and maintenance of siltation pond including drainage canals.



WATER QUALITY MANAGEMENT

RA 9275- PHILIPPINE CLEAN WATER ACT

Lower Togpon Siltation Pond

Discharge Permit No. DP-OL-R4B-22-02600.

Upper Togpon Siltation Pond with total volume capacity of 223,172.00 cubic meters, an area of 23.32 hectares, and discharges to Lower Togpon was observed during the monitoring. The constructed spillway was observed to be functioning well.

Remarks/Recommendation:

- Regular monitoring and maintenance of the Siltation Pond including drainage canals.

WASTEWATER DISCHARGE PERMIT

Republic of the Philippines
Department of Environmental and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU
Region IV-B

Date: May 05, 2022 Permit No.: DP-R4B-22-02600
Renewal

Pursuant to Section 14, Article 2, of the RA 9275 relative known as the "Philippine Clean Water Act of 2004", this permit is hereby granted to **Rio Tuba Nickel Mining Corporation** with office address at Rio Tuba, Bataraza, Palawan for its establishment.

Rio Tuba Nickel Mining Corporation
TIN No. 000-162-695-00000 Rio Tuba BATARAZA

1. This permit is issued to Rio Tuba Nickel Mining Corporation Station 7 Discharge Point through the series of retention ponds namely a. Lower Togpon Siltation Pond with a capacity of 226,000 cubic meters; and b. Lower Kinarop Siltation Pond with a capacity of 68,200 cubic meters.

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

Parameter	Standard	Parameter	Standard
pH	6-9 pH	Ammonia	0.04 mg/L
Manganese	4 mg/L	Lead	0.1 mg/L
Cadmium	0.03 mg/L	Vanadium	10 mg/L
Nickel	0.3 mg/L	Chromium	0.1 mg/L

3. Submit Self-Monitoring (SMS) based on the following schedule:

Quarter	Change	5-15 Apr	15-30 Apr	1-15 May	15-30 May
1st	Jan-Mar	1-15 Apr	1-15 May	1-15 Jun	1-15 Jul
2nd	Apr-Jun	1-15 May	1-15 Jun	1-15 Jul	1-15 Aug
3rd	Jul-Sep	1-15 Jun	1-15 Jul	1-15 Aug	1-15 Sep
4th	Oct-Dec	1-15 Jul	1-15 Aug	1-15 Sep	1-15 Oct

4. 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 DENR, in every submission of the SMS.

5. All water consumption shall be measured and recorded on a daily basis. An effective flow-measuring device(s) shall be installed for this purpose.

6. The permit holder shall maintain accessible port for water sampling activity of the Siltation Ponds within thirty (30) days upon receipt of permit. The holder, the representative of the permit holder (15) days upon completion of the said activity shall be submitted.

7. Provide flow measuring device at effluent side of your Siltation Ponds within thirty (30) days upon receipt of this permit. Submit report of compliance within (15) days upon completion of the said activity.

8. Submit Wastewater Discharge Permit Application for your other installation within thirty (30) days upon receipt hereof, if any.

9. The permit holder shall allow entry to the said facility establishment and provide immediate, safe and adequate access to authorized representatives of the DENR – EDM for the purpose of environmental inspection and water sampling.

10. This permit, together with the corresponding Official Receipts of Payment, shall be adequately framed and posted in a conspicuous place of the permit establishment.

11. This permit shall be renewed thirty (30) days prior to its expiration.

This permit is valid up to May 05, 2023, unless revoked or suspended by Risk Office in writing.

Non-compliance with the above conditions under any penalty provisions of RA 9275 otherwise known as "Philippine Clean Water Act of 2004", a corresponding penalty in the amount of P12,000,000.00 per violation shall be imposed.

Recommended by: **REP. NOLY VERRY DORADO**
DENR, Office of the Regional Director

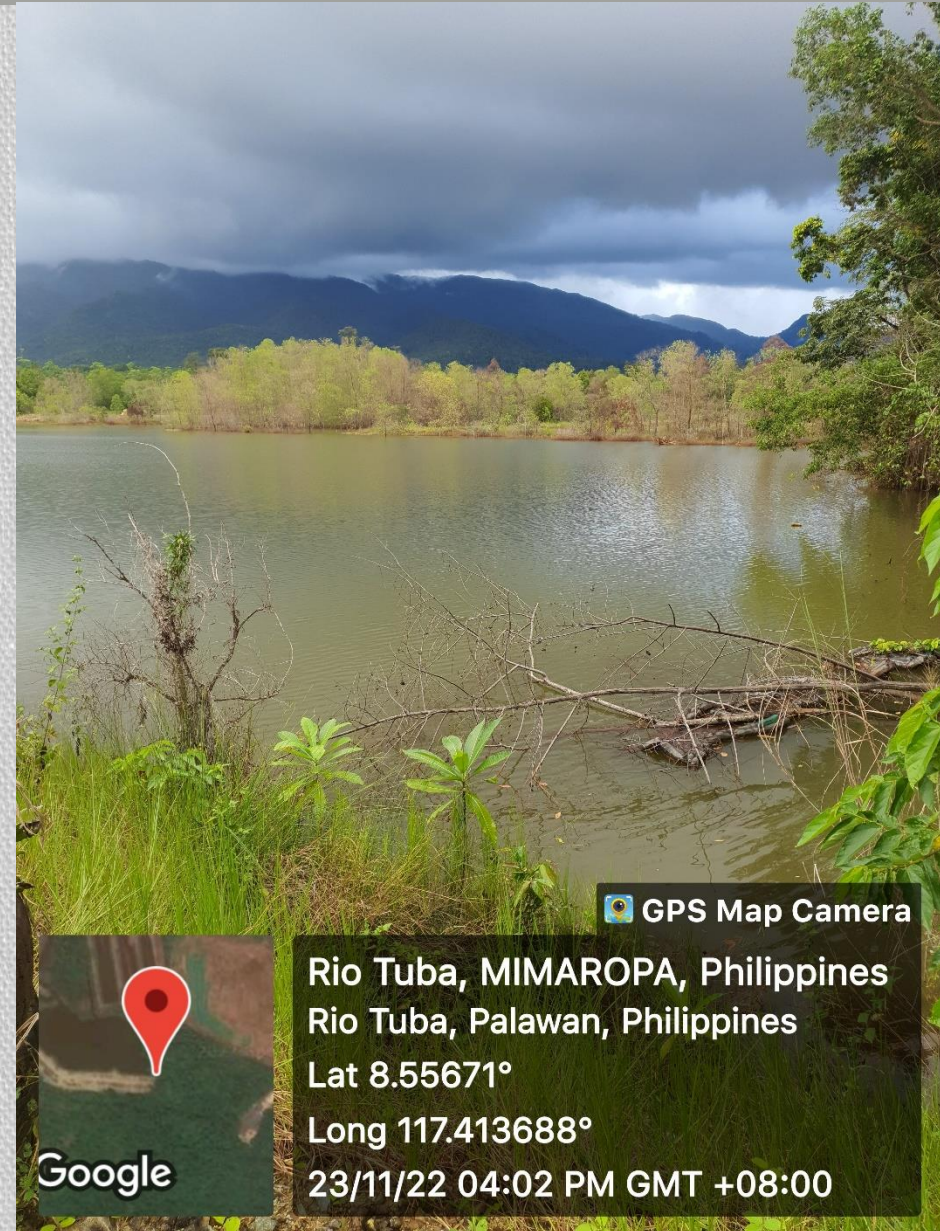
Approved by: **JOS. M. SALANO**
Regional Director

QR Code:

Google Map Camera

Rio Tuba, MIMAROPA, Philippines
GCPM+7QQ, Rio Tuba, Palawan, Philippines
Lat 8.535664°
Long 117.434587°
23/11/22 03:57 PM GMT +08:00

WATER QUALITY MANAGEMENT



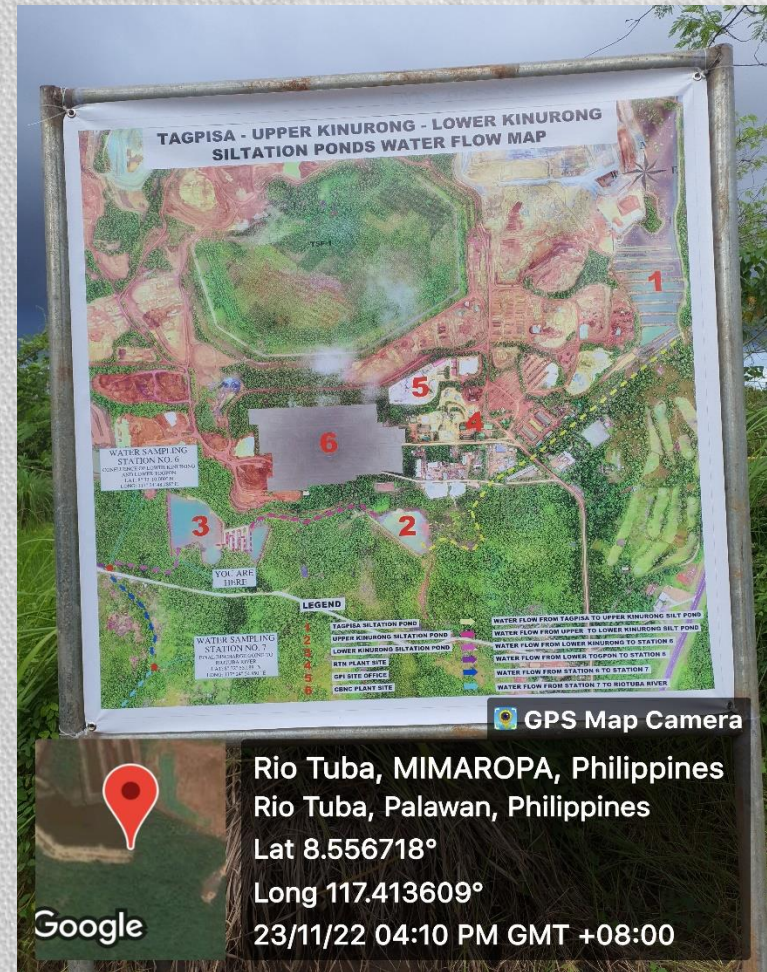
WATER QUALITY MANAGEMENT

RA 9275- PHILIPPINE CLEAN WATER ACT

Upper Kinurong Siltation Pond

Upper Kinurong Siltation Pond has a total volume capacity of 120,000 cubic meters, and an area of 5 hectares.

Upper Kinurong Siltation pond discharges to Lower Kinurong Siltation pond then to Station 6 Confluence and final discharge to Station 7 Effluent.



WATER QUALITY MANAGEMENT

RA 9275- PHILIPPINE CLEAN WATER ACT

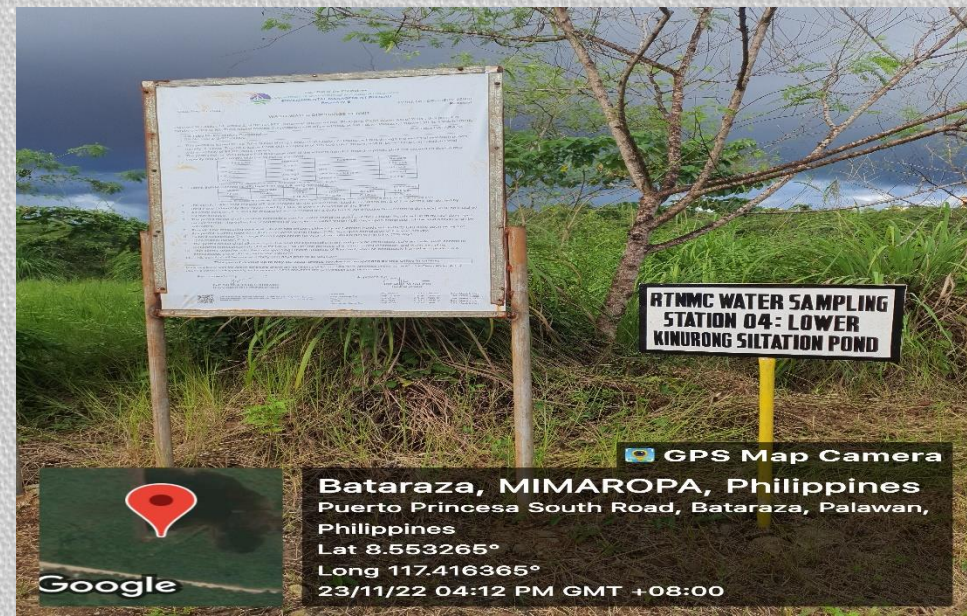
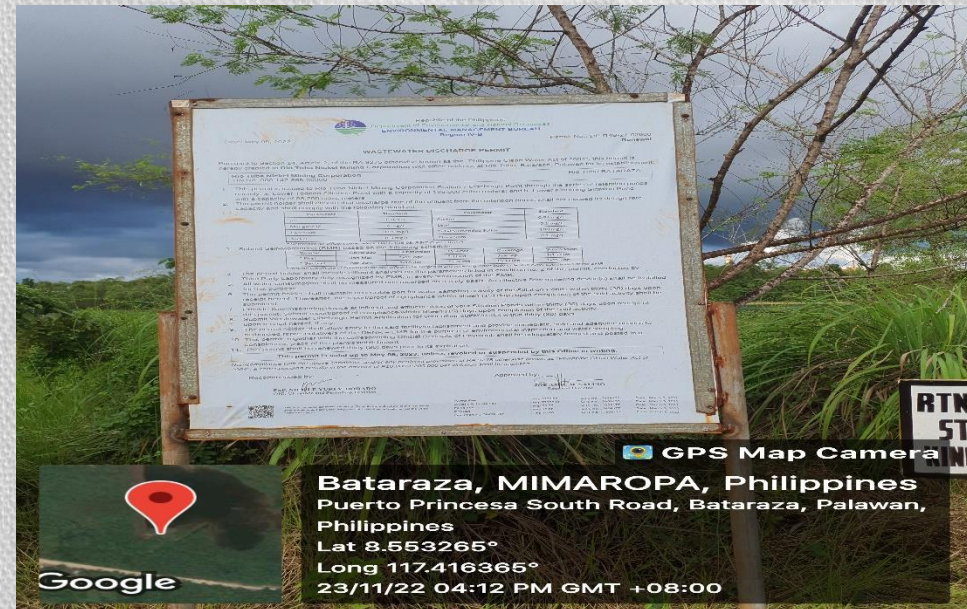
Lower Kinurong Siltation Pond

Functional Siltation Pond with total volume capacity of 88,200.00 cubic meters, and an area of 12.43 hectares was observed during the monitoring.

A Site Development Plan and water flow Map was installed in the area.

Remarks/Recommendation:

- Regular monitoring and maintenance is recommended.



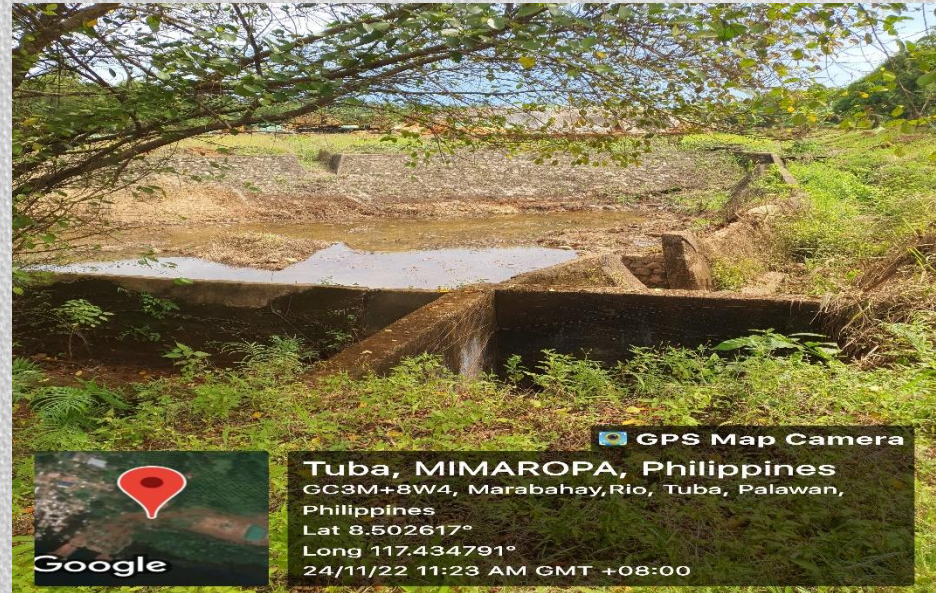
WATER QUALITY MANAGEMENT

Stockyard A Containment Pond

The containment pond is currently under maintenance and some area needs to be desilted.

Remarks/Recommendation:

- Regular monitoring and continue maintenance/desilting of drainage canal.



WATER QUALITY MANAGEMENT

Soil Contaminated with Oil Facility

A proposed Soil Contaminated with Oil Facility with an area of 1,426.00 square meters and a total volume capacity of 1,564.00 cubic meters will be constructed. The proposed location was observed during the monitoring.



Remarks/Recommendation:

- That the soil contaminated facility shall be lined with HDPE or any appropriate materials, and an oil-water separator should be constructed before discharge to Tagpisa Pond





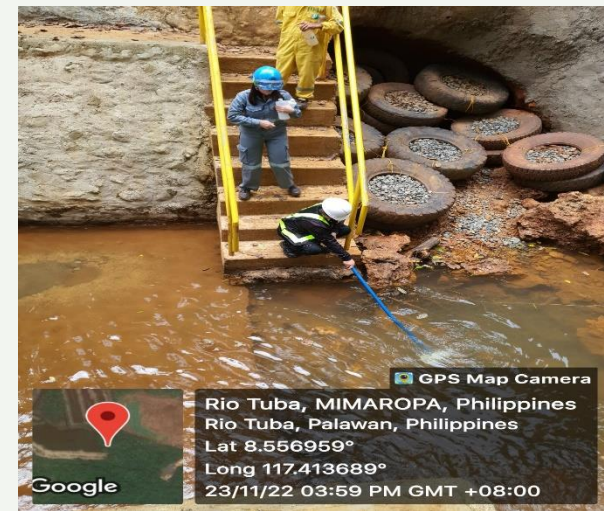
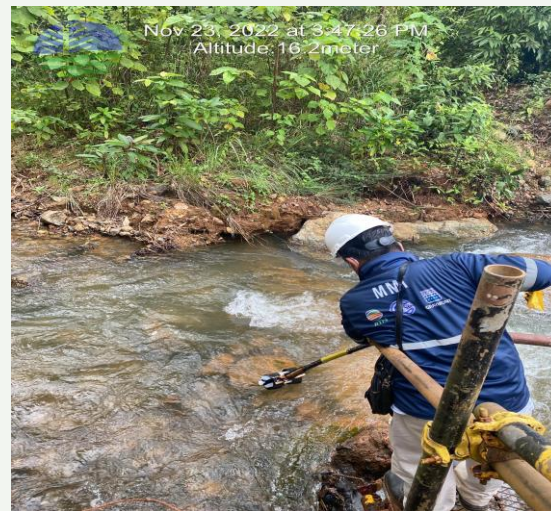
WATER QUALITY PARAMETERS

PSIC Code 07294: pH, Total Suspended Solids, Manganese, Arsenic, Cadmium, Lead & Nickel and Hexavalent Chromium

WATER SAMPLING

Collection of water samples and on-site measurements of water quality was conducted on November 23, 2022, taken 1:00pm until 4:00pm in Cloudy and light sunny weather was noted.

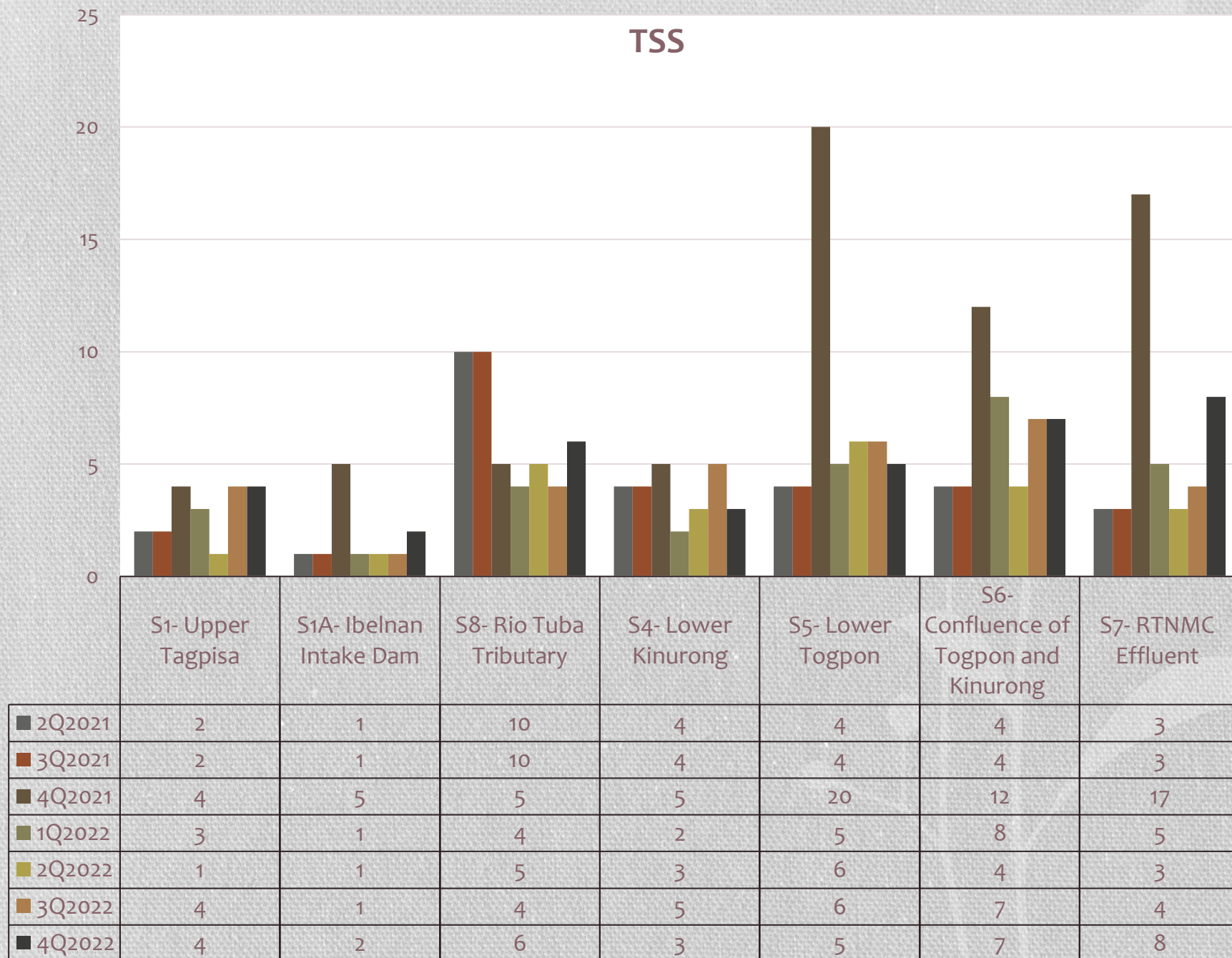
WATER SAMPLING



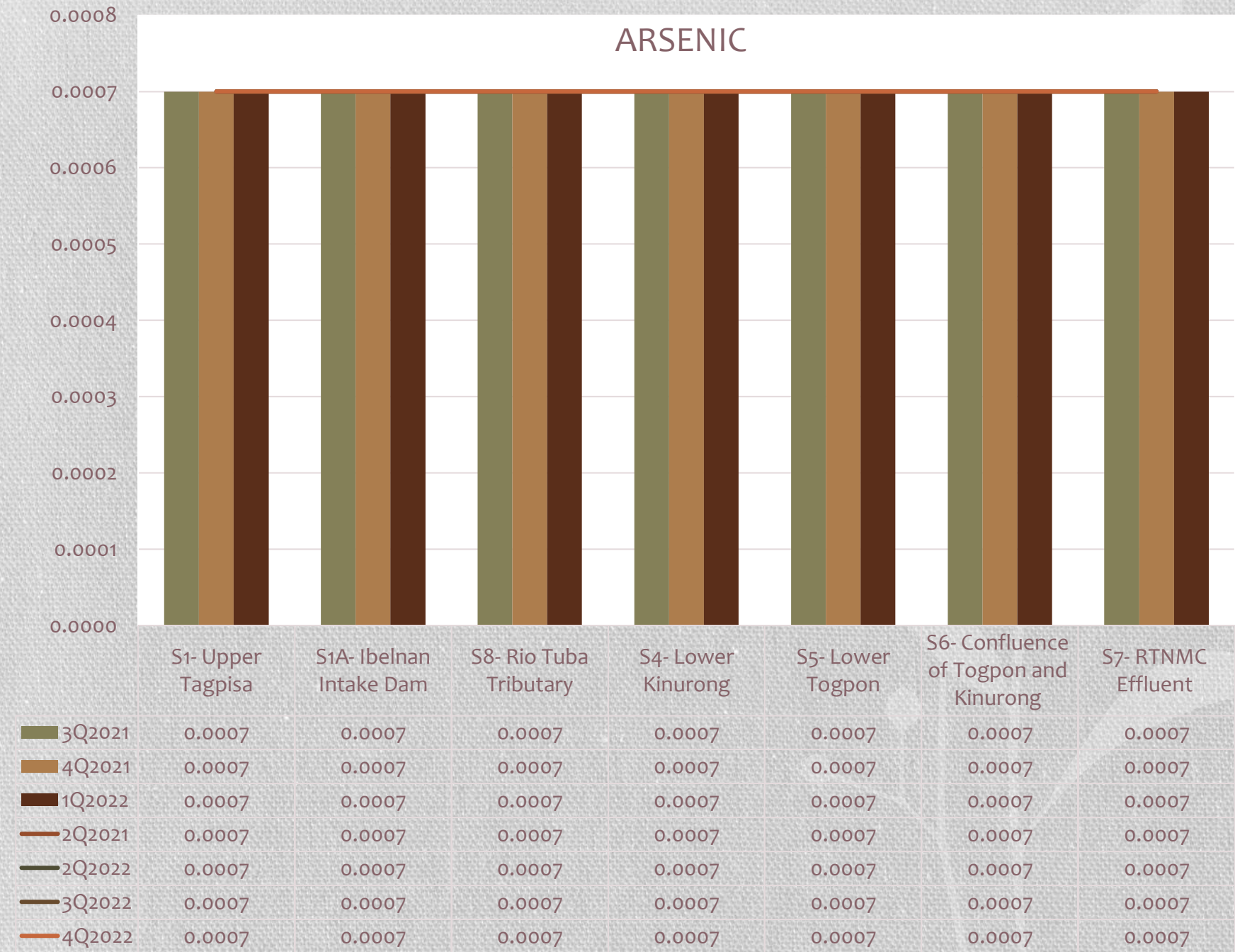
IN SITU RESULTS

PARAMETERS	MONITORING STATIONS			
Station Identification	Coral Reef S12 - (Receiving WW effluent & CCR effluent)	Rio Tuba SB - Tributary	Supermarket sampling E Port of Cebu city	confluence of Taypan & Kinurong ditch in River
Type of Sample				
GPS Coordinate	8.491764 N 117.441024 E	8.530280 N 117.410640 E	8.503071 N 117.449347 E	
Time	14:22	14:57	15:39	16:15:40
Weather Condition	sunny	sunny	sunny	
Water Appearance	clear			
Other Observation				
ON SITE MEASUREMENTS				
pH	7.74	7.22	7.25	7.45
Dissolved Oxygen, mg/L	5.99	7.05	5.11	6.59
Temperature, °C	30.70	29.86	30.15	30.49
TDS, g/L	27.6	12.5	2.05	0.477
Conductivity, mS/cm	45.02	20.2	3.20	0.746
Salinity, ‰	29.2	12	1.7	0.4
Turbidity, NTU	0	1.3	2.1	3.2
ORP, mV	298	317	221	291
Preservation Techniques Done				
Container Type				
Sampling Methods				
Analysis Requested				

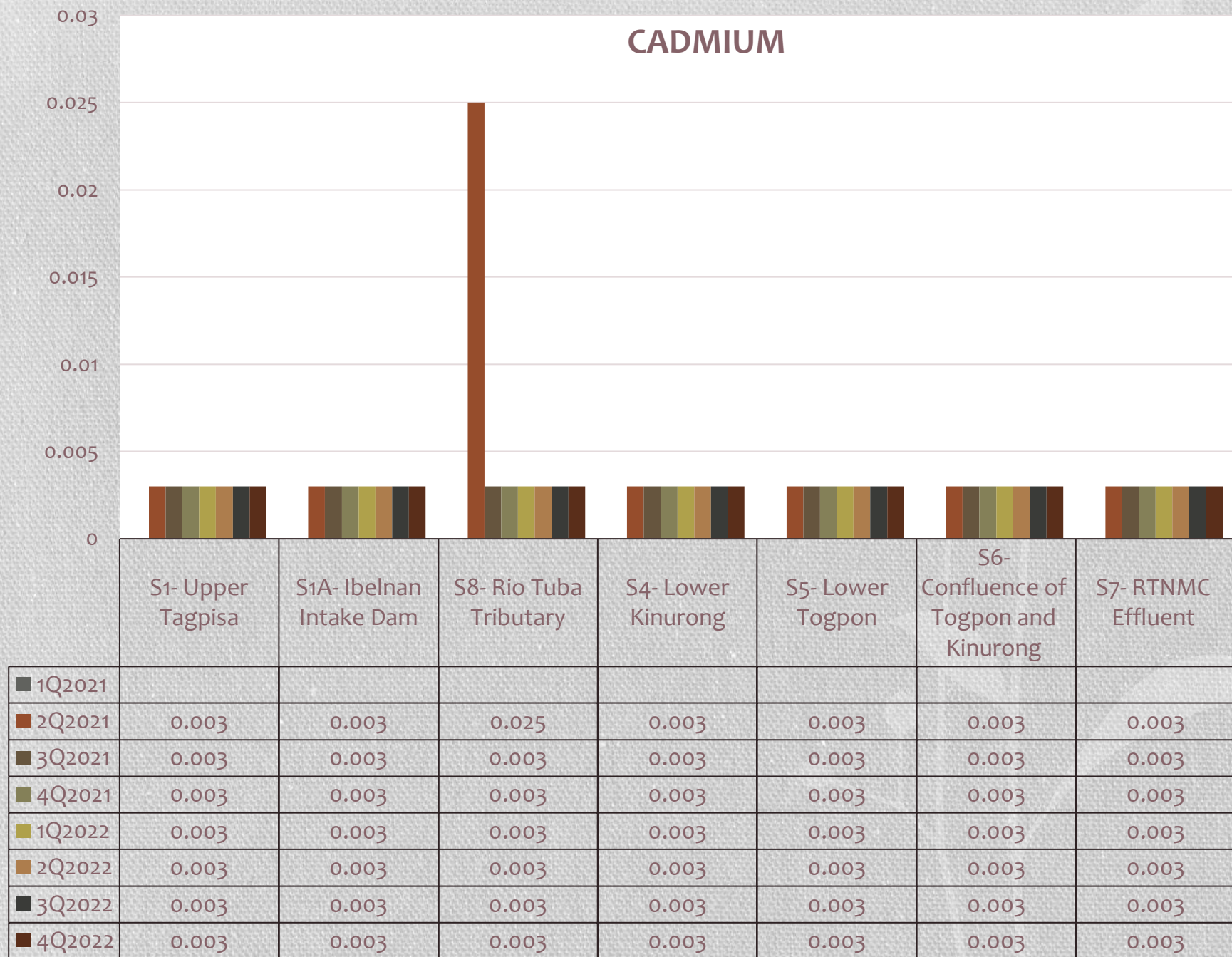
PARAMETERS	MONITORING STATIONS			
	S1	S1A	S4	S5
Station Identification	Upper Taypisa	Ibelnan Intake Dam	Lower Kinurong SP	Lower Taypan SP
Type of Sample				
GPS Coordinate				
Time	3:15 PM	3:50 PM	4:21 PM	4:08 PM
Weather Condition	cloudy	cloudy	cloudy	cloudy
Water Appearance	clear	clear	clear	clear
Other Observation				
ON SITE MEASUREMENTS				
pH	8.10	8.61	8.47	8.33
Dissolved Oxygen, mg/L	14.20	15.68	15.06	14.27
Temperature, °C	26.23	23.95	30.47	28.95
TDS, g/L	0.166	0.114	0.352	0.543
Conductivity, Us/cm	0.255	0.175	0.550	0.844
Salinity, ‰			0.3	0.4
Turbidity, NTU				
ORP, mV	311	275	269	290
Preservation Techniques Done				
Container Type	PLASTIC	PLASTIC	PLASTIC	PLASTIC
Sampling Methods	GRAB	GRAB	GRAB	GRAB
Analysis Requested	TSS, M Cr6	TSS, M Cr6	TSS, M Cr6	TSS, M Cr6



DENR STANDARD: 80 mg/l 100 mg/L



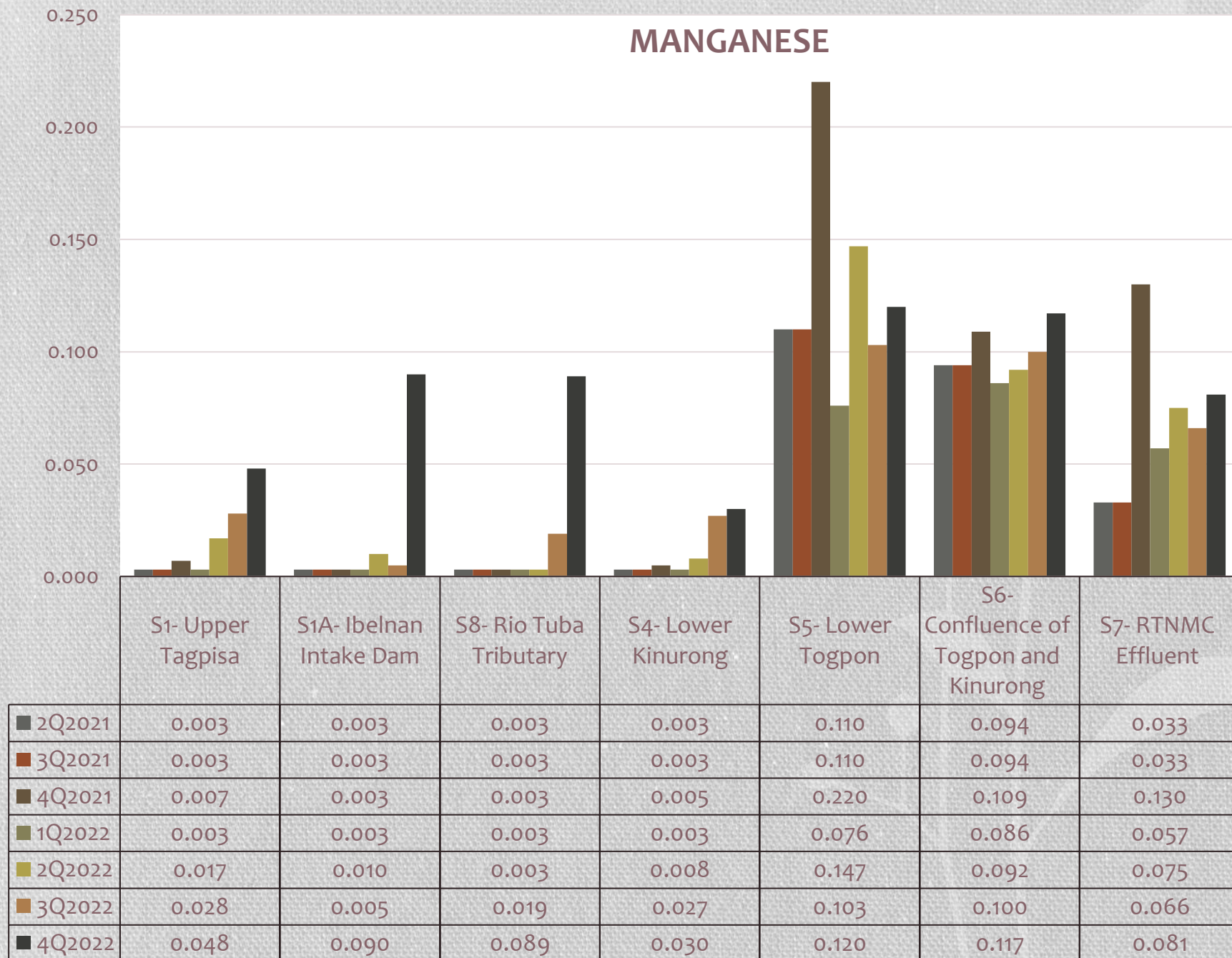
DENR STANDARD: 0.01 mg/L and 0.04 mg/L



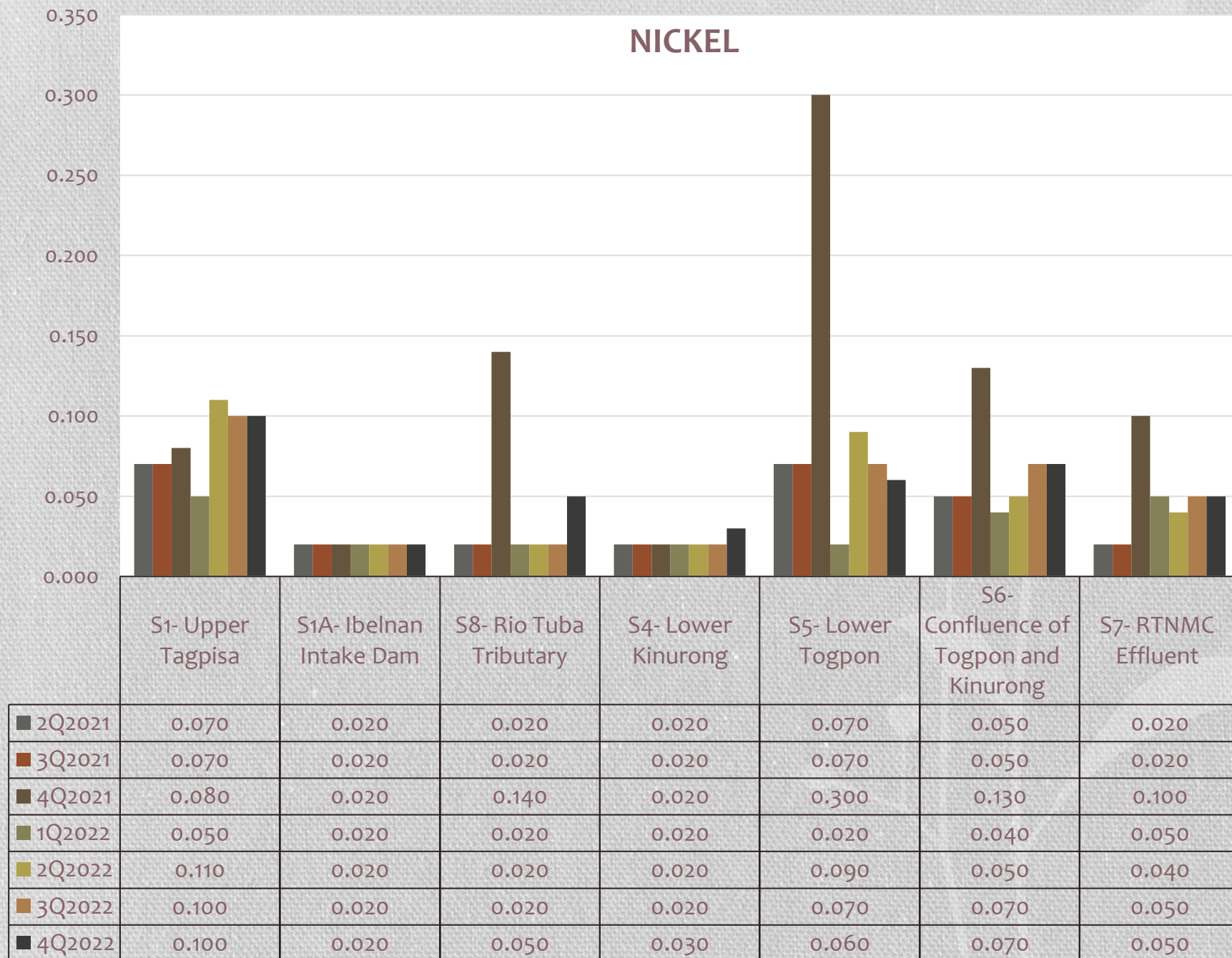
DENR STANDARD: 0.005 mg/L and 0.01 mg/L



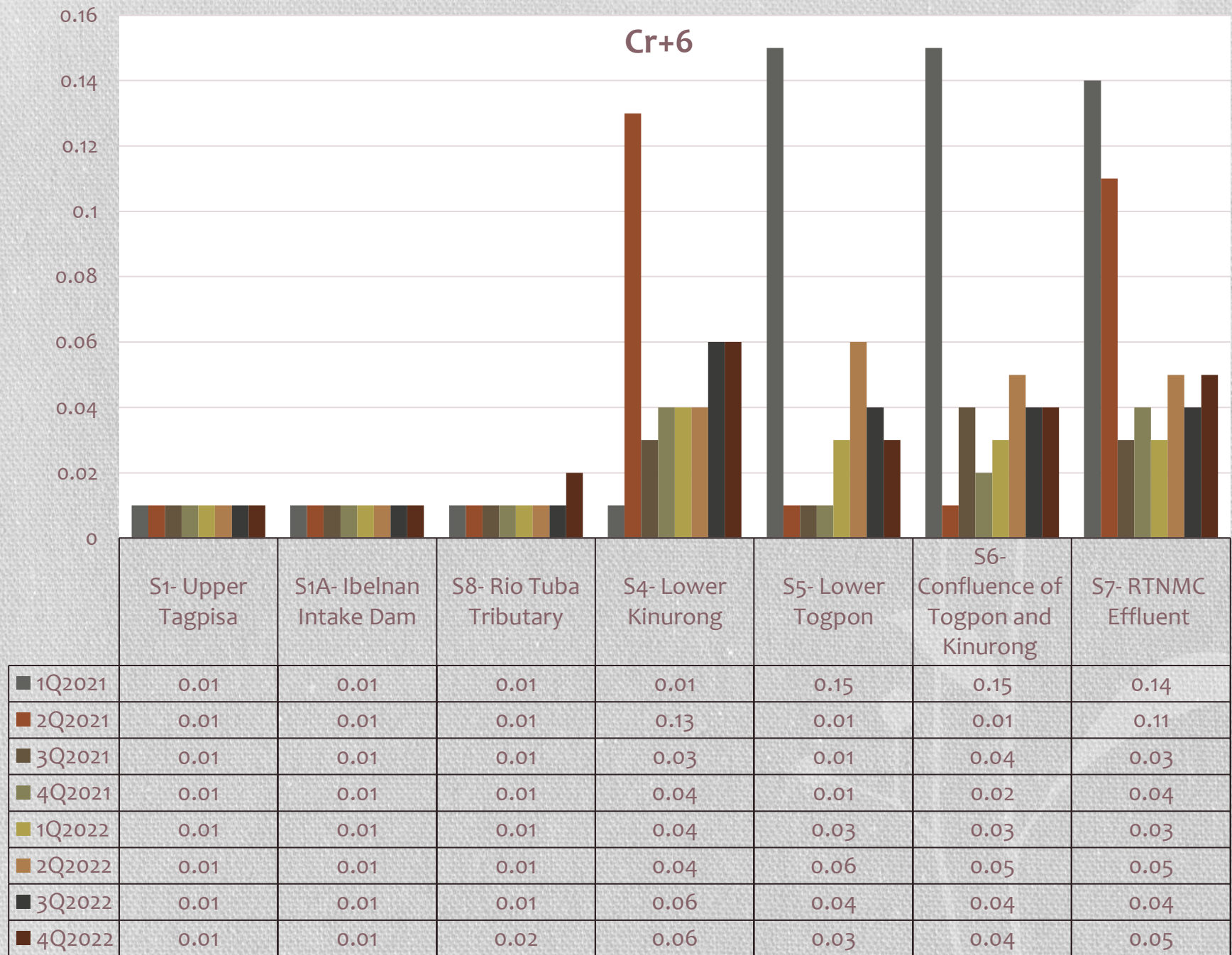
DENR STANDARD: 0.05 mg/L and 0.1 mg/L



DENR STANDARD: 0.06 mg/L and 4.0 mg/L



DENR STANDARD: 0.3 mg/L



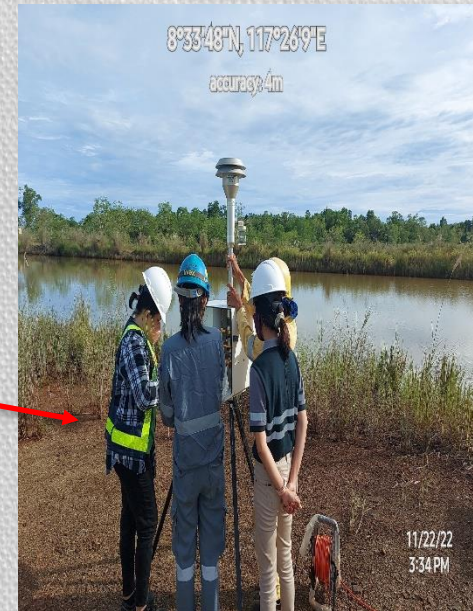
DENR STANDARD: 0.05 mg and .10 mg/L

PM10 SAMPLING

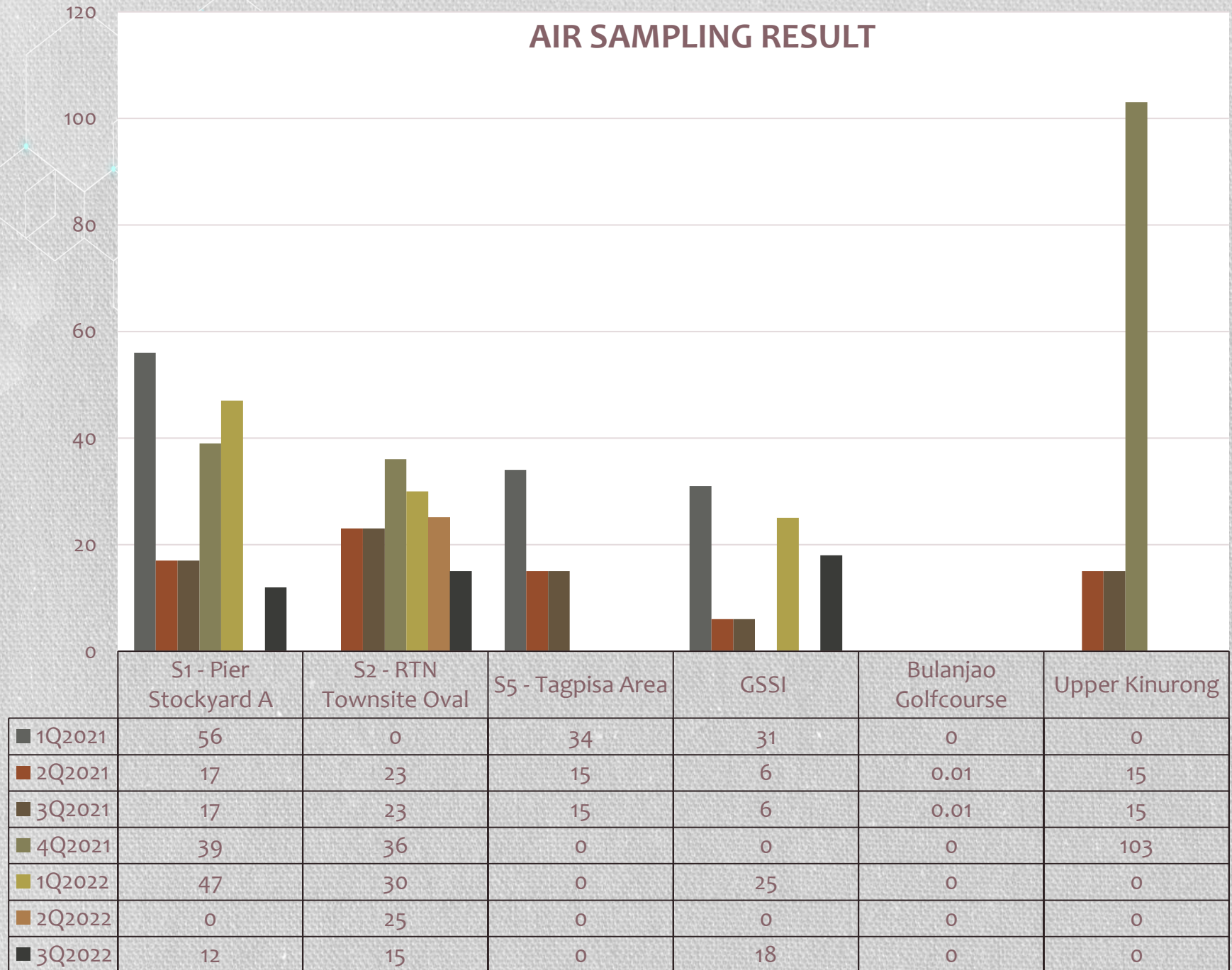
Particulate Matter 10 sampling is conducted on November 22-23



MMT SAMPLING STATION



AIR SAMPLING RESULT



Thank you!

Engr. Al Janry Tuazon

MGB

Mr. Francis Cometa

MGB

Engr. Nunilon Tanguilig

EMB

For. Leonora F. Mansueto

EMB

Swin R. Tanduyan

EMB

Ana Maria Genciano-Acosta

PCSDS

Roland Talabucon

PENRO

Boyet Patio

IP

Nonoy Siplan

IPDO

