

3RD QUARTER MULTIPARTITE MONITORING TEAM VALIDATION REPORT

Coral Bay Nickel Corporation

Date of Monitoring: 21-26 November 2022

MMT MEMBERS

Name	Agency
Al Janry Tuazon	MGB MIMAROPA
Francis Jade Cometa	MGB MIMAROPA
Nunilon Tanguilig	EMB MIMAROPA
Leonora Mansueto	EMB MIMAROPA
Mark Angelo Rogel	EMB MIMAROPA
Carl Anthony Madamag	EMB MIMAROPA
Swin Tanduyan	EMB MIMAROPA
Leonard Caluya	CENRO Brooke's Pt.
Roland Talabucon	DENR-PENRO
Ana Maria Acosta	PCSDS
Glenda Cadigal	PCSDS
Samuel Caligdong	BFAR
Rodolfo Flores	PEZA
Reynaldo Rivera	MENRO Bataraza

Name	Agency
Noel Aquino	Palawan ENRO
Inocencio Magallanes	Haribon Palawan
Simmy Didik	Brgy. Rio Tuba
Conchita Batiller	Brgy. Sandoval
Havier Matrasal	Brgy. Iwahig
Roger Montaña	AVPP
Gonzalo G. Ong	PO-BACHRISMUPAL
Nonoy Siplan	IPDO-Taratac
Boyet Patio	IPDO-Bohoy

Absent

Name	Agency
Jansen Jontilla	NCIP
Nelson Virgo	PHO

Other Matters/Issues discussed during the entry/exit meeting:

- Tugboat incident
- Bohoy Access Road
- Sumbiling Access Road
- Incident report of CBNC on minor H₂S leak
- Brgy. Taratak inclusion in the MMT considering the expansion of RTNMC
- Update on adopt an estero program
- MMT annual work and financial plan

CBNC 3rd Quarter AEPEP

AEPEP Content

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1.0 LAND RESOURCES

1.1 PROGRESSIVE REHABILITATION							
PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
1.1.1 New Areas Established	Area planted (hectares)	5	3	3	1 33.33%	1.5 50%	30%
	239,555	1,197,774	718,665	718,665	368,164 51.22%	368,164 51.22%	31%
	no. of seedlings planted	13,332	13,332	13,332	3,580 26.85%	3,580 26.85%	27%
1.1.2 Maintenance of Established Areas	Total Area maintained (hectares)	167	167	167	167 100%	167	
	27,885	4,656,838	1,164,210	3,492,629	844,726 24.18%	2,688,504 76.97%	58%
	no. of seedlings to be replanted	4,444	2,222	4,444	0%	500 11.25%	11%
	no. of seedling planted for enhancement	25,556	12,778	12,778	16,236 127.06%	31,922 249.82%	125%

Remarks/Recommendations:

- CBNC planted 0.8 hectares (Photo 1) with trees and 0.2 hectares (Photo 2) with grass.



Photo 1. The 0.8 hectares planted with trees under progressive rehabilitation (adjacent to the northwest portion of TSF2).



Photo 2 (c/o CBNC). The 0.2 hectares planted with grass (TSF3 motorpool).

1.0 LAND RESOURCES

1.2 Mangrove Reforestation

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
1.2.1 New Areas Established	Area planted (hectares)	15	15	15	-	15 100%	100%
	12,500	187,500	187,500	187,500	-	187,500 100%	100%
	no. of seedlings planted	37,500	37,500	37,500	-	37,500 100%	100%
1.2.2 Maintenance of Established Areas	Area maintained (hectares)	51	51	51	51 100%	51	

Remarks/Recommendations:

- The target mangrove reforestation area was accomplished in advance (2nd quarter).

1.0 LAND RESOURCES

1.3 Bamboo Plantation							
PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
1.3.1 New Areas Established	Area planted (hectares)	20	20	20	0%	20 100%	100%
	15,580	311,600	311,600	311,600	48,036 ^a 15.41%	446,165 143.18%	143%
	no. of propagules planted	4,080	4,080	4,080	0%	3,672 90%	90%
1.3.2 Maintenance of Established Areas	Area maintained (hectares)	30	30	30	30 100%	30	
	27,885	836,558	209,139	627,418	426,456 203.9%	1,238,076 197.32%	148%
	no. of propagules maintained	6,120	6,120	6,120	6,120 100%	6,120	
1.3.3 No. of seedlings produced	no. of seedlings produced	90,000	15,000	75,000	48,117 320.78%	70,953 94.6%	79%
	15	1,350,000	225,000	1,125,000	438,658 194.95%	1,033,292 91.84%	77%
SUBTOTAL (PHP)		8,540,270	2,816,114	6,462,811	2,126,040 75.49%	5,961,701 92.24%	70%

Remarks/Recommendations:

- ^aAdditional grass cutting and other maintenance activities at the newly established area.



Photo 3. The MMT-NGP Team during its monitoring of CBNC's bamboo plantation.

Photo 4. The team observed a well-maintained plantation with well-established fire lanes.



2.0 WATER RESOURCE

2.1 Operation of Water Pollution Control Facilities							
PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
2.1.1 Operation of Final-Neutralization Plant	no. of fully operational final neutralization plant	2	2	2	2 100%	2	
	no. of days operational final neutralization plant	365	92	273	92 100%	261 ^a 95.6%	72%
	3,727,008	1,360,357,747	342,884,692	1,017,473,055	411,361,242 119.97%	1,331,658,827 130.87%	98%
2.1.2 Operation of Tailings Storage Facilities (TSF)	no. of fully operational TSF	1	1	1	1 100%	1	
	no. of days of fully operational TSF	365	92	273	92 100%	273 100%	75%
	54,809	20,005,191	5,042,404	14,962,786	5,001,298 99.18%	15,003,893 100.27%	75%

Remarks/Recommendations:

- ^a12 days of non-operation of Final-Neutralization Plant was due to plant shutdown for maintenance activities.

2.0 WATER RESOURCE

2.2 Water Quality Monitoring							
PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
2.2.1 Effluent and Water Bodies	no. of submissions to laboratory for analysis	12	3	9	3 100%	9 100%	75%
	26,406	316,876	79,219	237,657	280,733 354.37%	490,413 206.35%	155%
	no. of lots of sampling materials/equipment utilized	12	3	9	3 100%	9 100%	75%
	6,192	74,300	18,575	55,725	0%	0%	0%
	No. of sampling conducted	264	66	198	66 100%	198 100%	75%
	No. of parameters measured per sample	16	16	16	16 100%	16	
2.2.2 Ground Water Quality	No. of sampling conducted	24	6	18	6 100%	18 100%	75%
	No. of parameters measured per sample	14	14	14	14 100%	14	

Remarks/Recommendations:

- Results of in-house water sampling of CBNC are within DENR standards.

2.0 WATER RESOURCE

2.3 Solid Waste Management							
PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
2.3.1 Non-hazardous	No. of days of wastes collection	313	79	234	79 100%	234 100%	75%
	41,102	12,865,000	3,247,077	9,617,923	0% 56.07%	3,971,279 41.29%	31%
	Amount of wastes generated (Tons)	2,600	650	1,950	365 56.07%	1,258 64.49%	48%
2.3.2 Hazardous	No. of Transport and Treatment	3	1	2	0% 100%	2 100%	67%
	878,333	2,635,000	878,333	1,756,667	164,238 18.69%	1,428,609 81.32%	54%
	Amount of wastes generated (Tons)	100	25	75	20 81.96%	71 95.32%	71%

Remarks/Recommendations:

- The MMT observed hazardous waste containers with proper labelling (yellow sticker) (**Photo 5**) as well as hazardous waste containers without proper labelling (**Photo 6**).
- It was recommended that all hazardous waste containers be labelled with the “yellow sticker”.



Photos 5 & 6. Properly labeled containers (left) and containers without proper labelling (right).

2.0 WATER RESOURCE

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
2.4 Coal ash sampling & analysis	No. of analysis conducted	2	1	2	0%	1 50%	50%
	133,153	266,306	133,153	266,306	0%	13,560 5.09%	5%
	No. of sampling conducted	4	2	4	0%	2 50%	50%
	No. of parameters measured per sample	8	8	16	0%	8 50%	50%
2.5 Fish tissue & sediment sampling & analysis	No. of analysis conducted	2	1	2	0%	1 50%	50%
	205,800	411,600	205,800	411,600	0%	132,567 32.2%	32%
	No. of sampling conducted	34	17	34	0%	17 50%	50%
	No. of parameters measured per sample	7	7	14	0%	7 50%	50%
SUBTOTAL (PHP)		1,396,932,020	352,489,254	1,044,781,719	416,807,510 118.24%	1,352,699,149 129.47%	97%

Remarks/Recommendations:

- Hazard signage (**Photo 7**) was observed at the coal stockyard.
- Information signages/boards was recommended to be placed at the siltation ponds.



Photos 7 & 8. Coal stockyard siltation ponds.



Photo 9. Siltation pond at CBNC's causeway.

3.0 NOISE

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
Noise Monitoring Activities	No. of monitoring conducted	12	3	9	3 100%	9 100%	75%
	175	2,100	525	1,575	525 100%	1,575 100%	75%
	No. of sampling stations	21	21	21	21 100%	21	

Remarks/Recommendations:

- Results of CBNC’s in-house measurement of noise are within DENR standards.

4.0 AIR QUALITY

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
4.1 Air Pollution Control Facilities	no. of fully operational Facilities	4	4	4	4 100%	4	
	no. of days operational	326	88	250	92 103.98%	261 104.38%	80%
	1,118,327	364,574,655	98,940,614	279,614,780	145,460,634 147.01%	436,494,816 156.1%	120%
4.2 Air Quality Monitoring	Monthly Lab. Analysis Cost	12	3	9	3 100%	9 100%	75%
	5,864	70,364	17,591	52,773	16,848 95.77%	43,848 83.08%	62%
	No. of sampling conducted	357	51	153	51 100%	153 100%	75%
	No. of parameters per sample	1	1	1	1 100%	1	

Remarks/Recommendations:

- Results of CBNC’s in-house air quality monitoring are within DENR standards.

4.0 AIR QUALITY

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
4.3 Stack Sampling	No. of Activity	1	1	1	0%	1 100%	100%
	1,355,415	1,355,415	1,355,415	1,355,415	870,524 64.22%	870,524 64.22%	64%
	No. of sampling conducted	13	-	13	-	13 100%	100%
	No. of parameters per sample	3	-	3	-	3 100%	100%
4.4 Cylinder Gas Audit	No. of CGA conducted	1	1	1	1 100%	1 100%	100%
	316,613	316,613	316,613	316,613	316,613 100%	316,613 100%	100%
	No. of sampling conducted	7	7	7	7 100%	7 100%	100%
	No. of parameters measured per sample	3	3	3	3 100%	3 100%	100%
SUBTOTAL (PHP)		366,832,526	100,759,103	281,726,190	146,664,619 145.55%	437,725,801 155.37%	119%

Remarks/Recommendations:

- Stack sampling and Cylinder Gas Audit were conducted by a third party and witnessed by a personnel from EMB MIMAROPA.



Photo 10. Continuous Emissions Monitoring System of CBNC showing Carbon Monoxide, NO and SO₂ readings that are way below the DENR standards during the MMT monitoring.

5.0 Conservation Values

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
5.1 ICRMP (Partner with Bataraza LGU)	No.of project implemented	1	1	3	3	7	
		3,550,000	1,155,357	2,723,214	114,498 9.91%	194,498 7.14%	5%
	Progress report prepared	4	1	3	1 100%	3 100%	75%
5.2 Carbon Sink Program (Mangrove Forest Protection & Enhancement)	MOA signed	1	-	1	-	1 100%	100%
	40,000	40,000	-	40,000	-	0%	0%
5.3 Maintenance of Bio Indicators	No.of project implemented	1	1	1	1 100%	1	
		367,800	91,950	275,850	95,350 103.69%	207,552 75.24%	56%
	Progress report prepared	4	1	3	1 100%	3 100%	75%
5.4 CRA	No. of Activity	1	-	1	-	1 100%	100%
	239,940	239,940	-	239,940	-	62,350 25.98%	26%
5.5 Fauna	No. of Activity	1	-	1	-	1 100%	100%
	309,441	309,441	-	309,441	-	229,718 74.23%	74%

5.0 Conservation Values

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
5.6 Flora	No. of Activity	1	-	1	-	1 100%	100%
	265,100	265,100	-	265,100	-	136,155 51.35%	51%
5.7 Coastal Resources Protection and Enhancement of Ameril and Ursula Islands	No. of Activity	4	1	3	3 300%	3 100%	75%
	290,277	1,161,108	290,277	870,831	141,685 48.81%	497,920 57.17%	43%
5.8 Piersite Nursery (Mangrove and other Trees)	No. of nursery maintained	1	1	1	1 100%	1	
	18,500	74,000	18,500	55,500	0%	0%	0%
5.9 Support to National and International Environmental Activities	No. of Activity	6	1	6	1 100%	6 100%	100%
		537,000	80,000	537,000	166,805 208.5%	602,435 121.18%	121.18%
SUBTOTAL (PHP)		6,544,389	1,636,084	5,316,876	748,521 45.75%	1,528,578 28.74%	23%

6.0 Environmental Research

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
6.1 Bamboo Growth Performance on Dried Tailings Soil Study	Research conducted	1	1	1	1 100%	1	
	Progress Report submitted/prepared	4	1	3	1 100%	3 100%	75%
6.2 Seagrass Enhancement	Research conducted	1	1	1	1 100%	1	
	Progress Report submitted/prepared	4	1	3	1 100%	3 100%	75%
6.3 Fish at Kinurong	Research conducted	1	1	1	1 100%	1	
	Progress Report submitted/prepared	4	1	3	1 100%	3 100%	75%
6.4 Soil Amelioration	Research conducted	1	1	1	1 100%	1	
	Progress Report submitted/prepared	4	1	3	1 100%	2 66.66%	50%
	Established Plots	15	5	10	0%	0%	0%
	147,280	2,209,200	736,400	1,472,800	0%	13,300 0.9%	1%

7.0 Others

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
7.1 MEPEO Operation	MEPEO Operationalized	1	1	1	1 100%	1	
	No. of months operated	12	3	9	3 100%	9 100%	75%
	155,306.77	1,863,681	465,920	1,397,761	10,799,694 2,318%	18,299,985 1,309%	982%
7.2 Office Management (inc. safety, PPE issuance, transportation, materials & Equipment for Envi. Mgt., etc.)	No. of months managed	12	3	9	3 100%	9 100%	75%
	7,667	92,000	23,000	69,000	1,478,524 6,428.36%	1,531,505 2,219.57%	1665%
7.3 Covid-19 Prevention Activities in the Workplace	No. of Activity	12	3	9	3 100%	9 100%	75%
	3,333	40,000	10,000	30,000	0%	0%	0%
7.4 Calibration of Monitoring Instruments	No. of Calibration	1	1	1	0%	1 100%	100%
	39,375	39,375	39,375	39,375	45,000 114.28%	45,000 114.28%	114%
7.5 Envi. Monitoring Equipment Maintenance & Repairs	No. of maint and repair	12	3	9	3 100%	9 100%	75%
	108,692	1,304,298	326,075	978,224	-158,242 -48.52%	1,241,860 126.95%	95%

7.0 Others

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
7.6 Maintenance of Integrated Management System	Audit conducted	4	2	4	1 50%	3 75%	75%
	156,000	623,999	312,000	623,999	54,155 17.35%	149,660 23.98%	24%
7.7 Permitting and Compliance (Regulatory Fees, New Application, Amendment and Renewal)	Permitting Compliance Activity conducted	4	1	3	3 300%	3 100%	75%
	2,791,908	11,167,631	2,791,908	8,375,723	946,569 33.9%	5,185,084 61.9%	46%
7.8 MMT validation and sampling	MMT Monitoring Conducted	4	1	3	1 100%	3 100%	75%
	413,560	1,654,240	413,560	1,240,680	217,386 52.56%	1,435,577 115.7%	87%

7.0 Others

PARTICULARS	Unit of Measure/ Unit Cost	Target			Accomplished		
		Annual	3 rd Quarter	As of 3 rd Quarter	3 rd Quarter	As of 3 rd Quarter	%Annual
7.9 MRFC Meeting	Meeting conducted	4	1	3	1 100%	3 100%	75%
	118,400	473,600	118,400	355,200	47,968 40.51%	182,024 51.24%	38%
7.10 Government Inspections	No. of inspections	6	3	4	0%	4 100%	
		324,536	119,222	259,222	18,540 34.39%	183,436 70.76%	
7.11 IEC for Stake Holders, Visitors and Workers.	IEC Conducted	6	1	4	0%	4 100%	67%
	46,333	278,000	-	139,000	-	311,760 224.28%	112%
SUBTOTAL (PHP)		17,861,359	4,609,459	13,573,497	13,449,594 291.78%	28,565,891 210.45%	160%