

Reference No.: EMQCS 04-2023-02

April 01, 2023

**ENGR. GLENN MARCELO C. NOBLE**

Regional Director

MGB MIMAROPA REGION

7<sup>th</sup> Floor DENR by the Bay Building

1515 Roxas Boulevard, Ermita, Manila

**SUBJECT : National Greening Program – Progress as of March 2023  
Bamboo Plantation Project – Progress as of March 2023**

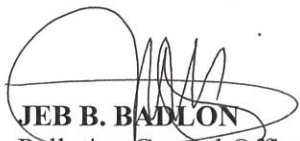
Dear Director Noble:

We are hereby submitting the following reports to your office;

1. National Greening Program Progress Report as of March 2023
2. Bamboo Plantation Project Progress Report as of March 2023

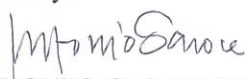
We hope that the above submissions are in compliance with the requirements of the respective program.

Thank you and regards.



**JEB B. BADLON**  
Pollution Control Officer

Noted by:



**ANTONIO O. SANONE**  
Section Manager/MEPEO

Cc: Mr. Al Janry Tuazon – MMT Team Leader, For. Leonard T. Caluya – CENRO BP and Engr. Ferdinand P. Olivares - MSESDD MGB IVB

**NATIONAL GREENING PROGRAM**  
**Accomplishment Report**  
 (Progress as of March 31 2023)

- I. **NAME OF COMPANY** : **CORAL BAY NICKEL CORPORATION (CBNC)**  
**HYDROMETALLURGICAL PROCESSING PLANT**  
**Location** : **Rio Tuba, Bataraza, Palawan**  
**Tenement No.** : **N/A**  
**Year Mining Forest was Initiated:** **2011**

II. **ACCOMPLISHMENTS:**

A. **DEVELOPMENT PLANS:**

/✓/ Long-Range Plan:

**Approved EPEP and FMR/DP**

*Rehabilitation works at Coral Bay Nickel Corp.*

/✓/ Annual Plan

**2022 and 2023 AEPEP**

*(Attach photocopy(ies).)*

B. **NURSERY OPERATIONS:**

/✓/ Own Nursery // Joint Venture //✓/ Acquired from Other Sources

Name of Nursery	Area (m <sup>2</sup> )	Capacity (No. of Seedlings Produced)*
CBNC EMQCS Nursery at TSF-2	10,000	100,000
Satellite Nursery at TSF-1 (with several components)	1,200	10,000
Community Nurseries (Wildlings of Native Trees)	400	30,000

**Seedling Inventory for the Year**

No. of Seedlings				No. of Seedlings Out-Planted		No. of seedlings donated	Balance in Stocks
				Planted for the Year	Replanted for the Year		
Previous Stocks	Produced	Acquired	Total				
37,455	18,518	200	56,173	2,325	491	538	52819

**Note:** for the list of species please see table below

C. **EXTENT OF PLANTED AREAS (ha) Within Project Facility**

**Total Area Planted to Date:** **150**

**Previous Plantation:** **150**

**New Plantations or Expansion:** **0**

*(Attached reforestation map of scale 1:25,000 showing distinctly the previous plantation from the new plantations or expansions)*

C1. **EXTENT OF PLANTED AREAS (ha) Within Outside Project Facility**

**Total Area Planted to Date:** **474**

**Previous Plantation:** **469**

**New Plantations or Expansion:** **5**

Remarks: 5 hectares' fruit bearing trees intercrop project planted at bamboo plantation project

(Attached reforestation map of scale 1:25,000 showing distinctly the previous plantation from the new plantations or expansions)

## C2. EXTENT OF PLANTED AREAS (ha) Using Forage Species

**Total Area Planted to Date:** 85

**Previous Plantation:** 85

**New Plantations or Expansion:** 0

- New plantation/expansion on grass planting activity was located at TSF-3 motor pool and TSF-2 east slope.
- 20 hectares was deducted from total area grass planted because TSF-2 Unsuitable Stockpile was used again as topsoil stockpile from TSF-3 area.

(Attached reforestation map of scale 1:25,000 showing distinctly the previous plantation from the new plantations or expansions)

## C2. EXTENT OF PLANTED AREAS (ha) Using Bamboo Species

**Total Area Planted to Date:** 52

**Previous Plantation:** 52

**New Plantations or Expansion:** 0

- 20 hectares Bamboo plantation is located at TSF-3 buffer zone area but within RTNMC tenement

(Attached reforestation map of scale 1:25,000 showing distinctly the previous plantation from the new plantations or expansions)

## D. DISTURBED AREAS (ha)

### 1. Areas directly affected by the operations

(Itemize all areas in a separate sheet.)

	Area (ha)			Area (ha)	
	Total	Rehab		Total	Rehab
A.HPP Complex and Vicinity	44	6	G.TSF-2 Unsuitable Stockpile	20	
B.Coal Ash Pit	9		H.TSF-3 Unsuitable Stockpile	22	
C.TSF No.1	85	85	I. Water Storage	28	4
D.TSF No.2	189	20.4	J. Sanitary Landfill	4	2
E.TSF No.3	122	7.05	K. Port Area and Causeway	28	4
F.TSF No.2 Borrow Area	32	22			
Total				583	150.45
Total Remaining Disturbed				432.55	

Remarks:

20 hectares TSF-2 Unsuitable Stockpile was used again as Topsoil recovery stockpile from TFS-3 area, permits were consulted in concerned government agencies prior of this activity.

### 2. Environmental Incidence Resulting to Damages

	Yes	Area Affected (ha)	No
a. Tailings dam failure			✓
b. Waste dump failure			✓
c. Shrinkage/subsidence			✓
d. Induced slides			✓
e. Others (specify)			✓
<b>T o t a l</b>			

(Note: Exclude areas that were previously rehabilitated.)



## E. MAINTENANCE AND PROTECTION

### 1. Plantation Activities Within Project Area

Aspect	Plantation Category					Total
	Old	Recent			Latest	
		JD19-JJ20	JD20-JJ21	JD21-JJ22	JD22-JJ23	
No. of Seedlings Planted	357,422	28,023	40,927	57,633	31,584	515,589
No. of Seedlings Replanted	37,944	756	870	1,450	741	41,761
No. of Surviving Plants	319,478	27,267	40,057	56,183	30,843	473,828
Survival (%)	89 %	97 %	98 %	97 %	97 %	92 %

Note: For old plantation, consider four (4)-year old growth and above.

For recent plantation, consider one (1)-year to three (3)-year old growth.

For latest plantation, consider those for the periods July-Dec. of the previous year and/or Jan.-June of the current year.

### 1.A Plantation Activities Outside Project Area

Aspect	Plantation Category					Total
	Old	Recent			Latest	
		JD19-JJ20	JD20-JJ21	JD21-JJ22	JD22-JJ23	
No. of Seedlings Planted	342,271		62,500	52,160	1,010	457,941
No. of Seedlings Replanted	0		1,200	1,000	0	2,200
No. of Surviving Plants	308,044		61,300	51,160	909	421,413
Survival (%)	90 %		98 %	98 %	90 %	92 %

Remarks: 5 hectares' fruit bearing trees intercrop project planted at bamboo plantation project

Note:

For old plantation, consider four (4)-year old growth and above.

For recent plantation, consider one (1)-year to three (3)-year old growth.

For latest plantation, consider those for the periods July-Dec. of the previous year and/or Jan.-June of the current year.

### 2. No. of Persons Involved

- No. of company foresters 2
- No. of deputized forest guards (or DENROs) 3
- No. of reforestation personnel 61
- No. of local residents involved (community involvement) 60

### 3. Vigorousness : / / Highly Vigorous / ✓/ Vigorous

### 4. Maintenance and Protection

	Yes	No	Coverage (ha)
Control of forest fires by establishment and construction of firebreaks/fire tower	✓		85
Brushing/Weeding/Mulching/Pruning	✓		85
Fertilizer/Lime/pesticide/Chemical application	✓		140
Water spraying	✓		30
Control of forest pest and diseases	✓		1
Patrol work	✓		183
Forest law enforcement	✓		183
Others (please specify)	N/A		

## F. OTHER ENVIRONMENTAL FACTORS

### 1. Species Diversity

Tree Species	Spacing (m x m)	Tree Species	Spacing (m x m)
Pagsahingin	2 x 2	Linatog	2 x 2
Magmaman	2 x 2	Talisay Gubat	2 x 2
Marangub	2 x 2	Padi padi	2 x 2
Patangis	2 x 2	Bagaay	2 x 2
Maglabungaw	2 x 2	Malaboho	2 x 2
Palawan lanete	2 x 2	Magsumbiling	2 x 2
Malakatmon	2 x 2	Mabalod	2 x 2
Pasi	2 x 2	Katampas	2 x 2
Palawan Dita	2 x 2	Kanomay	2 x 2
Dins	2 x 2	Kamuning	2 x 2
Bunog	2 x 2	Kandis	2 x 2
Malabunga	2 x 2	Handadarag	2 x 2
Balinad	2 x 2	Gangad-gangad	2 x 2
Syzygium	2 x 2	Alagaw	2 x 2
Bulong eta	2 x 2	Alupag	2 x 2
Palawan Cherry	2 x 2	Anagas	2 x 2
Palawan Amayan	2 x 2	Palinlin	2 x 2
Palawan Mangkono	2 x 2	Banato	2 x 2
Bangkal	2 x 2	Bakaw-bakaw	2 x 2
Kakawate	2 x 2	Balinag	2 x 2
Ipil-ipil	2 x 2	Buga	2 x 2
Mahogany	2 x 2	Tongkat-ali	2 x 2
Palawan Agoho	2 x 2	Apitong	2 x 2
Odling	2 x 2	Lomarau	2 x 2
Fire tree	2 x 2	Baris	2 x 2
Malugai	2 x 2	Amugis	2 x 2
Narra	2 x 2	Manggis	2 x 2
Palumarya	2 x 2	Malakalumpang	2 x 2
Yemani	2 x 2	Aripa	2 x 2
Batino	2 x 2	Kamagong	2 x 2
Rhizophora sp.	2 x 2	Marapisa	2 x 2

Herbal Species	Spacing (m x m)	Herbal Species	Spacing (m x m)
Banana	5 x 5	Ginger/Luya	0.3 x 0.3
Lemon Grass	0.3 x 0.3	Langundi	0.3 x 0.3
Sambong	0.3 x 0.3	Buyo	0.3 x 0.3
Luyang Dilaw	0.3 x 0.3	Ginseng	0.3 x 0.3

Ornamental Species	Spacing (m x m)	Ornamental Species	Spacing (m x m)
Bougainvillea	0.5 x 0.5	Pandan	0.3 x 0.3
Dwarf Santan	0.3 x 0.3	Indian tree	0.3 x 0.3
Doña Aurora	0.3 x 0.3	Dracaena	0.3 x 0.3
Yellow Bell	0.3 x 0.3 2 x 2	Sitcirica	0.3 x 0.3 0.3 x 0.3



Fox-tail Palm		Sansevieria	
Bromeliads	0.3 x 0.3	Boat Lily	0.3 x 0.3
Yellow Tops	0.3 x 0.3	Policias	0.3 x 0.3
Palmera	2.5 x 2.5	Beach Lily	0.3 x 0.3
Anahaw	2.5 x 2.5	Sampaguita	0.3 x 0.3
Balete	2 x 2	Ice cream grass	0.3 x 0.3
San Francisco	2 x 2	Rhoeo	0.3 x 0.3
Topiary plant	0.3 x 0.3	Blood leaf	0.3 x 0.3

#### Fruit Trees

Species	Spacing (m x m)	Species	Spacing (m x m)
Cashew	8 x 8	Guyabano	8 x 8
Pomelo	8 x 8	Santol	8 x 8
Guava	8 x 8	Duhat	8 x 8
Langka	8 x 8	Tabo	8 x 8
Coconut	10 x 10	Marang	8 x 8
Rambutan	8 x 8	Caimito	8 x 8
Maraitom	8 x 8	Kamansi	8 x 8
Mararing	8 x 8		8 x 8

#### Vines and Grasses

Species	Spacing (m x m)	Species	Spacing (m x m)
Humidicola grass	0.5 x 0.5	Stylo	0.5 x 0.5
Centro	0.5 x 0.5	Kudzu	1 x 1
Wild sugarcane	2.5 x 2.5	Banana	5 x 5
Australian Peanuts	0.3 x 0.3	Bermuda grass	1 x 1
Kangkong	0.3 x 0.3	Para grass	0.3 x 0.3
Carabao grass	1 x 1		

#### Other Plants

Species	Spacing (m x m)	Species	Spacing (m x m)
Jathropa	2 x 2 / 1.5 x 1.5	Nipa	2 x 2 / 1.5 x 1.5
		Bakawan Lalake	1 x 1 / 2.5 x 2.5
		Bakawan Babae	2 x 1 / 2.5 x 2.5
		Tangal	3 x 1 / 2.5 x 2.5

#### 2. Research/Studies on reforestation conducted:

Is there any research/study on reforestation conducted?

☒ (Attach copy(ies).) / / None

- Journal of plants in CBNC Tailings Storage Facility No.1 Arboretum (Continuous)
- Forest Replication for the purpose of biodiversity Enrichment of the Decommissioned Tailings Dam (Continuous)
- Arboretum (Continuous)
- Clonal Propagation (Continuous)
- Trial Tailings Soil Conditioning (On-going)
- Bamboo Growth Performance on Dried Tailings Soil (On-going)
- Fruit trees intercrop at Bamboo plantation

3. IEC on reforestation:  
Is there any IEC activities (in the form of publication, public dissemination, lectures, etc.) initiated for the Community?  
☒ Yes / / None

The Chronickel (Official Newspaper of CBNC); IEC presentations during mine tours, environmental exhibits, distribution of printed IEC materials (flyers, brochures, etc.).

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

4. Services to the Community  
Is there any reforestation assistance extended by the Company to the Community during the period under review?  
☒ Yes / / None

If yes, enumerate and specify the kind and value of assistance extended.  
If assistance was by seedling donation, specify how many seedlings were donated.

Kind of Community Assistance	Value of Assistance
1. Give Livelihood by purchasing wildlings/seedlings from IP's at Sitio Bohoy, Ocayan, Bataraza, Palawan	Php. 120,000 worth of seedlings/Wildlings for the year 2022 & 2022.
2. Seedlings and Donation and Joint tree planting with local People Organization, Private Companies, and University Student	<b>1. Tree Donations 720 seedlings</b> <b>2. Other plants donation 1,774 seedlings</b> <ul style="list-style-type: none"> <li>February 21, 2023 donated and delivered 320 assorted ornamental plants at Barangay Samariniana Brookes Point Palawan and 100 seedlings of Eugenia sp. at barangay Malihud, Bataraza, Palawan.</li> <li>Other seedlings were donated in Company employee, contractors and visitors.</li> </ul>
	<b>IEC and Tree Planting Activity</b> <ul style="list-style-type: none"> <li>January 21, 2023 DENR RED Lormelyn E. Claudio, PENRO Felizardo B Cayatoc, CENRO Leonard T. Caluya and company visited Tailings Storage Facility No.1 rehabilitation project.</li> <li>January 21, 2023 IEC on LSVMS batch 1998 and conducted fruit bearing intercrop tree planting activity at bamboo plantation project.</li> <li>January 30, 2023 MGB Mimaropa Regional Director Engr. Glenn C. Marcelo conducted ceremonial tree planting in the opening of Safety Skills Training Center building.</li> <li>February 13, 2023 conducted IEC and TSF-1 Rehabilitation tour on different personnel of Department of Justice and Palawan Council for Sustainable Development Staff.</li> <li>February 15, 2023 conducted IEC and TSF-1 Revalidation tour on Japanese visitors of production department.</li> <li>February 25, 2023 conducted IEC, TSF-1 Rehabilitation tour and fruit bearing tree intercrop planting on IIEE at bamboo plantation project.</li> </ul>



3. Engage in community by purchasing and planting of 37,500 rhizophora spp.	Php. 175,000 worth of seedlings planted for the year 2022 & 2023.
4. Engage in community by purchasing of 4,080 bamboo culms to be used in Bamboo plantation project.	Php. 81,600 worth of seedlings planted for the year 2022 & 2023.
5. Joint project in establishment of School Arboretum together with CBNC , DENR and Sumbiling Elementary School.	Donated and Planted of 40 Species Native Forest Trees at Sumbiling Elementary School, Bataraza, Palawan.

#### 5. Other Conservation Measures

a. Is there any reforestation assistance extended by the Company to the Community during this period under review? *Yes, See table above.*

b. Landscaping of mine and/or plant site surroundings?  
Yes ☒ Area 0.002 has. No ☐

c. Use of vines and grasses for initial rehabilitation?  
Yes ☒ Area 170 has. No ☐

Specify type/kind of vines/grasses: Humidicola, Stylosanthes, Centro, Wild Sugar cane,

d. Establishment of herbal and ornamental garden:  
Yes ☒ Area: Ornamental Garden 0.075  
Herbal Garden 0.09

#### 6. Wildlife and Faunal Migration

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


Common Name / Description	
Crested Goshawk	Yellow throated leaf bird
Common lora	Olive backed sunbird
Lovely Sunbird	Zitting Cisticola
Blue-eared Kingfisher	Glossy Swiftlet
Palawan Bulbul	White vented Shama
Brown-throated sunbird	Slender billed crow
Paddy field Pipet	Wandering whistling Duck
Asian-glossy Starling	Pygmy flowerpecker
Pale spider hunter	Ashy Drongo
Grey Heron	White bellied woodpecker
White Breasted wood	Pied Imperial Pigeon
Swallow	Grey Pigeon
Little Heron	Little Egret
Plantive cuckoo	Crested Lizard
Nicobar Pideon	Painted Bronzeback



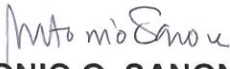
Large-tailed Nightjar	little Spiderhunter
Greater Coucal	Eastern Reef Egret
Oriental Dwarf Kingfisher	King Quail
Common emerald dove	Palawan Flycatcher
Zebra Dove	Palawan Narrow-disked Gecko
Oriental Pranticol	Palawan Mangrove Snake
Hill Myna	North Philippine Temple Pitviper
White-bellied Sea Eagle	Philippine Toad
Pacific Swallow	Blue-headed Raquettail
Black-naped Monarch	Palawan Flower Pecker
Sulphur-bellied Bulbul	Black-chinned Fruit Dove
Shrenk's bittern	Black-headed Bulbul

*Fauna species documented based on the fauna assessment 2022*

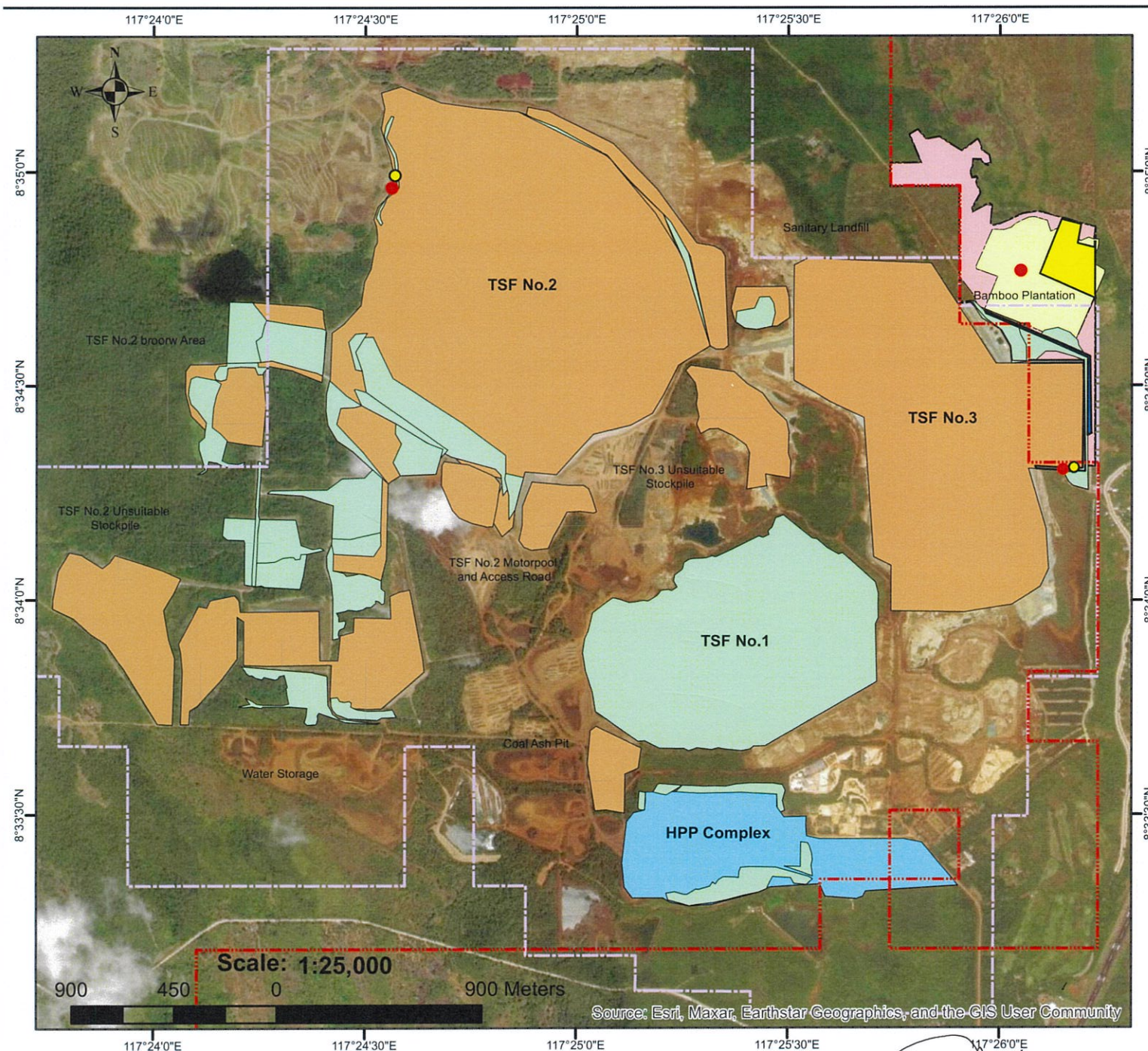
**Validated by:**

  
**For. LEONARD T. CALUYA**  
 CENRO  
 DENR- Brookes Point Office

**Conforme:**

  
**ANTONIO O. SANONE**  
 EQS Manager/MEPEO  
 Coral Bay Nickel Corporation





**Map  
Showing the Area Covered  
For  
National Greening Program  
of  
Coral Bay Nickel Corporation  
CY: January-March 2023**

Item No.	Category	Project Facility (Disturbed Area)	Specific Area	Total No. of Trees	Area Covered
1	Enhancement	TSF-3	Embankment and Buffer	100	N/A
		TSF-2	West Diversion Canal	1,012	N/A
2	Re-planting	TSF-3	West Diversion Canal	391	N/A
		TSF-3	Buffer and Ancillaries	100	N/A
		N/A	Bamboo	206	N/A
Other Accomplishment					
3	Fruit trees Incrop	N/A	RTNMC Acquired lot	1,010	N/A
	Forest Trees	N/A	Bohoy Road	200	N/A

**LEGEND**

	MPSA Boundary
	PEZA Boundary
	CBNC Disturbed Area
	HPP Complex
	CBNC Rehabilitation Area
	2021 Bamboo Plantation
	2022 Bamboo Plantation
	New Area
	Enrichment Planitng
	Re-planting
	Fruit Tree Intercrop

Digitized by:   
Rey Jean Mark A. Daanoy  
Assistant, EMQCS

Validated by:   
Randy C. Favila  
Senior Supervisor, EMQCS

Attested by:   
Jeb B. Badion  
Section Head, EMQCS

Approved by:   
Antonio O. Sanone  
EQS Manager / MEPEO



# PHOTO DOCUMENTATION

January 21, 2023 DENR RED Lormelyn E. Claudio  
PENRO Felizardo B Cayatoc, CENRO Leonard T.  
Caluya and company visited Tailings Storage  
Facility No.1 rehabilitation project



January 21, 2023 IEC on LSVMS Batch 1998 and  
conducted fruit bearing intercrop tree planting  
activity at Bamboo plantation project





**January 30, 2023 MGB Mimaropa Regional Director Engr. Glenn Marcelo C. Noble conducted ceremonial tree planting in the opening of Safety Skills Training Center building**



**February 13, 2023 conducted IEC and TSF-1 Rehabilitation tour on different personnel of Department of Justice and Palawan Counsel for Sustainable Development staff**

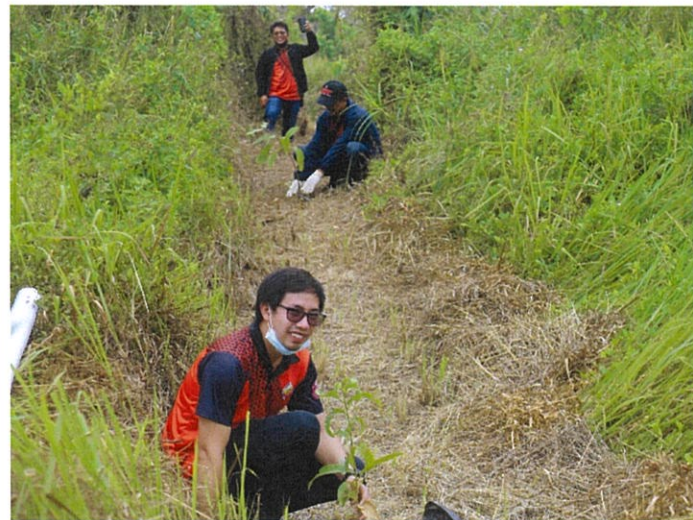




**February 15, 2023 conducted IEC and TSF-1 Rehabilitation tour on Japanese visitors of production department**



**February 25, 2023 conducted IEC, TSF-1 Rehabilitation tour and fruit bearing intercrop tree planting activity on IIEE at Bamboo plantation project**





**March 31, 2023 conducted IEC, fruit bearing intercrop tree planting activity at Bamboo plantation project and TSF-1 Rehabilitation tour to Tagmaya Elementary School Teachers and Students**





**BAMBOO PLANTATION PROGRAM**  
**Validation Report**  
**January to March 2023**

**I. BASIC INFORMATION**

<b>Name of Company</b>	<b>Coral Bay Nickel Corporation</b>
<b>Location</b>	Rio Tuba, Bataraza, Palawan
<b>Tenement No.</b>	MPP-006-2004-IVB
<b>Mine Life (no. of years)</b>	
<b>Total Disturbed Area in the approved 3YD/UWP (ha)</b>	583 hectares

**II. ACCOMPLISHMENTS:**

**A. BAMBOO DEVELOPMENT PLANS:** /☒/ Long-Range Plan /☒/ Annual Plan

**B. NURSERY OPERATIONS:**

/☒/ Own Nursery // Joint Venture // Acquired from Other Sources

<b>Name of Bamboo Nursery</b>	<b>Location</b>	<b>Area (m<sup>2</sup> or ha)</b>	<b>Capacity (No. of bamboo seedlings produced) *</b>
CBNC Bamboo Plantation	North of TSF3 along Bohoy road	5,000 m <sup>2</sup>	10,000
<b>TOTAL</b>			

Note: \* At least 1-ft plantable size

**Bamboo Seedling Inventory for the Year**

<b>No. of Seedlings</b>				<b>No. of Seedlings Planted</b>		<b>No. of seedlings donated</b>	<b>Balance in Stocks</b>
				<b>Planted for the Year</b>	<b>Replanted for the Year</b>		
<b>Previous Stocks</b>	<b>Produced</b>	<b>Acquired</b>	<b>Total</b>				
400	0	N/A	400	0	206		194

Note: \*460 re-planted was accomplished in latest plantation CY2022

\*Seedlings was donated to PQMI rehabilitation simultaneous tree planting.

**C. EXTENT OF PLANTED AREAS (ha)**

<b>EXTENT of PLANTED AREAS</b>			<b>HECTARES (ha)</b>
<b>Total Area Planted to Date (ha)</b>			<b>52</b>
Progressive Rehabilitation (Mined-out)			12
Reforestation/Afforestation			
Plantation Within MPSA			
Enhancement Plantation			
Temporary Revegetation			
Other Plantation*			
Plantation Outside MPSA			
Offset Plantation			40
<b>Previous Plantation (ha)</b>			<b>52</b>

<b>New Plantations/Expansions (ha)</b>	<b>0</b>
<b>TOTAL</b>	<b>52</b>

<b>New Plantation (ha)</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>TOTAL</b>
Progressive Rehab					
Enhancement	N/A				
Temp. Revegetation	N/A				
Other Plantation*	N/A				
Offset Plantation	N/A				
<b>TOTAL</b>					

Remarks: CBNC 3-year bamboo plantation target was successfully achieved, care, maintenance and protection of bamboo planted was maintained to ensure the survival and growth of 52 hectares' plantation.



\*Other re-greening/revegetation activities required by DENR (i.e., STCP, Carbon Sink Program, etc.)

## D. DISTURBED AREAS (ha)

### 1. Areas directly affected by the operations

<b>Actual Disturbed Areas</b>		<b>Area (ha)</b>	
A	Mining Areas	38	
B	Exploration Area		
C	Road Networks		
D	Ancillary Areas	394.7	
	1. Mine Camp/Facilities		
	2. Stockyards		22
	3. Other Ancillary Facilities		65
	4. Environmental Structures		
	4.1 Silt ponds		307.7
	4.2 Nurseries		
	4.3 Drainage System		
<b>TOTAL</b>		<b>432.7</b>	

### 2. Environmental Incidence Resulting in Damages

	<b>Yes</b>	<b>Area Affected (ha)</b>	<b>No</b>
a. Tailings Storage Facility/Settling Ponds failure			/
b. Waste dump failure			/
c. Shrinkage/subsidence			/
d. Induced slides			/
e. Others (specify)			/
<b>T o t a l</b>			

(Note: Exclude areas that were previously rehabilitated.)



## E. MAINTENANCE AND PROTECTION

### 1. Plantation Activities

Aspect	Old	Plantation Category						Grand Total
	(<JJ19)	Recent				Latest	Sub-total	
		JD19-JJ20	JD10-JJ21	JD21-JJ22	Sub-Total	JD21-JJ22	(Recent + Latest)	
No. of Bamboo Seedlings Planted	800	2,054	4,084	4,082	10,220		10,820	11,020
No. of Bamboo Seedlings Replanted	0	0	163	297	460	206	460	460
No. of Surviving Bamboos	720	1,849	3,921	3,785	9,349		10,095	10,275
Survival Rate	90%	90%	96%	88%	91%		91%	91%

Remarks:

- 2022 plantation was re-planted 206 culms this 1st qtr. of 2023.
- The 206culms re-planting in JD22-JJ223 was added in JD21-JJ22 297culms re-planting data to compute the survival rate.

Note: For old plantation, consider four (4)-year old growth and above.

For recent plantation, consider one (1)-year to three (3)-year old growth.

For latest plantation, consider those for the periods July-Dec of the previous year and/or Jan-June of the current year.

### 2. No. of Persons Involved

- No. of company foresters :2
- No. of deputized forest guards (or DENROs) :3
- No. of reforestation personnel :61
- No. of local residents involved (community involvement) :60

### 3. Vigorosity: // Highly Vigorous // Vigorous

### 4. Maintenance and Protection

Activities	Yes	No	Coverage (ha)
Patrol work	/		52
Forest law enforcement	/		52
Fireline establishment	/		34
Firebreak Plantations	N/A		
Brushing/weeding/mulching/pruning	/		52
Organic fertilizer application	/		52
Water spraying	/		52
Pest Control	N/A		
Others	N/A		

## F. OTHER ENVIRONMENTAL FACTORS

### 1. Species Diversity (Indicate per location of Bamboo Plantation)

Name of Bamboo Plantation: **Bamboo Plantation 1**

Location: **TSF-1**

Year Established: **2017-2020**

Bamboo Species (Common Name and Scientific Name)	No. of Species Planted	Spacing (m x m)	Bamboo Plantation	
			Hectares	Coordinates
1) Kawayan Tinik	430	7m x7m & 5m x 5m	12	Old plantation-
2) Patong	400			117°25'11.901"E, 08°33'57.064"N
2) Kawayan Kiling	2024			2020 plantation-
				117°25'40.697"E, 08°34'3.879"N

**Name of Bamboo Plantation: Bamboo Plantation 2**  
**Location: TSF-3 North dam RTN Acquired lot along Bohoy road, Ocayan, Bataraza**  
**Year Established: 2021 & 2022**

Bamboo Species (Common Name and Scientific Name)	No. of Species Planted	Spacing (m x m)	Bamboo Plantation	
			Hectares	Coordinates
1) Kawayan Tinik	4,448	7mx7m	40 hectares	2021 plantation- 117°26'8.727"E, 08°34'43.41"N 2022 plantation- 117°25'51.572"E, 08°35'0.524"N
2) Patong	383	7mx7m		
3) Bayog	2,577	7mx7m		
4) Giant Bamboo	10	7mx7m		
5) Kawayan Kiling	748	7mx7m		

## 2. Bamboo Plantation Target vs. Accomplishment (%)

Bamboo Plantation Target per year (ha)			Accomplishment (ha)				
This Semester	To date	Total	This Semester	% This Sem	To date	% To date	% Total
0	0	0	0	0 %	0	0%	0%

## 3. Bamboo Plantation Commitment (ha)

Year 1	Year 2	Year 3	Year 4	Year 5	...	Total
10	20	20				50

Remarks:


- 3 years' commitment for Bamboo plantation establishment was already completed.
- Continuous care and maintenance was undertaken to ensure the good growth performance of planted bamboo culms.
- Protection against grass fire was intensively implemented fire lanes/lines are well maintained, water pond and pumps are also prepared in case fire occurs.

## 4. Bamboo Harvest (if applicable)

Year	Species	Type of Harvest	Unit	Use
N/A	N/A	Pole	No. of Poles	Company Use (Staking, Fencing, Nursery Operation, etc.)
		Others (Bamboo Shoot, Bamboo Leaves etc.)	N/A	Commercial Use Others (Specify)

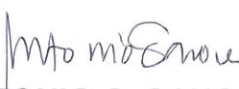


**Validated by:**

  
**For. LEONARD T. CALUYA**  
**CENRO**  
**DENR-CENRO Brookes Point**

MARCH 31, 2023  
Date

**Conforme:**

  
**ANTONIO O. SANONE**  
**EQS Manager/MEPEO**  
**Coral Bay Nickel Corporation**

**Attachments:**

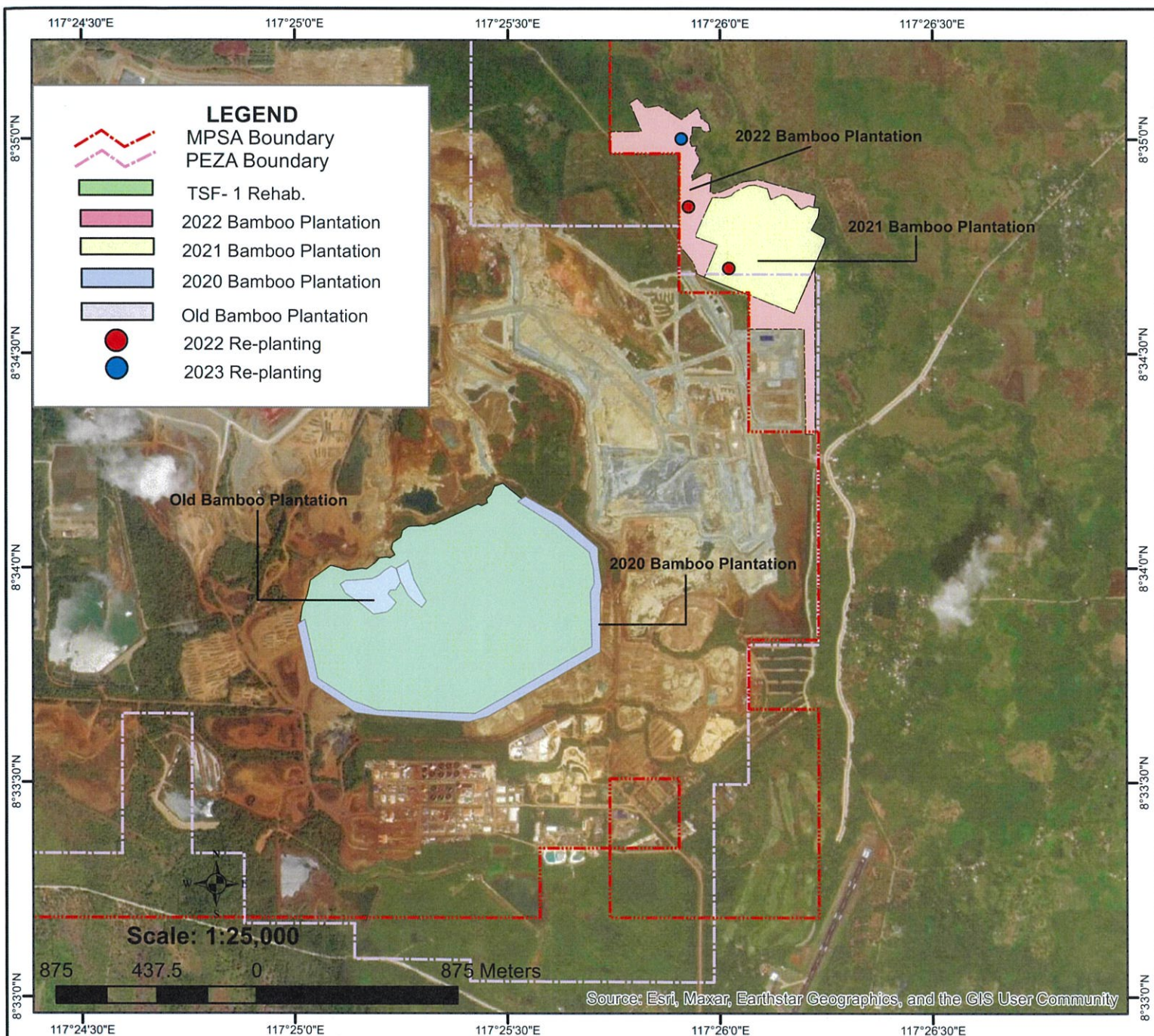
The following shall form part of the report:

1. *Bamboo Development Plans (long-range and annual)*
2. *Bamboo Plantation Map (Scale 1:25,000)*
3. *Photographs/Exhibits of all aspects of bamboo development activities (Geotagged photos, Drone photos, etc.)*
4. *Memorandum of Agreement (if applicable)*





# Bamboo Plantation Project of CBNC



Item No.	Description of developed Area	Rehabilitation As of 2017 to 2018		Rehabilitation As of end 2019		Rehabilitation As of end 2020		Rehabilitation As of end 2021		Rehabilitation As of end 2022		As of March 2023	Total		
		No.of Trees	Area (ha.)	No.of Trees	Area (ha.)	No.of Trees	Area (ha.)	No.of Trees	Area (ha.)	No.of Trees	Area (ha.)	Replant	No.of Trees	Replant	Area (ha.)
1	TSF-No.1 Impoundment	200	0.5										200		0.5
2	TSF-No.1 Impoundment			800	2								800		2
3	TSF-No.1 Impoundment & Embankment					2,054	10						2,054		10
4	North of TFS-3 (RTN Tenement)							4,084	20				4,084		20
5	North of TFS-3 (RTN Tenement)									4,082	20	460	4,082	666	20
Total		200	1	800	2	2,054	10	4,084	20	4,082	20		11,220	666	52

Digitized by:   
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