

4th Quarter 2023 MultiPartite Monitoring Team Validation

Date : October 19-20, 2023

Coverage : 3rd Quarter and Partial 4th Quarter of 2023 Annual Environmental Protection and Enhancement Program Accomplishments

Tenement : MPSA 264-2008-VII & MPSA 210-2005-VII

CARMEN COPPER CORPORATION

Activities <sup>1</sup>	Unit of Measure	Physical Target and Accomplishment							Financial Target and Utilization					Remarks - Q4		
		Annual Target	Physical Targets				% Physical Accomplishment to date <sup>2</sup>	Annual Budget	Financial Targets				% Financial Accomplishment to date <sup>3</sup>			
			Q1	Q2	Q3	Q4			Total Accomplishment to date	Q1	Q2	Q3			Q4	Total Expenditure to date
<b>1. Land Resource</b>																
a. National Greening Program Plantation maintenance (100 Ha.)	No. of validation Activity	2	-	1			1	50%	687,450	-	350,000	-	-	350,000	51%	- Ongoing maintenance activity of the 100 hectares plantation at Brgy Bunga, Toledo City. - The 2nd pass (July-December) activities of UNIFAMCO are the procurement/replanting of 12,495 sdigs, plantation maintenance of 100 hectares and purchasing and application of 85 sacks of Inorganic fertilizers
b. Improvement of Nursery Facilities - Repair of Nursery Office - Repair of Potting Shed - Repair of Vermil-Composting	No. of Facility	3	-	-	-	-	-	0%	1,697,583	-	-	-	-	-	0%	* Repair of Nursery office - ongoing delivery of materials * Repair of Potting shed - ongoing delivery of materials - on process labor request * Repair of Vermil-Composting- - ongoing delivery of materials
c. Operation and Maintenance of Waste Rock Dump Rehabilitation and Stabilization of Riverbank and left-over clearing (Airstrip, Odium & Sigpit area)	No. of Mntce. Activity	12	3	3	3		9	75%	16,500,000	4,780,912	4,031,668	3,833,790	-	12,646,370	77%	- Sigpit & Airstrip WRD - continuous maintenance of access roads, slopes and drainage system - Udium WRD - continuous maintenance of access roads and drainage systems
d. Operation and maintenance of roads and drainage within the Pit area	No. of Mntce. Activity	12	3	3	3		9	75%	8,000,000	2,222,644	1,783,360	1,800,455	-	5,806,459	73%	- Continuous maintenance of drainage system within the pit
e. Storage Facility for Household Electronic Wastes (Camp Housing area)	No. of Storage facility	3	-	-	-	-	-	0%	180,000	-	-	-	-	-	0%	- On process Purchase Order (PO) for approval.
f. Construction of North Dike Project	No. of Project	1	-	0.26			0.26	26%	51,280,374	-	10,256,075	17,435,327	-	27,691,402	54%	- Completed the drilling and grouting activity. - Ongoing embankment and development of stage 1 dike

g. Establishment of Sigpit Settling Pond Extension (Pond 1A and Pond 1B)	No. of Project	1	0.20	0.30	0.4		0.90	90%	9,700,000	939,680	3,880,000	4,228,560	-	9,048,240	93%	- Pond 1A is 100% completed. - Ongoing construction Sigpit Pond 1B at 90% completed.
h. Additional Two (2) unit Dump Trucks	No. of Truck	2	-	2			2	100%	6,000,000	-	6,000,000	-	-	6,000,000	100%	- Delivered and now used at Sigpit desilting maintenance activity.
i. Proposed Construction of Garbage Staging and Compost Facility	No. of Facility	1	-	-			-	0%	1,109,843	-	-	-	-	-	0%	- Capex Authorization Request (CAR) and manual Purchase Request (mPR) are already approved. - On process for bidding.
<b>Sub-total</b>									<b>95,155,250</b>	<b>7,943,236</b>	<b>26,301,103</b>	<b>27,298,132</b>	<b>-</b>	<b>61,542,471</b>		
<b>2. Water Resource and Quality</b>																
a. Operation, Regular Maintenance and Improvement of Emergency Tailings Pond (ETP)	No. of Mntce. Activity	12	3	3	3		9	75%	25,000,000	5,752,149	5,550,551	5,590,394	-	16,893,094	68%	- On-going desilting of ETP pond nos. 3 and 4 - regular cleaning of drainage/creek from Pump house to ETP
b. Operation and Maintenance of Tailings Disposal System (Land Based, Slurry Pumps and Tailings Pipelines and Launderers)	No. of Mntce. Activity	60	15	15	15		45	75%	30,000,000	12,590,349	5,182,435	4,979,929	-	22,752,713	76%	- facilities are well-maintained
c. Operation and maintenance of Sigpit Settling Pond, Spillway and Dikes	No. of Mntce. Activity	36	9	9	9		27	75%	19,531,200	3,894,532	2,860,185	3,194,220	-	9,948,937	51%	- On going desilting of pond no. 1 and Sigpit creek.
d. Maintenance of One (1) Slake Lime set-up @ SBDT area	No. of Mntce. Activity	12	3	3	3		9	75%	85,000	23,400	23,400	24,450	-	71,250	84%	- Slaking set up is operational and well maintained
e. Maintenance of Existing Used Oil Storage facility (Carmen HE & Machine Shop area)	No. of Mntce. Activity	24	6	6	6		18	75%	180,000	46,200	47,100	46,200	-	139,500	78%	- Well maintained, storage tank are in good condition
f. Maintenance of Oil-Water Separator Facilities (Carmen HE Main & Wash bay, Transport shop, Machine Shop & PED Yard areas)	No. of Mntce. Activity	60	15	15	15		45	75%	1,400,000	365,836	365,836	360,212	-	1,091,884	78%	Carmen H.E. - The existing facilities are operating properly and continuously maintained Transport Area - Well maintained. PED / Machine Shop - Well maintained

g. Maintenance of Wash Bays (Carmen HE and Transport shop)	No. of Mtnc. Activity	24	6	6	6		18	75%	200,000	50,550	50,550	50,250	-	151,350	76%	Carmen HE - Well maintained Transport shop - Well maintained
h. Maintenance of Environmental equipment (Water Quality Checker, Portable PH Meter, Online PH Meter, Flow Meter, etc.)	No. of Equipment	4	0	2	2		4	100%	180,000	10,000	15,000	131,537	-	156,537	87%	- Completed calibration and maintenance of envl equipment.
i. Water Laboratory Expenses	No. of Samples	212	53	53	53		159	75%	850,000	163,897	252,661	231,532	-	648,089	76%	- Continue collection of water samples for analysis to 3rd Party Service Provider (Ostrea Laboratories)
j. Handling, Transport & Disposal of Hazardous Waste (133,000 kgs)	Kilograms	133000	32,910	18,454	12,590		63,954	48%	1,000,000	226,590	143,973	93,133	-	463,696	46%	- Continue hauling of hazardous waste conducted by RRDS and Cleanaway.
k. Maintenance of Drainage system at Carmen Concentrator	No. of Mtnc. Activity	12	3	3	3		9	75%	362,400	88,560	88,560	80,520	-	257,640	71%	- Drainage regularly maintained
l. BTSF Discharge Pipeline Enhancement	No. of Project	1	-	-	-		0	0%	5,000,000	-	-	-	-	-	0%	- On process Capex Authorization Request and manual Purchase Request (CAR/mPR) for management approval
m. Procurement of additional Oil/Chemical Spill Kit	No. of IGI	2	-	2			2	100%	100,000	-	169,850	-	-	169,850	170%	- Spill kit were already delivered at mine site.
<b>Sub-total</b>									<b>83,888,600</b>	<b>23,212,063</b>	<b>14,750,101</b>	<b>14,782,377</b>	<b>-</b>	<b>52,744,541</b>		
<b>3. Noise and Vibration</b>																
a. Conduct Regular Ambient Noise Monitoring at the ff area: Biga Brgy Hall, Sitio Hag-it, Sigpit Area, Sangi Port & Airstrip	No. of Sites	60	15	15	15		45	75%	18,000	4,500	4,500	4500	-	13,500	75%	- Continue conducting monthly ambient noise sampling
<b>Sub-total</b>									<b>18,000</b>	<b>4,500</b>				<b>13,500</b>		

4. Air Quality																
a. Maintenance of Environmental Equipment (High Volume Air Sampler, Portable Genset, Micro-Climate System, etc.)	No. of Equipment	3	-	1	2		3	100%	100,000	17,500	-	79,023	-	96,523	97%	- Air Sampler equipment was already calibrated. - Genset already repaired and operational
b. Conduct Regular In-house PM10 Air Sampling at Biga Brgy Hall, Sitio Hag-it, Sigpit (near Sigpit Waste dump), Primary Crusher, Sangi Port)	No. of Sites	60	15	15	15		45	75%	74,000	19,500	19,500	19,500	-	58,500	79%	- Continue conducting monthly ambient noise sampling
c. Operation and Maintenance of Environmental Heavy Equipment (Excavator - 3 and Dump Trucks 5)	No. of Equipment	8	1	2	3		6	75%	2,500,000	426,039	369,921	299,867	-	1,095,827	44%	* 3 Unit Excavators - Completed repair of 3 units and operational.  * 5 Unit Dump Trucks - 3 units are under repair - 2 units are operational  * Additional fleet of 8 Dump trucks were assigned to Sigpit for desilting activity
<i>Sub-total</i>									<b>2,674,000</b>	<b>463,039</b>	<b>389,421</b>	<b>398,390</b>	<b>-</b>	<b>1,250,850</b>		
5. Biodiversity Conservation / Consideration																
a. Seedling Production (Forest & Fruit-Bearing trees)	No. of Seedlings	28500	15,414	15,137			30,551	107%	342,000	184,968	181,644	-	-	366,612	107%	- Completed the seedling production for this year's target.
b. Mining Forest Program (Nursery operation and Tree Planting Activity)																
- Tree Planting Activity	No. of Ha.	6		1.01	1.36		2.37	40%	150,000	-	25,250	34,000	-	59,250	40%	- Continue planting at Lantoy area ( part of Lutopan Waste Rock Dump area).
- Enrichment Planting	No. of Ha.	25			13.37		13	53%	75,000	-	-	40,116	-	40,116	53%	- On going enrichment planting at Mabals and Lusong Waste Rock Dump (WRD) area

c. Establishment of Bamboo plantation	No. of Ha.	30			0.74		0.74	2%	105,000	-	-	7,500	-	7,500	7%	- Ongoing production of bamboo propagules. - Ongoing planting of bamboo propagules at Brgy Bagacay and Loay
d. Maintenance of existing Reforested areas: (Reforestation/ mine revegetation)																
- Ecopark Maintenance activity	No. of Ha.	6	1.5	1.5	1.5		4.5	75%	40,008	10,002	10,002	10,002	-	30,006	75%	- Conducted grass cutting and brushing/clearing activity
- Ringweeding and Brushing activity	No. of Seedlings	25,000	6,250	7,500	3,800		17,550	70%	100,000	34,757	34,757	-	-	69,514	70%	- Ongoing ringweeding and brushing activity
- Pruning and Salvaging activity	No. of Ha.	15	7.83	5.89			13.72	91%	50,010	26,105	19,638	-	-	45,743	91%	- Completed the pruning and salvaging activity.
- Replanting activity	No. of Seedlings	5,250		927	2,895		3,822	73%	52,500	-	11,124	27,144	-	38,268	73%	- Ongoing replanting at Mabais and Lusong Waste Rock Dump area.
- Growth and Survival	No. of Ha.	5		5			5	100%	12,500	-	12,750	-	-	12,750	102%	- Completed the growth and survival monitoring.
e. Wildlife Monitoring within the mine site	No. of Monitoring activity	2		0.5			0.5	25%	46,000	-	16,917	-	-	16,917	37%	- Next monitoring schedule on 4th quarter.
f. Proposed Solar Power at Administrative Building	No. of Project	1	0.283	0.72			1	100.3%	8,000,000	2,249,850	5,700,150	-	-	7,950,000	99.4%	- Solar Panel/system installation is now completed and operational.
g. Procurement of accessories for DLSR Camera intended for Wildlife monitoring as ff: - 150-600 Super Telephoto lens - AF 2X Teleconverter/ Extender EF 2X III	No. of Item	2	-	-	2		2	100%	125,000	-	-	148,490	-	148,490	119%	- Items delivered on September 29, schedule for turn-over to Mr Hernando of DENR CDD office.
<b>Sub-total</b>									<b>9,098,018</b>	<b>2,505,682</b>	<b>6,012,232</b>	<b>267,252</b>		<b>8,785,166</b>		

6. Social Issues																	
a. IEC/Pulong-pulong to five (5) Sitios	No. of Activity	4	3	1			4	100%	20,000	21,200	-	-	-	21,200	106%	- Completed the IEC activity at the identified barangays and sitios.	
b. Conduct River Clean up on identified river within Toledo City	No. of Activity	4	1	1	1		3	75%	100,000	22,950	33,500	33,500	-	89,950	90%	- Conducted the 3rd quarter clean up last Sept. 29, 2023. (see attached photos)	
<i>Sub-total</i>										<i>120,000</i>	<i>44,150</i>	<i>33,500</i>	<i>33,500</i>	<i>-</i>	<i>111,150</i>		
7. Research Proposals / Activities																	
a. UPLB Research "Greening the Mine out Areas Philippines-Toledo City"	No. of Monitoring	4	-	1	2		3	75%	425,700	-	106,425	106,425	-	212,850	50%	- Conducted fertilizer application and growth measurement of planted seedling on Sept 12-15, 2023.	
b. Subsurface and Topographic Investigation Survey and Transmission Line Route Survey	No. of Study	2	-	-			0	0%	6,189,300	-	-	6,159,300	-	6,159,300	99.52%	- Waiting for the final report that will be provided by the service provider (DGS).	
<i>Sub-total</i>										<i>6,615,000</i>	<i>-</i>	<i>106,425</i>	<i>6,265,725</i>	<i>-</i>	<i>6,372,150</i>		


**OTHER MMT FINDINGS / OBSERVATIONS:**

1. Average ore production as of September 2023 is at 42,308 MTPD at 0.266% Cu. Milling production as of September 2023 at 43,411 MTPD at 0.230% Cu Generally, the mine and mill production have significantly reduced due to the expansion push back activities.
2. Active mine waste dumps are located in North Lutopan and near Carmen HE Shop.
3. Water samples were obtained from all sampling stations except Carmen HE shop and HE shop washbay. The team decided to forego with water sampling at the HE Shop, which will completely be relocated next month.
4. Air sampling activities were done in Barangay Biga and the old sampling station in Sitio Hag-it on the first day, and La Salle Soccer Playground on the following day.
5. The team was informed of the present utilization of 2 water sprinkling trucks (which include an outsourced / rented unit) for the company's dust mitigation activities along certain access roads within the mine complex.
6. The EMB-7 representative shared the hourly-generated results of the 24-hour air sampling activity conducted near the Barangay Biga Hall on September 5-6, 2023, which were all very well within the threshold limit.
7. The company informed that the purchase request for the BTSF discharge pipeline enhancement in the amount of PSM is still under processing.
9. The company informed of the completed construction of the zero-discharge decant tower at the BTSF last August 30, 2023.
10. The team commends the notable improvement of the Sigpit Silt Pond System (Silt Pond # 2 reportedly at 90% completion already) with an existing dedicated fleet comprised of 3 backhoes and 10 haul trucks.
11. The team noted the much improved physical state of the Emergency Tilings Pond (ETP) vis observations during the past MMT validations.
12. The team plans on conducting a Biodiversity benchmarking to be headed by the DENR-CDD, as part of the proposed 2024 AEPEP.
13. The company informed of the ongoing improvement of Nursery Facilities (Nursery Office, Potting Shed and Vermi-Composting area).
14. The company, during the closing meeting of MMT validation, awarded the newly purchased accessories for DLSR Camera intended for wildlife monitoring (150-600 Super Telephoto lens, AF 2X Teleconverter/ Extender, and EF 2X III) for its Biodiversity Conservation to DENR-7 CDD.
15. The company shared a comparative presentation to the team between acquiring a new or repairing its existing service vehicle. The company was advised to share the same in the upcoming MRFC meeting.
16. The company requests the DENR7-CDD for the conduct of Carbon Stock Assessment as part of its proposed 2024 AEPEP. Initially, a special orientation will be scheduled next month.

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