

BIDS AND AWARDS COMMITTEE

SUPPLEMENTAL BID BULLETIN NO. 01

Rebidding of Environmental Monitoring For 2023 (Waste Water -Effluent and Marine, Raw Water, Ambient Air Sampling and Laboratory Analysis)

Invitation to Bid No. 2023-01-045

The PNOC Bids and Awards Committee hereby adopts the following provision in the Philippine Bidding Documents:

1. Amendments/Clarifications on **Section VII. Technical Specification/Scope of Work**

Item No.	Reference	From	To
1	Proposed Sampling Schedules for 2023 (page no. 26)	<ul style="list-style-type: none"> Waste Water Sampling - February 21, 2023 (Tuesday) 	<ul style="list-style-type: none"> Waste Water Sampling - March 22, 2023 (Wednesday)
		<ul style="list-style-type: none"> Raw and Marine Water Sampling - February 21, 2023 (Tuesday) 	<ul style="list-style-type: none"> Raw and Marine Water Sampling - March 22, 2023 (Wednesday)
		<ul style="list-style-type: none"> Air Sampling and Noise Level Monitoring - February 22, 2023 (Wednesday) 	<ul style="list-style-type: none"> Air Sampling and Noise Level Monitoring - March 23, 2023 (Thursday)
2	Quarterly Effluent and Marine Water Monitoring (page no. 28 & 29)	<p>1. Laboratory analysis for the following shall be conducted.</p> <p>(Please see table on page no. 28 & 29)</p>	<p>1. Laboratory analysis for the following shall be conducted.</p> <p>(Please see Annex A attached)</p>

Amendments/inclusions/clarifications made herein shall be considered an integral part of the Bidding Document.

For guidance and information of all concerned.

Issued this 09 February 2023.


ATTY. GRACIELA M. BARLETA
Chairperson

ANNEX A

Quarterly Effluent and Marine Water Monitoring

1. Laboratory Analysis for the following shall be conducted:

ITEM	DESCRIPTION	QUANTITY	REMARKS
Quarterly: Air Quality and Noise Level Monitoring (4 sampling stations)			
1	Sulfur Dioxide (SO ₂)	Ambient Air Sample	AQ2, AQ5, AQ7, and AQ9
2	Nitrogen Dioxide (NO ₂)	Ambient Air Sample	
3	Particulate Matter 10 microns (PM ₁₀)	Ambient Air Sample	
4	Total Suspended Particulate (TSP)	Ambient Air Sample	
5	Lead (Pb)	Ambient Air Sample	
Quarterly: Raw Water Deep Well (5 production wells)			
1	Chloride	Raw Water Sample	PW2, PW3, PW4, PW6 and PW7
2	Iron	Raw Water Sample	
3	Bicarbonate as CaCO ₃	Raw Water Sample	
4	Color	Raw Water Sample	
5	Manganese	Raw Water Sample	
6	Calcium	Raw Water Sample	
7	Fecal Coliform	Raw Water Sample	
8	Potassium	Raw Water Sample	
9	Magnesium	Raw Water Sample	
10	Nitrate as NO ₃ -N	Raw Water Sample	
11	Sodium	Raw Water Sample	
12	Sulfate	Raw Water Sample	
13	pH (range)	Raw Water Sample	
14	Turbidity	Raw Water Sample	
15	Silica	Raw Water Sample	
16	Phosphate	Raw Water Sample	
17	Specific conductivity	Raw Water Sample	
18	Total Hardness	Raw Water Sample	
19	TSS	Raw Water Sample	
20	TDS	Raw Water Sample	
21	Oil and Greas (2nd and 4th quarter only)	Raw Water Sample	
Quarterly: Effluent (Outfall) Water (4 sampling stations)			
1	Ammonia (NH ₃)	Effluent Water Sample	E1, E2, E3
2	Arsenic (As)	Effluent Water Sample	E1, E2, E3, E5
3	Benzene (C ₆ H ₆)	Effluent Water Sample	E1, E2, E3
4	Benzo(a)pyrene (C ₂₀ H ₁₂)	Effluent Water Sample	E1, E2, E3

5	BOD	Effluent Water Sample	16	E1, E2, E3, E5
6	Cadmium (Cd)	Effluent Water Sample	16	E1, E2, E3, E5
7	Chromium (Cr ⁺⁶)	Effluent Water Sample	16	E1, E2, E3, E5
8	COD	Effluent Water Sample	16	E1, E2, E3, E5
9	Color	Effluent Water Sample	16	E1, E2, E3, E5
10	Cyanide (CN ⁻)	Effluent Water Sample	12	E1, E2, E3
11	Dissolved Oxygen	Effluent Water Sample	16	E1, E2, E3, E5
12	Ethylbenzene (C ₈ H ₁₀)	Effluent Water Sample	12	E1, E2, E3
13	Lead (Pb)	Effluent Water Sample	16	E1, E2, E3, E5
14	Mercury (Hg)	Effluent Water Sample	16	E1, E2, E3, E5
15	Nitrate as NO ₃ -N	Effluent Water Sample	16	E1, E2, E3, E5
16	Oil and Grease	Effluent Water Sample	16	E1, E2, E3, E5
17	pH	Effluent Water Sample	16	E1, E2, E3, E5
18	Phenol & Phenol Substances	Effluent Water Sample	16	E1, E2, E3, E5
19	Phosphate	Effluent Water Sample	16	E1, E2, E3, E5
20	Sulfate	Effluent Water Sample	16	E1, E2, E3, E5
21	Temperature	Effluent Water Sample	16	E1, E2, E3, E5
22	Toluene (C ₇ H ₈)	Effluent Water Sample	12	E1, E2, E3
23	TSS	Effluent Water Sample	16	E1, E2, E3, E5
24	Xylene (C ₈ H ₁₀)	Effluent Water Sample	12	E1, E2, E3
25	Zinc (Zn)	Effluent Water Sample	12	E1, E2, E3
26	Fecal Coliform	Effluent Water Sample	16	E1, E2, E3, E5
27	Surfactant (MBAS)	Effluent Water Sample	12	E1, E3, E5

Quarterly: Marine Water (6 sampling stations)				
1	BOD	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
2	Arsenic	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
3	Cadmium	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
4	Chloride	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
5	Color	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
6	Dissolved Oxygen	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
7	Fecal Coliform	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
8	Hexavalent Chromium	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
9	Lead	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
10	Mercury	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
11	Nitrate as NO ₃ -N	Marine Water Sample	24	M2, M4, M5, M6, M10, M11

12	Oil and Grease	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
13	pH	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
14	Phenol & Phenol Substances	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
15	Phosphate	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
16	Temperature	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
17	TSS	Marine Water Sample	24	M2, M4, M5, M6, M10, M11
18	COD	Marine Water Sample	24	M2, M4, M5, M6, M10, M11