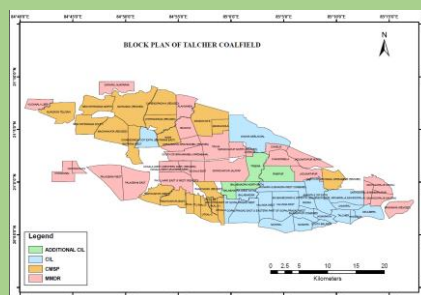


ANNUAL REPORT OF ROUTINE ENVIRONMENTAL MONITORING OF TALCHER COAL FIELD YEAR. : 2024-25



CLIENT NAME	MAHANADI COALFIELDS LIMITED, JAGRUTI VIHAR, BURLA, SAMBALPUR – 768020
SITE LOCATION	Talcher Coalfield
STUDY PERIOD	April 2024 to March 2025
REPORT DATE	June 2025
CONSULTANT	CENTRAL MINE PLANNING & DESIGN INSTITUTE LTD.

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SECTION 1: FOREWORD

Routine Environmental Monitoring (REM) involves the systematic and regular assessment of various environmental parameters to observe changes over time against statutory requirement of EC, CTE and CTO. It plays a vital role in protecting environmental quality, enabling timely interventions, and promoting sustainable development. REM encompasses the systematic collection, analysis, and interpretation of data related to air quality, water quality, noise levels, and meteorological conditions.

By consistently monitoring these parameters, valuable insights are obtained regarding ecosystem health and environmental trends. This enables the early identification of potential risks and supports informed decision-making for mitigating environmental degradation.

The data generated through REM forms a critical input for the preparation of Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) reports for coal mining projects. These reports are essential for the environmental appraisal and clearance of projects by the Ministry of Environment, Forest & Climate Change (MoEF & CC). As per regulatory requirements, baseline environmental data—including ambient air, water, and noise quality—must be generated prior to EIA/EMP preparation.

M/s Central Mine Planning & Design Institute Ltd (CMPDI), Regional Institute-VII, Bhubaneswar, has been entrusted with the task of conducting Routine Environmental Monitoring (REM) for the Talcher Coalfield of M/s Mahanadi Coalfields Limited (MCL), as per Work Order No. MCL/HQ/Env & Forest/24-25/1422 dated 09.04.2024.

The REM has been conducted for the year 2024–25, and the data generated has been presented in this report, along with graphical representations where applicable.

We extend our sincere thanks to the General Manager (Environment & Forest), Mahanadi Coalfields Limited, Burla, for the opportunity to contribute to this important environmental initiative. We also acknowledge the support and cooperation of the staff involved during the course of the study.

Section 2: LIST OF EQUIPMENT

Sl. No.	Name of the Equipment /Instrument	Make and Model
1	Analytical Balance	Citizen, CX 420
2	Atomic Absorption Spectrophotometer	Agilent, Spectro AA 280 FS
3	Atomic Absorption Spectrophotometer	LABINDIA, AA8000
4	AUTOCLAVE	CHEMINCO, CIC-VA-22
5	Automatic Weather Monitoring Station	Analysar Instrument Co. Pvt.Ltd.
6	BOD Incubator	CHEMINCO, CIC-BI-12
7	CO Analyser	Horiba, APMA 370
8	COD Digestor (Close reflux)	CHEMINCO, CIC-COD-15
9	Conductivity Meter	Labtronics, LT-51
10	Deep Freezer	CHEMINCO, CIC-DFY-20
11	Desiccator cecador cabinet	TARSON
12	DO Meter	Labtronics; LT-52;
13	Electronic Precision Balance (Max 220g)	Citizen CX 265
14	Electronic Micro Balance	Citizen CM-2
15	Fine particulate sampler	Ecotech/ AAS 127 FC
16	Fine particulate sampler	EE-FPS-001
17	Fume Hood	DINESH SCIENTIFIC, DS-FH-7723
18	Gas Chromatograph	Agilent, 7890 B
19	Gaseous Sampling Attachment	Envirotech/ APM 411 TE M
20	Heating Mantle	LOCAL, 01L
21	Hot air oven	Relitech
22	Incubator	CHEMINCO, CIC-BI-12
23	Laminar Flow	CHEMINCO,
24	Microwave Digestor	Milestone, Start D
25	Microwave Digestor	Milestone, Ethhos Easy
26	pH meter	Eutech Instruments, p H700
27	Portable Analyser kit	Labtronics; MB-14-02-64
28	Refrigerator	Godrej (286 Litre)
29	Respirable Dust Sampler	Envitotech/ APM 460
30	TKN Analyser	Pelican, Kjeloplus
31	Turbidity meter	Reliable Lab Equipment, RLE 302 C
32	Ultrapure Water Purification System	ELGA, Pure lab Quest
33	UV-Vis Spetrophotometer Double Beam	Labard, LIM:332
34	UV-Vis Spetrophotometer Single beam	Labard, LIM :330

Section 3: LIST OF PROJECT PERSONNEL

Sl. No.	Name	Designation
1	Dr Vinita Arora	Gm (Env.)/HoD (Env.)
2	MM Rabbani	Sr Manager (Env.)
3	B.G.Ray	Manager (Geo.)
4	Subhashree Pattanaik	Manager (Envt.)
5	Simma Aditya Prasad	Dy. Manager (Envt.)
6	Shalinie Kumar	Dy. Manager (Envt.)
7	Saswati Samantaray	Dy. Manager (Envt.)
8	Rakesh Kr. Sahu	Scientific Assistant
9	Mahendra Behera	Scientific Assistant
10	Simma Bhaskar Rao	Scientific Assistant
11	Amit Pal	Junior Scientific Assistant
12	Suresh Kumar Varri	Junior Scientific Assistant
13	Snehasish Chowdhuri	Junior Scientific Assistant
14	Raja Deb	Rigman
15	Keshav Ch. Roy	Clerk
16	S.C. Bharatiya	Sampling Assistant
17	Sambh Dey	Sampling Assistant
18	B. Chandrashekhar	Sampling Assistant
19	Dharamvir Kr. Bharati	Sampling Assistant
20	Dinesh Ku. Mahato	Sampling Assistant
21	Pradeep Kumar	Cat-1
22	B. Kameshwar Rao	Sampling Assistant
23	Kamlesh Yadav	Cat-1
24	Kanai Bauri	Cat-1
25	Shyam Kahar	Bega Opr

SECTION 4: EXECUTIVE SUMMARY

M/s Central Mine Planning & Design Institute Ltd RI-VII, Bhubaneswar has undertaken the task of Routine Environmental Monitoring of Talcher & Ib Valley Coalfield of MCL for the year 2024-25. The results obtained from monitoring of various parameters of ambient Air, effluent, drinking water, surface water and Noise level is crucial for understanding, managing, and protecting our environment. By systematically collecting and analyzing data, we gain valuable insights into environmental health, identify risks, and guide decision-making processes. The data is also used for preparing EIA/EMP report for various projects of M/s Mahanadi Coal field Ltd.

Ambient Air Quality Monitoring (AAQM)

Ambient Air Quality Monitoring stations were selected based on the predominant wind direction using meteorological data, in line with CPCB guidelines. The monitoring was carried out in accordance with the work order issued by MCL and in consultation with the State Pollution Control Board (SPCB). Key parameters analyzed included PM₁₀, PM_{2.5}, gaseous pollutants (SO₂, NO₂, etc.), heavy metals, and organic pollutants.

Compliance was ensured with the standards specified under:

- GSR 826(E) dated 16.11.2009 (National Ambient Air Quality Standards)
- GSR 742(E) dated 25.09.2000 for Suspended Particulate Matter (SPM), PM₁₀, SO_x, and NO_x

Water Quality Monitoring

Water quality monitoring was undertaken to assess the overall hydro-environmental status of the project area. Samples were collected and analyzed from:

- **Drinking water sources** (village wells)
- **Surface water bodies** (rivers and ponds)
- **Effluent water** (from mine sump water and treatment plants)
- **Groundwater** (wells and piezometric boreholes)

The analysis was conducted in accordance with:

- **IS 10500:2012** for drinking water quality (including amendments of 2015, 2018, and 2021)
- **MoEF & CC Schedule VI, Part A – General Standards for Discharge of Environmental Pollutants (Class 'a')** for effluent parameters

Noise Level Monitoring

Noise monitoring was carried out at nearly all ambient air monitoring stations, covering both day and night-time periods. Monitoring was conducted on a monthly basis as per CMPDI's Standard Operating Procedure (SOP): **CMPDI/RN/LSOP-07: March**.

5.1 Concept

Routine Environmental Monitoring (REM) is based on the understanding that environmental conditions evolve over time. Continuous monitoring is essential to track these changes, detect trends, and evaluate the effectiveness of environmental management strategies. REM provides a robust foundation for evidence-based decision-making, regulatory compliance, and the development of sound environmental protection and conservation policies.

Key components of Routine Environmental Monitoring include:

1. **Data Collection:**
Environmental data is collected systematically using methods such as field sampling, direct measurement, laboratory analysis, and remote sensing. Monitoring is conducted through fixed stations, mobile units, and periodic field surveys.
2. **Parameter Selection:**
Selection of environmental parameters is based on project-specific concerns and monitoring objectives. These typically include air quality indicators (PM₁₀, PM_{2.5}, SO₂, NO₂, etc.), water quality parameters (pH, TDS, BOD, COD, heavy metals, etc.), and noise levels.
3. **Monitoring Network:**
A network of monitoring stations is strategically established to represent key zones such as core, buffer, residential, and sensitive areas. The network may include both stationary and mobile monitoring setups to ensure spatial and temporal coverage.
4. **Data Analysis and Interpretation:**
Collected data is subjected to statistical and graphical analysis to identify variations, long-term trends, and deviations from standards. Advanced tools and software are used for data interpretation and visualization to draw meaningful conclusions.
5. **Reporting and Communication:**
Transparent and timely reporting of monitoring results is essential for accountability and stakeholder engagement. Data is compiled into structured reports, shared with regulatory bodies, and used to inform corrective actions and environmental management decisions.

5.2 Scope of Work

The objective of this study is to conduct Routine Environmental Monitoring for the Talcher Coalfield to assess the current environmental conditions related to air, water, and noise. The monitoring was undertaken during the year 2024–25.

The data collected will be used to:

- Evaluate the baseline environmental status
- Assess compliance with applicable environmental standards
- Identify any emerging concerns
- Support the development of EIA/EMP documents for future projects

5.3 Methodology

In the present study, the following standard methods were adopted for the collection, analysis, and interpretation of environmental data:

- a. **Ambient Air Quality Monitoring:** Conducted as per IS: 5182 series and CPCB guidelines using high-volume air samplers and analyzers for particulate and gaseous pollutants.
- b. **Water Quality Monitoring:**

Sampling and analysis of drinking water, surface water, effluent water, and groundwater (including piezometer wells) were conducted in accordance with:

- IS 10500:2012 (for drinking water) with amendments of 2015, 2018, and 2021
- **MoEF&CC Schedule VI, Class 'a' – General Standards for Discharge of Environmental Pollutants** for effluent parameters

- c. **Noise Level Monitoring:**

Noise monitoring was carried out following CPCB protocols and CMPDI SOP (CMPDI/RN/LSOP-07: March), covering day and night-time levels at various strategic locations.

- d. **Laboratory Analysis:**

All samples were preserved, transported, and analyzed using standard procedures in NABL-accredited or equivalent laboratories, following APHA and BIS methods.

Table 1: Standard methods used for Analysis & Instruments used:

SNo.	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used	Analytical Instruments
1	Ambient Air	Ammonia	IS 5182 Part 25	Spectrophotometer
2	Ambient Air	Arsenic	EPA-IO-3.1,3.2	AAS
3	Ambient Air	Lead	IS 5182 Part 22	AAS
4	Ambient Air	Nickel	IS 5182 Part 26	AAS
5	Ambient air	Nitrogen Dioxide	IS 5182 Part 6	Spectrophotometer
6	Ambient Air	Ozone	IS 5182 Part 9	Spectrophotometer
7	Ambient Air	Particulate Matter 10	IS 5182 Part 23	Precision Weighing Balance
8	Ambient Air	Particulate Matter 2.5	IS 5182 Part 24	Micro Weighing Balance
9	Ambient Air	Sulfur Dioxide	IS 5182 Part 2/Sec 1	Spectrophotometer
10	Drinking Water	Total Chromium	APHA 24th Ed 3113 B	AAS
11	Drinking Water	Arsenic	APHA 24th Ed 3114 C	AAS
12	Drinking Water	Boron	APHA 24th Ed 4500-B B	Spectrophotometer
13	Drinking Water	Boron	APHA 24th Ed 4500-B C	Spectrophotometer
14	Drinking Water	Cadmium	APHA 24th Ed 3113 B	AAS
15	Drinking Water	Copper	APHA 24th Ed 3111 B	AAS

16	Drinking Water	Fluoride	APHA 24th Ed 4500-F D	Spectrophotometer
17	Drinking Water	Iron	APHA 24th Ed 3111 B	AAS
18	Drinking Water	Lead	APHA 24th Ed 3113 B	AAS
19	Drinking Water	Manganese	APHA 24th Ed 3111 B	AAS
20	Drinking Water	Selenium	APHA 24th Ed 3114 C	AAS
21	Drinking Water	Zinc	APHA 24th Ed 3111 B	AAS
22	Drinking Water	Calcium	IS 3025 Part 40	Burette , Pipette
23	Drinking Water	Chloride	IS 3025 Part 32	Burette , Pipette
24	Drinking Water	Colour	APHA 24th Ed 2120 C	Spectrophotometer
25	Drinking Water	Nitrate	APHA 24th Ed 4500 NO3 B	Spectrophotometer
26	Drinking Water	pH	APHA 24th Ed 4500 H, B	pH meter
27	Drinking Water	Sulphate	APHA 24th Ed 4500 SO4 2 E	Spectrophotometer
28	Drinking Water	Total Alkalinity (as CaCO3)	IS 3025 Part 23	Burette , Pipette
29	Drinking Water	Total Dissolved Solids	IS 3025 Part 16	Hot air Oven
30	Drinking Water	Total Hardness (as CaCO3)	IS 3025 Part 21	Burette , Pipette
31	Drinking Water	Turbidity	IS 3025 Part 10	Turbidity Meter
32	Surface Water	Arsenic	APHA 24th Ed 3114 C	AAS
33	Surface Water	Cadmium	APHA 24th Ed 3113 B	AAS
34	Surface Water	Copper	APHA 24th Ed 3111 B	AAS
35	Surface Water	Fluoride	APHA 24th Ed 4500-F D	Spectrophotometer
36	Surface Water	Hexavalent Chromium	APHA 24th Ed 3500-Cr B	Spectrophotometer
37	Surface Water	Iron	APHA 24th Ed 3111 B	AAS
38	Surface Water	Lead	APHA 24th Ed 3113 B	AAS

SNo.	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used	Analytical Instruments
39	Surface Water	Selenium	APHA 24th Ed 3114 C	AAS
40	Surface Water	Zinc	APHA 24th Ed 3111 B	AAS
41	Surface Water	Total Dissolved Solids	IS 3025 Part 16	Hot air Oven
42	Surface Water	Biochemical Oxygen Demand (3 Days@ 27°C)	IS 3025 Part 44	BOD Incubator
43	Surface Water	Chloride	IS 3025 Part 32	Burette , Pipette
44	Surface Water	Colour	APHA 24th Ed 2120 C	Spectrophotometer
45	Surface Water	Nitrate	APHA 24th Ed 4500 NO3 B	Spectrophotometer
46	Surface Water	Oil & Grease	IS 3025 Part 39	Hot air Oven
47	Surface Water	pH	APHA 24th Ed 4500-H ₂ B	pH meter
48	Surface Water	Sulphate	APHA 24th Ed 4500 SO4 2 E	Spectrophotometer
49	Surface Water	Temperature	IS 3025 Part 9	Thermometer
50	Surface Water	Total Hardness	IS 3025 Part 21	Burette , Pipette
51	Surface Water	Total Suspended Solids	IS 3025 Part 17	Hot air Oven
52	Waste Water (Effluent /Sewage)	Odour	IS 3025 Part 05	Qualitative
53	Waste Water (Effluent /Sewage)	Oil & Grease	IS 3025 Part 39	Hot air Oven
54	Waste Water (Effluent /Sewage)	Lead	APHA 24th Ed 3113 B	AAS
55	Waste Water (Effluent /Sewage)	Manganese	APHA 24th Ed 3111 B	AAS
56	Waste Water (Effluent /Sewage)	pH	APHA 24th Ed 4500 H+ B	pH meter
57	Waste Water (Effluent /Sewage)	Total Chromium	APHA 24th Ed 3113 B	AAS
58	Waste Water (Effluent /Sewage)	Chemical Oxygen Demand (COD)	APHA 24th Ed 5220 B,C	COD Digestor
59	Waste Water (Effluent /Sewage)	Arsenic	APHA 24th Ed 3114 C	AAS
60	Waste Water (Effluent /Sewage)	Copper	APHA 24th Ed 3111 B	AAS
61	Waste Water (Effluent /Sewage)	Dissolved Phosphate	APHA 24th Ed 4500-P, C	Spectrophotometer
62	Waste Water (Effluent /Sewage)	Fluoride	APHA 24th Ed 4500-F D	Spectrophotometer
63	Waste Water (Effluent /Sewage)	Hexavalent Chromium	APHA 24th Ed 3500-Cr B	Spectrophotometer
64	Waste Water (Effluent /Sewage)	Iron	APHA 24th Ed 3111 B	AAS
65	Waste Water (Effluent /Sewage)	Nickel	APHA 24th Ed 3113 B.	AAS
66	Waste Water (Effluent /Sewage)	Nitrate Nitrogen	APHA 24th Ed 4500 NO3 B	Spectrophotometer
67	Waste Water (Effluent /Sewage)	Sulphide	APHA 24th Ed 4500-S2 D	Spectrophotometer
68	Waste Water (Effluent /Sewage)	Total Kjeldahl Nitrogen	APHA 24th Ed 4500 N org C	TKN Analyser
69	Waste Water (Effluent /Sewage)	Total Suspended Solids	IS 3025 Part 17	Filtration assembly, hot air oven
70	Waste Water (Effluent /Sewage)	Zinc	APHA 24th Ed 3111, B	AAS

SNo.	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used	Analytical Instruments
71	Waste Water (Effluent/Sewage)	Ammonical Nitrogen as N	APHA 24th Ed 4500-NH ₃ B,F	Spectrophotometer
72	Waste Water (Effluent/Sewage)	Ammonical Nitrogen as N	APHA 24th Ed 4500-NH ₃ B,C	Burette , Pipette
73	Waste Water (Effluent/Sewage)	Biochemical Oxygen Demand (3 Days@ 27°C)	IS 3025 Part 44	BOD Incubator
74	Waste Water (Effluent/Sewage)	Cadmium	APHA 24th Ed 3113 B	AAS
75	Waste Water (Effluent/Sewage)	Colour	APHA 24th Ed 2120 C	Spectrophotometer
76	Waste Water (Effluent/Sewage)	Selenium	APHA 24th Ed 3114 C	AAS

SECTION 6: PLAN FOR SAMPLING LOCATIONS

Site selection plays a crucial role in the initiation of Routine Environmental Monitoring (REM) as it determines the relevance and representativeness of the data generated. A well-planned selection of monitoring locations provides valuable insights into the type of environmental compliance measures and management strategies to be adopted by the project proponent.

In this study, sampling stations were identified based on key meteorological parameters such as the predominant wind direction (as per IMD data), average wind speeds, and the physiographic features of the area. This approach ensures that monitoring covers critical zones, including upwind, downwind, and crosswind directions, as well as areas potentially impacted by project activities.

Table 2: Description of Air Sampling Location used for monitoring in the year 2024-25

Name of Air Monitoring Station	Latitude			Longitude		
	DD	MM	SS.SS	DD	MM	SS.SS
Near NBVL Station	20	56	11.58	85	8	42.30
Near MDTP	20	56	46.86	85	9	19.26
CWS Colony, MEETI	20	55	5.00	85	8	28.97
Central Nursery	20	56	15.39	85	10	7.69
North East of Mine	20	59	9.24	85	8	50.64
Guthasahi Village	20	59	2.51	85	5	40.55
Sibarampur Village	21	1	12.98	85	7	55.67
Asanabahali Village	21	0	13.57	85	11	39.98
Near ETP/Workshop	20	56	38.91	85	6	28.93
North-West Point of the Mine	20	57	52.96	85	5	57.59
Near MGR-RLS of Bharatpur	20	54	59.97	85	6	51.53
Near Regional Store	20	56	19.04	85	7	52.88
Near Joragadia Village	20	59	30.23	85	6	14.42
Sakasinga Village	20	52	42.12	85	6	33.28
Bantol Village						
Near OB Dump no. 5 (South Side of the Mine)	20	56	55.09	85	11	21.13
Near OB Dump no. 10 (North Side of the Mine)	20	58	5.46	85	11	48.53
IWSS	20	57	20.86	85	12	36.26
Near Lingaraj to Dera Road	20	56	56.62	85	10	39.15
Near Kankili Community Centre	20	57	43.91	85	14	8.90
Near Project Office , Kaniha OCP	21	4	46.38	85	3	37.38
New Time Office (Near Z-Patch)	21	4	57.27	85	2	45.30
Old Site Office, Kaniha	21	5	9.32	85	2	25.57
Near Jatra Padia, Jarada	21	4	12.40	85	2	45.00
Near External OB Dump, Jamania	21	4	21.81	85	1	51.38
North of the Mine	21	5	18.35	85	3	42.36
South of Proposed Quarry Limit of KOCP	21	3	12.65	85	2	54.15
South West of the Mine	21	3	20.10	85	0	34.84
Time Office, Hingula	20	57	29.20	85	1.00	31.22
South West Side of the Mine	20	57	14.80	85	0	52.45
North of the Mine, Purnapani, Kumunda Village	20	57	58.22	85	1	0.07

Name of Air Monitoring Station	Latitude			Longitude		
	DD	MM	SS.SS	DD	MM	SS.SS
North East of the Mine, Solada Village	20	58	23.29	85	4	45.53
Banabaspur Village	20	59	14.38	85	2	35.23
Sanamahitala Village	20	55	20.58	85	2	3.33
Near Project Office , Balram	20	56	53.44	85	6	8.88
Pump House near Outsourcing Working Patch	20	57	28.75	85	5	16.54
East of the Mine, Natedi Village	20	55	21.77	85	5	58.64
Natada Village	20	56	4.59	83	3	59.15
Purunasahi Village	20	57	23	85	3	2.83
Near Canteen Talcher Colliery	20	57	0.00	85	10	31.40
Officer Club, Talcher Area	20	56	47.60	85	10	27.80
Project Office, Nandira	20	55	40.10	85	7	22.00
Sub-station , Nandira	20	55	43.60	85	7	27.50
Nandira Colony	20	55	25.47	85	7	38.58
Manager's Office, Handhidhua Colliery	20	56	25.50	85	11	34.20
Near Mandapal Chowk	20	56	42.60	85	14	28.90
Near Pachismeshwar Temple	20	55	44.80	85	14	26.90

Sampling stations covering ground water, surface water, effluent water, well water and piezometer were selected in the core and buffer zones of the projects. All samples were collected on in the year 2024-25.

Table 3: Details of Surface Water Sampling stations for monitoring in the year 2024-25

Project/OCP	NAME OF STATION
Jagannath	Bangaru Jhor river near Joragarhia as downstream water point of Bharatpur OCP (Upstream for Jagannath) (Reported)
	Downstream of Bangaru Jhor nalla
	Upstream of Brahmani River where Bangaru Water meets
	Downstream of Brahmani River where Bangaru Water meets
	East Sump
	Central Sump
Bharatpur	Bangaru Jhor river near Joragadia as downstream water point of Bharatpur OCP
	Bangaru Jhor river near up stream water point of Bharatpur OCP
	Pond near N-W point of the mine
	Jambubahali Village pond
Lingaraj	Village Pond near Deulbera Siding
Kaniha	Singada jhor stream nearer to Village Khairnali as u/s Water for Kaniha OCP
	Before Junction Point of Singadajhor & Brahmani River at Balangi Village as d/s for Kaniha OCP
	Tikra Nadi Near Kaniah Village as u/s Water for Kaniah OCP
	Tikra Nadi Near Shagarhi Pala Village as d/s Water for Kaniah OCP
Hingula	Singadhajhor stream near Kumunda Village
	Singadhajhor stream near Baghabaspur Village

	Pond water of Kankarei village
Balaram	Derjenga reservoir as a part of Impact Study
	Pond water of Ambapal village
Talcher	Pond Water of Dera Village
Nandira	Jambubahali Village Pond
Deulbera	Pond Water of Gopinathpur Village
Handhidhua Colliery	Pond Near Handidhua
Mandapal Sand Mine	Upstream - At 200 m before leasehold area
	Downstream - At 200 m after leasehold area

Table No. 4: List of Drinking water collection points

OCP/UG MINE	NAME OF OCP/UG MINE
Jagannath	Balanda Colony
	Jagannath Colony
	Rakas Village Well
Ananta	Ananta Vihar Colony
	Dera Village Tube Well Water
Bharatpur	Water in Nehru Shatabdi Nagar A Type Quarters
	Water in Nehru Shatabdi Nagar B Type Quarters
	Water in Nehru Shatabdi Nagar C Type Quarters
	Water in Nehru Shatabdi Nagar Transit House
	Taleipasi Village Open Well
	Joragadia Village Open Well
	Time Office, BOCP
Lingaraj	G.M. Office, Lingaraj Area Tap water
	Balunga Khamar village well
	Deulbera village well
	Talabera village well
	Kankili Village Well
Kaniha	Telisinga Well Water
	Jarda Village Well Water
Hingula	Time Office Water
	Gopalprasad Village Bore Well Water
	Kumunda Village Bore Well Water
Balram	Danara Village Borewell Water
	Balaram Colony Tap Water
	Nakeipasi Village Bore Well Water
Talcher Colliery	Canteen Tap-Water, GM Office
	Canteen Tap-Water, Talcher Colliery
Nandira Colliery	Canteen Tap-Water
	Pit Top Tap Water
Deulbera colliery	Deulbera Colliery Mine Discharge at Pit Top
	Ranipark Submersible Pump
	Deulbera Manager Office Tap Water

Handhidhua colliery	19X Cut Road Bore Hole Point
	Pit Top Tap Water
	RWSS (Pit Top Tap Water)

Table No 5 List of Noise monitoring stations

Area	Project (OCP/UG)	Name of the Station
Jagannath	Jagannath OCP	Central Nursery (Reported)
		Near NBVL Station
		Near MDTP
		CWS Colony, MEETI
	Ananta OCP	Central Nursery
		Near NBVL Station (Reported)
		North East of Mine
		Guthasahi Village
Bharatpur	Bharatpur OCP	Near Workshop
		North-West Point of the Mine
		Near MGR-RLS of Bharatpur
		Near Regional Store
Lingaraj	Lingaraj OCP	Near OB Dump no. 5 (South Side of the Mine)
		Near OB Dump no. 10 (North Side of the Mine)
		IWSS
		Near Lingaraj to Dera Road
Kaniha	Kaniha OCP	Patharmunda Village
		Telisingha Village
		Near Jarda Village
		Site Office
Hingula	Hingula OCP	Time Office
		South West Side of the Mine
		North of the Mine, Purnapani, Kumunda Village
		North East of the Mine, Solada Village
	Balaram OCP	Near Project Office, Balaram OCP
		Pump House near Outsourcing Working Patch
		North West of the Mine, Solada Village (Reported)
		Natedi Village
Talcher	Talcher Colliery	Natada Village
		Officer's Club, Talcher Area
	Nandira Colliery	Near Canteen, Talcher Colliery
		Project Office
	Deulbera Colliery	Sub-Station, Nandira colliery
	Mandapal Sand Mine	Manager's Office
		Near Gopinathpur Village

Table No.: 6: Description of piezometer locations

Project/OCP	Description
Bharatpur OCP	Piezometer no MTP 09; Inside the premises of Joragarhia Panchayat high school Latitude 220.94989 N Longitude 85.12217 E
Bharatpur OCP	Piezometer no MTP 22 ; Inside the premises of the abundant office of Junior Engineer (MI SectionC, hendipada) (in the safety zone of Chendipada OCP) Latitud21°4'38" N Longitude 84°52'29" E
Bharatpur OCP	Piezometer no MTP 21; Between Chendipada weigh bridge and coal stock yard Latitude 21 ° 4'37" N Longitude 84° 52'51" E
Chhendipada OCP	Piezometer no MTP 23; Inside the premises of Vetenary hospital, Chendipada Latitude 21 ° 4'51" N Longitude 84 ° 52'39" E
Balram OCP	Piezometer no MTP 12; In Betianalli village, opposite to Sindhu deori's house Latitude 20.932371 N Longitude 85.068313 E
Balram OCP	Piezometer no MTP 13 ; Inside the premises of Ambapal Natarha high school Latitude 20.952590 N, Longitude 85.059238 E
Balram OCP	Piezometer no MTP 10; Inside the premises of Danara high school Latitude 20.946469 N Longitude 85.093961 E
Balram OCP	Piezometer no MTP 17; Inside the premises of market building (through gramin rojgar yojna), andhaberani village Latitude 2.96151 N" Longitue 85.086205 E
Hingula OCP	Piezometer no MTP 14; Inside the premises of Pirakhamam village primary school Latitude 20.995123 N Longitude 84.943942 E
Hingula OCP	Piezometer no MTP 15; Beside Sujan Pradhan's house in Chottaberani village, near nalla. Latitude 20.963202 N Longitude 84.991708 E
Hingula OCP	Piezometer no MTP 16; Backside of Hingula Mandir VIP guest house Latitude 20.966988 N Longitude 85.045291 E
Lajkura OCP	Piezometer No MIP 02; Village Gumadera; Village high school Latitude 21°47'50" N Longitude83°52'37" E
Ananta OCP	Piezometer no MTP 05; Outside Ananta OCP canteen Latitude 20° 57' 05" N Longitude 85° 09' 13" E
Project/OCP	Description
Jagannath OCP	Piezometer no MTP 04; Inside central nursery (beside golf hut), Jagannath area Latitude 20.936933 N Longitude 85.169323 E
Kaniha OCP	Piezometer no MTP 20; Inside the premises of Kansamunda village old site office, MCL Latitude 21 °5'10" N Longitude 85 ° 2' 54" E
Kaniha OCP	Piezometer no MTP 19; Outside Golaghar sahi primary school, Bijigol (school constructed by NTPC) Latitude 21° 4' 49" N Longitude 85° 5' 12"
Kaniha OCP	Piezometer no MTP 18; Inside the premisses of Chellia Prathamiki school Latitude 21 ° 2' 56 " N Longitude 85 ° 2' 54" E
Lingraj OCP	Piezometer no MTP 06 ; Inside the premises of Kandhal high school Latitude 20° 58' 07"N Longitude 85° 11' 32" E
Lingraj OCP	Piezometer no MTP 01; Inside the premises of Mandapal hospital Latitude 20° 56'42" N Longitude 85° 14' 27"E
Handhidhua Colliery	Piezometer no MTP 03; Near Handidua level crossing Latitude 20° 56' 17" N Longitude 85° 11' 45" E
Nandira Colliery	Piezometer no MTP 11; Inside the premises of Hingula area office Latitude 20° 55' 27" N Longitude 85°7' 34" E

BLOCK PLAN OF TALCHER COALFIELD

Legend

- ADDITIONAL CIL
- CIL
- CMSP
- MMDR

0 2.5 5 10 15 20
Kilometers

84°40'0"E 84°45'0"E 84°50'0"E 84°55'0"E 85°0'0"E 85°5'0"E 85°10'0"E 85°15'0"E

21°15'0"N 21°10'0"N 21°5'0"N 21°0'0"N 20°55'0"N

SECTION 7: RATIONALE BEHIND SAMPLING

Ambient Air Quality Monitoring (AAQM):

Ambient Air Quality Monitoring (AAQM) stations were selected in accordance with IS: 5182 (Part 14): 2000 guidelines for industrial and mining project areas. Station locations were determined using the wind rose pattern, ensuring representative spatial distribution. A minimum of two stations were established within the core zone (compliance stations) and two in the buffer/residential areas (reference stations). Special attention was given to ensuring coverage in the **upwind**, **downwind**, and **crosswind** directions to accurately reflect the dispersion of air pollutants.

Water Sampling:

Water being a vital natural resource, its quality was assessed through a comprehensive monitoring strategy. Samples were collected to evaluate physical, chemical, and microbiological characteristics across various sources. The types of water samples collected included:

- **Drinking Water Samples** from village wells
- **Surface Water Samples** from Brahmani River and its tributaries (upstream and downstream), including **Singadhajhor**, **Bangarujhor**, and nearby ponds
- **Effluent Water Samples** from opencast mine sump water and domestic/industrial effluent treatment plants

Additionally, groundwater levels were recorded quarterly from open wells and piezometric wells. Groundwater samples from piezometers were also subjected to quantitative analysis to evaluate hydrogeological and quality parameters.

Noise Monitoring:

Noise level monitoring was carried out at or near the AAQM stations to assess ambient noise conditions. Monitoring was conducted as per the **CPCB Protocol for Ambient Noise Monitoring**, covering both **day time** and **night time** periods. Sampling was done **once every fortnight**, ensuring compliance with prescribed noise standards and identifying any noise-related environmental concerns.

AMBIENT AIR QUALITY DATA



AMBIENT AIR MONITORING REPORT

8.1 CONCEPT & SCOPE

The Ambient Air monitoring report encompasses the results and statistical evaluation of the data monitored at 48 different locations in Talcher coalfield of MCL. Ambient Air Quality for parameters such as SPM, PM₁₀, PM_{2.5}, SO₂ and NO₂, were monitored at 27 locations and is governed by coal mine standard whereas ambient air quality parameter such as PM₁₀, PM_{2.5}, SO₂, NO₂, Ozone, Ammonia, Carbon monoxide, Lead, Arsenic, Nickel, Benzene, Benzo alpha pyrene were monitored at 20 locations as per NAAQS, 2009 standard, around the proposed project. Additionally half yearly ambient air samples were collected in the compliance stations as per work order for trace metal analysis like Cadmium, Chromium, Mercury. For the collection of samples, Respirable dust sampler and PM_{2.5} sampler were installed at Ambient Air Quality station. PM₁₀ and PM_{2.5} samples were collected on GF/A filter paper and Teflon coated PTFE membrane respectively. For heavy metals EPM 2000 or equivalent filter papers were used for sampling. Sampling for other parameters were done as per CPCB guidelines.

8.2 FREQUENCY OF SAMPLING

Frequency of sampling for AAQM is as follows:

Parameters	Frequency of each location
PM ₁₀ , PM _{2.5} , Oxides of Sulphur, Oxides of Nitrogen	Fortnightly for compliance stations & Twice in a week for reference stations
Ozone, Ammonia, CO, Lead, Nickel, Arsenic, Benzo (α) Pyrene & Benzene	Twice in a week for reference stations
Mercury, Chromium and Cadmium	Half yearly in compliance station

8.3 SAMPLING DURATION

Sr. No.	Parameters	Sampling Duration (Hr.)
1	Particulate Matter (PM ₁₀)	24
2	Particulate Matter (PM _{2.5})	24
3	Oxides of Sulphur (SO ₂)	24
4	Oxides of Nitrogen (NO _x)	24
5	Ammonia (NH ₃)	24
6	Ozone (O ₃)	1
7	Carbon Monoxide (CO)	8
8	Benzene	4
9	Benzo (α) Pyrene	24
10	Lead (Pb)	24
11	Nickel (Ni)	24
12	Arsenic (As)	24
13	Mercury	24
14	Chromium	24
15	Cadmium	24

8.4 AMBIENT AIR QUALITY MONITORING AT DIFFERENT LOCATIONS

Ambient air quality monitoring at different locations is a critical process for assessing the air quality around the mining project. Monitoring is conducted across upwind, downwind, cross wind direction and in the core zone locations to capture spatial variations in air quality.



8.5 ENVIRONMENTAL PARAMETER ANALYSIS

TABLES NO 8 FOR AIR QUALITY DATA

Table: 8.5.1

Area: Jagannath

Project: Jagannath OCP

Monitoring Station: Central Nursery (Reported Only)

All values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	207	112	46	15.27	11.79
20-Apr-24	216	125	48	18.54	15.52
04-May-24	283	158	78	12.34	10.60
18-May-24	237	129	65	12.19	20.13
01-Jun-24	209	122	51	11.38	17.64
17-Jun-24	240	112	62	14.97	20.85
05-Jul-24	248	132	59	11.64	31.23
20-Jul-24	219	106	51	16.98	26.74
03-Aug-24	243	138	74	14.16	15.20
19-Aug-24	233	108	56	17.42	12.97
06-Sep-24	249	138	68	11.88	20.77
20-Sep-24	265	122	64	16.99	18.42
01-Oct-24	214	118	62	18.70	15.58
28-Oct-24	252	137	64	12.08	31.22
06-Nov-24	240	142	67	13.74	26.45
20-Nov-24	267	148	71	10.25	27.45
06-Dec-24	253	142	67	17.15	25.55
18-Dec-24	246	138	68	17.64	23.44
06-Jan-25	254	146	61	10.50	22.82
16-Jan-25	250	139	64	16.91	30.22
01-Feb-25	248	134	63	13.66	24.08
17-Feb-25	269	146	64	19.13	29.70
01-Mar-25	257	140	62	11.67	25.11
21-Mar-25	237	121	58	11.13	18.16
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	283	158	78	19.13	31.23
Minimum	207	106	46	10.25	10.60
Average	243.17	131.38	62.21	14.43	21.74
Standard (24 Hrs)	500	250		120	120
Standard (Annual)				80	80

Table: 8.5.2

Area: Jagannath**Project:** Jagannath OCP**Monitoring Station:** Near MDTPAll values are in $\mu\text{g}/\text{m}^3$

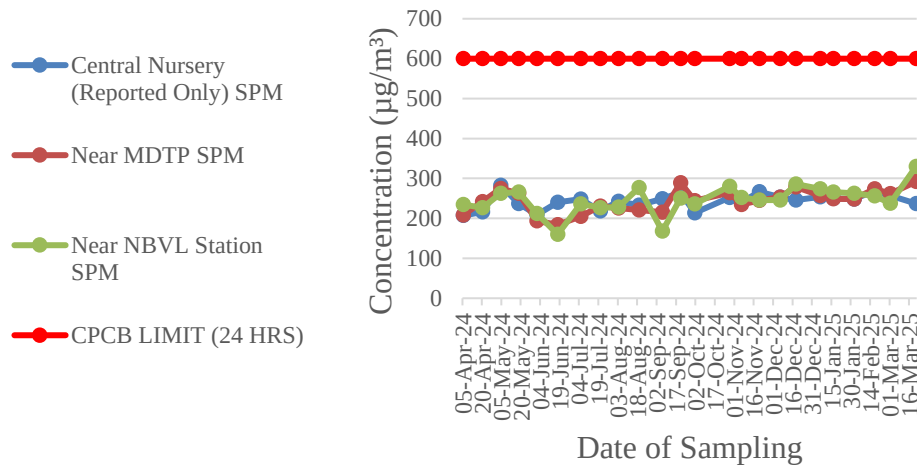
Date of Sampling	SPM	PM10	PM2.5	SO ₂	NO _x
05-Apr-24	208	91	40	15.79	12.21
20-Apr-24	242	146	58	12.92	11.77
04-May-24	275	149	64	9.96	9.17
18-May-24	263	132	68	11.66	18.05
01-Jun-24	194	102	53	12.75	9.24
17-Jun-24	184	91	56	15.01	12.81
05-Jul-24	205	110	56	13.79	21.29
20-Jul-24	231	120	59	14.78	28.23
03-Aug-24	226	124	65	15.71	16.01
19-Aug-24	221	124	60	17.65	23.56
06-Sep-24	215	132	65	13.49	25.42
20-Sep-24	289	148	71	16.04	16.69
01-Oct-24	244	132	68	17.33	27.50
28-Oct-24	264	130	63	14.37	19.51
08-Nov-24	235	134	60	12.87	12.29
20-Nov-24	245	142	65	22.85	25.25
12-Dec-24	253	147	68	19.60	22.99
18-Dec-24	279	146	65	15.78	23.40
06-Jan-25	257	167	68	12.18	28.35
16-Jan-25	249	159	65	13.18	20.24
01-Feb-25	248	146	63	14.31	25.23
17-Feb-25	274	156	65	14.90	24.81
01-Mar-25	262	155	64	17.50	25.42
21-Mar-25	292	118	59	16.30	23.24
Brief Statistics	SPM	PM10	PM2.5	SO₂	NO_x
Maximum	292	167	71	22.85	28.35
Minimum	184	91	40	9.96	9.17
Average	243.96	133.38	62.00	15.03	20.11
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.3

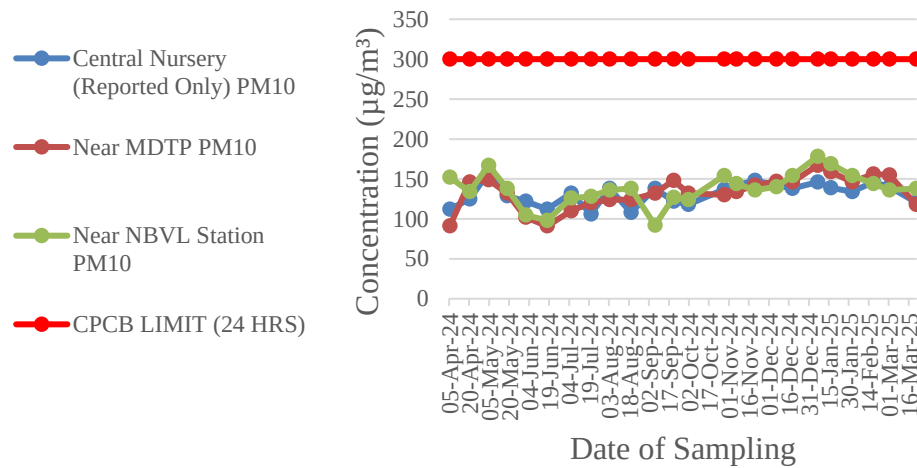
Area: Jagannath**Project:** Jagannath OCP**Monitoring Station:** Near NBVL StationAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO ₂	NO _x
05-Apr-24	235	152	59	12.92	10.07
20-Apr-24	227	134	52	15.73	13.80
04-May-24	263	167	72	12.91	9.90
18-May-24	266	138	56	17.44	20.36
01-Jun-24	212	105	56	11.38	38.81
17-Jun-24	160	98	52	19.06	8.07
05-Jul-24	236	126	58	13.96	20.37
20-Jul-24	227	128	62	12.47	39.28
03-Aug-24	228	136	68	17.74	13.93
19-Aug-24	277	138	67	15.55	21.17
06-Sep-24	168	92	54	16.23	22.23
20-Sep-24	251	127	68	14.32	32.89
01-Oct-24	236	124	66	14.60	14.12
28-Oct-24	280	154	71	13.11	32.04
06-Nov-24	252	144	68	11.38	30.80
20-Nov-24	246	136	64	23.21	35.20
06-Dec-24	246	140	65	16.60	27.05
18-Dec-24	286	154	67	10.82	13.93
06-Jan-25	274	178	70	11.76	29.73
16-Jan-25	266	169	67	15.37	28.19
01-Feb-25	263	154	65	16.56	29.92
17-Feb-25	256	144	62	15.61	22.94
01-Mar-25	238	136	59	13.12	20.34
21-Mar-25	330	138	62	14.71	31.23
Brief Statistics	SPM	PM10	PM2.5	SO₂	NO_x
Maximum	330	178	72	23.21	39.28
Minimum	160	92	52	10.82	8.07
Average	246.79	138.00	62.92	14.86	23.60
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

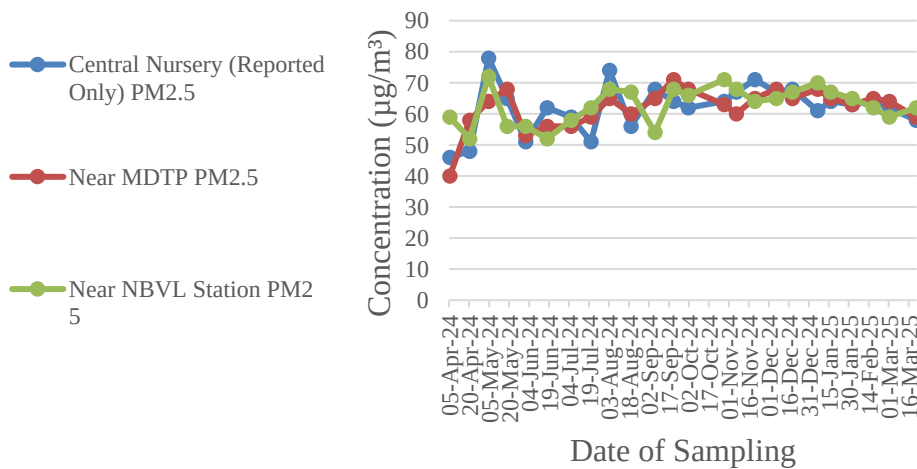
Graph Showing SPM for Jagannath OCP



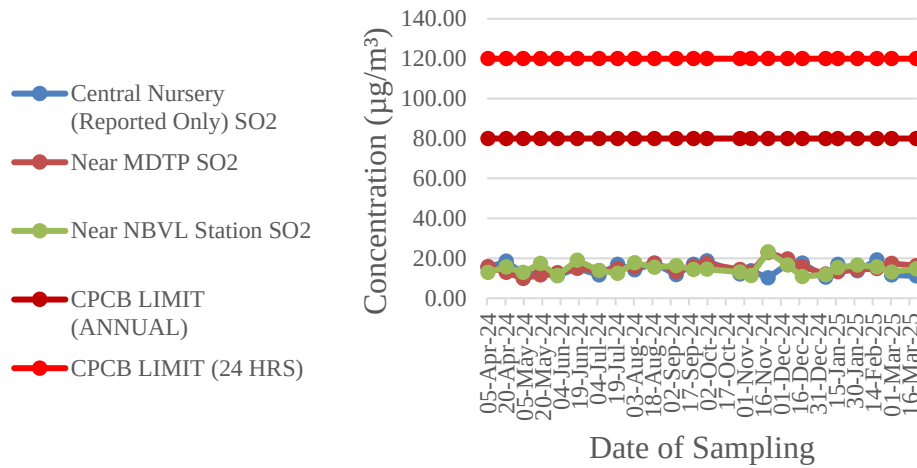
Graph Showing PM10 for Jagannath OCP



Graph Showing PM2.5 for Jagannath OCP



Graph Showing SO₂ for Jagannath OCP



Graph Showing NO_x for Jagannath OCP

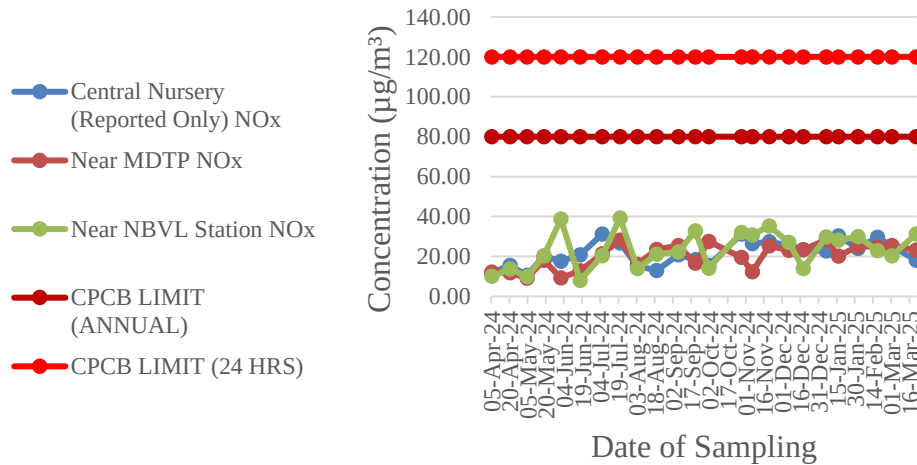


Table: 8.5.4**Area: Jagannath****Project: Jagannath OCP****Monitoring Station: CWS Colony, Meeti**All values are in $\mu\text{g}/\text{m}^3$

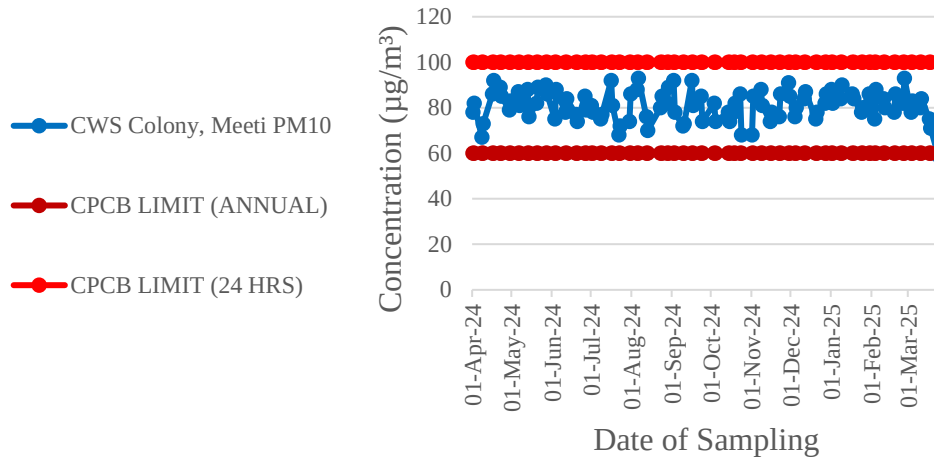
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	195	78	34	11.16	11.65
02-Apr-24	190	82	36	12.92	12.90
08-Apr-24	179	67	44	16.44	14.57
09-Apr-24	197	73	35	12.92	13.46
16-Apr-24	184	86	42	12.92	14.17
17-Apr-24	197	92	45	11.75	13.32
22-Apr-24	168	89	33	17.23	10.90
23-Apr-24	175	85	36	15.38	11.92
29-Apr-24	158	79	34	10.67	12.47
30-Apr-24	148	83	27	15.27	10.54
06-May-24	218	87	37	10.02	13.88
07-May-24	183	81	46	13.11	15.72
13-May-24	231	88	42	11.88	15.83
14-May-24	180	76	39	9.33	11.38
20-May-24	195	82	38	13.15	15.11
21-May-24	188	89	40	14.65	15.45
27-May-24	215	90	48	13.49	13.63
28-May-24	205	86	43	14.75	12.55
03-Jun-24	160	75	42	8.50	19.32
04-Jun-24	182	88	36	9.92	26.88
11-Jun-24	188	78	37	9.55	25.08
12-Jun-24	198	84	45	12.36	44.90
19-Jun-24	171	77	38	25.55	11.22
20-Jun-24	187	74	42	14.23	17.58
26-Jun-24	160	85	46	15.01	21.57
27-Jun-24	178	79	40	17.74	18.88
01-Jul-24	176	81	36	13.72	32.53
02-Jul-24	166	78	44	14.97	39.30
08-Jul-24	164	75	40	15.55	42.86
09-Jul-24	172	77	38	14.90	42.18
16-Jul-24	218	92	47	11.65	25.41
17-Jul-24	167	81	43	11.69	18.82
22-Jul-24	139	68	34	9.78	25.52
23-Jul-24	162	72	36	11.20	37.64
30-Jul-24	171	74	41	9.74	31.91
31-Jul-24	192	86	48	12.94	39.73
05-Aug-24	197	88	40	25.08	14.88
06-Aug-24	208	93	41	20.26	19.84
12-Aug-24	179	76	36	14.47	20.01
13-Aug-24	165	70	32	21.70	15.76
23-Aug-24	227	80	41	18.38	26.86
24-Aug-24	219	85	43	15.65	37.59
28-Aug-24	201	82	40	19.79	18.33

29-Aug-24	246	89	44	13.77	26.61
02-Sep-24	165	92	48	13.11	29.78
03-Sep-24	135	78	40	10.41	26.15
09-Sep-24	141	72	35	10.69	31.96
10-Sep-24	130	73	36	13.65	29.87
16-Sep-24	191	92	47	10.47	20.54
17-Sep-24	180	81	39	15.83	15.84
23-Sep-24	198	85	42	15.47	27.13
24-Sep-24	144	74	37	17.70	24.08
03-Oct-24	184	82	45	13.33	26.47
04-Oct-24	157	74	38	10.88	24.13
14-Oct-24	180	78	40	12.32	32.71
15-Oct-24	164	74	37	15.96	30.48
18-Oct-24	180	78	41	15.05	26.76
19-Oct-24	188	82	42	13.41	24.20
23-Oct-24	186	86	45	15.83	27.83
24-Oct-24	139	68	35	15.24	26.96
01-Nov-24	192	68	40	10.47	29.33
02-Nov-24	198	85	43	15.81	28.02
08-Nov-24	204	88	47	17.91	39.05
09-Nov-24	190	81	42	15.02	43.55
15-Nov-24	184	74	39	13.35	33.03
16-Nov-24	195	78	41	11.01	19.36
22-Nov-24	182	76	37	12.16	20.74
23-Nov-24	199	86	44	17.06	13.93
29-Nov-24	207	91	48	16.52	37.91
30-Nov-24	194	85	42	21.77	22.58
04-Dec-24	182	76	38	12.60	21.90
05-Dec-24	192	80	43	14.95	28.66
11-Dec-24	198	84	45	17.17	31.46
12-Dec-24	208	87	49	14.28	14.60
20-Dec-24	206	75	45	14.83	26.48
21-Dec-24	217	78	48	17.64	36.30
27-Dec-24	205	82	50	16.71	19.36
28-Dec-24	180	86	54	18.06	18.98
01-Jan-25	217	88	49	14.49	26.24
02-Jan-25	198	82	45	13.73	32.64
08-Jan-25	208	84	47	14.22	28.32
09-Jan-25	226	90	51	12.56	34.19
17-Jan-25	218	86	49	11.81	24.74
18-Jan-25	205	84	47	15.94	22.27
24-Jan-25	194	78	43	12.88	33.57
25-Jan-25	201	80	45	14.98	23.86
30-Jan-25	215	86	48	16.91	25.45
31-Jan-25	201	79	44	16.10	29.16
03-Feb-25	187	75	42	16.85	26.49
04-Feb-25	224	88	49	17.76	23.28
10-Feb-25	213	84	47	16.48	24.46
11-Feb-25	195	80	43	15.18	31.34
18-Feb-25	200	78	44	14.12	26.49
19-Feb-25	214	86	48	18.72	38.35
25-Feb-25	204	82	45	18.67	28.10
26-Feb-25	225	93	50	14.38	25.35
03-Mar-25	191	78	42	18.81	26.37

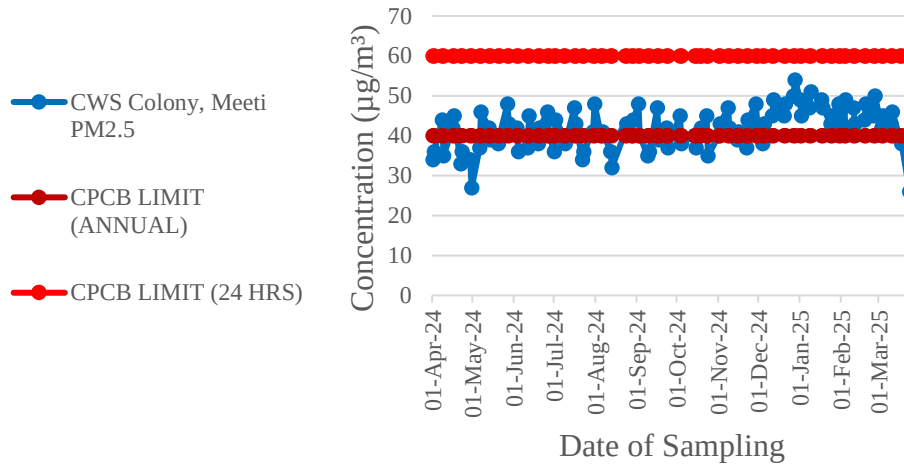
04-Mar-25	204	83	45	14.74	32.80
10-Mar-25	195	80	43	12.43	28.59
11-Mar-25	215	84	46	14.00	22.37
17-Mar-25	188	75	39	18.37	27.16
18-Mar-25	180	71	38	15.66	21.02
24-Mar-25	158	59	26	18.81	33.56
25-Mar-25	181	73	36	19.93	31.07
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	246	93	54	25.55	44.90
Minimum	130	59	26	8.50	10.54
Average	188.95	80.91	41.75	14.71	24.79
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



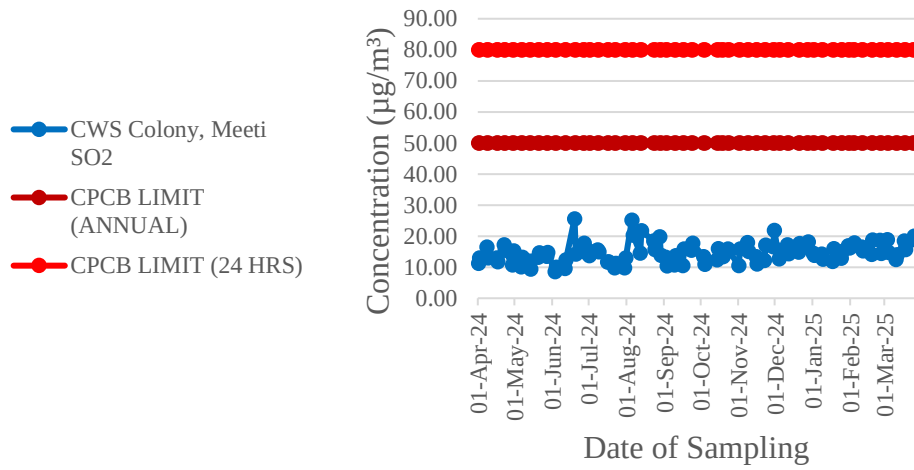
Graph Showing PM10 for Jagannath OCP



Graph Showing PM2.5 for Jagannath OCP



Graph Showing SO₂ for Jagannath OCP



Graph Showing NO_x for Jagannath OCP

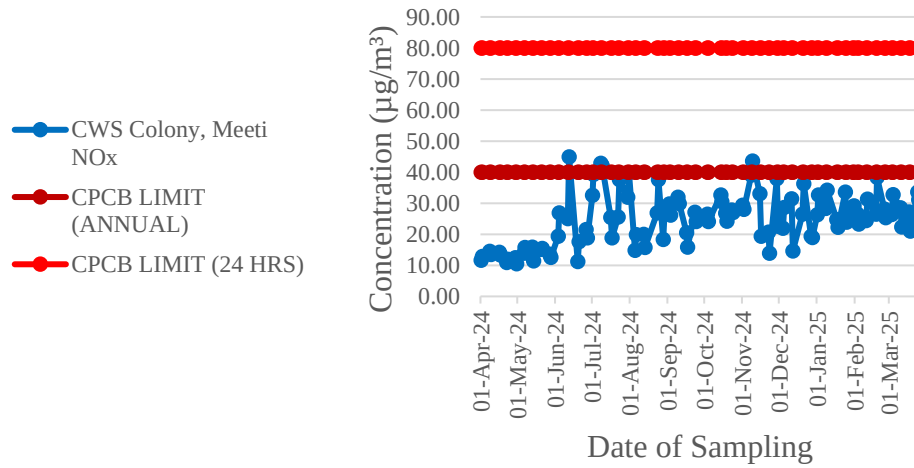


Table: 8.5.5

Area: Jagannath**Project:** Ananta OCP**Monitoring Station:** Central NurseryAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	207	112	46	15.27	11.79
20-Apr-24	216	125	48	18.54	15.52
04-May-24	283	158	78	12.34	10.60
18-May-24	237	129	65	12.19	20.13
01-Jun-24	209	122	51	11.38	16.03
17-Jun-24	240	112	62	14.97	20.85
05-Jul-24	248	132	59	11.64	31.23
20-Jul-24	219	106	51	16.98	26.74
03-Aug-24	243	138	74	14.16	15.20
19-Aug-24	233	108	56	17.42	12.97
06-Sep-24	249	138	68	11.88	20.77
20-Sep-24	265	122	64	16.99	18.42
01-Oct-24	214	118	62	18.70	18.58
28-Oct-24	252	137	64	12.08	31.22
08-Nov-24	240	142	67	13.74	26.45
20-Nov-24	267	148	71	10.25	27.45
06-Dec-24	253	142	67	17.15	25.55
18-Dec-24	246	138	68	17.64	23.44
06-Jan-25	254	146	67	10.50	22.82
16-Jan-25	249	139	65	16.91	30.22
01-Feb-25	248	134	63	13.66	24.08
17-Feb-25	269	146	64	19.13	29.70
01-Mar-25	257	140	62	11.67	25.11
21-Mar-25	237	121	58	11.13	18.16
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	283	158	78	19.13	31.23
Minimum	207	106	46	10.25	10.60
Average	243.13	131.38	62.50	14.43	21.79
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.6

Area: Jagannath**Project:** Ananta OCP**Monitoring Station:** Near NBVL Station (Reported)All values are in $\mu\text{g}/\text{m}^3$

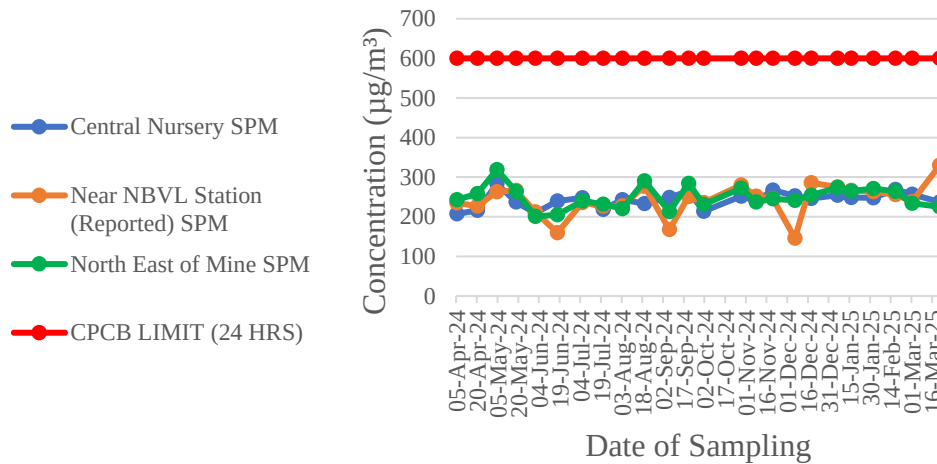
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	235	152	59	12.92	10.07
20-Apr-24	227	134	52	15.73	13.80
04-May-24	263	167	72	12.91	9.91
18-May-24	266	138	56	17.44	20.36
01-Jun-24	212	105	56	11.38	38.81
17-Jun-24	160	98	52	19.06	8.07
05-Jul-24	236	126	58	13.96	20.37
20-Jul-24	227	128	62	12.47	39.28
03-Aug-24	228	136	68	17.74	13.93
19-Aug-24	277	138	67	15.55	21.17
06-Sep-24	168	92	54	16.23	22.23
20-Sep-24	251	127	68	14.32	32.89
01-Oct-24	236	124	66	14.60	14.12
28-Oct-24	280	154	71	13.11	32.04
06-Nov-24	252	144	68	11.38	30.80
20-Nov-24	246	136	64	23.21	35.20
06-Dec-24	146	140	65	16.60	27.05
18-Dec-24	286	154	67	10.82	13.93
06-Jan-25	275	178	71	11.76	29.73
16-Jan-25	266	169	64	15.37	28.19
01-Feb-25	263	154	65	16.56	29.92
17-Feb-25	256	144	62	15.61	22.94
01-Mar-25	238	136	59	13.12	20.34
21-Mar-25	330	138	62	14.71	31.23
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	330	178	72	23.21	39.28
Minimum	146	92	52	10.82	8.07
Average	242.67	138.00	62.83	14.86	23.60
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.7

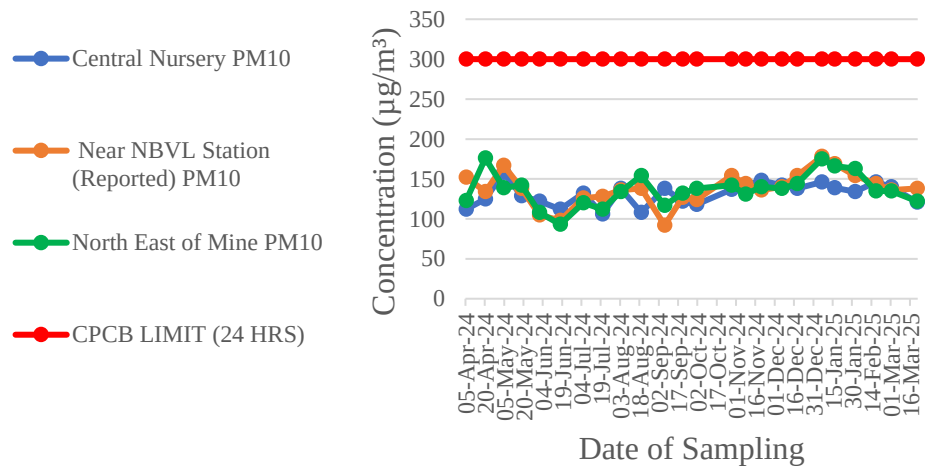
Area: Jagannath**Project:** Ananta OCP**Monitoring Station:** North East of MineAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	243	123	57	18.09	16.02
20-Apr-24	258	176	64	12.33	17.76
04-May-24	319	139	71	14.38	12.67
18-May-24	264	142	78	14.84	11.38
01-Jun-24	201	108	54	19.83	17.64
17-Jun-24	205	93	65	16.37	8.76
05-Jul-24	240	120	56	13.61	25.17
20-Jul-24	232	112	55	10.59	42.77
03-Aug-24	220	134	71	16.54	19.76
19-Aug-24	291	154	74	18.00	38.12
06-Sep-24	213	117	56	14.94	38.05
20-Sep-24	284	132	69	16.55	31.18
01-Oct-24	231	138	67	11.66	20.36
28-Oct-24	272	142	67	18.32	18.33
06-Nov-24	237	131	64	12.19	21.11
20-Nov-24	245	140	68	12.54	22.06
06-Dec-24	241	138	65	13.46	37.11
18-Dec-24	254	144	72	11.76	30.66
06-Jan-25	274	175	70	10.54	23.13
16-Jan-25	265	166	63	13.86	22.13
01-Feb-25	271	163	66	15.18	25.99
17-Feb-25	264	135	58	16.85	25.69
01-Mar-25	234	135	56	10.74	29.05
21-Mar-25	225	122	57	13.33	26.63
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	319	176	78	19.83	42.77
Minimum	201	93	54	10.54	8.76
Average	249.29	136.63	64.29	14.44	24.23
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

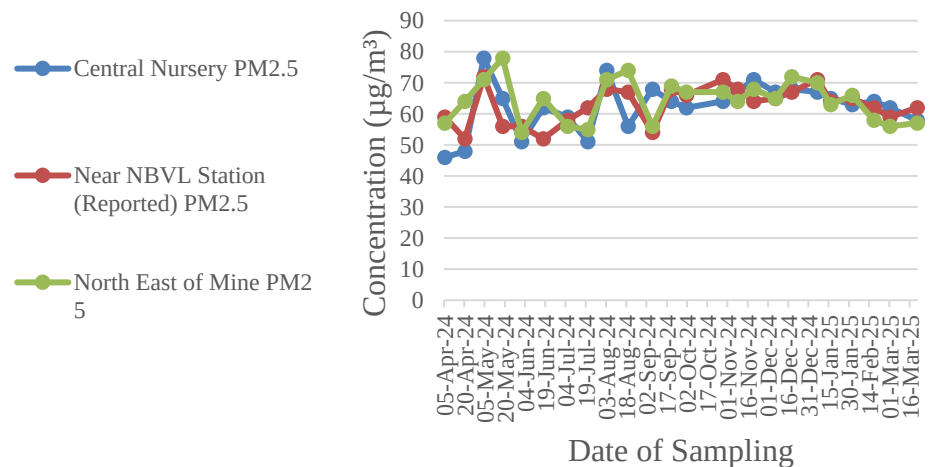
Graph Showing SPM for Ananta OCP



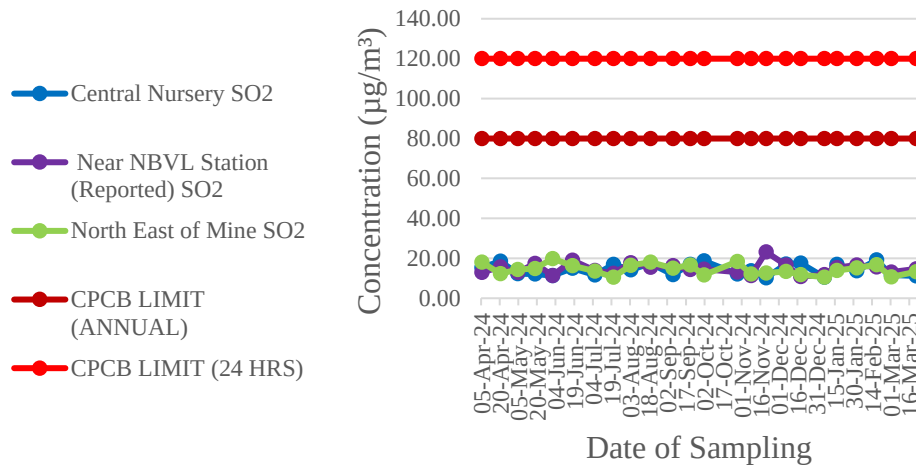
Graph Showing PM10 for Ananta OCP



Graph Showing PM2.5 for Ananta OCP



Graph Showing SO₂ for Ananta OCP



Graph Showing NO_x for Ananta OCP

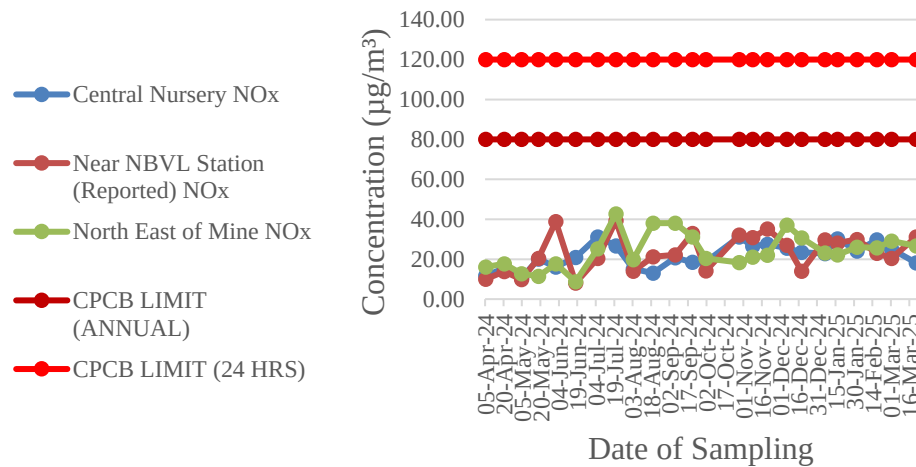


Table: 8.5.8

Area: Jagannath**Project:** Ananta OCP**Monitoring Station:** Guthasahi VillageAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	237	90	42	11.80	16.19
02-Apr-24	187	88	43	15.86	13.59
08-Apr-24	222	90	37	12.92	17.34
09-Apr-24	191	74	24	14.68	11.65
16-Apr-24	162	86	33	13.51	16.65
17-Apr-24	208	88	44	17.98	10.48
22-Apr-24	168	72	29	13.48	11.68
23-Apr-24	176	88	35	14.04	16.32
29-Apr-24	162	75	28	15.17	22.42
30-Apr-24	192	92	38	10.11	15.29
06-May-24	186	76	38	13.57	10.55
07-May-24	204	89	44	15.04	13.63
13-May-24	197	93	47	14.42	17.49
14-May-24	226	82	40	13.57	16.10
20-May-24	184	71	36	19.03	14.72
21-May-24	203	78	34	8.87	10.85
27-May-24	225	83	42	10.41	16.91
28-May-24	196	63	48	13.49	10.85
03-Jun-24	156	81	37	15.65	16.03
04-Jun-24	150	90	49	23.29	25.78
11-Jun-24	181	85	38	12.48	37.94
12-Jun-24	184	89	40	13.84	30.09
19-Jun-24	196	94	44	8.54	18.98
20-Jun-24	181	84	35	23.07	28.11
26-Jun-24	166	77	39	13.98	18.42
27-Jun-24	169	80	31	15.38	15.20
01-Jul-24	164	75	41	16.81	33.30
02-Jul-24	202	89	46	17.70	28.66
08-Jul-24	180	74	35	14.53	36.22
09-Jul-24	177	82	41	17.26	43.37
16-Jul-24	174	83	45	13.68	26.74
17-Jul-24	153	70	37	14.78	33.88
22-Jul-24	163	73	41	11.65	22.58
23-Jul-24	150	67	37	12.10	38.58
30-Jul-24	144	72	40	11.40	41.06
31-Jul-24	175	75	38	11.65	20.70
05-Aug-24	176	85	37	14.62	18.80
06-Aug-24	236	89	38	19.29	16.63
12-Aug-24	194	93	40	20.10	18.80
13-Aug-24	157	74	32	19.19	16.03
23-Aug-24	240	86	42	19.55	20.01
24-Aug-24	200	85	43	20.33	28.32
28-Aug-24	155	86	40	17.06	17.37

29-Aug-24	202	88	45	17.69	14.82
02-Sep-24	168	89	48	14.14	24.35
03-Sep-24	188	95	51	17.86	31.96
09-Sep-24	151	84	42	14.84	23.17
10-Sep-24	149	85	47	13.15	15.18
16-Sep-24	176	79	38	13.53	37.33
17-Sep-24	202	87	48	18.67	34.17
23-Sep-24	195	84	45	18.33	21.25
24-Sep-24	171	68	29	16.45	30.10
03-Oct-24	152	73	30	13.74	20.36
04-Oct-24	157	65	28	16.54	25.54
14-Oct-24	175	89	32	15.05	20.07
15-Oct-24	162	73	30	12.08	11.54
18-Oct-24	165	82	41	11.49	21.07
19-Oct-24	181	74	42	12.49	22.40
23-Oct-24	197	90	47	11.17	20.81
24-Oct-24	192	87	46	13.11	11.50
01-Nov-24	186	78	40	10.65	30.25
02-Nov-24	188	84	43	14.77	20.48
08-Nov-24	208	88	46	12.26	18.66
09-Nov-24	203	83	44	15.25	24.58
15-Nov-24	210	85	47	12.71	22.08
16-Nov-24	214	92	50	13.46	26.09
22-Nov-24	184	80	39	14.28	24.56
23-Nov-24	198	86	44	13.47	22.88
29-Nov-24	206	91	48	10.55	20.08
30-Nov-24	214	92	50	14.87	20.04
04-Dec-24	206	91	48	12.73	21.36
05-Dec-24	172	89	46	13.46	21.46
11-Dec-24	221	94	51	14.26	30.24
12-Dec-24	186	95	49	13.84	24.69
20-Dec-24	184	86	48	16.84	21.84
21-Dec-24	154	82	47	17.82	28.79
27-Dec-24	156	74	45	18.24	19.84
28-Dec-24	203	85	52	17.63	26.24
01-Jan-25	198	83	46	13.42	35.34
02-Jan-25	228	91	52	12.08	34.19
08-Jan-25	196	79	44	16.91	34.19
09-Jan-25	221	92	50	17.29	33.48
17-Jan-25	226	92	50	13.73	29.30
18-Jan-25	203	83	45	14.49	30.04
24-Jan-25	197	79	44	14.49	37.11
25-Jan-25	205	88	46	12.35	31.81
30-Jan-25	214	84	47	17.71	37.11
31-Jan-25	194	81	43	17.18	37.11
03-Feb-25	204	83	45	14.57	34.52
04-Feb-25	193	72	41	13.66	29.70
10-Feb-25	197	78	43	14.12	22.48
11-Feb-25	218	81	49	15.94	34.52
18-Feb-25	192	75	43	21.25	33.00
19-Feb-25	188	72	39	16.85	27.29
25-Feb-25	207	85	46	16.78	26.19
26-Feb-25	201	80	44	19.73	34.79
03-Mar-25	183	79	41	12.64	29.29

04-Mar-25	180	74	37	17.50	29.56
10-Mar-25	198	82	43	14.58	24.86
11-Mar-25	192	78	42	18.88	31.12
17-Mar-25	208	81	45	13.12	33.73
18-Mar-25	193	78	39	13.81	35.32
24-Mar-25	160	63	27	19.34	23.55
25-Mar-25	185	75	37	17.98	31.96
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	240	95	52	23.29	43.37
Minimum	144	63	24	8.54	10.48
Average	188.52	82.22	41.56	15.04	24.48
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.9

Area: Jagannath**Project:** Ananta OCP**Monitoring Station:** Asanabahali VillageAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	204	94	38	18.09	18.77
02-Apr-24	207	84	37	20.03	15.26
08-Apr-24	168	76	27	12.36	12.47
09-Apr-24	196	96	44	15.27	11.10
16-Apr-24	169	84	38	15.86	20.67
17-Apr-24	188	95	46	12.36	14.73
22-Apr-24	182	88	37	15.86	19.42
23-Apr-24	154	71	24	10.11	14.20
29-Apr-24	178	85	33	14.61	13.14
30-Apr-24	164	76	27	21.14	22.89
06-May-24	230	92	44	17.81	10.00
07-May-24	218	96	38	11.88	13.33
13-May-24	175	74	35	13.57	16.10
14-May-24	168	82	33	14.42	13.05
20-May-24	245	82	33	11.88	13.33
21-May-24	198	72	34	8.95	16.04
27-May-24	243	81	38	12.19	14.23
28-May-24	207	93	37	13.78	15.27
03-Jun-24	137	74	39	10.82	17.41
04-Jun-24	171	78	49	12.42	29.47
11-Jun-24	176	80	45	15.38	49.24
12-Jun-24	145	75	41	21.63	39.40
19-Jun-24	203	90	45	27.95	22.25
20-Jun-24	198	77	40	27.82	16.04
26-Jun-24	187	74	36	18.45	12.16
27-Jun-24	192	76	38	21.53	19.00
01-Jul-24	199	88	46	15.41	30.83
02-Jul-24	175	78	41	15.85	33.14
08-Jul-24	156	75	39	17.70	34.08
09-Jul-24	198	86	44	18.84	23.01
16-Jul-24	177	72	37	11.95	41.22
17-Jul-24	185	75	34	17.92	35.55
22-Jul-24	180	81	38	11.52	24.20
23-Jul-24	194	83	46	13.44	18.82
30-Jul-24	222	88	47	13.44	21.96
31-Jul-24	179	84	45	10.52	27.82
05-Aug-24	213	94	49	27.58	20.08
06-Aug-24	195	86	35	23.49	24.71
12-Aug-24	185	83	34	19.77	20.42
13-Aug-24	213	86	31	22.94	21.76
23-Aug-24	242	96	50	20.07	36.43
24-Aug-24	206	89	47	16.73	26.56
28-Aug-24	180	79	42	16.86	19.55

29-Aug-24	226	91	48	15.69	27.71
02-Sep-24	159	93	47	11.71	19.02
03-Sep-24	169	95	49	12.25	26.63
09-Sep-24	169	87	45	15.18	18.50
10-Sep-24	169	77	42	14.61	32.85
16-Sep-24	170	86	45	14.51	30.36
17-Sep-24	163	76	39	14.44	28.90
23-Sep-24	29.21	81	43	16.45	29.21
24-Sep-24	195	95	53	16.03	30.20
03-Oct-24	178	72	35	11.76	16.32
04-Oct-24	195	81	44	10.00	19.00
14-Oct-24	184	77	40	13.33	13.57
15-Oct-24	198	84	46	12.63	34.06
18-Oct-24	185	77	40	19.16	33.56
19-Oct-24	173	75	39	19.16	33.56
23-Oct-24	167	70	33	22.03	38.25
24-Oct-24	172	72	36	16.11	28.38
01-Nov-24	198	82	44	12.63	18.45
02-Nov-24	184	76	41	10.22	21.70
08-Nov-24	172	70	35	14.88	17.56
09-Nov-24	178	72	37	11.65	25.36
15-Nov-24	192	79	40	13.78	22.72
16-Nov-24	188	76	42	16.36	20.00
22-Nov-24	190	84	41	14.36	28.63
23-Nov-24	202	87	45	15.72	22.08
29-Nov-24	210	92	48	12.45	24.06
30-Nov-24	196	84	43	11.96	29.38
04-Dec-24	196	77	42	14.99	29.89
05-Dec-24	208	83	46	12.53	27.43
11-Dec-24	214	85	48	12.18	32.12
12-Dec-24	202	81	44	16.31	31.42
20-Dec-24	195	75	45	15.32	29.85
21-Dec-24	204	78	50	11.46	22.99
27-Dec-24	209	81	51	13.72	34.06
28-Dec-24	213	84	53	15.12	27.01
01-Jan-25	189	77	44	13.42	29.16
02-Jan-25	195	82	46	12.35	29.16
08-Jan-25	228	88	50	11.50	33.32
09-Jan-25	236	93	54	15.94	32.60
17-Jan-25	185	73	42	15.57	28.27
18-Jan-25	191	78	44	10.63	23.86
24-Jan-25	217	84	48	10.58	25.75
25-Jan-25	231	88	51	16.78	30.13
30-Jan-25	189	75	42	16.91	24.65
31-Jan-25	204	81	46	14.01	34.19
03-Feb-25	187	76	41	16.19	37.46
04-Feb-25	198	80	44	16.85	30.50
10-Feb-25	227	92	50	13.42	32.11
11-Feb-25	193	82	45	18.72	24.08
18-Feb-25	181	72	38	16.78	25.35
19-Feb-25	217	77	43	18.21	30.50
25-Feb-25	178	70	37	15.03	28.10
26-Feb-25	203	83	45	21.25	39.24
03-Mar-25	173	78	40	14.00	30.36

04-Mar-25	190	82	41	18.81	34.35
10-Mar-25	184	75	38	13.12	19.97
11-Mar-25	194	85	43	14.58	22.07
17-Mar-25	178	70	38	20.26	31.96
18-Mar-25	172	69	35	17.50	35.51
24-Mar-25	195	76	42	17.94	20.77
25-Mar-25	183	71	40	12.43	34.48
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	245	96	54	27.95	49.24
Minimum	29	69	24	8.95	10.00
Average	190.12	81.35	41.61	15.52	25.31
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.10

Area: Jagannath**Project:** Ananta OCP**Monitoring Station:** Sibarampur VillageAll values are in $\mu\text{g}/\text{m}^3$

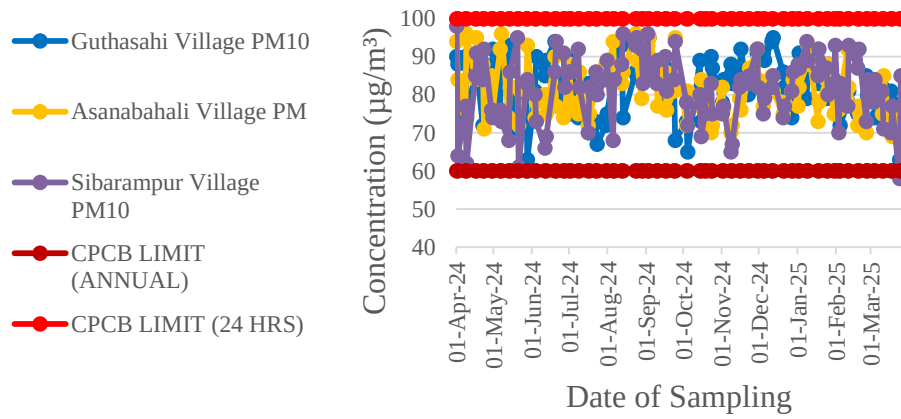
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	201	98	34	18.73	15.72
02-Apr-24	159	64	25	12.92	15.40
08-Apr-24	163	77	29	14.86	15.72
09-Apr-24	156	62	23	15.50	12.97
16-Apr-24	165	85	31	15.73	18.58
17-Apr-24	187	91	38	13.51	17.06
22-Apr-24	210	84	42	11.80	13.93
23-Apr-24	178	92	39	15.86	17.10
29-Apr-24	154	76	29	10.11	13.93
30-Apr-24	165	74	31	13.54	12.35
06-May-24	214	76	41	12.72	13.57
07-May-24	186	73	38	16.12	14.44
13-May-24	175	68	33	13.15	18.88
14-May-24	203	86	40	14.00	13.05
20-May-24	229	95	40	11.03	16.38
21-May-24	153	61	34	8.11	16.66
27-May-24	185	83	31	10.33	14.49
28-May-24	223	84	30	19.09	16.10
03-Jun-24	148	80	45	15.38	36.47
04-Jun-24	166	73	48	12.30	12.77
11-Jun-24	167	66	37	26.14	25.53
12-Jun-24	146	69	41	12.42	11.97
19-Jun-24	191	86	35	11.38	32.34
20-Jun-24	202	94	38	21.53	33.43
26-Jun-24	189	91	39	9.23	31.91
27-Jun-24	196	82	43	20.19	36.83
01-Jul-24	207	86	45	15.04	21.69
02-Jul-24	190	86	42	16.37	32.53
08-Jul-24	185	92	45	17.96	23.01
09-Jul-24	183	82	40	14.97	27.74
16-Jul-24	159	70	34	15.68	33.88
17-Jul-24	164	82	40	12.94	21.96
22-Jul-24	194	86	43	11.20	25.41
23-Jul-24	202	80	42	13.18	29.89
30-Jul-24	187	84	46	12.10	18.82
31-Jul-24	175	89	46	11.65	37.64
05-Aug-24	125	68	29	19.29	15.46
06-Aug-24	185	84	43	15.99	13.82
12-Aug-24	208	88	46	21.22	17.51
13-Aug-24	226	96	55	22.67	19.84
23-Aug-24	203	93	47	14.35	11.49
24-Aug-24	190	95	49	20.33	21.45
28-Aug-24	220	92	46	20.80	27.08

29-Aug-24	262	83	44	26.20	26.92
02-Sep-24	182	96	53	11.45	38.35
03-Sep-24	167	86	49	12.95	32.80
09-Sep-24	156	83	41	16.12	25.57
10-Sep-24	171	89	45	16.07	37.84
16-Sep-24	171	90	51	13.91	34.94
17-Sep-24	185	81	37	12.02	20.97
23-Sep-24	190	84	42	11.51	20.88
24-Sep-24	196	94	52	17.75	12.65
03-Oct-24	184	78	44	10.88	32.64
04-Oct-24	178	72	34	11.24	31.22
14-Oct-24	189	80	39	15.67	36.90
15-Oct-24	172	69	33	14.16	29.19
18-Oct-24	186	75	37	14.36	22.77
19-Oct-24	184	80	41	14.85	26.54
23-Oct-24	199	83	44	10.95	20.07
24-Oct-24	181	75	38	17.24	10.93
01-Nov-24	181	75	37	10.33	27.83
02-Nov-24	175	77	36	14.85	22.56
08-Nov-24	194	65	42	12.55	28.93
09-Nov-24	188	67	41	13.76	23.76
15-Nov-24	184	82	43	10.04	25.55
16-Nov-24	192	84	45	12.98	19.05
22-Nov-24	192	83	40	10.85	27.14
23-Nov-24	203	85	46	15.64	21.58
29-Nov-24	210	92	48	13.07	28.99
30-Nov-24	197	82	44	11.09	24.18
04-Dec-24	182	75	38	15.96	37.96
05-Dec-24	190	79	42	16.71	34.69
11-Dec-24	198	82	44	11.62	16.02
12-Dec-24	209	85	47	10.42	19.51
20-Dec-24	194	74	45	19.19	43.28
21-Dec-24	198	77	47	17.15	33.21
27-Dec-24	206	81	50	13.72	16.18
28-Dec-24	216	86	54	9.59	15.99
01-Jan-25	214	88	46	10.63	31.01
02-Jan-25	220	87	49	14.75	28.46
08-Jan-25	236	94	53	9.66	31.01
09-Jan-25	226	89	50	13.34	29.54
17-Jan-25	213	85	47	18.31	27.62
18-Jan-25	227	92	50	13.53	27.83
24-Jan-25	216	87	48	16.43	23.06
25-Jan-25	199	80	44	17.39	31.81
30-Jan-25	209	83	47	13.53	27.04
31-Jan-25	226	93	51	10.12	28.02
03-Feb-25	185	70	39	15.03	34.52
04-Feb-25	204	83	45	18.21	33.00
10-Feb-25	195	77	42	15.82	22.81
11-Feb-25	229	93	51	13.42	33.80
18-Feb-25	216	87	48	21.25	39.24
19-Feb-25	206	92	45	13.66	24.88
25-Feb-25	184	73	41	19.65	27.88
26-Feb-25	205	84	45	19.58	32.91
03-Mar-25	186	78	40	17.50	29.29

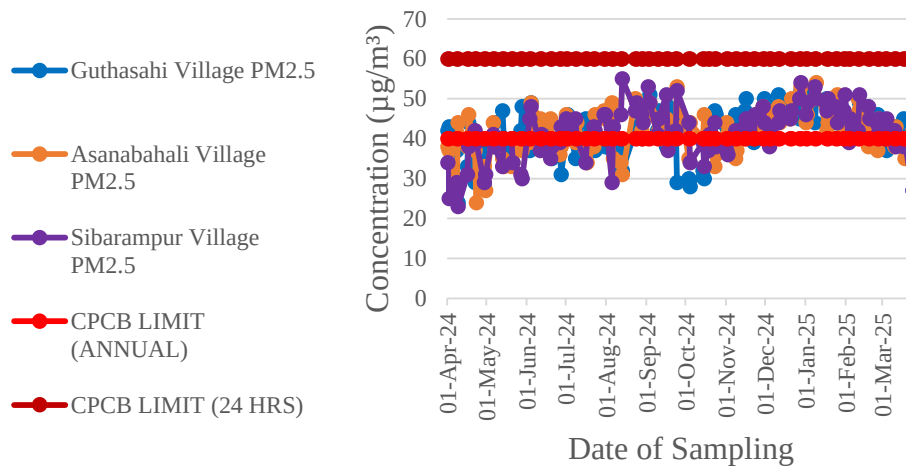
04-Mar-25	206	84	45	14.10	30.18
10-Mar-25	197	81	42	15.55	23.97
11-Mar-25	176	71	38	17.50	21.57
17-Mar-25	177	70	38	19.93	23.97
18-Mar-25	192	77	39	15.75	24.77
24-Mar-25	140	58	27	11.51	32.80
25-Mar-25	208	85	41	21.87	27.52
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	262	98	55	26.20	43.28
Minimum	125	58	23	8.11	10.93
Average	191.04	81.66	41.69	14.87	24.74
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



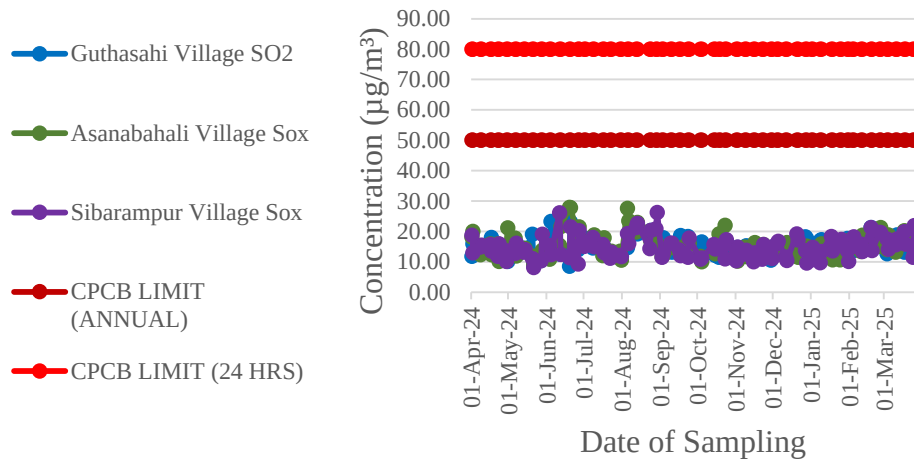
Graph Showing PM10 for Ananta OCP



Graph Showing PM2.5 for Ananta OCP



Graph Showing SO₂ for Ananta OCP



Graph Showing NO_x for Ananta OCP

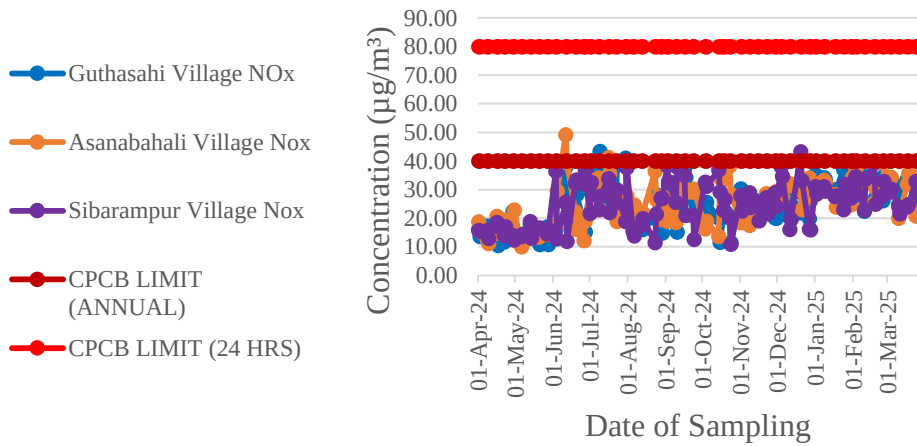


Table: 8.5.11

Area: Bharatpur**Project:** Bharatpur OCP**Monitoring Station:** Near ETP/WorkshopAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	208	90	42	18.09	16.33
20-Apr-24	248	132	56	14.61	10.22
04-May-24	266	169	69	16.23	15.21
18-May-24	234	134	60	18.66	16.38
01-Jun-24	207	102	61	11.38	34.59
17-Jun-24	216	98	56	10.89	14.80
05-Jul-24	225	134	62	13.19	26.48
20-Jul-24	223	109	52	12.63	22.24
03-Aug-24	245	135	69	12.83	15.98
19-Aug-24	299	144	70	19.24	36.01
06-Sep-24	262	157	73	13.65	29.87
20-Sep-24	263	157	70	14.67	27.58
01-Oct-24	275	126	70	15.41	29.19
28-Oct-24	285	159	74	16.76	23.42
06-Nov-24	224	115	56	16.21	25.35
20-Nov-24	241	128	62	20.02	22.28
06-Dec-24	241	132	64	16.31	28.36
18-Dec-24	254	142	66	15.43	32.27
06-Jan-25	268	173	70	15.46	31.01
16-Jan-25	260	164	67	10.92	24.20
01-Feb-25	256	142	63	10.76	20.43
17-Feb-25	250	89	62	14.31	25.23
01-Mar-25	238	137	59	16.25	28.91
21-Mar-25	234	126	59	14.71	18.16
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	299	173	74	20.02	36.01
Minimum	207	89	42	10.76	10.22
Average	246.75	133.08	63.00	14.94	23.94
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.12

Area: Bharatpur**Project:** Bharatpur OCP**Monitoring Station:** Near MGR-RLS of BharatpurAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
06-Apr-24	220	106	44	11.16	12.07
20-Apr-24	236	142	58	16.29	12.74
04-May-24	254	143	66	9.22	13.76
18-May-24	236	121	59	8.48	11.11
07-Jun-24	210	109	58	14.97	20.18
17-Jun-24	182	113	58	17.71	26.29
05-Jul-24	220	119	54	13.19	21.73
20-Jul-24	242	118	53	11.40	24.81
03-Aug-24	214	130	66	16.18	12.17
19-Aug-24	292	138	72	18.37	28.95
06-Sep-24	199	128	64	14.01	15.28
20-Sep-24	227	107	58	14.14	18.04
01-Oct-24	213	103	57	13.93	14.19
28-Oct-24	294	166	78	17.49	30.54
13-Nov-24	265	158	73	15.02	16.86
27-Nov-24	258	147	68	28.67	24.20
06-Dec-24	248	138	66	15.87	39.85
18-Dec-24	244	138	63	23.86	22.54
07-Jan-25	252	154	66	17.39	35.78
16-Jan-25	244	146	63	10.08	29.73
01-Feb-25	245	140	60	13.01	22.17
17-Feb-25	239	136	58	12.42	24.08
07-Mar-25	248	141	60	15.41	28.15
22-Mar-25	254	105	49	17.12	23.62
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	294	166	78	28.67	39.85
Minimum	182	103	44	8.48	11.11
Average	239.00	131.08	61.29	15.22	22.04
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.13

Area: Bharatpur**Project:** Bharatpur OCP**Monitoring Station:** Near Regional StoreAll values are in $\mu\text{g}/\text{m}^3$

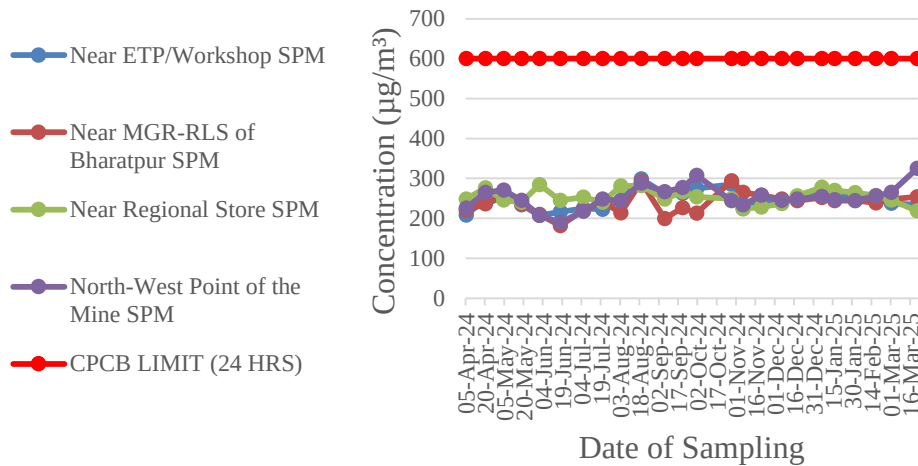
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
06-Apr-24	248	136	54	16.44	13.87
20-Apr-24	276	164	61	15.17	14.20
04-May-24	246	123	58	11.43	10.62
18-May-24	240	122	71	10.02	13.25
07-Jun-24	284	116	53	28.59	9.69
17-Jun-24	245	119	68	9.55	28.31
05-Jul-24	253	142	66	11.64	38.02
20-Jul-24	240	124	56	11.20	33.88
03-Aug-24	281	142	69	22.19	15.76
19-Aug-24	282	117	59	17.61	22.27
06-Sep-24	248	148	69	16.58	18.16
20-Sep-24	267	123	68	11.98	22.57
01-Oct-24	254	112	60	16.54	19.16
28-Oct-24	249	128	64	15.80	28.10
13-Nov-24	224	118	57	15.05	19.36
27-Nov-24	228	122	59	24.31	18.44
06-Dec-24	237	127	61	20.09	37.47
18-Dec-24	256	152	67	13.00	26.62
07-Jan-25	278	185	72	13.53	28.63
16-Jan-25	270	176	68	10.10	31.08
01-Feb-25	264	157	65	13.66	29.92
17-Feb-25	257	160	62	18.67	24.88
07-Mar-25	246	147	59	15.31	21.57
22-Mar-25	219	106	47	11.25	22.83
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	284	185	72	28.59	38.02
Minimum	219	106	47	9.55	9.69
Average	253.83	136.08	62.21	15.40	22.86
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.14

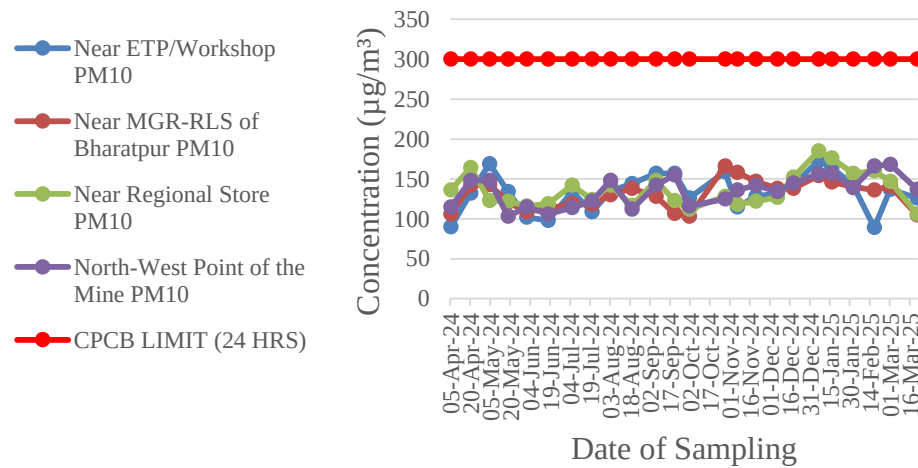
Area: Bharatpur**Project:** Bharatpur OCP**Monitoring Station:** North-West Point of the MineAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	226	115	48	14.09	17.06
20-Apr-24	265	148	66	15.17	11.68
04-May-24	271	148	75	14.01	14.97
18-May-24	245	103	66	12.91	16.42
01-Jun-24	207	115	57	17.00	12.60
17-Jun-24	190	106	51	19.06	28.25
05-Jul-24	218	114	50	15.55	31.30
20-Jul-24	248	122	56	12.47	16.36
03-Aug-24	244	148	75	18.28	19.90
19-Aug-24	288	112	58	16.57	23.28
06-Sep-24	267	142	68	13.15	32.76
20-Sep-24	277	155	72	15.65	23.91
01-Oct-24	308	116	61	15.24	27.67
28-Oct-24	244	125	60	13.50	14.90
06-Nov-24	234	136	63	10.47	19.06
20-Nov-24	258	142	66	13.65	20.53
06-Dec-24	245	134	63	15.87	19.93
18-Dec-24	248	145	64	13.80	14.66
06-Jan-25	255	156	67	11.34	30.42
16-Jan-25	247	157	64	12.30	21.69
01-Feb-25	244	139	62	14.57	29.70
17-Feb-25	256	166	63	15.61	29.82
01-Mar-25	265	168	63	16.62	31.16
21-Mar-25	325	137	60	15.11	24.69
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	325	168	75	19.06	32.76
Minimum	190	103	48	10.47	11.68
Average	253.13	135.38	62.42	14.67	22.20
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

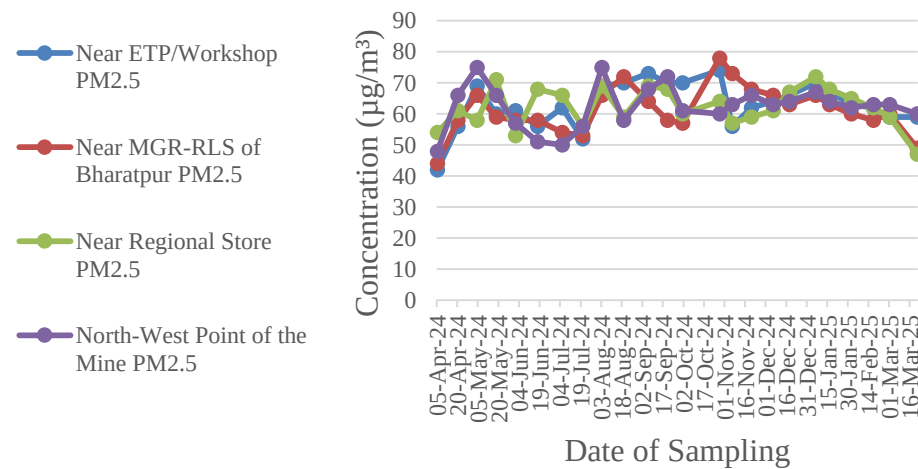
Graph Showing SPM for Bharatpur OCP



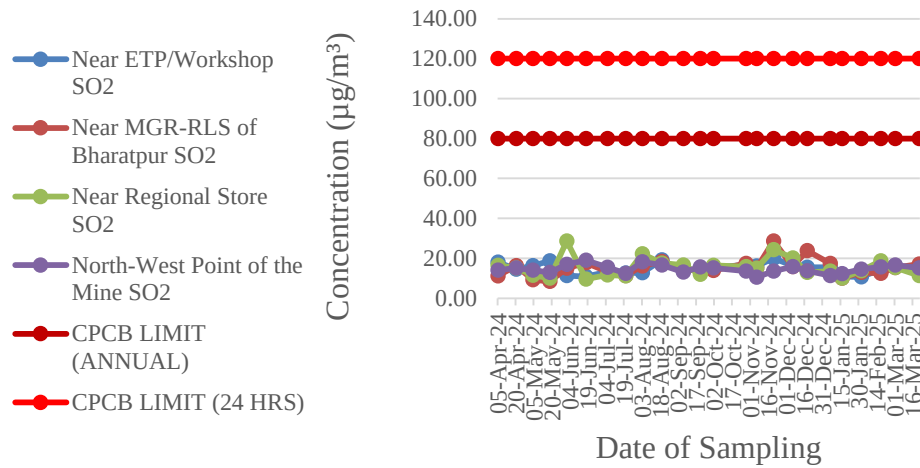
Graph Showing PM10 for Bharatpur OCP



Graph Showing PM2.5 for Bharatpur OCP



Graph Showing SO₂ for Bharatpur OCP



Graph Showing NO_x for Bharatpur OCP

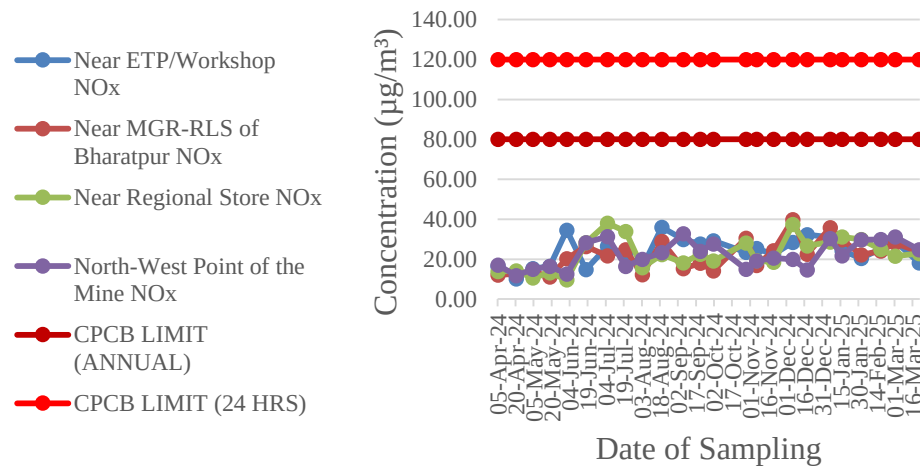


Table: 8.5.15

Area: Jagannath**Project:** Bharatpur OCP**Monitoring Station:** East of the Mine, Natedi Village
(Reported Only)All values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	178	82	33	12.92	21.02
04-Apr-24	195	87	39	13.51	16.09
10-Apr-24	215	85	42	10.57	14.01
11-Apr-24	188	66	37	14.21	12.97
18-Apr-24	215	91	46	10.57	15.12
19-Apr-24	204	89	38	21.80	22.32
24-Apr-24	186	74	34	15.61	12.21
25-Apr-24	175	84	30	16.51	17.97
02-May-24	221	90	48	14.84	15.27
03-May-24	196	81	39	15.42	11.86
09-May-24	203	75	42	12.72	14.44
10-May-24	235	95	47	14.42	18.60
16-May-24	190	92	41	14.84	16.66
17-May-24	157	70	31	8.91	20.82
22-May-24	149	80	53	19.32	13.57
23-May-24	173	83	43	10.60	14.44
30-May-24	191	71	33	11.45	16.10
31-May-24	143	75	29	9.59	11.35
05-Jun-24	160	86	38	8.50	27.72
06-Jun-24	155	94	41	13.98	16.58
13-Jun-24	154	87	38	20.09	26.57
14-Jun-24	139	74	42	8.17	25.02
21-Jun-24	180	81	45	21.79	31.46
22-Jun-24	173	85	39	29.36	23.67
28-Jun-24	156	76	33	9.92	20.30
29-Jun-24	175	82	37	18.33	30.66
03-Jul-24	200	88	46	18.58	28.66
04-Jul-24	196	95	53	15.04	20.91
10-Jul-24	194	84	42	13.21	30.06
11-Jul-24	167	78	40	15.04	18.59
18-Jul-24	171	78	39	11.65	37.64
19-Jul-24	174	84	46	13.89	30.11
24-Jul-24	183	80	44	13.44	23.52
25-Jul-24	170	78	36	12.10	41.40
01-Aug-24	173	76	32	18.33	17.08
02-Aug-24	132	64	27	18.66	17.59
09-Aug-24	165	74	33	15.71	14.50
10-Aug-24	148	68	28	14.06	12.00
16-Aug-24	181	94	53	23.26	30.70
17-Aug-24	161	84	44	15.78	16.89
21-Aug-24	143	82	38	14.16	16.89
22-Aug-24	166	82	38	12.03	32.40

30-Aug-24	155	81	43	19.28	39.48
31-Aug-24	136	68	33	14.80	28.48
04-Sep-24	158	74	36	12.30	31.16
05-Sep-24	154	78	40	15.69	22.37
11-Sep-24	157	85	46	15.81	28.33
12-Sep-24	163	82	41	15.75	22.07
18-Sep-24	180	80	44	14.26	34.66
19-Sep-24	167	76	35	12.58	23.71
25-Sep-24	177	86	43	13.20	12.43
26-Sep-24	168	70	29	16.73	28.19
07-Oct-24	180	80	38	12.49	33.26
08-Oct-24	172	75	34	20.53	21.56
16-Oct-24	168	76	35	13.74	15.61
17-Oct-24	178	84	41	14.58	17.65
21-Oct-24	200	85	43	14.62	13.97
22-Oct-24	216	88	49	12.91	23.08
25-Oct-24	188	81	43	19.61	34.19
26-Oct-24	172	74	33	12.24	22.55
04-Nov-24	181	85	46	12.23	22.40
05-Nov-24	195	80	44	17.80	11.65
11-Nov-24	202	87	48	15.52	31.46
12-Nov-24	190	77	42	14.22	28.02
18-Nov-24	196	83	45	16.60	36.51
19-Nov-24	187	78	41	22.13	30.56
25-Nov-24	204	89	47	26.69	28.68
26-Nov-24	210	92	50	21.02	22.58
02-Dec-24	194	78	42	15.04	21.29
03-Dec-24	206	83	45	17.09	32.53
09-Dec-24	212	86	48	15.85	39.30
10-Dec-24	218	91	50	14.02	28.36
16-Dec-24	187	77	44	14.54	21.56
17-Dec-24	193	80	46	8.75	5.76
23-Dec-24	203	85	51	10.19	27.95
24-Dec-24	192	82	48	12.02	14.58
30-Dec-24	189	81	47	9.08	31.13
31-Dec-24	214	87	50	14.19	36.18
03-Jan-25	205	83	46	15.18	25.75
04-Jan-25	230	90	52	17.87	25.63
10-Jan-25	242	93	54	15.94	32.60
11-Jan-25	223	88	50	16.64	29.16
20-Jan-25	228	88	51	16.27	31.81
21-Jan-25	212	84	48	12.35	36.23
27-Jan-25	196	79	44	16.43	23.86
28-Jan-25	223	86	49	17.80	29.30
05-Feb-25	205	82	46	18.72	37.46
06-Feb-25	214	86	48	15.69	33.89
12-Feb-25	186	77	43	17.76	34.52
13-Feb-25	187	74	40	15.18	35.68
20-Feb-25	184	71	38	18.67	27.29
21-Feb-25	206	84	46	19.13	33.71
27-Feb-25	195	78	42	14.67	36.57
28-Feb-25	211	87	48	14.12	34.52
05-Mar-25	186	74	40	16.53	33.73
06-Mar-25	197	81	44	14.87	25.57

12-Mar-25	186	76	41	13.61	24.86
13-Mar-25	202	84	45	18.96	27.52
19-Mar-25	185	72	40	12.15	29.29
20-Mar-25	193	76	41	12.64	31.07
26-Mar-25	184	73	38	19.69	19.97
27-Mar-25	203	80	43	15.20	26.07
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	242	95	54	29.36	41.40
Minimum	132	64	27	8.17	5.76
Average	186.03	81.31	41.90	15.27	24.76
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.16

Area: Jagannath**Project:** Bharatpur OCP**Monitoring Station:** Near Joragdia VillageAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	220	93	45	14.21	16.33
02-Apr-24	216	86	32	15.86	14.84
08-Apr-24	215	90	39	14.09	16.92
09-Apr-24	235	88	44	11.75	13.59
16-Apr-24	178	87	36	11.23	19.37
17-Apr-24	184	84	31	16.29	16.98
22-Apr-24	198	95	40	14.15	17.44
23-Apr-24	218	92	47	13.48	19.37
29-Apr-24	206	84	43	12.36	14.46
30-Apr-24	192	92	40	16.44	17.48
06-May-24	188	76	37	16.96	10.00
07-May-24	196	95	44	14.00	13.60
13-May-24	218	82	48	10.60	16.10
14-May-24	249	96	50	12.64	15.27
20-May-24	176	77	46	9.75	18.32
21-May-24	184	91	31	11.03	15.83
27-May-24	188	96	34	12.91	10.14
28-May-24	155	85	45	18.12	11.11
03-Jun-24	184	93	46	15.38	27.35
04-Jun-24	158	83	43	12.36	16.49
11-Jun-24	181	89	35	13.98	35.91
12-Jun-24	181	87	39	15.53	38.68
19-Jun-24	175	73	30	10.82	24.44
20-Jun-24	180	84	34	13.98	21.49
26-Jun-24	197	92	42	20.09	20.09
27-Jun-24	190	89	38	27.04	28.83
01-Jul-24	202	82	40	14.90	39.88
02-Jul-24	193	92	46	16.81	29.43
08-Jul-24	212	95	48	17.61	26.20
09-Jul-24	185	77	40	15.93	30.98
16-Jul-24	232	80	42	13.21	17.83
17-Jul-24	182	93	49	15.09	12.88
22-Jul-24	147	70	38	12.54	35.76
23-Jul-24	193	85	43	12.26	25.75
30-Jul-24	165	68	34	12.10	44.23
31-Jul-24	181	82	40	10.91	40.91
05-Aug-24	173	85	38	18.33	20.72
06-Aug-24	153	65	27	18.73	17.41
12-Aug-24	213	82	38	17.36	21.59
13-Aug-24	157	76	32	13.89	16.02
23-Aug-24	212	87	45	17.78	22.59
24-Aug-24	181	81	43	16.52	33.41
28-Aug-24	178	77	41	13.17	20.05

29-Aug-24	170	74	38	14.45	10.93
02-Sep-24	158	80	43	16.12	24.77
03-Sep-24	170	90	48	12.72	36.75
09-Sep-24	146	75	43	17.44	34.62
10-Sep-24	164	74	36	18.30	28.59
16-Sep-24	194	84	40	15.42	22.41
17-Sep-24	201	91	47	12.28	30.84
23-Sep-24	191	93	51	15.21	17.90
24-Sep-24	187	88	45	18.61	34.06
03-Oct-24	204	90	50	14.99	19.68
04-Oct-24	165	80	39	12.19	31.22
14-Oct-24	175	84	41	15.24	26.25
15-Oct-24	170	75	38	16.24	33.94
18-Oct-24	165	68	32	15.80	15.61
19-Oct-24	176	76	36	10.54	19.51
23-Oct-24	167	71	33	14.90	14.74
24-Oct-24	190	84	46	20.11	35.12
01-Nov-24	178	75	39	13.17	12.74
02-Nov-24	186	78	40	17.02	20.16
08-Nov-24	197	83	44	19.49	28.02
09-Nov-24	195	81	43	22.02	24.20
15-Nov-24	191	78	42	20.02	40.33
16-Nov-24	206	85	46	16.33	29.72
22-Nov-24	174	75	38	26.69	38.54
23-Nov-24	188	81	42	20.27	20.16
29-Nov-24	184	78	40	30.03	15.32
30-Nov-24	196	86	44	21.45	27.65
04-Dec-24	187	76	41	13.63	20.90
05-Dec-24	198	81	44	13.67	13.03
11-Dec-24	206	85	47	14.83	20.90
12-Dec-24	216	89	52	13.44	35.77
20-Dec-24	189	81	52	16.24	17.75
21-Dec-24	218	88	57	22.28	12.91
27-Dec-24	191	83	50	15.96	24.09
28-Dec-24	207	86	53	11.89	29.99
01-Jan-25	198	83	46	13.73	35.16
02-Jan-25	221	90	50	16.91	34.99
08-Jan-25	228	94	52	14.24	37.67
09-Jan-25	204	85	47	18.06	27.66
17-Jan-25	194	76	44	18.19	30.87
18-Jan-25	217	84	48	19.32	32.69
24-Jan-25	223	87	49	13.96	37.99
25-Jan-25	200	80	45	16.56	23.48
30-Jan-25	208	85	46	13.22	30.97
31-Jan-25	188	80	42	13.96	30.04
03-Feb-25	226	90	51	19.73	28.54
04-Feb-25	208	83	47	13.42	34.64
10-Feb-25	191	75	40	14.86	24.50
11-Feb-25	196	78	42	12.75	29.70
18-Feb-25	228	94	51	20.24	27.65
19-Feb-25	188	77	40	21.76	32.11
25-Feb-25	181	66	37	16.70	33.00
26-Feb-25	195	75	41	15.34	35.49
03-Mar-25	215	87	48	18.42	27.75

04-Mar-25	180	71	38	14.87	26.37
10-Mar-25	195	80	42	18.88	29.43
11-Mar-25	186	75	39	11.97	21.87
17-Mar-25	185	74	38	18.47	28.41
18-Mar-25	193	77	40	12.25	34.35
24-Mar-25	167	62	30	16.19	33.56
25-Mar-25	170	68	35	14.58	34.62
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	249	96	57	30.03	44.23
Minimum	146	62	27	9.75	10.00
Average	191.40	82.48	42.03	15.77	25.18
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.17

Area: Jagannath**Project:** Bharatpur OCP**Monitoring Station:** Sakasinga VillageAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	187	76	36	14.09	11.65
02-Apr-24	221	74	37	16.80	16.17
08-Apr-24	209	88	35	17.44	13.89
09-Apr-24	166	94	41	16.44	11.65
16-Apr-24	172	81	35	11.23	16.32
17-Apr-24	185	94	38	15.17	20.70
22-Apr-24	210	79	40	20.67	16.48
23-Apr-24	174	72	32	12.24	19.76
29-Apr-24	166	84	30	14.61	18.97
30-Apr-24	157	78	29	15.73	17.51
06-May-24	228	83	44	14.42	17.49
07-May-24	216	89	42	15.69	14.44
13-May-24	165	78	35	11.03	12.77
14-May-24	260	92	54	10.60	14.44
20-May-24	173	87	29	9.25	9.09
21-May-24	206	93	37	15.69	16.10
27-May-24	140	78	32	18.51	13.12
28-May-24	158	74	39	10.41	14.89
03-Jun-24	172	92	44	9.27	29.32
04-Jun-24	159	89	50	15.53	8.29
11-Jun-24	174	78	46	13.91	45.82
12-Jun-24	188	91	43	22.46	22.54
19-Jun-24	208	79	44	21.53	33.43
20-Jun-24	215	98	46	21.74	32.23
26-Jun-24	194	89	40	21.74	36.83
27-Jun-24	187	88	36	11.38	20.39
01-Jul-24	204	85	46	13.72	34.85
02-Jul-24	190	75	39	17.61	21.58
08-Jul-24	159	68	35	15.04	34.08
09-Jul-24	183	65	31	17.09	25.31
16-Jul-24	168	72	33	10.24	35.85
17-Jul-24	212	88	45	13.94	17.77
22-Jul-24	188	72	36	13.44	29.27
23-Jul-24	142	66	34	13.23	26.89
30-Jul-24	178	73	38	15.09	30.71
31-Jul-24	194	85	46	12.10	18.82
05-Aug-24	214	96	49	16.91	13.82
06-Aug-24	210	88	38	20.74	19.84
12-Aug-24	196	92	46	21.02	15.48
13-Aug-24	200	98	55	15.08	16.86
23-Aug-24	184	83	46	16.45	23.45
24-Aug-24	170	89	48	19.08	16.16
28-Aug-24	179	85	44	15.05	22.19

29-Aug-24	175	73	35	18.60	32.10
02-Sep-24	147	67	33	16.52	31.96
03-Sep-24	135	76	39	14.84	39.15
09-Sep-24	155	83	46	13.67	26.63
10-Sep-24	158	88	42	11.18	22.52
16-Sep-24	182	83	41	15.55	24.72
17-Sep-24	204	87	44	14.82	13.48
23-Sep-24	180	92	50	14.10	20.50
24-Sep-24	214	87	49	14.90	25.26
03-Oct-24	164	68	30	14.58	39.37
04-Oct-24	172	73	32	13.74	31.90
14-Oct-24	151	64	28	11.24	19.00
15-Oct-24	178	74	36	11.24	19.68
18-Oct-24	168	73	35	11.25	19.85
19-Oct-24	174	78	39	14.36	25.36
23-Oct-24	188	85	43	12.47	19.56
24-Oct-24	204	89	46	13.42	20.56
01-Nov-24	194	81	43	10.96	18.44
02-Nov-24	192	78	40	11.92	19.20
08-Nov-24	196	83	44	15.81	13.58
09-Nov-24	210	87	48	14.22	35.66
15-Nov-24	198	84	45	12.12	39.05
16-Nov-24	214	89	50	11.59	20.38
22-Nov-24	188	78	42	23.36	24.20
23-Nov-24	206	87	45	17.39	32.26
29-Nov-24	216	94	51	22.13	33.96
30-Nov-24	205	85	47	21.77	15.32
04-Dec-24	189	79	41	22.74	16.13
05-Dec-24	194	82	43	16.38	27.01
11-Dec-24	203	84	46	12.83	34.14
12-Dec-24	211	88	49	19.74	21.17
20-Dec-24	190	76	42	18.56	26.62
21-Dec-24	208	80	45	14.57	15.33
27-Dec-24	214	85	48	14.43	12.54
28-Dec-24	205	89	50	11.89	10.00
01-Jan-25	197	78	44	11.19	26.79
02-Jan-25	225	92	50	14.75	28.46
08-Jan-25	237	94	53	11.81	30.04
09-Jan-25	216	87	49	12.35	37.99
17-Jan-25	206	84	47	15.03	25.62
18-Jan-25	195	76	42	12.20	27.62
24-Jan-25	216	85	48	14.49	24.65
25-Jan-25	224	90	49	19.32	30.04
30-Jan-25	211	83	47	12.71	26.79
31-Jan-25	200	82	46	19.32	26.51
03-Feb-25	188	76	42	12.94	36.33
04-Feb-25	196	79	44	14.75	23.70
10-Feb-25	182	69	38	18.31	28.10
11-Feb-25	228	94	50	20.50	2.34
18-Feb-25	215	84	47	19.58	25.69
19-Feb-25	196	80	43	17.26	27.04
25-Feb-25	208	86	45	19.17	28.73
26-Feb-25	182	68	38	14.57	24.08
03-Mar-25	214	84	47	15.75	31.16

04-Mar-25	205	50	44	15.75	22.37
10-Mar-25	187	76	40	13.61	16.40
11-Mar-25	199	79	42	17.50	22.19
17-Mar-25	190	75	40	14.74	31.96
18-Mar-25	213	84	45	17.98	27.52
24-Mar-25	153	64	29	19.80	23.55
25-Mar-25	198	77	43	13.12	34.35
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	260	98	55	23.36	45.82
Minimum	135	50	28	9.25	2.34
Average	191.58	81.76	41.94	15.39	23.50
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.18

Area: Jagannath**Project:** Bharatpur OCP**Monitoring Station:** Bantol VillageAll values are in $\mu\text{g}/\text{m}^3$

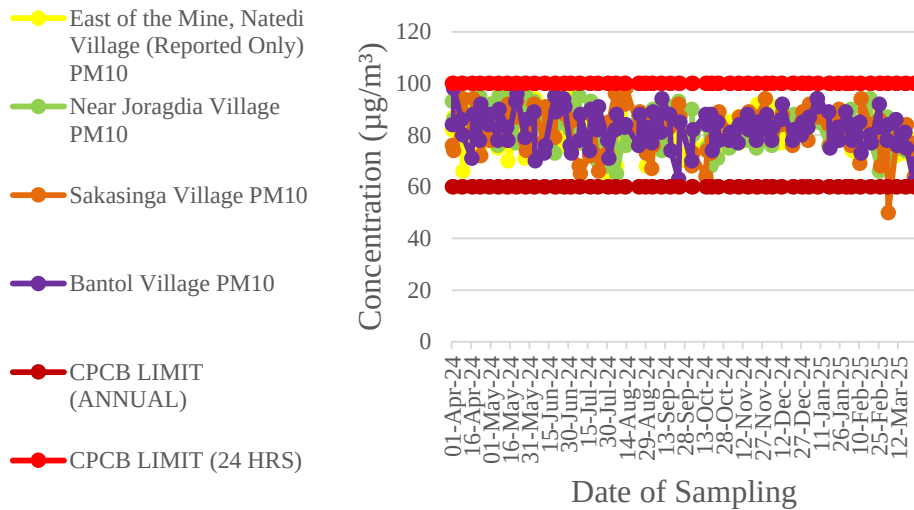
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	180	84	36	13.51	13.73
02-Apr-24	207	98	45	11.16	14.15
08-Apr-24	188	86	37	14.68	17.06
09-Apr-24	180	80	35	17.03	22.89
16-Apr-24	155	71	27	12.33	16.65
17-Apr-24	172	88	32	13.51	14.15
22-Apr-24	180	78	36	15.86	13.04
23-Apr-24	195	92	40	19.38	14.43
29-Apr-24	172	84	38	10.67	16.98
30-Apr-24	186	88	42	23.38	17.58
06-May-24	193	78	38	12.30	15.55
07-May-24	235	90	46	14.00	16.10
13-May-24	186	83	42	16.54	12.41
14-May-24	166	78	38	14.84	10.00
20-May-24	156	93	35	13.88	11.86
21-May-24	165	96	33	8.48	9.90
27-May-24	135	79	43	11.45	15.16
28-May-24	154	86	45	17.58	16.78
03-Jun-24	164	89	52	21.63	21.08
04-Jun-24	145	70	18	13.84	10.94
11-Jun-24	189	73	40	7.73	18.33
12-Jun-24	184	76	47	16.92	35.56
19-Jun-24	210	95	42	17.00	16.04
20-Jun-24	216	89	45	20.09	12.22
26-Jun-24	181	94	48	13.98	19.18
27-Jun-24	180	91	38	22.66	22.40
01-Jul-24	165	76	38	15.85	23.12
02-Jul-24	204	73	33	14.02	19.17
08-Jul-24	177	78	36	15.85	32.37
09-Jul-24	206	88	46	16.81	15.49
16-Jul-24	168	74	36	10.13	22.91
17-Jul-24	174	90	48	12.99	44.23
22-Jul-24	175	82	43	11.65	26.35
23-Jul-24	195	91	46	11.65	31.99
30-Jul-24	184	78	40	12.80	18.82
31-Jul-24	172	71	37	14.34	20.70
05-Aug-24	172	82	41	19.19	20.45
06-Aug-24	159	88	45	19.29	20.42
12-Aug-24	178	83	44	17.84	14.88
13-Aug-24	218	84	41	20.74	16.92
23-Aug-24	158	76	38	15.31	24.93
24-Aug-24	188	88	46	15.07	12.15
28-Aug-24	149	80	43	17.90	17.79

29-Aug-24	152	83	45	13.16	29.52
02-Sep-24	151	77	36	15.75	14.46
03-Sep-24	162	89	51	16.96	37.84
09-Sep-24	158	81	42	13.11	28.33
10-Sep-24	185	94	56	16.52	31.96
16-Sep-24	190	88	52	17.27	22.01
17-Sep-24	182	74	37	20.87	28.23
23-Sep-24	168	63	26	15.70	20.01
24-Sep-24	160	85	49	18.49	12.60
03-Oct-24	170	70	31	15.41	11.54
04-Oct-24	185	82	40	16.42	31.96
14-Oct-24	214	88	47	13.33	25.11
15-Oct-24	206	84	43	14.58	24.43
18-Oct-24	195	88	47	11.02	20.29
19-Oct-24	174	74	36	19.16	33.69
23-Oct-24	198	85	46	15.63	27.94
24-Oct-24	178	78	37	21.07	36.69
01-Nov-24	185	78	41	13.49	33.66
02-Nov-24	204	81	45	15.28	33.11
08-Nov-24	176	77	37	11.01	15.32
09-Nov-24	195	84	42	10.57	21.51
15-Nov-24	204	88	46	13.51	12.90
16-Nov-24	188	82	42	12.64	37.36
22-Nov-24	188	78	40	14.22	38.21
23-Nov-24	194	85	43	15.81	38.21
29-Nov-24	189	82	41	24.19	21.51
30-Nov-24	201	88	47	21.34	35.66
04-Dec-24	185	78	42	13.86	36.50
05-Dec-24	198	83	44	18.13	25.55
11-Dec-24	213	86	48	13.46	22.59
12-Dec-24	218	92	50	13.63	16.02
20-Dec-24	188	78	45	12.60	9.49
21-Dec-24	198	82	48	14.43	18.12
27-Dec-24	190	80	46	14.39	36.30
28-Dec-24	184	85	53	15.43	36.79
01-Jan-25	205	83	46	11.70	27.62
02-Jan-25	215	87	49	13.42	28.27
08-Jan-25	241	94	55	16.43	31.81
09-Jan-25	236	91	53	16.27	35.16
17-Jan-25	198	89	45	14.24	32.64
18-Jan-25	190	75	42	14.24	29.30
24-Jan-25	203	83	46	14.49	24.65
25-Jan-25	195	78	44	15.57	30.92
30-Jan-25	225	89	50	16.43	23.86
31-Jan-25	210	85	48	14.98	30.22
03-Feb-25	198	82	44	13.16	37.46
04-Feb-25	192	78	41	13.90	33.80
10-Feb-25	216	85	48	18.72	28.54
11-Feb-25	183	73	39	18.21	33.80
18-Feb-25	197	80	43	15.18	29.43
19-Feb-25	194	77	41	21.76	30.33
25-Feb-25	224	92	50	19.73	26.76
26-Feb-25	206	83	45	17.30	24.88
03-Mar-25	196	78	43	19.93	27.52

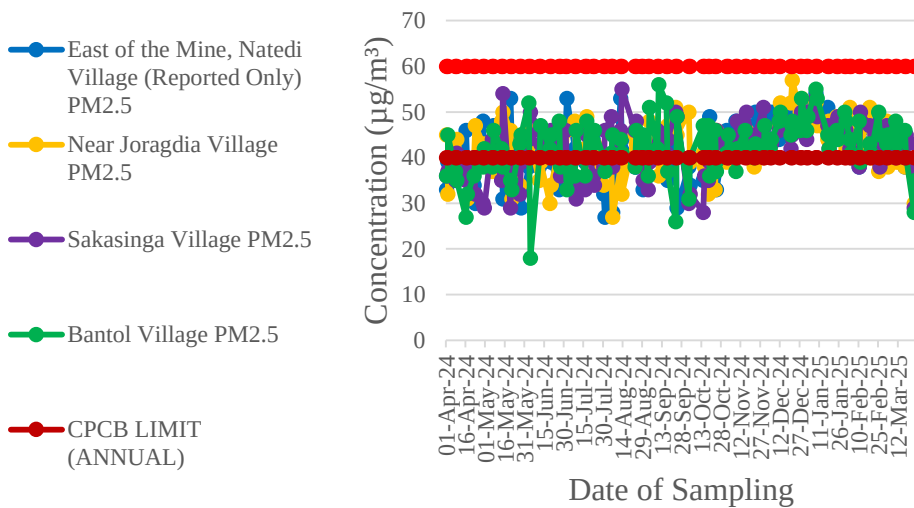
04-Mar-25	206	84	45	15.83	20.54
10-Mar-25	214	86	48	12.25	31.96
11-Mar-25	197	76	43	21.39	22.19
17-Mar-25	209	81	46	15.55	29.29
18-Mar-25	190	75	40	17.01	24.86
24-Mar-25	149	62	28	11.97	35.32
25-Mar-25	172	69	35	16.12	24.39
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	241	98	56	24.19	44.23
Minimum	135	62	18	7.73	9.49
Average	187.53	82.46	42.28	15.52	23.92
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



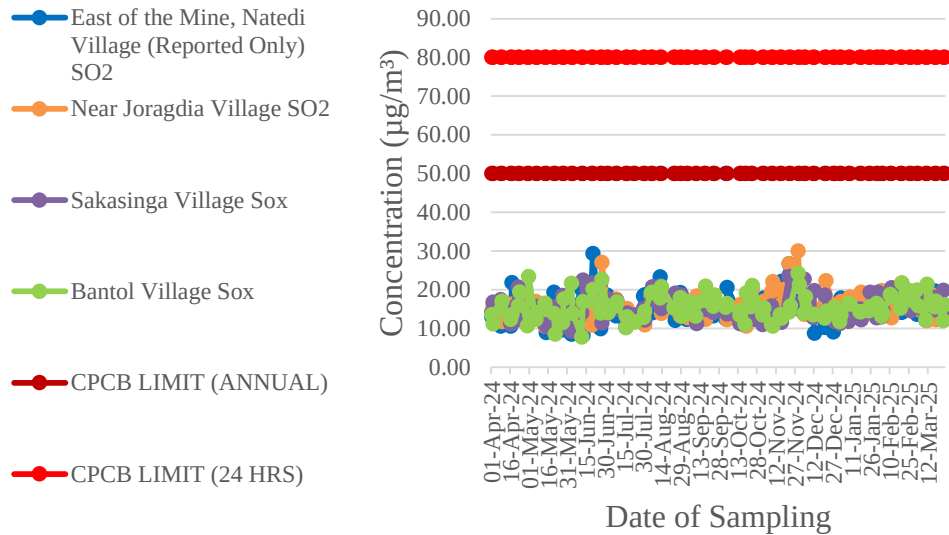
Graph Showing PM10 for Bharatpur OCP



Graph Showing PM2.5 for Bharatpur OCP



Graph Showing SO₂ for Bharatpur OCP



Graph Showing NO_x for Bharatpur OCP

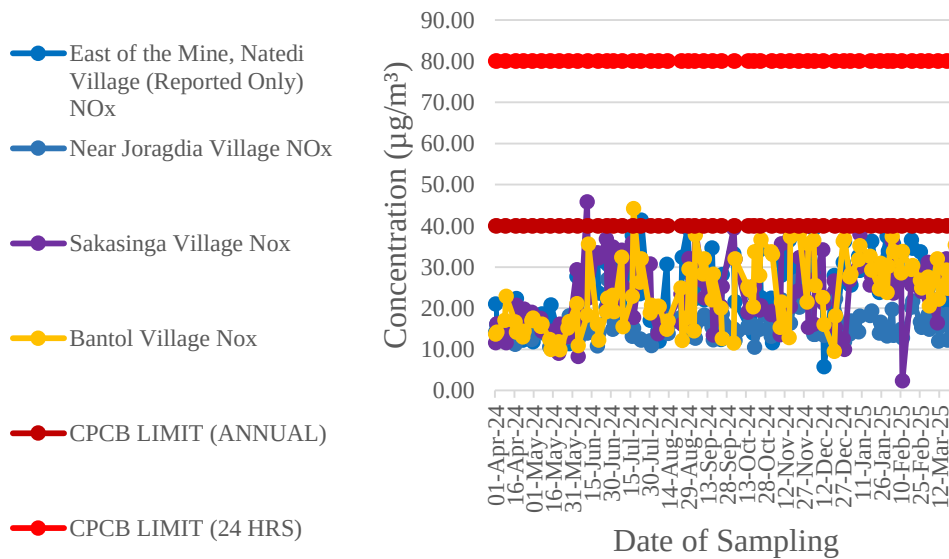


Table: 8.5.19

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring Station:** IWSSAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
06-Apr-24	186	106	45	18.09	12.21
26-Apr-24	272	142	64	12.92	14.53
08-May-24	226	155	70	10.69	13.52
24-May-24	266	117	65	13.28	14.00
07-Jun-24	238	116	57	10.89	26.64
18-Jun-24	233	126	69	29.95	14.13
06-Jul-24	223	134	60	13.58	31.23
29-Jul-24	253	124	57	11.00	35.93
07-Aug-24	259	142	68	16.54	14.25
20-Aug-24	284	128	63	18.50	27.23
07-Sep-24	232	144	65	14.94	21.31
21-Sep-24	240	114	51	16.40	15.01
05-Oct-24	250	133	68	14.58	28.51
29-Oct-24	290	163	75	12.77	17.35
07-Nov-24	256	172	77	13.51	20.97
21-Nov-24	286	166	74	20.48	11.73
07-Dec-24	275	161	70	14.19	31.99
26-Dec-24	249	136	67	15.19	21.29
07-Jan-25	265	163	64	12.60	27.66
22-Jan-25	260	155	60	12.88	29.16
07-Feb-25	256	148	64	13.44	24.46
22-Feb-25	248	140	62	16.05	29.82
07-Mar-25	247	148	61	13.92	30.51
22-Mar-25	215	90	48	14.71	21.79
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	290	172	77	29.95	35.93
Minimum	186	90	45	10.69	11.73
Average	250.38	138.46	63.50	15.05	22.30
Standard (24 Hrs)	500	250		120	120
Standard (Annual)				80	80

Table: 8.5.20

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring Station:** Near Lingaraj to Dera RoadAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
06-Apr-24	251	145	58	14.86	14.34
26-Apr-24	242	156	56	16.00	11.48
08-May-24	235	139	62	12.54	13.28
24-May-24	268	141	70	10.69	16.66
07-Jun-24	277	111	47	17.70	31.48
18-Jun-24	231	112	64	16.34	24.22
06-Jul-24	252	142	63	11.66	21.77
29-Jul-24	214	115	56	13.85	17.11
07-Aug-24	284	156	78	14.32	16.02
20-Aug-24	277	110	51	18.28	12.14
07-Sep-24	190	112	54	11.06	22.23
21-Sep-24	244	120	64	14.25	36.07
05-Oct-24	229	115	61	15.41	24.43
29-Oct-24	242	126	62	11.71	13.01
07-Nov-24	236	135	64	10.01	19.06
21-Nov-24	248	138	66	22.88	27.65
07-Dec-24	248	134	63	17.20	13.80
26-Dec-24	248	144	65	15.87	17.63
07-Jan-25	268	81	61	17.02	28.02
22-Jan-25	257	147	67	10.63	30.22
07-Feb-25	251	145	63	11.59	31.38
22-Feb-25	236	135	58	13.66	24.08
07-Mar-25	245	145	61	14.58	30.44
22-Mar-25	226	90	47	17.10	21.79
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	284	156	78	22.88	36.07
Minimum	190	81	47	10.01	11.48
Average	245.79	128.92	60.88	14.55	21.60
Standard (24 Hrs)	500	250		120	120
Standard (Annual)				80	80

Table: 8.5.21

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring Station:** Near OB Dump no. 10 (North Side of the Mine)All values are in $\mu\text{g}/\text{m}^3$

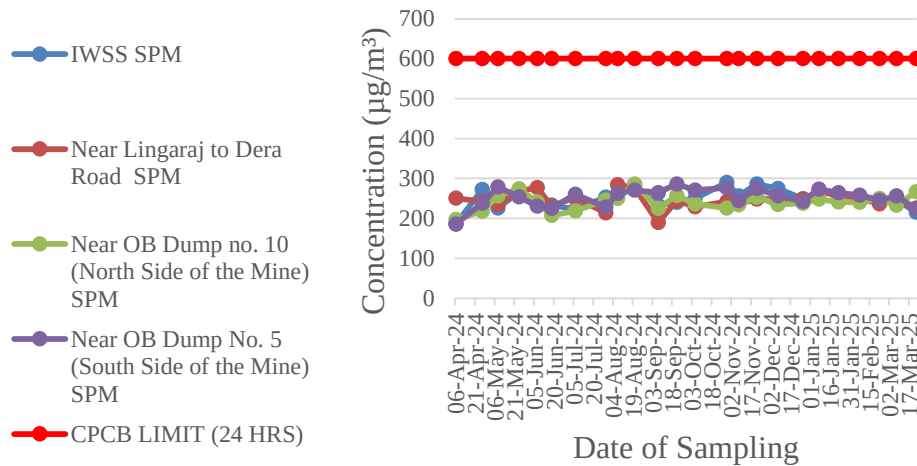
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
06-Apr-24	197	122	47	16.80	15.26
26-Apr-24	218	112	48	19.04	17.51
08-May-24	256	148	66	14.38	11.83
24-May-24	274	127	61	10.66	10.38
07-Jun-24	241	118	54	13.61	8.88
18-Jun-24	207	99	55	19.10	21.57
06-Jul-24	219	128	56	12.83	31.30
29-Jul-24	246	126	59	10.52	31.09
07-Aug-24	250	152	73	15.71	13.50
20-Aug-24	286	114	59	21.60	22.15
07-Sep-24	225	155	72	14.84	19.97
21-Sep-24	257	125	67	12.47	20.37
05-Oct-24	236	120	60	10.83	33.94
28-Oct-24	226	116	56	13.89	13.27
13-Nov-24	234	135	61	11.06	39.05
27-Nov-24	253	145	67	21.77	30.65
07-Dec-24	235	127	61	16.24	18.56
26-Dec-24	238	162	60	18.96	19.93
07-Jan-25	248	148	68	9.66	23.51
22-Jan-25	241	141	63	13.73	24.27
07-Feb-25	240	134	59	16.19	26.76
22-Feb-25	250	138	61	21.76	39.24
07-Mar-25	233	130	57	16.19	25.57
22-Mar-25	267	112	50	17.10	30.51
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	286	162	73	21.77	39.24
Minimum	197	99	47	9.66	8.88
Average	240.71	130.58	60.00	15.37	22.88
Standard (24 Hrs)	500	250		120	120
Standard (Annual)				80	80

Table: 8.5.22

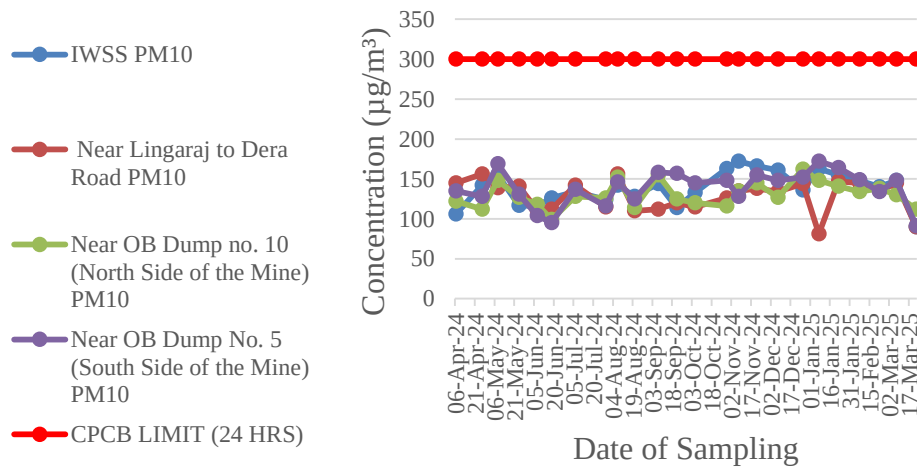
Area: Lingaraj**Project:** Lingaraj OCP**Monitoring Station:** Near OB Dump no. 5 (South Side of the Mine)All values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
06-Apr-24	186	135	56	14.21	16.33
24-Apr-24	238	128	52	15.73	13.53
08-May-24	279	169	75	12.17	11.71
24-May-24	254	131	59	14.38	14.24
07-Jun-24	231	104	52	13.61	17.76
18-Jun-24	225	95	59	12.25	26.91
06-Jul-24	260	137	62	14.38	27.22
29-Jul-24	228	116	55	12.80	32.26
07-Aug-24	263	146	71	16.57	11.70
20-Aug-24	271	125	61	17.21	18.42
07-Sep-24	264	158	75	16.54	15.98
21-Sep-24	286	157	72	12.21	20.54
05-Oct-24	271	145	76	13.68	34.19
28-Oct-24	276	148	72	14.58	25.79
13-Nov-24	244	128	66	15.02	30.65
27-Nov-24	275	155	72	19.76	22.07
07-Dec-24	256	148	69	19.19	23.44
26-Dec-24	243	152	66	13.63	20.90
07-Jan-25	273	172	65	13.02	24.20
22-Jan-25	264	164	65	13.04	31.81
07-Feb-25	258	149	64	12.14	27.52
22-Feb-25	245	134	57	17.76	33.71
07-Mar-25	256	148	62	17.08	24.35
22-Mar-25	224	91	45	18.37	21.57
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	286	172	76	19.76	34.19
Minimum	186	91	45	12.14	11.70
Average	252.92	138.96	63.67	14.97	22.78
Standard (24 Hrs)	500	250		120	120
Standard (Annual)				80	80

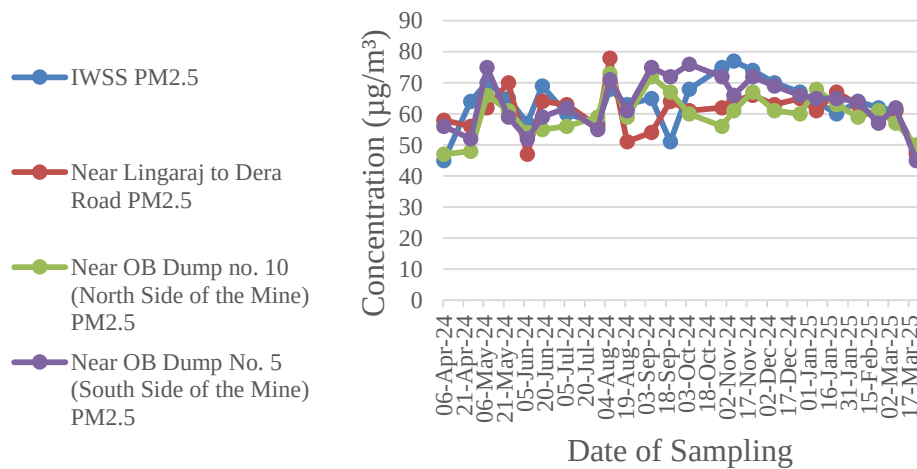
Graph Showing SPM for Lingaraj OCP



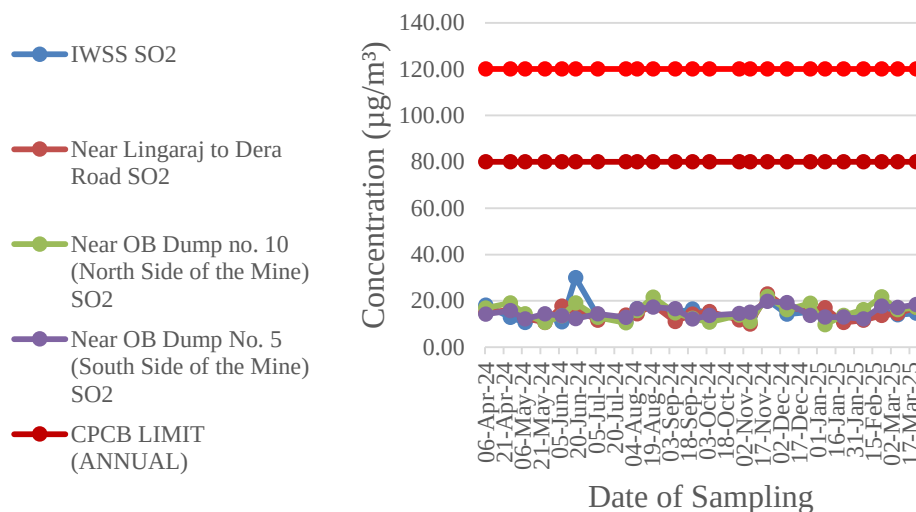
Graph Showing PM10 for Lingaraj OCP



Graph Showing PM2.5 for Lingaraj OCP



Graph Showing SO₂ for Lingaraj OCP



Graph Showing NO_x for Lingaraj OCP

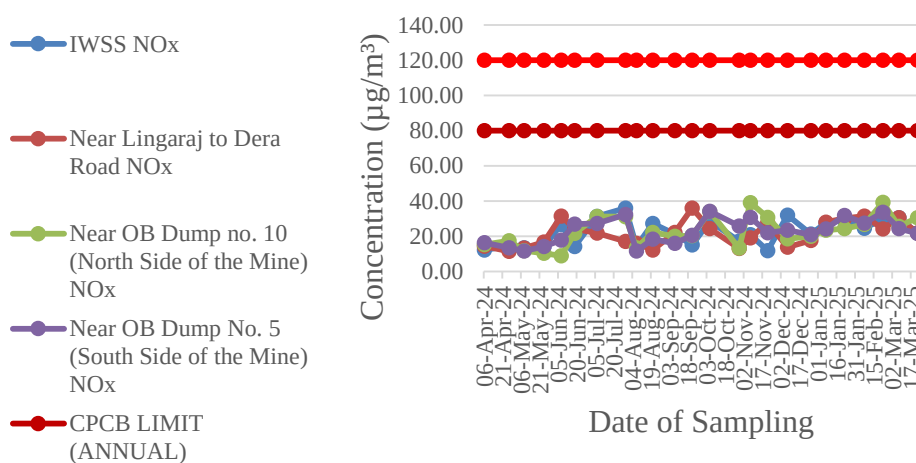


Table: 8.5.23

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring Station:** Near Kankili Community CentreAll values are in $\mu\text{g}/\text{m}^3$

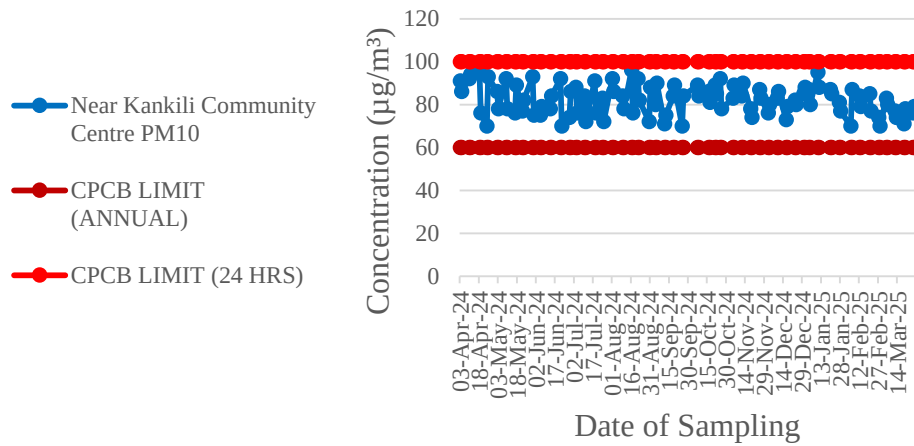
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	192	91	44	17.23	12.55
04-Apr-24	184	86	33	20.99	16.98
10-Apr-24	203	92	38	14.09	13.18
11-Apr-24	196	94	47	19.38	12.55
18-Apr-24	198	95	43	22.76	20.93
19-Apr-24	176	76	38	12.36	16.85
24-Apr-24	167	70	34	22.15	20.64
25-Apr-24	184	93	39	18.36	16.70
02-May-24	168	86	44	12.72	12.20
03-May-24	158	78	32	15.04	13.88
09-May-24	255	92	40	10.80	18.68
10-May-24	178	78	35	8.11	15.69
16-May-24	167	76	42	11.03	16.66
17-May-24	183	89	43	11.88	14.44
22-May-24	151	77	38	14.27	14.13
23-May-24	144	82	49	18.51	9.09
30-May-24	257	93	38	10.37	16.20
31-May-24	270	75	35	13.78	14.23
05-Jun-24	143	75	27	11.38	24.47
06-Jun-24	147	79	35	15.65	16.03
13-Jun-24	160	78	30	10.89	32.29
14-Jun-24	140	84	40	16.37	22.65
21-Jun-24	204	92	45	15.53	36.83
22-Jun-24	148	70	48	17.00	16.10
28-Jun-24	165	74	40	18.50	31.64
29-Jun-24	174	86	35	9.96	12.66
03-Jul-24	139	88	49	14.34	36.94
04-Jul-24	156	76	38	15.16	21.77
10-Jul-24	192	84	43	13.22	19.05
11-Jul-24	186	72	37	13.61	29.94
18-Jul-24	202	91	48	15.23	32.93
19-Jul-24	162	76	35	10.13	31.09
24-Jul-24	170	83	45	12.54	30.11
25-Jul-24	166	72	34	12.63	29.94
01-Aug-24	212	92	49	17.84	20.42
02-Aug-24	196	86	40	11.32	14.84
09-Aug-24	168	84	39	14.62	20.73
10-Aug-24	163	78	34	16.54	18.01
16-Aug-24	166	96	49	13.93	24.46
17-Aug-24	150	76	38	14.02	30.85
21-Aug-24	181	92	48	19.39	31.75
22-Aug-24	148	82	41	17.34	20.97
30-Aug-24	145	72	34	14.96	21.28

31-Aug-24	145	88	45	12.69	15.35
04-Sep-24	142	80	42	18.07	15.28
05-Sep-24	160	90	45	15.04	28.33
11-Sep-24	139	71	36	11.80	35.43
12-Sep-24	153	75	39	18.98	23.59
18-Sep-24	220	84	42	17.95	37.95
19-Sep-24	176	89	51	14.16	26.67
25-Sep-24	180	70	31	13.71	28.95
26-Sep-24	165	84	47	13.69	20.77
07-Oct-24	205	89	46	21.44	14.87
08-Oct-24	187	84	43	16.88	27.50
16-Oct-24	194	86	45	28.05	25.65
17-Oct-24	176	81	38	15.41	12.22
21-Oct-24	215	89	47	17.91	31.22
22-Oct-24	205	85	46	20.98	36.43
25-Oct-24	224	92	49	15.83	27.83
26-Oct-24	192	78	40	10.45	16.32
04-Nov-24	198	83	45	12.29	16.86
05-Nov-24	216	89	48	14.75	30.56
11-Nov-24	208	84	46	14.78	21.51
12-Nov-24	222	90	51	13.01	31.46
18-Nov-24	185	78	41	16.45	36.87
19-Nov-24	178	74	39	25.94	20.53
25-Nov-24	196	87	45	14.30	27.65
26-Nov-24	192	83	44	19.11	18.33
02-Dec-24	176	76	38	14.39	31.46
03-Dec-24	186	80	41	15.54	29.93
09-Dec-24	196	83	45	14.57	13.33
10-Dec-24	204	86	48	19.96	18.56
16-Dec-24	181	73	42	13.80	10.66
17-Dec-24	197	79	46	14.55	22.19
23-Dec-24	208	82	50	11.62	22.05
24-Dec-24	193	80	44	11.76	17.52
30-Dec-24	216	85	53	18.16	29.75
31-Dec-24	224	88	54	13.92	18.56
03-Jan-25	210	87	48	10.50	26.28
04-Jan-25	196	80	44	14.49	29.64
10-Jan-25	236	95	54	12.25	28.56
11-Jan-25	214	88	49	13.69	25.80
20-Jan-25	231	87	51	15.64	30.29
21-Jan-25	210	85	47	12.08	33.40
27-Jan-25	204	81	45	16.56	28.02
28-Jan-25	190	77	42	14.75	28.46
05-Feb-25	186	70	38	12.75	22.48
06-Feb-25	215	87	48	14.86	34.64
12-Feb-25	212	84	46	12.14	25.23
13-Feb-25	196	79	43	13.44	26.76
20-Feb-25	215	85	48	15.48	28.10
21-Feb-25	198	77	43	12.58	32.11
27-Feb-25	187	74	41	14.31	30.58
28-Feb-25	184	70	39	15.03	26.49
05-Mar-25	205	83	45	14.00	34.35
06-Mar-25	189	80	41	16.25	31.96
12-Mar-25	179	77	39	12.92	19.78

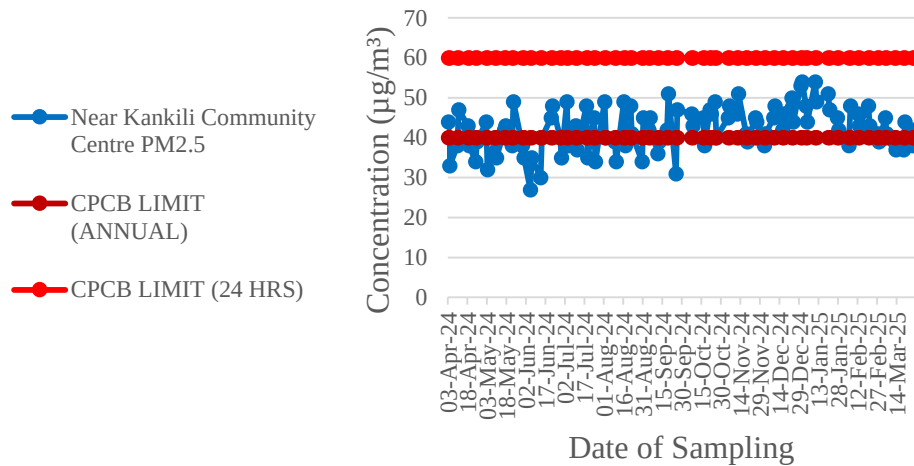
13-Mar-25	176	74	37	16.62	20.77
19-Mar-25	178	71	37	16.19	25.57
20-Mar-25	201	78	44	19.69	29.56
26-Mar-25	183	76	38	16.25	27.39
27-Mar-25	200	79	42	17.01	21.31
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	270	96	54	28.05	37.95
Minimum	139	70	27	8.11	9.09
Average	186.89	82.16	42.29	15.17	23.66
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



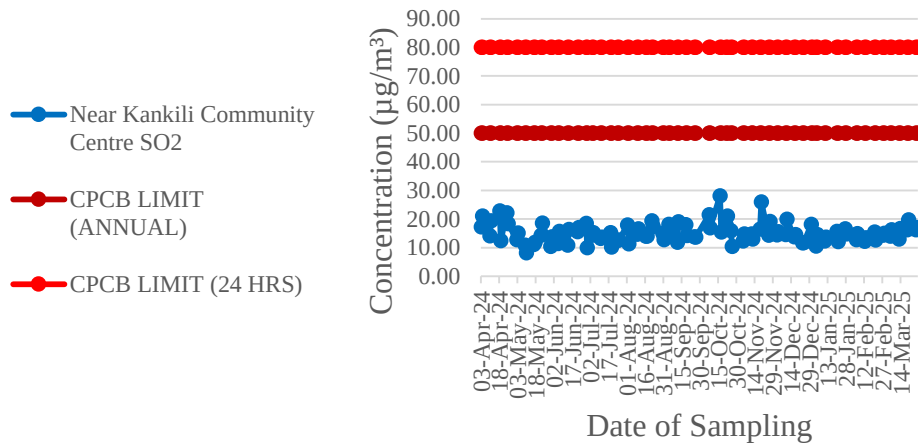
Graph Showing PM10 for Lingaraj OCP



Graph Showing PM2.5 for Lingaraj OCP



Graph Showing SO₂ for Lingaraj OCP



Graph Showing NO_x for Lingaraj OCP

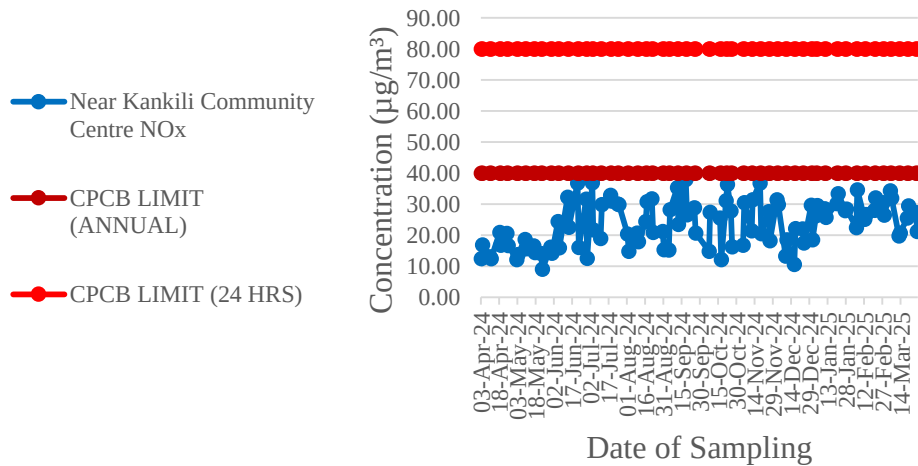


Table: 8.5.24

Area: Kaniha**Project:** Kaniha OCP**Monitoring Station:** Near External OB Dump, JamaniaAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
12-Apr-24	198	116	44	10.11	13.00
26-Apr-24	267	132	58	15.17	10.08
11-May-24	285	156	68	12.17	15.45
25-May-24	222	121	54	13.61	12.55
08-Jun-24	241	129	56	20.46	7.28
24-Jun-24	236	102	62	16.37	39.10
12-Jul-24	244	135	64	13.96	29.19
26-Jul-24	223	118	56	10.13	31.91
14-Aug-24	225	125	60	12.08	13.47
27-Aug-24	256	108	66	19.23	28.41
13-Sep-24	205	106	57	14.29	26.07
27-Sep-24	233	104	55	13.79	21.79
09-Oct-24	244	133	65	18.65	29.58
29-Oct-24	238	131	62	17.24	30.44
14-Nov-24	241	140	66	11.01	17.67
28-Nov-24	249	138	64	16.45	36.87
13-Dec-24	244	134	66	13.63	25.36
19-Dec-24	273	163	68	12.85	16.13
13-Jan-25	278	182	71	17.02	28.02
23-Jan-25	270	173	69	10.98	25.30
08-Feb-25	263	154	65	18.21	23.28
22-Feb-25	256	80	64	16.39	25.69
08-Mar-25	245	143	60	16.66	27.39
28-Mar-25	246	140	62	11.53	21.06
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	285	182	71	20.46	39.10
Minimum	198	80	44	10.11	7.28
Average	245.08	131.79	61.75	14.67	23.13
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.25

Area: Kaniha**Project:** Kaniha OCP**Monitoring Station:** Near Jatra Padia, JaradaAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
12-Apr-24	207	132	54	15.79	18.14
26-Apr-24	238	108	46	17.84	16.71
11-May-24	259	142	55	13.65	14.24
25-May-24	235	127	57	10.69	14.00
08-Jun-24	242	118	47	19.10	32.36
24-Jun-24	258	120	65	9.53	20.18
12-Jul-24	238	142	61	10.87	23.78
26-Jul-24	258	136	67	10.75	25.41
14-Aug-24	254	134	57	14.32	21.27
27-Aug-24	272	120	65	27.38	21.74
13-Sep-24	217	128	61	11.57	21.79
27-Sep-24	273	134	66	18.05	21.37
05-Oct-24	254	142	76	15.17	24.07
29-Oct-24	282	145	70	24.43	42.15
14-Nov-24	234	128	63	13.65	13.20
28-Nov-24	250	143	66	20.27	20.97
13-Dec-24	252	146	68	10.89	20.78
19-Dec-24	252	143	65	10.59	22.58
13-Jan-25	255	164	68	14.05	23.86
23-Jan-25	247	156	60	16.91	32.60
08-Feb-25	247	144	62	14.67	34.79
22-Feb-25	241	86	57	15.94	24.08
08-Mar-25	253	149	62	12.69	27.16
28-Mar-25	223	120	55	139.98	295.61
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	282	164	76	139.98	295.61
Minimum	207	86	46	9.53	13.20
Average	247.54	133.63	61.38	20.37	34.70
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.26

Area: Kaniha**Project:** Kaniha OCP**Monitoring Station:** Near Project OfficeAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
12-Apr-24	182	85	48	14.21	10.68
26-Apr-24	224	116	48	12.30	22.96
11-May-24	278	153	65	10.69	15.21
25-May-24	245	96	74	11.80	10.62
08-Jun-24	232	101	51	14.97	33.10
24-Jun-24	206	92	51	19.06	33.63
12-Jul-24	228	128	55	13.58	38.02
26-Jul-24	247	128	60	10.52	26.18
14-Aug-24	264	145	71	14.47	15.01
27-Aug-24	281	155	72	20.56	29.32
13-Sep-24	203	108	59	16.54	27.96
27-Sep-24	226	138	67	19.15	23.20
05-Oct-24	238	126	65	14.58	15.61
29-Oct-24	240	124	61	14.37	14.19
14-Nov-24	231	125	62	13.93	31.56
28-Nov-24	248	134	66	20.24	25.25
13-Dec-24	275	163	70	14.25	28.65
19-Dec-24	284	175	72	13.89	41.40
13-Jan-25	263	162	61	10.50	27.66
23-Jan-25	256	154	63	9.66	28.35
08-Feb-25	244	140	62	16.15	29.19
22-Feb-25	268	162	64	18.65	29.05
08-Mar-25	246	153	60	11.13	27.60
28-Mar-25	223	126	58	11.53	21.06
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	284	175	74	20.56	41.40
Minimum	182	85	48	9.66	10.62
Average	243.00	132.88	61.88	14.45	25.23
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.27

Area: Kaniha**Project:** Kaniha OCP**Monitoring Station:** New Time Office (Near Z-Patch)All values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
12-Apr-24	238	142	57	12.92	11.41
26-Apr-24	235	134	52	15.73	13.40
11-May-24	292	154	61	10.33	10.86
25-May-24	270	136	68	14.38	13.76
08-Jun-24	275	109	56	8.17	29.06
24-Jun-24	238	109	58	16.37	15.51
12-Jul-24	252	132	56	12.44	38.10
26-Jul-24	230	118	57	12.63	18.82
14-Aug-24	222	108	56	15.10	11.65
27-Aug-24	244	136	69	21.92	23.35
13-Sep-24	250	152	74	13.33	19.78
27-Sep-24	213	110	60	13.89	24.58
05-Oct-24	232	131	64	13.93	19.16
29-Oct-24	228	116	55	11.49	21.07
14-Nov-24	216	123	58	16.10	18.24
28-Nov-24	240	131	64	13.71	20.34
13-Dec-24	248	141	67	12.55	24.63
19-Dec-24	258	145	66	10.75	22.58
13-Jan-25	257	165	67	11.76	31.12
23-Jan-25	249	157	58	12.74	23.13
08-Feb-25	238	133	60	15.73	27.00
22-Feb-25	232	165	63	17.39	29.92
08-Mar-25	251	145	60	13.75	22.07
28-Mar-25	238	144	61	17.91	31.96
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	292	165	74	21.92	38.10
Minimum	213	108	52	8.17	10.86
Average	243.58	134.83	61.13	13.96	21.73
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.28

Area: Kaniha**Project:** Kaniha OCP**Monitoring Station:** North of the MineAll values are in $\mu\text{g}/\text{m}^3$

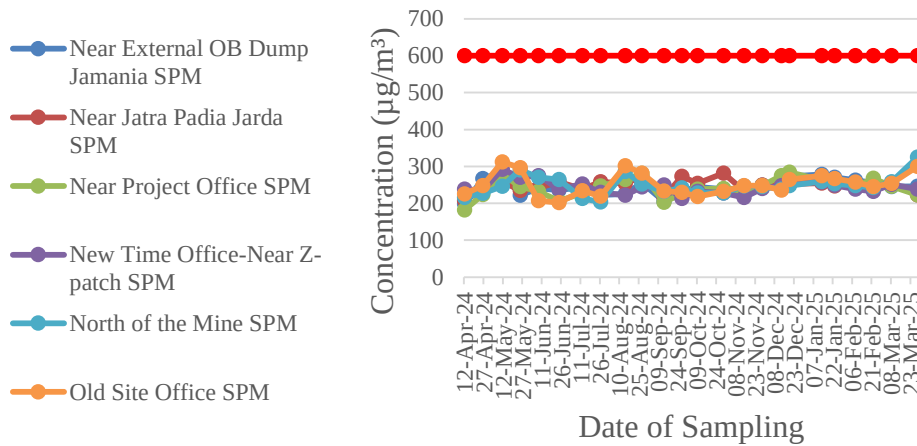
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
12-Apr-24	216	122	48	14.21	17.85
26-Apr-24	227	118	47	11.80	11.28
11-May-24	246	148	57	10.69	12.58
25-May-24	290	96	46	16.23	9.90
08-Jun-24	270	106	60	25.61	16.03
24-Jun-24	264	105	57	19.06	30.27
12-Jul-24	213	116	56	12.05	36.74
26-Jul-24	204	105	52	11.00	20.53
14-Aug-24	286	176	65	17.82	18.80
27-Aug-24	252	123	64	19.76	24.21
13-Sep-24	232	128	64	14.94	16.74
27-Sep-24	242	121	58	14.35	22.12
09-Oct-24	228	114	62	15.96	20.81
29-Oct-24	228	112	56	15.33	16.39
14-Nov-24	247	145	69	14.11	11.73
28-Nov-24	245	135	66	12.97	35.93
13-Dec-24	238	137	65	11.54	30.48
19-Dec-24	248	140	65	13.65	18.82
13-Jan-25	259	159	68	14.72	29.54
23-Jan-25	253	151	65	10.92	26.97
08-Feb-25	248	139	62	16.30	32.11
22-Feb-25	243	134	60	14.75	28.29
08-Mar-25	258	157	63	11.37	26.37
28-Mar-25	325	137	60	13.56	30.36
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	325	176	69	25.61	36.74
Minimum	204	96	46	10.69	9.90
Average	248.42	130.17	59.79	14.70	22.70
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.29

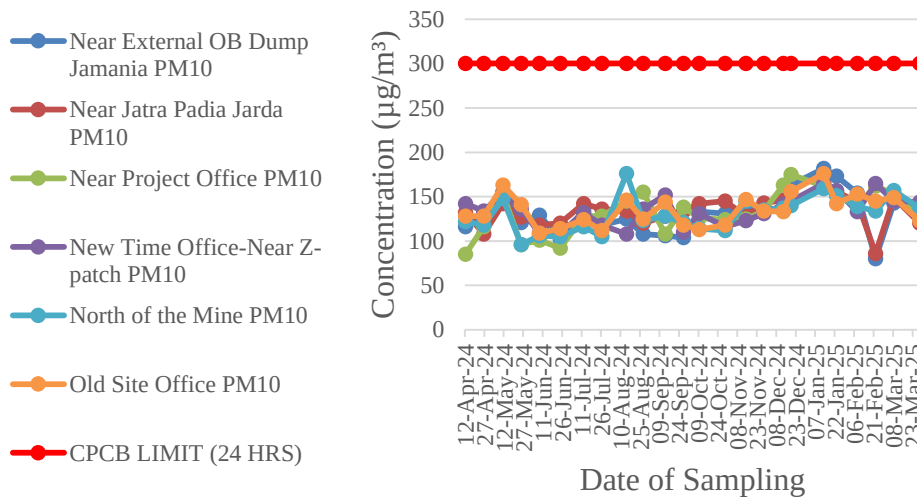
Area: Kaniha**Project:** Kaniha OCP**Monitoring Station:** Old Site OfficeAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
12-Apr-24	225	128	44	19.38	14.95
26-Apr-24	248	128	55	19.04	19.76
11-May-24	312	163	71	9.59	14.00
25-May-24	296	141	60	13.28	16.66
08-Jun-24	207	109	49	12.25	10.49
17-Jun-24	202	114	54	19.06	14.13
12-Jul-24	234	124	53	11.64	29.19
26-Jul-24	219	112	56	10.24	39.43
14-Aug-24	302	146	54	16.91	21.28
27-Aug-24	282	125	68	21.85	28.05
13-Sep-24	233	144	71	9.96	20.84
27-Sep-24	230	118	62	16.47	13.42
05-Oct-24	218	113	57	16.16	28.29
29-Oct-24	232	118	60	10.08	18.90
14-Nov-24	248	147	66	12.29	27.86
28-Nov-24	248	134	62	23.89	30.80
13-Dec-24	236	133	64	10.06	26.08
19-Dec-24	264	156	68	13.23	34.95
13-Jan-25	275	176	70	12.74	28.19
23-Jan-25	267	142	67	10.54	31.08
08-Feb-25	257	153	64	12.94	27.88
22-Feb-25	245	145	60	16.85	25.69
08-Mar-25	254	149	62	15.55	31.07
28-Mar-25	300	123	59	18.33	24.35
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	312	176	71	23.89	39.43
Minimum	202	109	44	9.59	10.49
Average	251.42	135.04	60.67	14.68	24.06
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

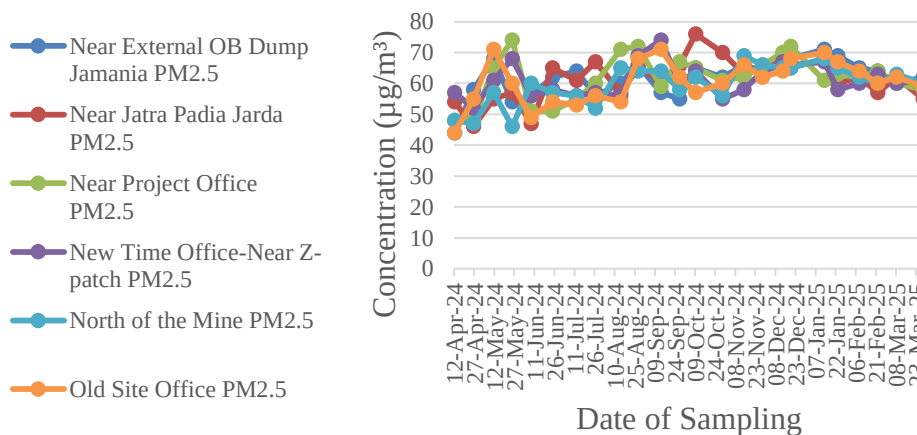
Graph Showing SPM for Kaniha OCP



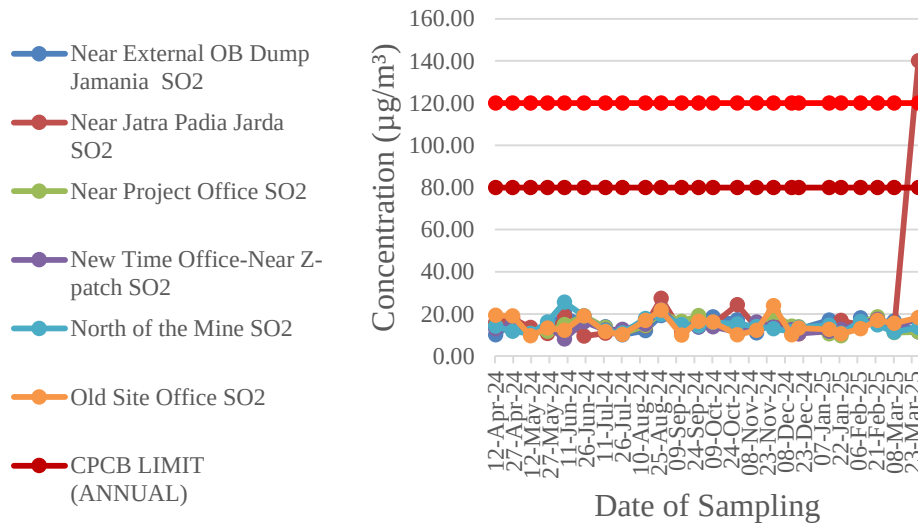
Graph Showing PM10 for Kaniha OCP



Graph Showing PM2.5 for Kaniha OCP



Graph Showing SO₂ for Kaniha OCP



Graph Showing NO_x for Kaniha OCP

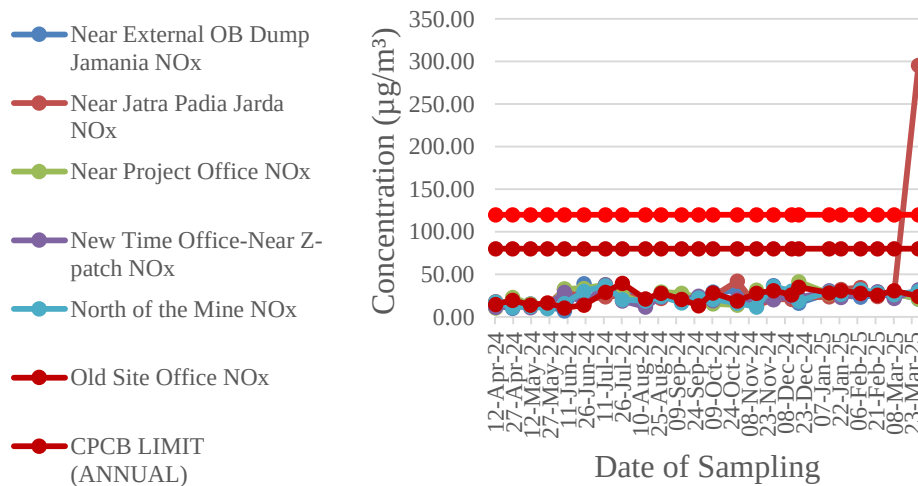


Table: 8.5.30

Area: Kaniha**Project:** Kaniha OCP**Monitoring Station:** South Of Proposed Quarry Limit of
KOCFAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	182	81	34	16.80	16.02
04-Apr-24	165	92	26	11.23	13.00
10-Apr-24	177	61	32	12.92	9.82
11-Apr-24	178	82	35	15.17	11.54
18-Apr-24	162	76	31	23.49	16.51
19-Apr-24	178	83	34	19.76	13.10
24-Apr-24	158	75	29	23.99	9.88
25-Apr-24	195	84	38	13.48	12.61
02-May-24	196	78	36	9.25	10.60
03-May-24	186	85	45	12.99	13.12
09-May-24	170	76	33	11.03	12.22
10-May-24	215	95	47	12.54	9.17
16-May-24	208	88	44	11.03	16.10
17-May-24	188	95	52	10.33	12.55
22-May-24	207	93	25	12.17	16.38
23-May-24	181	84	33	15.27	18.32
30-May-24	195	87	29	15.12	15.21
31-May-24	208	78	30	13.28	9.90
05-Jun-24	169	78	37	14.17	20.16
06-Jun-24	158	86	44	18.41	22.68
13-Jun-24	150	75	48	10.89	25.83
14-Jun-24	160	89	51	17.74	19.42
21-Jun-24	171	78	34	21.34	23.20
22-Jun-24	202	90	42	12.75	30.10
28-Jun-24	183	87	39	19.83	27.30
29-Jun-24	221	84	35	19.74	32.05
03-Jul-24	168	79	43	13.38	39.74
04-Jul-24	154	66	32	15.52	29.19
10-Jul-24	159	62	30	12.03	21.73
11-Jul-24	184	72	36	13.61	31.98
18-Jul-24	177	77	41	12.26	37.64
19-Jul-24	173	71	36	10.91	34.37
24-Jul-24	165	75	39	10.75	18.82
25-Jul-24	372	83	43	10.91	32.73
01-Aug-24	181	88	40	15.48	13.70
02-Aug-24	167	78	35	13.02	17.90
09-Aug-24	168	86	38	18.28	18.80
10-Aug-24	224	84	49	21.22	23.63
16-Aug-24	181	92	49	16.91	18.27
17-Aug-24	168	81	39	15.96	34.08
21-Aug-24	180	85	40	19.39	28.32
22-Aug-24	161	88	46	19.08	35.41

30-Aug-24	169	89	51	18.17	16.93
31-Aug-24	160	85	46	18.21	18.65
04-Sep-24	148	75	36	14.14	31.96
05-Sep-24	152	80	41	14.65	24.69
11-Sep-24	159	86	45	14.00	35.95
12-Sep-24	142	85	40	11.71	24.35
18-Sep-24	162	73	34	13.27	27.86
19-Sep-24	161	78	37	14.31	24.05
25-Sep-24	183	85	47	15.97	17.19
26-Sep-24	159	92	50	12.71	17.95
07-Oct-24	158	83	39	23.95	24.53
08-Oct-24	163	76	37	12.49	12.90
16-Oct-24	183	83	39	18.59	20.20
17-Oct-24	191	86	42	14.60	33.45
21-Oct-24	189	82	40	14.12	25.47
22-Oct-24	218	85	49	20.59	35.90
25-Oct-24	206	83	48	18.59	33.06
26-Oct-24	185	75	38	20.53	17.84
04-Nov-24	184	79	40	15.25	33.80
05-Nov-24	195	83	44	13.70	37.36
11-Nov-24	208	86	47	33.37	31.37
12-Nov-24	219	89	51	21.13	26.89
18-Nov-24	195	81	43	19.52	16.94
19-Nov-24	208	90	48	18.77	35.49
25-Nov-24	198	85	46	20.48	23.46
26-Nov-24	218	94	52	18.02	18.55
02-Dec-24	296	86	44	15.07	19.08
03-Dec-24	298	92	48	13.47	23.55
09-Dec-24	321	92	50	12.85	22.03
10-Dec-24	328	84	53	12.89	29.36
16-Dec-24	187	80	45	13.44	22.42
17-Dec-24	191	82	47	10.52	24.20
23-Dec-24	204	86	53	15.23	18.82
24-Dec-24	198	84	51	10.13	21.96
30-Dec-24	213	88	54	12.54	27.82
31-Dec-24	194	83	50	12.63	22.93
03-Jan-25	198	84	46	12.60	28.35
04-Jan-25	217	88	49	13.86	21.44
10-Jan-25	246	93	54	13.80	31.05
11-Jan-25	228	91	50	12.42	24.99
20-Jan-25	217	85	48	12.35	30.04
21-Jan-25	194	78	43	14.93	23.86
27-Jan-25	188	74	40	14.49	28.63
28-Jan-25	226	88	49	17.39	25.45
05-Feb-25	198	76	43	15.03	21.67
06-Feb-25	193	74	40	16.48	31.34
12-Feb-25	208	92	45	12.42	31.38
13-Feb-25	184	72	38	14.86	33.80
20-Feb-25	231	93	50	14.75	30.58
21-Feb-25	203	86	45	14.31	30.58
27-Feb-25	185	74	41	14.12	30.50
28-Feb-25	196	79	43	19.65	32.11
05-Mar-25	196	79	42	13.33	23.59
06-Mar-25	211	88	47	17.06	31.16

12-Mar-25	198	82	44	18.37	24.77
13-Mar-25	177	75	38	13.33	23.59
19-Mar-25	219	86	47	12.25	19.17
20-Mar-25	195	81	37	17.94	31.16
26-Mar-25	190	75	40	17.08	29.68
27-Mar-25	177	69	38	18.37	27.16
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	372	95	54	33.37	39.74
Minimum	142	61	25	9.25	9.17
Average	193.75	82.49	41.97	15.43	23.90
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.31

Area: Kaniha**Project:** Kaniha OCP**Monitoring Station:** South West of the MineAll values are in $\mu\text{g}/\text{m}^3$

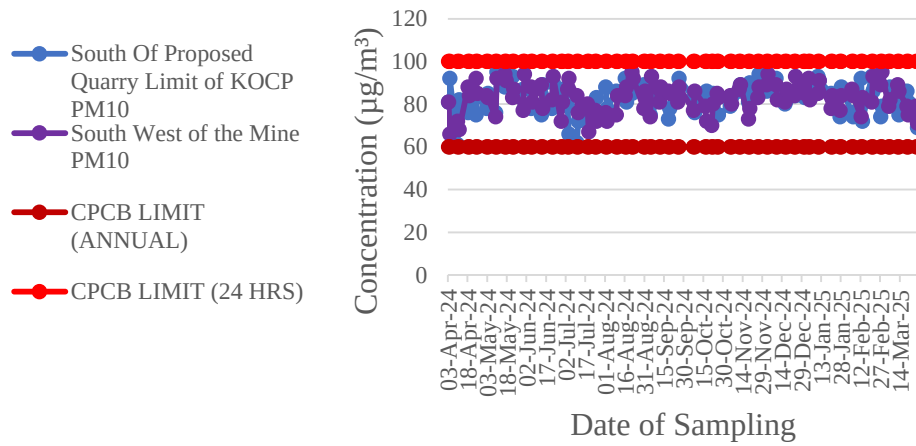
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	194	81	34	11.23	13.00
04-Apr-24	170	66	24	14.61	14.46
10-Apr-24	161	72	25	12.36	16.32
11-Apr-24	189	68	30	15.73	13.93
18-Apr-24	198	88	45	18.54	15.92
19-Apr-24	188	84	42	24.61	21.07
24-Apr-24	192	92	37	12.92	23.61
25-Apr-24	185	85	36	16.32	21.20
02-May-24	195	84	41	17.39	13.05
03-May-24	175	83	38	14.84	16.10
09-May-24	168	74	33	11.03	12.77
10-May-24	196	92	44	11.88	16.38
16-May-24	168	94	31	17.81	14.44
17-May-24	187	91	36	10.80	16.15
22-May-24	176	83	39	10.33	10.86
23-May-24	177	87	30	11.18	14.64
30-May-24	194	77	24	12.17	16.66
31-May-24	243	94	31	14.54	10.84
05-Jun-24	178	88	46	18.63	46.96
06-Jun-24	144	81	38	12.75	30.24
13-Jun-24	168	89	42	13.64	32.36
14-Jun-24	171	78	53	10.89	25.02
21-Jun-24	194	82	41	9.92	25.90
22-Jun-24	216	93	46	18.45	12.16
28-Jun-24	181	72	32	19.83	26.60
29-Jun-24	215	81	38	9.32	25.32
03-Jul-24	204	87	45	16.73	36.22
04-Jul-24	180	92	48	15.34	22.24
10-Jul-24	195	84	41	16.73	30.83
11-Jul-24	183	76	37	13.15	29.14
18-Jul-24	190	80	41	12.10	27.29
19-Jul-24	163	67	32	10.59	34.22
24-Jul-24	162	77	41	10.13	28.64
25-Jul-24	181	72	36	11.65	24.47
01-Aug-24	181	76	33	16.54	22.26
02-Aug-24	164	72	27	14.99	18.62
09-Aug-24	169	75	30	13.89	15.49
10-Aug-24	192	84	34	14.62	16.58
16-Aug-24	197	84	42	18.38	30.91
17-Aug-24	170	88	40	18.02	38.02
21-Aug-24	181	95	50	13.75	19.32
22-Aug-24	208	92	47	14.58	21.34
30-Aug-24	173	78	42	15.57	22.96

31-Aug-24	153	86	45	12.13	27.32
04-Sep-24	154	74	38	14.42	16.78
05-Sep-24	177	93	46	16.96	31.16
11-Sep-24	157	81	52	15.86	18.76
12-Sep-24	163	88	39	11.57	23.24
18-Sep-24	175	86	36	10.62	19.26
19-Sep-24	185	85	48	16.56	27.92
25-Sep-24	145	81	43	16.50	29.60
26-Sep-24	154	88	47	16.51	33.70
07-Oct-24	179	77	41	16.24	19.68
08-Oct-24	196	86	45	17.49	25.11
16-Oct-24	174	79	41	15.41	22.40
17-Oct-24	168	72	34	16.50	20.81
21-Oct-24	173	70	35	25.54	32.09
22-Oct-24	187	80	41	18.24	21.56
25-Oct-24	201	85	48	10.54	31.22
26-Oct-24	196	83	44	14.90	23.42
04-Nov-24	187	84	43	21.60	35.66
05-Nov-24	185	80	42	23.18	25.47
11-Nov-24	193	87	46	18.52	19.36
12-Nov-24	206	89	50	16.21	26.89
18-Nov-24	177	73	39	13.51	21.78
19-Nov-24	197	78	44	16.60	22.92
25-Nov-24	207	83	48	16.45	21.51
26-Nov-24	216	88	50	20.02	14.59
02-Dec-24	301	89	42	14.77	35.64
03-Dec-24	304	94	46	10.09	31.23
09-Dec-24	297	89	48	11.45	28.69
10-Dec-24	306	82	50	12.28	25.81
16-Dec-24	192	81	48	11.65	21.09
17-Dec-24	206	87	53	13.89	24.64
23-Dec-24	197	84	51	13.44	29.94
24-Dec-24	225	93	57	12.10	27.64
30-Dec-24	218	89	55	12.54	30.11
31-Dec-24	201	85	52	11.09	23.52
03-Jan-25	234	92	51	14.49	27.47
04-Jan-25	198	82	45	12.30	28.92
10-Jan-25	205	85	47	15.46	27.83
11-Jan-25	235	91	52	18.82	37.67
20-Jan-25	188	78	42	12.20	35.16
21-Jan-25	210	84	46	11.70	32.64
27-Jan-25	196	77	43	12.88	24.23
28-Jan-25	215	84	47	15.46	34.19
05-Feb-25	216	87	48	17.74	32.95
06-Feb-25	205	84	45	19.17	22.81
12-Feb-25	194	74	41	15.03	27.29
13-Feb-25	213	83	46	12.46	22.81
20-Feb-25	203	81	44	16.91	32.11
21-Feb-25	235	93	51	19.58	35.32
27-Feb-25	210	89	48	17.76	30.50
28-Feb-25	238	95	52	19.65	27.04
05-Mar-25	187	79	40	17.10	21.79
06-Mar-25	194	82	41	17.96	28.59
12-Mar-25	217	89	48	14.10	31.96

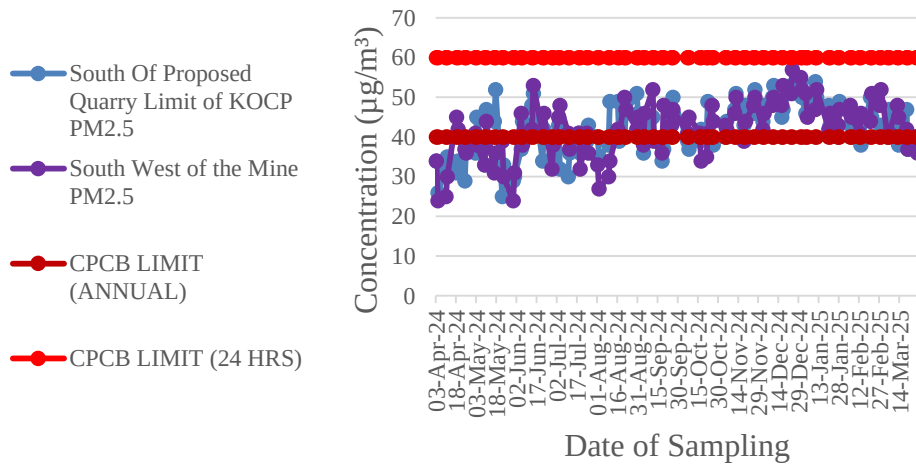
13-Mar-25	206	86	45	15.55	30.18
19-Mar-25	200	79	42	19.69	28.76
20-Mar-25	185	75	37	17.01	23.97
26-Mar-25	196	79	40	12.69	21.57
27-Mar-25	217	71	36	13.61	37.28
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	306	95	57	25.54	46.96
Minimum	144	66	24	9.32	10.84
Average	194.75	83.00	42.02	15.03	24.88
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



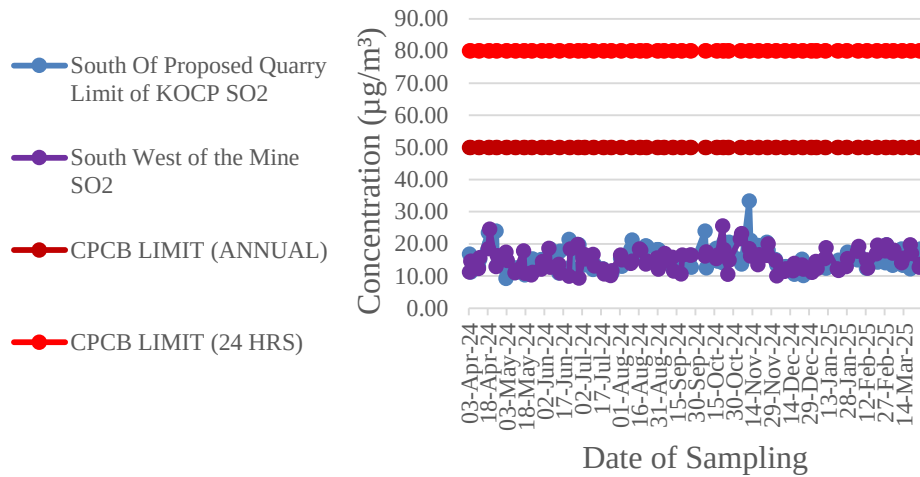
Graph Showing PM10 for Kaniha OCP



Graph Showing PM2.5 for Kaniha OCP



Graph Showing SO₂ for Kaniha OCP



Graph Showing NO_x for Kaniha OCP

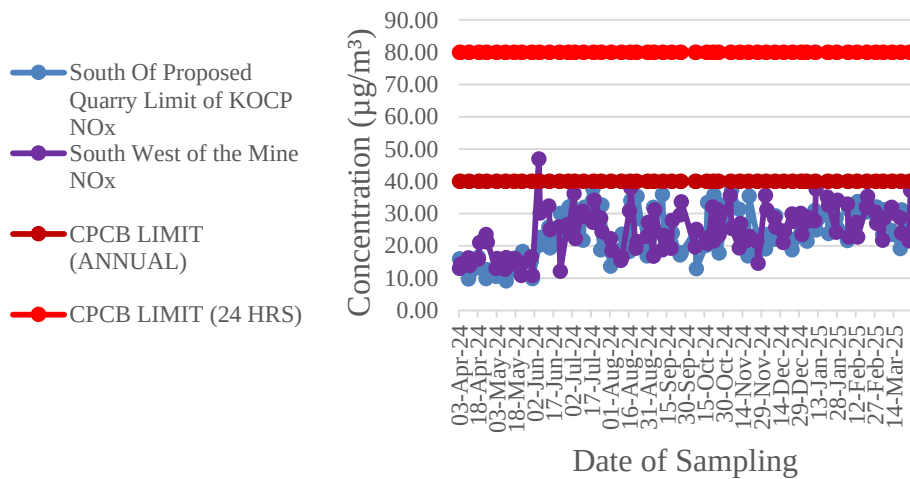


Table: 8.5.32

Area: Hingula**Project:** Hingula OCP**Monitoring Station:** South West Side of the MineAll values are in $\mu\text{g}/\text{m}^3$

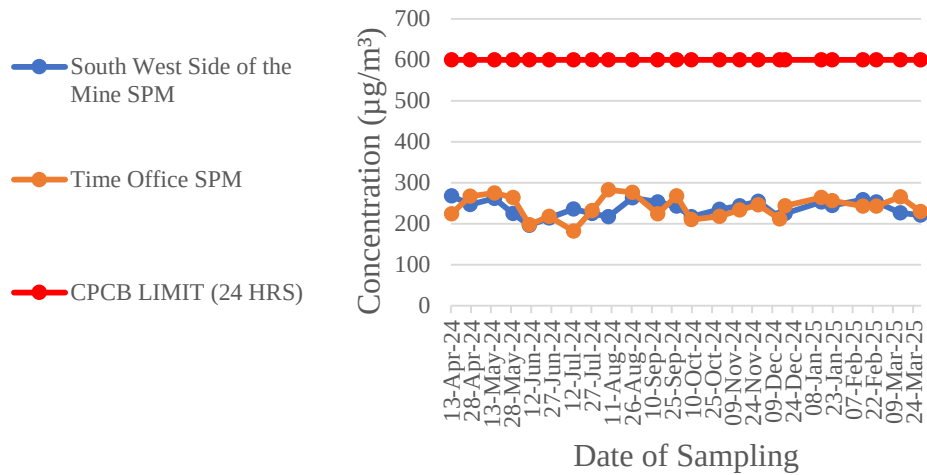
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
13-Apr-24	268	148	59	18.09	12.97
00-Jan-00	247	132	58	14.09	17.48
15-May-24	262	145	67	10.33	14.05
29-May-24	225	92	45	12.12	14.23
10-Jun-24	196	116	56	18.50	15.19
25-Jun-24	214	105	51	8.17	28.25
13-Jul-24	236	126	54	15.16	27.22
27-Jul-24	225	129	59	12.54	16.94
08-Aug-24	217	134	68	15.63	14.44
26-Aug-24	263	124	62	28.67	26.40
14-Sep-24	253	155	73	12.72	22.37
28-Sep-24	243	115	57	17.39	39.84
09-Oct-24	217	116	57	13.74	22.40
30-Oct-24	235	140	66	17.79	31.22
14-Nov-24	244	138	63	20.02	18.55
28-Nov-24	255	144	67	18.77	36.30
14-Dec-24	216	124	61	16.80	27.01
18-Dec-24	225	133	62	18.10	26.62
14-Jan-25	253	146	65	14.72	28.78
22-Jan-25	245	166	62	15.37	29.64
14-Feb-25	259	157	64	15.03	24.88
24-Feb-25	253	148	62	20.61	25.35
14-Mar-25	227	136	55	16.66	31.96
29-Mar-25	221	125	57	12.33	29.78
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	268	166	73	28.67	39.84
Minimum	196	92	45	8.17	12.97
Average	237.46	133.08	60.42	15.97	24.24
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.33

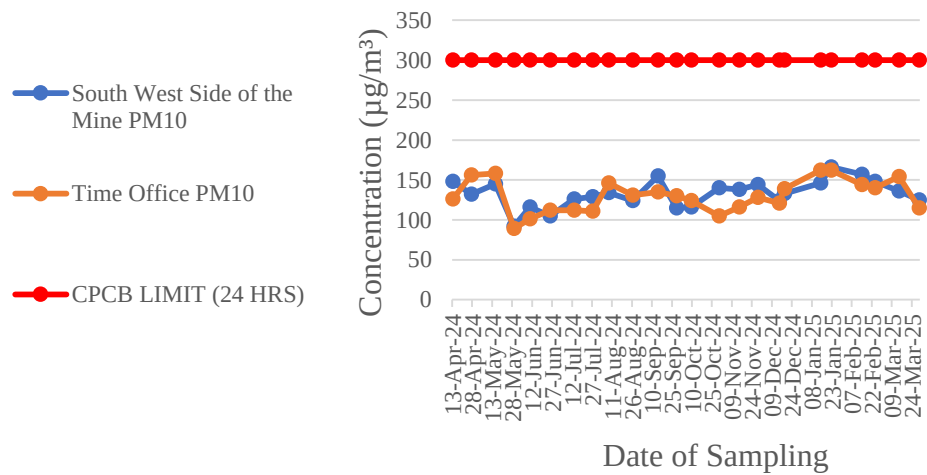
Area: Hingula**Project:** Hingula OCP**Monitoring Station:** Time OfficeAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
13-Apr-24	224	126	47	13.57	14.95
27-Apr-24	267	156	68	15.73	19.58
15-May-24	275	158	63	13.28	11.35
29-May-24	264	89	52	16.49	13.50
10-Jun-24	198	101	53	10.89	33.90
25-Jun-24	218	112	53	10.91	33.03
13-Jul-24	182	112	47	13.19	23.08
27-Jul-24	232	111	54	10.18	17.11
08-Aug-24	283	146	73	18.23	16.81
26-Aug-24	277	131	65	17.15	39.12
14-Sep-24	224	135	68	12.54	33.35
28-Sep-24	268	130	63	16.82	33.50
09-Oct-24	210	124	53	19.16	22.30
29-Oct-24	218	105	51	14.37	16.48
14-Nov-24	234	116	57	16.84	23.46
28-Nov-24	246	128	63	13.06	18.94
14-Dec-24	212	121	58	17.24	17.42
18-Dec-24	244	139	64	22.31	35.16
14-Jan-25	264	162	68	16.91	26.24
22-Jan-25	256	162	65	14.26	29.54
14-Feb-25	243	144	61	13.66	29.19
24-Feb-25	243	140	59	13.44	29.82
14-Mar-25	266	154	62	17.50	28.91
29-Mar-25	230	115	58	11.53	26.87
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	283	162	73	22.31	39.12
Minimum	182	89	47	10.18	11.35
Average	240.75	129.88	59.38	14.97	24.73
Standard (24 Hrs)	500	250	-	120	120
	360	180	-	80	80

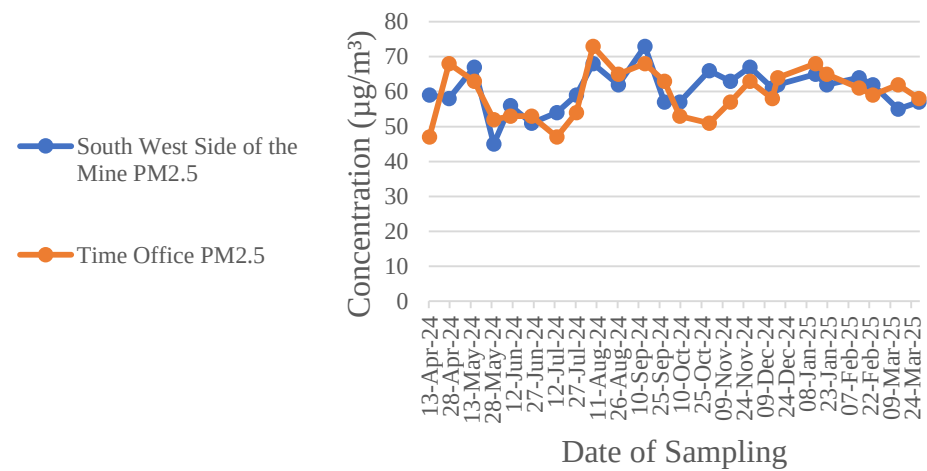
Graph Showing SPM for Hingula OCP



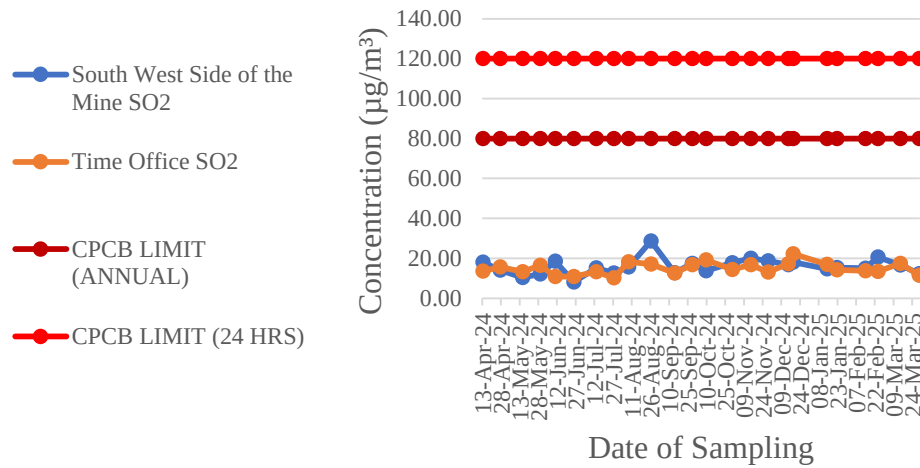
Graph Showing PM10 for Hingula OCP



Graph Showing PM2.5 for Hingula OCP



Graph Showing SO₂ for Hingula OCP



Graph Showing NO_x for Hingula OCP

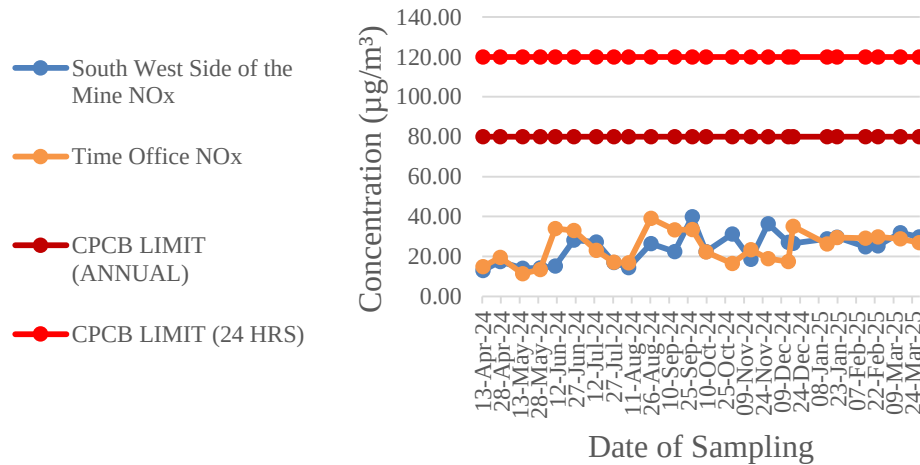


Table: 8.5.34

Area: Hingula**Project:** Hingula OCP**Monitoring Station:** Banabaspur VillageAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	194	92	40	11.63	11.60
04-Apr-24	208	87	41	12.92	17.06
10-Apr-24	174	70	27	17.44	18.01
11-Apr-24	192	86	38	18.66	16.95
18-Apr-24	175	88	43	10.11	16.06
19-Apr-24	188	93	46	11.80	19.11
24-Apr-24	166	86	37	17.23	10.17
25-Apr-24	218	91	47	16.00	12.50
02-May-24	153	92	36	10.37	15.09
03-May-24	257	68	49	13.67	16.04
09-May-24	215	92	45	13.28	9.42
10-May-24	206	78	41	16.54	13.33
16-May-24	189	91	31	11.71	18.25
17-May-24	211	96	41	16.12	14.44
22-May-24	188	82	31	8.48	16.10
23-May-24	180	90	33	11.57	11.11
30-May-24	219	86	29	10.02	10.35
31-May-24	235	78	31	11.88	16.10
05-Jun-24	123	73	45	9.27	11.00
06-Jun-24	145	82	51	15.38	29.18
13-Jun-24	147	85	56	13.91	19.24
14-Jun-24	178	89	48	12.30	29.18
21-Jun-24	190	79	38	20.29	35.47
22-Jun-24	196	74	36	13.84	17.48
28-Jun-24	176	89	44	11.38	27.42
29-Jun-24	179	85	40	20.19	26.09
03-Jul-24	191	81	42	15.04	30.20
04-Jul-24	200	88	46	13.21	18.50
10-Jul-24	164	68	33	14.02	33.74
11-Jul-24	178	75	38	17.09	33.74
18-Jul-24	161	75	36	17.47	18.82
19-Jul-24	172	82	39	12.54	28.23
24-Jul-24	206	86	42	13.94	19.87
25-Jul-24	177	88	45	11.09	36.74
01-Aug-24	195	90	47	19.29	19.84
02-Aug-24	170	84	33	16.06	16.02
09-Aug-24	171	78	35	16.40	14.00
10-Aug-24	166	71	27	19.29	17.80
16-Aug-24	163	94	45	15.32	20.08
17-Aug-24	139	84	37	12.53	17.92
21-Aug-24	173	88	41	15.83	19.15
22-Aug-24	217	86	39	15.24	36.60
30-Aug-24	169	89	43	15.44	19.11

31-Aug-24	182	92	46	21.60	27.72
04-Sep-24	182	90	45	17.44	22.19
05-Sep-24	173	95	52	14.42	23.17
11-Sep-24	150	83	42	11.71	23.59
12-Sep-24	167	72	35	17.86	32.80
18-Sep-24	137	67	30	16.48	14.66
19-Sep-24	170	76	38	17.96	16.51
25-Sep-24	145	85	48	14.56	11.12
26-Sep-24	165	77	45	17.52	32.15
07-Oct-24	175	73	34	18.59	36.73
08-Oct-24	198	82	44	16.42	23.79
16-Oct-24	192	84	43	13.33	31.22
17-Oct-24	187	81	42	12.19	35.48
21-Oct-24	189	80	40	19.16	33.56
22-Oct-24	181	76	38	21.07	36.69
25-Oct-24	198	86	44	10.49	28.99
26-Oct-24	208	89	48	11.97	25.76
04-Nov-24	204	81	45	14.01	18.55
05-Nov-24	210	84	46	13.35	11.65
11-Nov-24	196	82	44	11.12	37.64
12-Nov-24	201	88	47	11.59	35.66
18-Nov-24	186	82	40	21.69	25.99
19-Nov-24	174	76	38	23.27	28.23
25-Nov-24	192	88	45	20.55	22.07
26-Nov-24	205	90	48	18.35	14.34
02-Dec-24	182	89	44	14.19	17.33
03-Dec-24	169	84	46	18.08	28.36
09-Dec-24	176	86	42	16.38	19.71
10-Dec-24	183	84	41	14.83	15.33
16-Dec-24	198	78	42	22.31	29.75
17-Dec-24	217	83	45	24.50	25.55
23-Dec-24	191	92	51	17.64	32.85
24-Dec-24	193	87	49	18.13	29.80
30-Dec-24	216	83	45	16.17	19.59
31-Dec-24	198	93	52	14.28	26.28
03-Jan-25	193	79	44	14.98	29.42
04-Jan-25	210	85	48	17.39	31.01
10-Jan-25	225	91	50	14.98	30.22
11-Jan-25	234	95	53	13.04	34.19
20-Jan-25	214	86	48	18.25	37.99
21-Jan-25	229	90	50	15.76	35.99
27-Jan-25	201	79	44	16.10	37.11
28-Jan-25	211	83	47	13.04	22.27
05-Feb-25	185	77	43	16.19	25.87
06-Feb-25	200	83	47	14.12	21.67
12-Feb-25	231	94	53	13.66	20.87
13-Feb-25	185	76	40	15.69	31.22
20-Feb-25	195	74	41	19.73	37.46
21-Feb-25	210	86	49	15.69	38.35
27-Feb-25	202	73	39	16.39	26.49
28-Feb-25	178	67	36	17.30	35.32
05-Mar-25	186	73	39	17.01	26.63
06-Mar-25	205	88	47	19.93	31.96
12-Mar-25	178	73	37	16.53	31.07

13-Mar-25	185	86	40	15.31	27.96
19-Mar-25	172	68	36	17.94	31.96
20-Mar-25	188	75	39	16.62	27.96
26-Mar-25	203	80	43	17.06	24.77
27-Mar-25	160	65	32	16.53	20.42
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	257	96	56	24.50	38.35
Minimum	123	65	27	8.48	9.42
Average	188.08	82.87	41.97	15.57	24.22
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.35

Area: Hingula**Project:** Hingula OCP**Monitoring Station:** North East of the Mine, Solda VillageAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	198	72	43	16.80	14.95
04-Apr-24	169	89	31	12.92	13.56
10-Apr-24	206	85	38	14.21	11.29
11-Apr-24	154	70	25	14.09	14.84
18-Apr-24	181	91	47	16.61	17.44
19-Apr-24	174	84	40	11.75	14.57
24-Apr-24	166	85	36	12.92	15.54
25-Apr-24	183	87	42	16.44	14.98
02-May-24	191	85	39	11.88	13.60
03-May-24	175	58	37	17.44	14.81
09-May-24	224	73	41	11.88	17.21
10-May-24	228	87	44	16.54	14.44
16-May-24	191	92	38	10.80	13.12
17-May-24	228	94	29	19.51	13.33
22-May-24	181	82	31	10.41	15.90
23-May-24	219	89	39	13.88	13.12
30-May-24	173	74	28	13.49	11.11
31-May-24	180	82	34	9.22	14.00
05-Jun-24	157	92	48	13.91	33.90
06-Jun-24	173	88	53	9.32	35.78
13-Jun-24	168	84	48	12.36	27.49
14-Jun-24	171	80	40	15.45	31.15
21-Jun-24	208	90	38	14.05	27.76
22-Jun-24	166	80	45	15.38	9.88
28-Jun-24	197	93	40	14.17	17.50
29-Jun-24	202	91	49	20.09	32.07
03-Jul-24	215	93	46	17.17	24.66
04-Jul-24	187	75	37	16.65	34.51
10-Jul-24	180	84	41	15.41	28.51
11-Jul-24	197	96	48	17.26	20.91
18-Jul-24	134	65	27	11.00	32.51
19-Jul-24	199	78	37	12.73	21.79
24-Jul-24	186	73	34	10.75	33.88
25-Jul-24	172	69	32	12.99	31.05
01-Aug-24	205	92	46	16.45	22.39
02-Aug-24	195	86	39	19.29	17.80
09-Aug-24	196	94	42	13.89	21.27
10-Aug-24	212	79	38	16.91	14.93
16-Aug-24	155	72	30	15.60	37.20
17-Aug-24	168	78	37	17.66	21.37
21-Aug-24	196	85	41	15.46	14.80
22-Aug-24	134	77	34	17.43	26.77
30-Aug-24	163	88	44	16.42	14.50

31-Aug-24	176	84	40	17.80	36.79
04-Sep-24	148	72	34	13.57	38.35
05-Sep-24	159	79	42	11.31	39.57
11-Sep-24	155	92	47	14.27	31.96
12-Sep-24	168	82	43	14.38	26.40
18-Sep-24	162	77	38	11.29	17.17
19-Sep-24	164	74	35	14.65	35.47
25-Sep-24	151	81	42	13.40	31.33
26-Sep-24	181	78	39	15.51	31.72
07-Oct-24	184	84	40	18.15	32.04
08-Oct-24	168	68	31	13.93	19.16
16-Oct-24	160	80	37	13.68	21.56
17-Oct-24	195	88	46	14.58	13.57
21-Oct-24	176	72	37	9.58	28.38
22-Oct-24	198	82	44	15.80	28.10
25-Oct-24	195	85	43	15.80	13.27
26-Oct-24	191	84	42	10.06	18.73
04-Nov-24	195	77	40	10.51	16.13
05-Nov-24	185	75	38	15.81	37.36
11-Nov-24	198	84	42	12.01	28.23
12-Nov-24	210	86	45	15.81	31.41
18-Nov-24	174	72	36	23.36	34.05
19-Nov-24	185	75	40	19.76	16.13
25-Nov-24	196	83	44	23.27	20.97
26-Nov-24	208	86	47	17.27	36.30
02-Dec-24	196	82	43	12.27	12.66
03-Dec-24	201	87	46	15.72	19.33
09-Dec-24	194	81	42	18.48	27.01
10-Dec-24	186	82	41	21.42	24.82
16-Dec-24	175	80	46	15.54	20.44
17-Dec-24	210	83	47	12.83	27.17
23-Dec-24	180	81	46	11.22	18.12
24-Dec-24	194	86	46	17.12	13.52
30-Dec-24	204	88	47	20.23	29.75
31-Dec-24	178	92	47	16.84	14.63
03-Jan-25	207	86	48	11.19	30.13
04-Jan-25	203	83	46	13.02	24.20
10-Jan-25	235	92	53	12.08	29.42
11-Jan-25	226	88	50	13.04	27.04
20-Jan-25	222	87	49	16.91	31.01
21-Jan-25	196	82	44	12.42	21.02
27-Jan-25	190	79	43	13.73	25.11
28-Jan-25	209	84	47	12.56	31.81
05-Feb-25	188	76	40	15.48	32.11
06-Feb-25	223	87	49	11.84	32.91
12-Feb-25	211	83	47	18.69	24.50
13-Feb-25	195	79	43	14.67	36.57
20-Feb-25	192	85	44	18.21	35.32
21-Feb-25	198	81	45	15.03	28.10
27-Feb-25	215	89	48	13.21	31.31
28-Feb-25	182	74	39	12.58	28.29
05-Mar-25	183	76	42	18.42	32.80
06-Mar-25	189	79	43	14.44	19.97
12-Mar-25	205	85	46	17.50	37.28

13-Mar-25	174	74	37	12.64	26.63
19-Mar-25	203	83	40	14.74	35.32
20-Mar-25	186	75	38	12.43	21.02
26-Mar-25	163	66	33	10.94	23.17
27-Mar-25	177	72	35	19.80	30.28
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	235	96	53	23.36	39.57
Minimum	134	58	25	9.22	9.88
Average	187.54	81.84	41.06	14.82	24.31
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.36

Area: Hingula**Project:** Hingula OCP**Monitoring Station:** North of the Mine, Purnapani, Kumunda VillageAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	175	112	30	11.16	10.27
04-Apr-24	178	85	33	13.51	12.35
10-Apr-24	187	95	36	15.27	13.32
11-Apr-24	205	92	34	12.92	9.42
18-Apr-24	198	92	45	11.23	15.29
19-Apr-24	196	95	44	12.45	14.85
24-Apr-24	192	84	40	15.73	16.72
25-Apr-24	195	88	39	11.24	15.13
02-May-24	182	80	37	15.69	13.05
03-May-24	226	91	46	11.03	14.72
09-May-24	240	66	52	17.39	11.66
10-May-24	214	80	44	15.27	12.22
16-May-24	215	91	36	15.69	15.27
17-May-24	222	85	49	10.71	18.12
22-May-24	171	85	33	15.27	13.05
23-May-24	153	72	41	10.80	14.13
30-May-24	205	96	44	12.25	20.98
31-May-24	205	79	54	16.60	15.45
05-Jun-24	139	82	45	20.19	14.73
06-Jun-24	190	95	49	9.34	11.08
13-Jun-24	150	88	43	19.99	9.12
14-Jun-24	174	82	45	12.42	34.99
21-Jun-24	188	91	43	21.63	24.44
22-Jun-24	156	79	37	23.29	39.90
28-Jun-24	171	90	46	18.50	9.14
29-Jun-24	169	89	41	10.87	16.88
03-Jul-24	186	87	41	14.90	24.54
04-Jul-24	165	68	33	15.85	18.50
10-Jul-24	175	74	37	13.27	19.36
11-Jul-24	209	91	43	14.97	23.89
18-Jul-24	172	84	40	11.69	31.09
19-Jul-24	186	92	49	12.99	21.64
24-Jul-24	167	76	38	12.45	25.09
25-Jul-24	176	73	37	13.44	16.73
01-Aug-24	208	87	38	19.19	13.27
02-Aug-24	210	92	40	19.77	21.59
09-Aug-24	229	95	47	16.06	17.86
10-Aug-24	214	84	41	17.36	17.59
16-Aug-24	128	68	31	18.38	10.58
17-Aug-24	176	72	34	18.95	33.54
21-Aug-24	144	76	39	15.38	25.59
22-Aug-24	159	73	36	15.77	23.48

30-Aug-24	148	79	40	18.95	36.31
31-Aug-24	160	82	41	19.57	16.91
04-Sep-24	170	92	47	15.75	34.24
05-Sep-24	157	81	33	14.94	31.20
11-Sep-24	161	94	36	12.54	15.28
12-Sep-24	146	78	42	16.16	22.07
18-Sep-24	139	82	44	13.97	32.71
19-Sep-24	171	70	35	15.24	20.51
25-Sep-24	153	76	38	16.58	20.08
26-Sep-24	183	72	36	16.22	27.77
07-Oct-24	185	81	42	22.35	25.27
08-Oct-24	178	78	37	20.67	23.83
16-Oct-24	150	70	30	11.40	20.81
17-Oct-24	192	91	47	12.77	20.81
21-Oct-24	220	94	52	13.74	10.86
22-Oct-24	203	86	45	21.55	26.54
25-Oct-24	212	92	50	10.41	14.93
26-Oct-24	218	94	51	15.80	21.07
04-Nov-24	208	84	46	18.97	16.13
05-Nov-24	212	87	48	16.02	11.29
11-Nov-24	215	91	49	14.01	15.32
12-Nov-24	222	93	51	16.68	19.72
18-Nov-24	193	77	41	23.36	36.74
19-Nov-24	178	75	37	22.52	28.23
25-Nov-24	205	82	44	22.13	18.68
26-Nov-24	214	93	50	19.76	22.07
02-Dec-24	196	91	51	16.49	32.66
03-Dec-24	184	89	48	16.75	29.89
09-Dec-24	186	88	49	14.99	20.69
10-Dec-24	182	84	46	14.03	27.87
16-Dec-24	197	77	44	13.46	20.98
17-Dec-24	200	82	47	14.57	25.99
23-Dec-24	178	87	55	15.12	25.55
24-Dec-24	214	85	53	17.12	14.43
30-Dec-24	185	82	48	16.38	16.79
31-Dec-24	179	88	56	15.19	35.77
03-Jan-25	196	84	45	10.63	35.78
04-Jan-25	227	89	50	11.59	32.60
10-Jan-25	208	82	46	11.81	29.16
11-Jan-25	236	91	52	9.66	35.16
20-Jan-25	226	92	50	16.43	23.86
21-Jan-25	213	85	48	13.73	32.64
27-Jan-25	196	78	44	13.22	30.13
28-Jan-25	205	82	46	15.94	24.65
05-Feb-25	213	83	47	16.05	30.58
06-Feb-25	192	74	40	13.44	32.11
12-Feb-25	197	76	42	19.23	36.57
13-Feb-25	183	70	39	16.39	21.67
20-Feb-25	188	75	42	17.26	31.26
21-Feb-25	212	84	46	14.38	35.49
27-Feb-25	185	74	40	17.74	26.19
28-Feb-25	178	69	38	18.67	25.69
05-Mar-25	183	75	40	14.44	23.97
06-Mar-25	202	78	43	19.25	23.97

12-Mar-25	177	71	38	11.37	30.36
13-Mar-25	170	68	35	12.25	23.97
19-Mar-25	205	80	44	19.44	23.08
20-Mar-25	198	78	42	18.88	27.75
26-Mar-25	168	67	35	13.12	26.63
27-Mar-25	195	78	40	17.50	25.57
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	240	112	56	23.36	39.90
Minimum	128	66	30	9.34	9.12
Average	188.70	83.00	42.66	15.58	22.45
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.37

Area: Hingula**Project:** Hingula OCP**Monitoring Station:** Sanamahitala VillageAll values are in $\mu\text{g}/\text{m}^3$

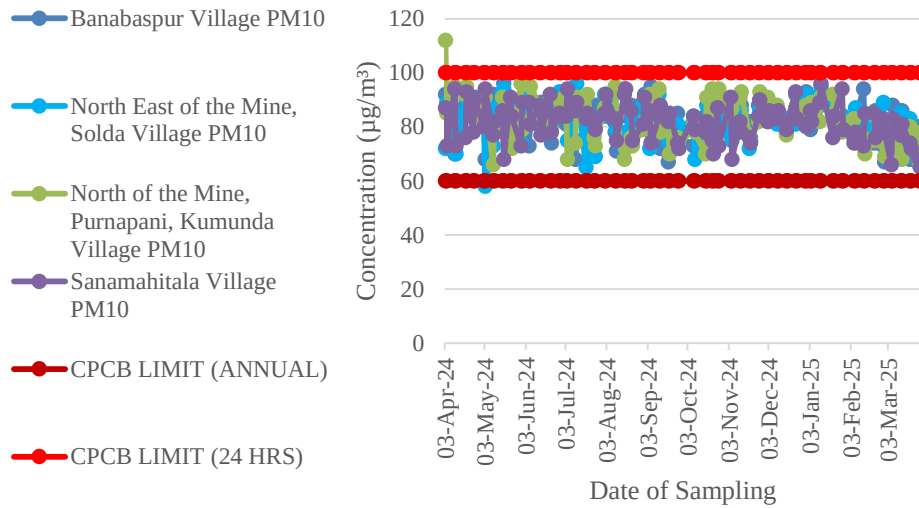
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	216	87	45	16.51	16.62
04-Apr-24	192	73	31	15.17	11.28
10-Apr-24	198	94	40	14.21	15.11
11-Apr-24	166	73	28	10.57	10.96
18-Apr-24	156	76	30	11.69	16.42
19-Apr-24	168	93	34	16.51	21.02
24-Apr-24	173	78	41	14.61	14.06
25-Apr-24	195	90	42	12.30	12.21
02-May-24	178	80	39	13.11	13.12
03-May-24	214	94	46	16.12	17.21
09-May-24	232	77	43	14.42	13.60
10-May-24	186	82	36	12.30	16.10
16-May-24	194	86	46	8.48	13.04
17-May-24	159	68	52	12.54	14.00
22-May-24	163	91	39	11.88	13.88
23-May-24	189	84	42	16.12	16.66
30-May-24	207	73	50	11.03	15.55
31-May-24	187	89	36	10.18	12.22
05-Jun-24	159	89	41	12.42	24.86
06-Jun-24	162	81	35	12.30	16.41
13-Jun-24	165	88	44	18.45	27.35
14-Jun-24	161	77	34	17.00	13.74
21-Jun-24	187	92	48	13.91	11.45
22-Jun-24	176	78	39	9.32	16.11
28-Jun-24	170	85	35	17.00	30.10
29-Jun-24	162	84	31	13.98	15.35
03-Jul-24	190	84	42	13.21	21.58
04-Jul-24	203	94	49	15.49	28.66
10-Jul-24	190	86	42	13.27	33.30
11-Jul-24	181	89	45	14.90	21.47
18-Jul-24	165	83	41	13.89	44.23
19-Jul-24	176	85	44	12.37	43.91
24-Jul-24	180	82	41	11.32	43.58
25-Jul-24	177	79	37	12.10	19.76
01-Aug-24	181	85	34	16.88	23.34
02-Aug-24	205	92	40	17.82	22.94
09-Aug-24	199	83	36	21.22	21.88
10-Aug-24	169	75	32	17.82	15.76
16-Aug-24	181	92	43	14.83	34.00
17-Aug-24	189	94	48	20.11	33.96
21-Aug-24	262	86	42	16.15	16.97
22-Aug-24	205	75	31	22.87	13.02
30-Aug-24	172	81	44	18.55	19.24

31-Aug-24	188	91	48	13.59	20.41
04-Sep-24	180	86	39	18.66	35.95
05-Sep-24	179	74	36	17.91	39.06
11-Sep-24	151	84	45	15.04	37.04
12-Sep-24	172	88	49	13.65	20.84
18-Sep-24	214	82	40	22.56	25.75
19-Sep-24	169	85	42	13.89	17.19
25-Sep-24	141	74	37	10.71	19.46
26-Sep-24	127	72	33	9.56	38.89
07-Oct-24	186	84	38	12.91	29.19
08-Oct-24	175	79	36	14.37	26.02
16-Oct-24	159	78	36	11.76	19.87
17-Oct-24	186	82	40	14.80	26.25
21-Oct-24	182	75	38	15.80	15.61
22-Oct-24	165	70	31	17.79	17.84
25-Oct-24	204	87	45	16.54	18.45
26-Oct-24	174	73	35	21.55	26.54
04-Nov-24	219	91	54	16.13	29.57
05-Nov-24	178	68	36	12.64	19.53
11-Nov-24	204	82	46	16.68	20.61
12-Nov-24	195	78	43	18.52	20.97
18-Nov-24	186	76	40	28.36	19.72
19-Nov-24	178	74	37	25.03	15.23
25-Nov-24	212	84	46	21.69	19.72
26-Nov-24	215	90	49	21.02	20.16
02-Dec-24	196	82	44	15.96	23.36
03-Dec-24	204	86	46	14.55	32.96
09-Dec-24	201	83	42	11.62	20.90
10-Dec-24	192	86	43	13.63	13.24
16-Dec-24	176	79	42	11.34	33.58
17-Dec-24	183	82	44	17.64	32.36
23-Dec-24	204	93	52	14.57	21.33
24-Dec-24	188	83	47	13.80	12.66
30-Dec-24	190	81	45	15.32	18.56
31-Dec-24	185	80	44	10.74	16.66
03-Jan-25	207	86	48	12.88	29.54
04-Jan-25	204	82	45	11.59	35.78
10-Jan-25	229	89	51	9.66	35.78
11-Jan-25	243	96	54	10.63	34.19
20-Jan-25	197	76	43	12.08	27.83
21-Jan-25	218	84	48	12.20	35.99
27-Jan-25	232	94	51	14.49	34.19
28-Jan-25	205	79	44	13.04	27.83
05-Feb-25	187	74	41	13.66	28.10
06-Feb-25	198	78	44	13.16	36.57
12-Feb-25	187	73	41	17.74	32.95
13-Feb-25	215	85	47	15.03	25.69
20-Feb-25	212	85	47	18.21	34.79
21-Feb-25	196	76	42	17.78	28.29
27-Feb-25	208	83	45	15.82	30.42
28-Feb-25	195	78	43	17.35	26.76
05-Mar-25	174	66	35	12.25	28.76
06-Mar-25	202	83	44	13.56	20.77
12-Mar-25	187	77	49	18.81	35.95

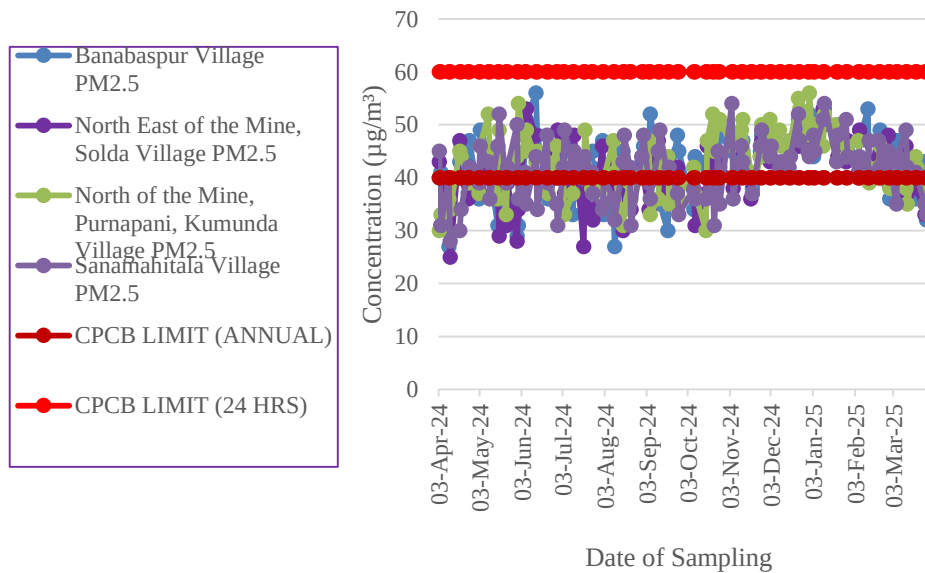
13-Mar-25	199	81	42	11.37	24.77
19-Mar-25	190	74	41	12.69	23.97
20-Mar-25	185	72	40	18.47	23.97
26-Mar-25	170	68	35	21.39	24.86
27-Mar-25	162	65	33	14.27	26.07
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	262	96	54	28.36	44.23
Minimum	127	65	28	8.48	10.96
Average	188.24	81.89	41.56	15.03	23.68
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



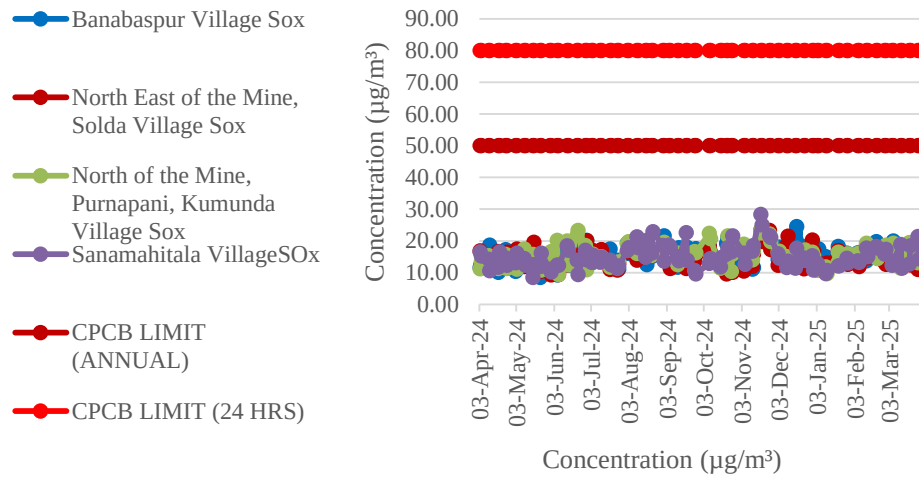
Graph Showing PM10 for Hingula OCP



Graph Showing PM2.5 for Hingula OCP



Graph Showing SO₂ for Hingula OCP



Graph Showing NO_x for Hingula OCP

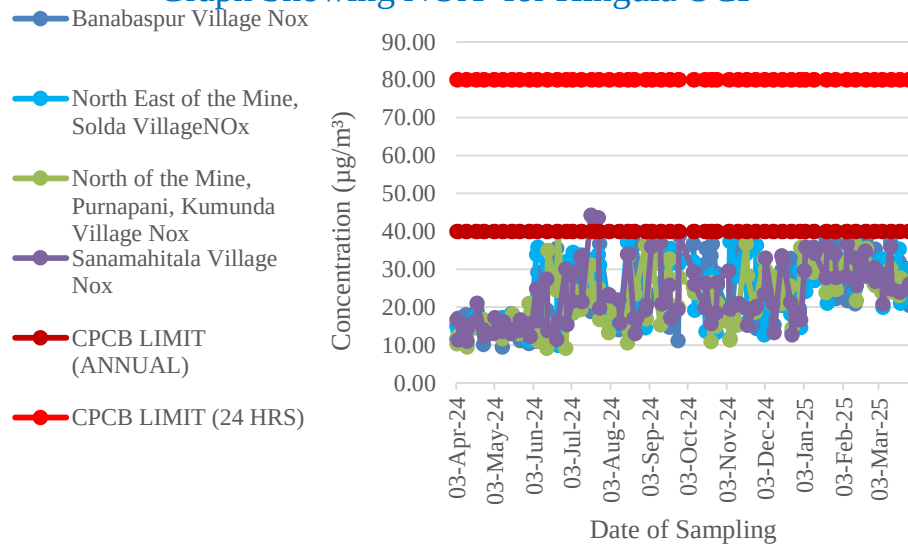


Table: 8.5.38

Area: Hingula**Project:** Balaram OCP**Monitoring Station:** Near Project OfficeAll values are in $\mu\text{g}/\text{m}^3$

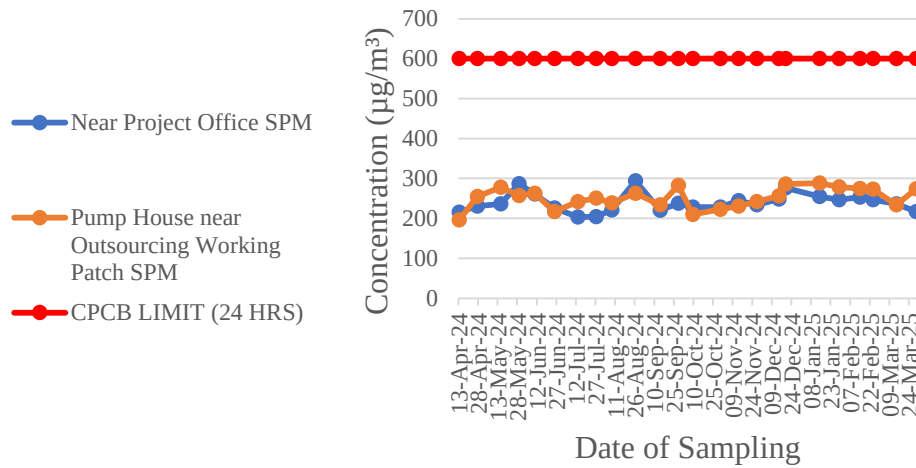
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
13-Apr-24	215	87	44	12.92	13.12
27-Apr-24	231	135	56	15.07	14.65
15-May-24	236	156	59	11.80	9.90
29-May-24	287	148	56	13.12	18.47
10-Jun-24	261	106	47	19.10	9.71
25-Jun-24	226	115	56	17.70	29.87
13-Jul-24	203	118	51	14.35	18.33
27-Jul-24	204	99	50	14.03	37.64
08-Aug-24	221	122	66	11.84	14.08
26-Aug-24	294	138	67	24.59	28.49
14-Sep-24	220	123	60	11.71	22.83
28-Sep-24	238	138	66	13.38	36.59
09-Oct-24	228	102	52	11.86	17.84
30-Oct-24	228	119	59	12.93	23.42
13-Nov-24	244	134	66	16.33	32.26
27-Nov-24	234	126	62	17.88	13.83
14-Dec-24	248	126	65	13.61	20.88
19-Dec-24	276	146	67	9.20	28.08
14-Jan-25	255	153	66	11.04	25.75
29-Jan-25	247	145	63	14.49	20.96
14-Feb-25	253	148	63	11.84	32.11
24-Feb-25	247	154	61	12.42	23.35
14-Mar-25	236	139	58	15.31	22.37
29-Mar-25	217	118	55	13.33	20.54
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	294	156	67	24.59	37.64
Minimum	203	87	44	9.20	9.71
Average	239.54	128.96	58.96	14.16	22.29
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.39

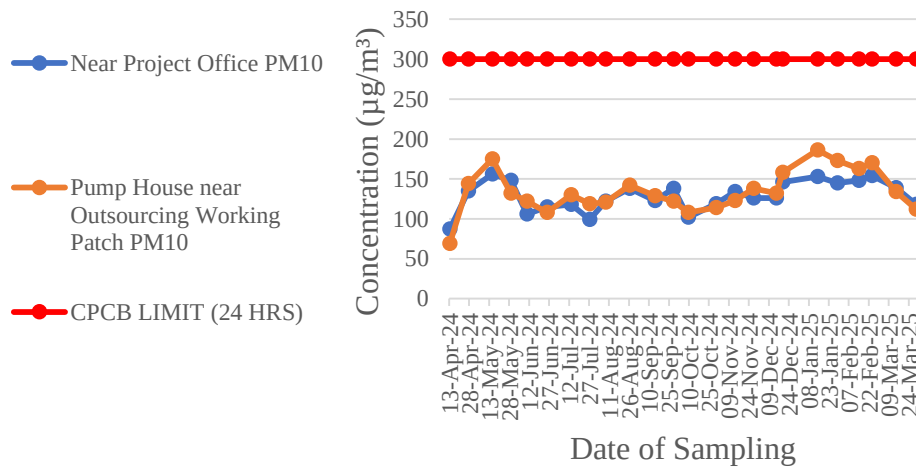
Area: Hingula**Project:** Balaram OCP**Monitoring Station:** Pump House near Outsourcing Working PatchAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
13-Apr-24	196	69	42	15.86	14.29
27-Apr-24	255	144	64	18.57	19.46
15-May-24	278	175	64	16.23	13.04
29-May-24	257	132	50	15.72	17.12
10-Jun-24	263	122	52	13.61	16.95
25-Jun-24	217	108	49	19.10	33.98
13-Jul-24	242	130	62	12.44	21.09
27-Jul-24	251	119	57	12.10	42.34
08-Aug-24	239	121	64	15.92	17.21
26-Aug-24	263	142	68	19.78	30.16
14-Sep-24	234	129	66	13.28	27.09
28-Sep-24	283	122	59	34.03	35.51
09-Oct-24	210	108	55	17.64	39.44
30-Oct-24	223	114	54	15.51	15.61
13-Nov-24	231	123	59	13.35	13.83
27-Nov-24	242	138	63	22.52	38.71
14-Dec-24	256	132	68	12.03	21.69
19-Dec-24	286	158	69	11.92	23.57
14-Jan-25	288	186	74	11.59	25.45
29-Jan-25	279	173	70	17.71	29.16
14-Feb-25	275	163	66	11.28	26.76
24-Feb-25	273	170	64	12.58	27.52
14-Mar-25	234	134	56	17.06	21.57
29-Mar-25	274	112	54	17.94	24.77
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	288	186	74	34.03	42.34
Minimum	196	69	42	11.28	13.04
Average	252.04	134.33	60.38	16.16	24.85
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

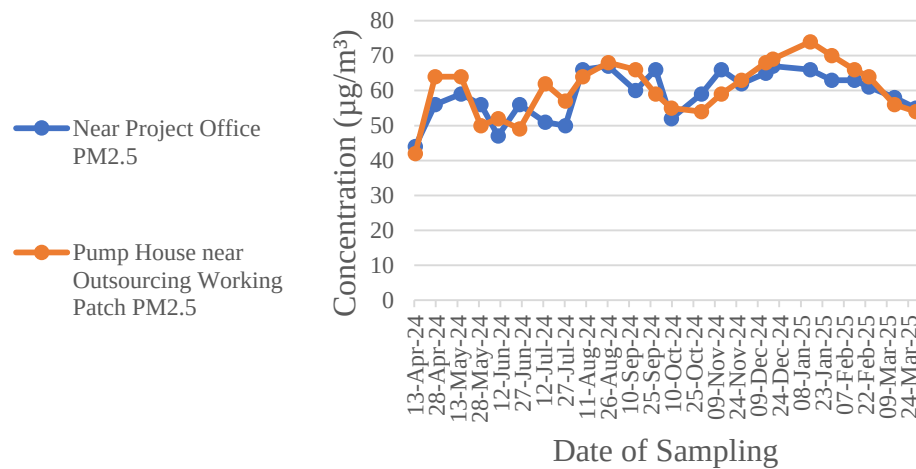
Graph Showing SPM for Balaram OCP



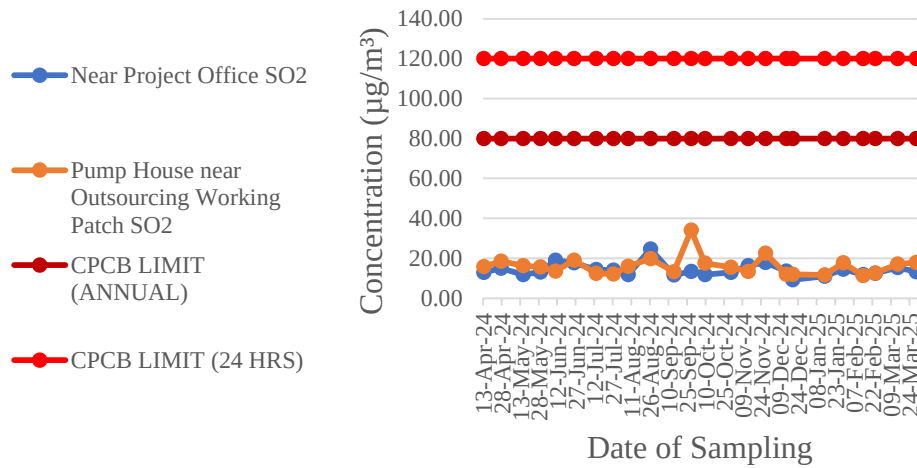
Graph Showing PM10 for Balaram OCP



Graph Showing PM2.5 for Balaram OCP



Graph Showing SO₂ for Balaram OCP



Graph Showing NO_x for Balaram OCP

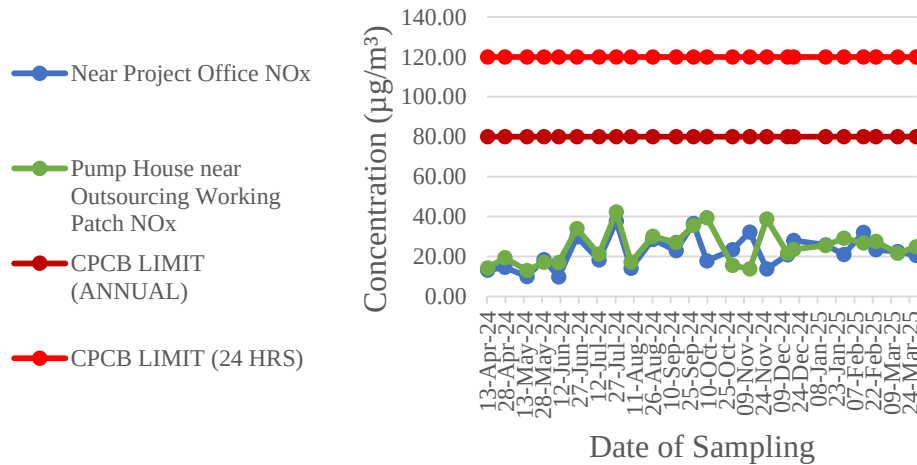


Table: 8.5.40

Area: Hingula**Project:** Balram OCP**Monitoring Station:** East of the Mine, Natedi VillageAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	178	82	33	12.92	21.02
04-Apr-24	195	87	39	13.51	16.09
10-Apr-24	215	85	42	10.57	14.01
11-Apr-24	188	66	37	14.21	12.97
18-Apr-24	215	91	46	10.57	15.12
19-Apr-24	204	89	38	21.80	22.32
24-Apr-24	186	74	34	15.61	12.21
25-Apr-24	175	84	30	16.51	17.97
02-May-24	221	90	48	14.84	15.27
03-May-24	196	81	39	15.42	11.86
09-May-24	203	75	42	12.72	14.44
10-May-24	235	95	47	14.42	18.60
16-May-24	190	92	41	14.84	16.66
17-May-24	157	70	31	8.91	20.82
22-May-24	149	80	53	19.32	13.57
23-May-24	173	83	43	10.60	14.44
30-May-24	191	71	33	11.45	16.10
31-May-24	143	75	29	9.59	11.35
05-Jun-24	160	86	38	8.50	27.72
06-Jun-24	155	94	41	13.98	16.58
13-Jun-24	154	87	38	20.09	26.57
14-Jun-24	139	74	42	8.17	25.02
21-Jun-24	180	81	45	21.79	31.46
22-Jun-24	173	85	39	29.36	23.67
28-Jun-24	156	76	33	9.92	20.30
29-Jun-24	175	82	37	18.33	30.66
03-Jul-24	200	88	46	18.58	28.66
04-Jul-24	196	95	53	15.04	20.91
10-Jul-24	194	84	42	13.21	30.06
11-Jul-24	167	78	40	15.04	18.59
18-Jul-24	171	78	39	11.65	37.64
19-Jul-24	174	84	46	13.89	30.11
24-Jul-24	183	80	44	13.44	23.52
25-Jul-24	170	78	36	12.10	41.40
01-Aug-24	173	76	32	18.33	17.08
02-Aug-24	132	64	27	18.66	17.59
09-Aug-24	165	74	33	15.71	14.50
10-Aug-24	148	68	28	14.06	12.00
16-Aug-24	181	94	53	23.26	30.70
17-Aug-24	161	84	44	15.78	16.89
21-Aug-24	143	82	38	14.16	16.89
22-Aug-24	166	82	38	12.03	32.40
30-Aug-24	155	81	43	19.28	39.48

31-Aug-24	136	68	33	14.80	28.48
04-Sep-24	158	74	36	12.30	31.16
05-Sep-24	154	78	40	15.69	22.37
11-Sep-24	157	85	46	15.81	28.33
12-Sep-24	163	82	41	15.75	22.07
18-Sep-24	180	80	44	14.26	34.66
19-Sep-24	167	76	35	12.58	23.71
25-Sep-24	177	86	43	13.20	12.43
26-Sep-24	168	70	29	16.73	28.19
07-Oct-24	180	80	38	12.49	33.26
08-Oct-24	172	75	34	20.53	21.56
16-Oct-24	168	76	35	13.74	15.61
17-Oct-24	178	84	41	14.58	17.65
21-Oct-24	200	85	43	14.62	13.97
22-Oct-24	216	88	49	12.91	23.08
25-Oct-24	188	81	43	19.61	34.19
26-Oct-24	172	74	33	12.24	22.55
04-Nov-24	181	85	46	12.23	22.40
05-Nov-24	195	80	44	17.80	11.65
11-Nov-24	202	87	48	15.52	31.46
12-Nov-24	190	77	42	14.22	28.02
18-Nov-24	196	83	45	16.60	36.51
19-Nov-24	187	78	41	22.13	30.56
25-Nov-24	204	89	47	26.69	28.68
26-Nov-24	210	92	50	21.02	22.58
02-Dec-24	194	78	42	15.04	21.29
03-Dec-24	206	83	45	17.09	32.53
09-Dec-24	212	86	48	15.85	39.30
10-Dec-24	218	91	50	14.02	28.36
16-Dec-24	187	77	44	14.54	21.56
17-Dec-24	193	80	46	8.75	5.76
23-Dec-24	203	85	51	10.19	27.95
24-Dec-24	192	82	48	12.02	14.58
30-Dec-24	189	81	47	9.08	31.13
31-Dec-24	214	87	50	14.19	36.18
03-Jan-25	205	83	46	15.18	25.75
04-Jan-25	230	90	52	17.87	25.63
10-Jan-25	242	93	54	15.94	32.60
11-Jan-25	223	88	50	16.64	29.16
20-Jan-25	228	88	51	16.27	31.81
21-Jan-25	212	84	48	12.35	36.23
27-Jan-25	196	79	44	16.43	23.86
28-Jan-25	223	86	49	17.80	29.30
05-Feb-25	205	82	46	18.72	37.46
06-Feb-25	214	86	48	15.69	33.89
12-Feb-25	186	77	43	17.76	34.52
13-Feb-25	187	74	40	15.18	35.68
20-Feb-25	184	71	38	18.67	27.29
21-Feb-25	206	84	46	19.13	33.71
27-Feb-25	195	78	42	14.67	36.57
28-Feb-25	211	87	48	14.12	34.52
05-Mar-25	186	74	40	16.53	33.73
06-Mar-25	197	81	44	14.87	25.57
12-Mar-25	186	76	41	13.61	24.86

13-Mar-25	202	84	45	18.96	27.52
19-Mar-25	185	72	40	12.15	29.29
20-Mar-25	193	76	41	12.64	31.07
26-Mar-25	184	73	38	19.69	19.97
27-Mar-25	203	80	43	15.20	26.07
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	242	95	54	29.36	41.40
Minimum	132	64	27	8.17	5.76
Average	186.03	81.31	41.90	15.27	24.76
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.41

Area: Hingula**Project:** Balram OCP**Monitoring Station:** Natada VillageAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	172	83	29	15.50	11.29
04-Apr-24	156	74	26	14.36	16.28
10-Apr-24	189	78	35	11.63	13.43
11-Apr-24	154	77	22	16.51	17.46
18-Apr-24	186	84	40	14.96	16.38
19-Apr-24	162	92	32	15.64	19.76
24-Apr-24	174	89	37	16.61	15.84
25-Apr-24	215	94	43	12.92	12.10
02-May-24	210	88	46	14.00	10.55
03-May-24	174	82	38	15.04	13.12
09-May-24	159	79	34	18.85	20.98
10-May-24	180	90	44	13.57	12.49
16-May-24	158	82	33	13.88	16.41
17-May-24	149	83	35	11.18	17.16
22-May-24	185	71	51	12.30	16.38
23-May-24	189	75	32	9.75	15.83
30-May-24	159	96	27	13.66	12.22
31-May-24	133	87	32	13.88	14.89
05-Jun-24	158	95	54	9.27	17.41
06-Jun-24	149	79	44	12.30	35.56
13-Jun-24	172	90	39	13.98	11.05
14-Jun-24	161	93	42	10.82	17.41
21-Jun-24	167	94	48	15.38	9.88
22-Jun-24	172	92	43	12.42	17.65
28-Jun-24	186	89	38	16.92	9.76
29-Jun-24	173	90	46	20.19	19.18
03-Jul-24	144	75	38	16.65	19.17
04-Jul-24	188	84	42	14.02	23.77
10-Jul-24	192	78	39	15.34	24.54
11-Jul-24	187	90	47	17.09	34.51
18-Jul-24	180	85	43	12.54	22.58
19-Jul-24	177	87	45	11.09	34.95
24-Jul-24	188	92	49	13.89	22.58
25-Jul-24	181	78	42	10.75	18.82
01-Aug-24	189	92	45	14.47	22.47
02-Aug-24	223	84	35	14.62	21.28
08-Aug-24	175	76	34	17.80	21.79
09-Aug-24	157	72	31	16.93	19.43
16-Aug-24	174	90	45	14.77	15.44
17-Aug-24	171	78	37	14.09	20.46
21-Aug-24	170	82	42	15.53	11.87
22-Aug-24	190	85	43	15.69	35.81
30-Aug-24	180	92	47	19.64	33.81

31-Aug-24	178	86	43	18.87	13.70
04-Sep-24	131	67	34	15.69	19.17
05-Sep-24	145	72	36	12.93	15.98
11-Sep-24	143	78	39	15.12	21.54
12-Sep-24	147	70	32	16.96	28.33
18-Sep-24	177	93	51	16.12	16.29
19-Sep-24	180	89	50	12.32	22.39
25-Sep-24	160	74	36	15.29	31.13
26-Sep-24	187	83	41	16.12	31.23
07-Oct-24	214	92	46	13.61	30.40
08-Oct-24	183	84	40	15.96	19.33
16-Oct-24	163	78	37	12.77	22.30
17-Oct-24	166	66	32	12.60	22.18
21-Oct-24	188	82	41	12.91	23.08
22-Oct-24	184	78	39	13.33	15.61
25-Oct-24	196	83	40	13.41	26.54
26-Oct-24	204	88	46	10.06	18.73
04-Nov-24	182	73	38	16.02	26.62
05-Nov-24	193	77	42	12.51	36.30
11-Nov-24	198	81	44	21.07	21.23
12-Nov-24	209	84	46	11.01	26.62
18-Nov-24	193	78	42	15.81	22.92
19-Nov-24	186	75	40	18.77	17.74
25-Nov-24	195	81	43	23.36	32.26
26-Nov-24	205	85	47	19.76	24.62
02-Dec-24	188	77	40	15.85	25.63
03-Dec-24	196	81	43	16.81	33.30
09-Dec-24	203	84	45	17.09	28.66
10-Dec-24	215	88	46	16.07	36.22
16-Dec-24	178	76	43	11.55	25.32
17-Dec-24	186	80	46	9.55	12.38
23-Dec-24	206	85	52	12.40	15.99
24-Dec-24	201	83	51	12.41	32.41
30-Dec-24	212	89	51	9.60	30.84
31-Dec-24	218	93	50	14.35	17.02
03-Jan-25	198	80	44	15.94	33.40
04-Jan-25	206	83	48	15.26	26.79
10-Jan-25	231	94	53	13.04	31.01
11-Jan-25	224	91	50	17.71	37.99
20-Jan-25	217	88	49	19.32	30.04
21-Jan-25	207	85	48	12.35	35.34
27-Jan-25	204	87	46	16.91	28.63
28-Jan-25	185	83	42	13.80	25.75
05-Feb-25	224	91	50	12.94	27.04
06-Feb-25	212	86	48	15.82	31.26
12-Feb-25	228	95	52	13.16	34.79
13-Feb-25	210	87	48	19.23	29.43
20-Feb-25	208	83	46	17.20	33.89
21-Feb-25	185	73	40	19.73	39.24
27-Feb-25	180	70	39	13.21	26.49
28-Feb-25	195	78	43	13.66	28.90
05-Mar-25	199	79	43	14.27	33.64
06-Mar-25	177	74	38	15.75	23.97
12-Mar-25	184	82	40	15.66	31.96

13-Mar-25	196	86	44	17.98	35.51
19-Mar-25	190	76	39	17.04	23.55
20-Mar-25	173	70	35	18.88	20.18
26-Mar-25	193	77	40	14.10	26.63
27-Mar-25	173	69	36	19.44	23.08
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	231	96	54	23.36	39.24
Minimum	131	66	22	9.27	9.76
Average	184.48	82.80	41.64	14.91	23.30
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.42

Area: Hingula**Project:** Balram OCP**Monitoring Station:** North West of the Mine, Solda Village
(Reported Only)All values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	198	72	43	16.80	14.95
04-Apr-24	169	89	31	12.92	13.56
10-Apr-24	206	85	38	14.21	11.29
11-Apr-24	154	70	25	14.09	14.84
18-Apr-24	181	91	47	16.61	17.44
19-Apr-24	174	84	40	11.75	14.57
24-Apr-24	166	85	36	12.92	15.54
25-Apr-24	183	87	42	16.44	14.98
02-May-24	191	85	39	11.88	13.60
03-May-24	175	58	37	17.44	14.81
09-May-24	224	73	41	11.88	17.21
10-May-24	228	87	44	16.54	14.44
16-May-24	191	92	38	10.80	13.12
17-May-24	228	94	29	19.51	13.33
22-May-24	181	82	31	10.41	15.90
23-May-24	219	89	39	13.88	13.12
30-May-24	173	74	28	13.49	11.11
31-May-24	180	82	34	9.22	14.00
05-Jun-24	157	92	48	13.91	33.90
06-Jun-24	173	88	53	9.32	35.78
13-Jun-24	168	84	48	12.36	27.49
14-Jun-24	171	80	40	15.45	31.15
21-Jun-24	208	90	38	14.05	27.76
22-Jun-24	166	80	45	15.38	9.88
28-Jun-24	197	93	40	14.17	17.50
29-Jun-24	202	91	49	20.09	32.07
03-Jul-24	215	93	46	17.17	24.66
04-Jul-24	187	75	37	16.65	34.51
10-Jul-24	180	84	41	15.41	28.51
11-Jul-24	197	96	48	17.26	20.91
18-Jul-24	134	65	27	11.00	32.51
19-Jul-24	199	78	37	12.73	21.79
24-Jul-24	186	73	34	10.75	33.88
25-Jul-24	172	69	32	12.99	31.05
01-Aug-24	205	92	46	16.45	22.39
02-Aug-24	195	86	39	19.29	17.80
09-Aug-24	196	94	42	13.89	21.27
10-Aug-24	212	79	38	16.91	14.93
16-Aug-24	155	72	30	15.60	37.20
17-Aug-24	168	78	37	17.66	21.37
21-Aug-24	196	85	41	15.46	14.80
22-Aug-24	134	77	34	17.43	26.77

30-Aug-24	163	88	44	16.42	14.50
31-Aug-24	176	84	40	17.80	36.79
04-Sep-24	148	72	34	13.57	38.35
05-Sep-24	159	79	42	11.31	39.57
11-Sep-24	155	92	47	14.27	31.96
12-Sep-24	168	82	43	14.38	26.40
18-Sep-24	162	77	38	11.29	17.17
19-Sep-24	164	74	35	14.65	35.47
25-Sep-24	151	81	42	13.40	31.33
26-Sep-24	181	78	39	15.51	31.72
07-Oct-24	184	84	40	18.15	32.04
08-Oct-24	168	68	31	13.93	19.16
16-Oct-24	160	80	37	13.68	21.56
17-Oct-24	195	88	46	14.58	13.57
21-Oct-24	176	72	37	9.58	28.38
22-Oct-24	198	82	44	15.80	28.10
25-Oct-24	195	85	43	15.80	13.27
26-Oct-24	191	84	42	10.06	18.73
04-Nov-24	195	77	40	10.51	16.13
05-Nov-24	185	75	38	15.81	37.36
11-Nov-24	198	84	42	12.01	28.23
12-Nov-24	210	86	45	15.81	31.41
18-Nov-24	174	72	36	23.36	34.05
19-Nov-24	185	75	40	19.76	16.13
25-Nov-24	196	83	44	23.27	20.97
26-Nov-24	208	86	47	17.27	36.30
02-Dec-24	196	82	43	12.27	12.66
03-Dec-24	201	87	46	15.72	19.33
09-Dec-24	194	81	42	18.48	27.01
10-Dec-24	186	82	41	21.42	24.82
16-Dec-24	175	80	46	15.54	20.44
17-Dec-24	210	83	47	12.83	27.17
23-Dec-24	180	81	46	11.22	18.12
24-Dec-24	194	86	46	17.12	13.52
30-Dec-24	204	88	47	20.23	29.75
31-Dec-24	178	92	47	16.84	14.63
03-Jan-25	207	86	48	11.19	30.13
04-Jan-25	203	83	46	13.02	24.20
10-Jan-25	235	92	53	12.08	29.42
11-Jan-25	226	88	50	13.04	27.04
20-Jan-25	222	87	49	16.91	31.01
21-Jan-25	196	82	44	12.42	21.02
27-Jan-25	190	79	43	13.73	25.11
28-Jan-25	209	84	47	12.56	31.81
05-Feb-25	188	76	40	15.48	32.11
06-Feb-25	223	87	49	11.84	32.91
12-Feb-25	211	83	47	18.69	24.50
13-Feb-25	195	79	43	14.67	36.57
20-Feb-25	192	85	44	18.21	35.32
21-Feb-25	198	81	45	15.03	28.10
27-Feb-25	215	89	48	13.21	31.31
28-Feb-25	182	74	39	12.58	28.29
05-Mar-25	183	76	42	18.42	32.80
06-Mar-25	189	79	43	14.44	19.97

12-Mar-25	205	85	46	17.50	37.28
13-Mar-25	174	74	37	12.64	26.63
19-Mar-25	203	83	40	14.74	35.32
20-Mar-25	186	75	38	12.43	21.02
26-Mar-25	163	66	33	10.94	23.17
27-Mar-25	177	72	35	19.80	30.28
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	235	96	53	23.36	39.57
Minimum	134	58	25	9.22	9.88
Average	187.54	81.84	41.06	14.82	24.31
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.43

Area: Hingula**Project:** Balram OCP**Monitoring Station:** Purunasahi VillageAll values are in $\mu\text{g}/\text{m}^3$

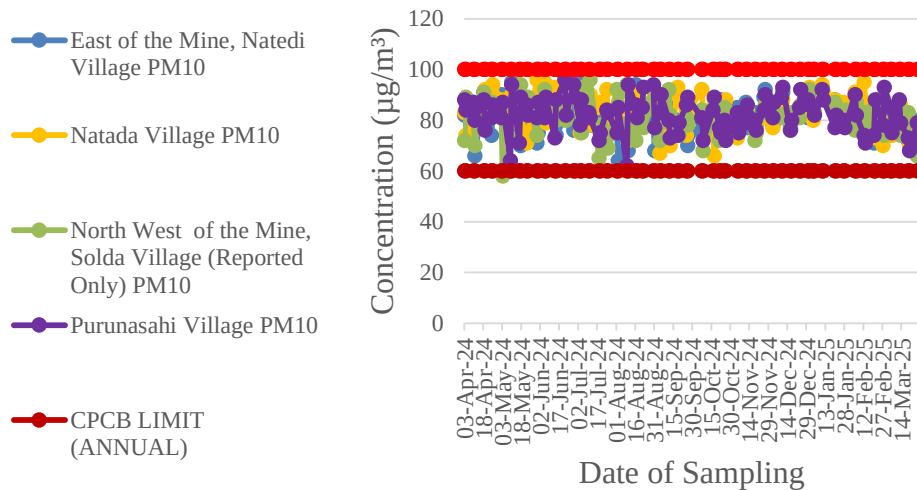
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	184	88	35	14.21	16.02
04-Apr-24	215	84	40	18.09	13.43
10-Apr-24	206	87	32	12.92	10.27
11-Apr-24	166	80	25	10.57	13.59
18-Apr-24	182	88	41	15.17	13.93
19-Apr-24	168	76	35	13.48	11.68
24-Apr-24	176	81	38	10.11	10.08
25-Apr-24	205	86	42	21.23	21.58
02-May-24	194	81	37	11.88	14.72
03-May-24	196	87	43	17.49	13.54
09-May-24	166	64	34	12.09	11.66
10-May-24	224	94	51	15.27	10.00
16-May-24	131	71	29	11.18	13.12
17-May-24	201	89	32	10.80	10.35
22-May-24	228	86	31	15.27	16.94
23-May-24	169	82	27	9.75	11.11
30-May-24	193	81	30	11.95	14.13
31-May-24	166	87	48	10.41	15.90
05-Jun-24	187	81	45	14.52	37.04
06-Jun-24	168	89	47	27.82	43.98
13-Jun-24	140	73	53	13.84	17.32
14-Jun-24	175	88	46	18.45	10.94
21-Jun-24	167	96	36	23.29	25.32
22-Jun-24	155	82	39	18.29	30.59
28-Jun-24	193	94	44	16.92	32.05
29-Jun-24	205	89	40	20.09	27.49
03-Jul-24	207	78	41	14.16	28.66
04-Jul-24	208	88	46	16.81	20.91
10-Jul-24	162	83	45	15.04	30.20
11-Jul-24	200	81	40	17.61	18.50
18-Jul-24	161	72	34	13.23	16.13
19-Jul-24	185	75	38	10.59	39.35
24-Jul-24	194	84	40	12.10	42.34
25-Jul-24	188	83	46	11.95	37.64
01-Aug-24	170	75	32	14.62	14.93
02-Aug-24	181	85	40	12.59	15.49
09-Aug-24	160	62	25	17.84	14.88
10-Aug-24	196	94	45	15.53	21.84
16-Aug-24	208	86	42	13.75	33.81
17-Aug-24	172	81	40	14.71	33.99
21-Aug-24	171	85	41	20.76	29.61
22-Aug-24	197	93	47	16.76	29.66
30-Aug-24	175	94	50	20.06	15.38

31-Aug-24	163	77	42	20.25	12.55
04-Sep-24	170	83	45	22.77	30.28
05-Sep-24	189	90	49	18.24	23.17
11-Sep-24	154	80	44	14.01	28.48
12-Sep-24	157	73	30	15.18	24.39
18-Sep-24	168	74	37	14.01	14.02
19-Sep-24	211	79	42	17.55	20.88
25-Sep-24	185	86	44	13.14	35.49
26-Sep-24	185	89	48	10.22	34.80
07-Oct-24	174	81	38	16.24	25.11
08-Oct-24	164	72	34	15.41	18.33
16-Oct-24	186	84	40	16.13	34.51
17-Oct-24	198	89	44	16.54	17.03
21-Oct-24	180	77	40	15.33	14.83
22-Oct-24	185	75	38	17.79	11.89
25-Oct-24	195	80	41	12.24	22.55
26-Oct-24	174	72	36	14.85	26.54
04-Nov-24	195	83	46	13.51	33.07
05-Nov-24	182	75	42	15.25	22.28
11-Nov-24	186	79	44	13.70	16.98
12-Nov-24	206	86	48	11.12	21.51
18-Nov-24	187	80	41	23.36	24.20
19-Nov-24	175	76	38	29.20	25.99
25-Nov-24	204	84	45	20.55	27.17
26-Nov-24	216	90	49	15.02	19.53
02-Dec-24	195	81	42	15.00	32.53
03-Dec-24	210	87	46	16.55	23.01
09-Dec-24	218	89	47	13.19	27.74
10-Dec-24	224	93	50	14.77	30.83
16-Dec-24	179	76	42	12.23	20.40
17-Dec-24	188	80	47	9.76	29.67
23-Dec-24	195	85	52	11.72	36.19
24-Dec-24	224	92	58	8.15	30.97
30-Dec-24	215	88	51	14.56	25.18
31-Dec-24	203	86	53	11.34	16.80
03-Jan-25	205	85	47	9.66	22.41
04-Jan-25	186	82	45	14.01	24.65
10-Jan-25	234	92	51	10.74	37.99
11-Jan-25	218	88	49	14.01	29.42
20-Jan-25	194	77	43	17.80	23.44
21-Jan-25	215	82	47	12.08	28.63
27-Jan-25	195	80	44	12.88	25.62
28-Jan-25	186	77	40	18.79	35.34
05-Feb-25	220	90	49	19.73	38.35
06-Feb-25	208	82	45	12.75	30.50
12-Feb-25	193	74	40	15.94	22.48
13-Feb-25	185	71	39	12.30	24.08
20-Feb-25	183	74	41	16.91	33.64
21-Feb-25	220	88	49	21.76	28.54
27-Feb-25	198	78	44	20.13	26.19
28-Feb-25	226	93	50	20.24	31.22
05-Mar-25	203	85	44	17.01	24.86
06-Mar-25	181	75	39	17.50	23.08
12-Mar-25	210	88	46	12.64	31.07

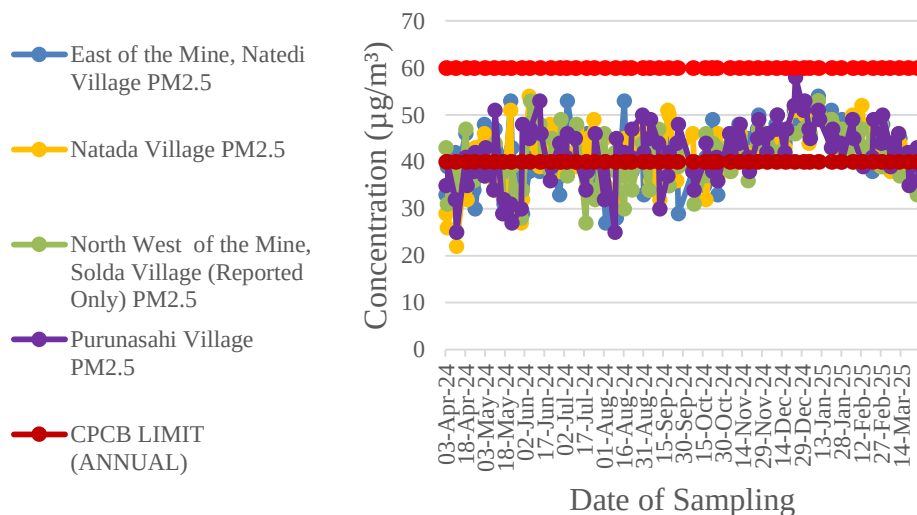
13-Mar-25	189	79	41	17.01	33.73
19-Mar-25	190	73	42	18.47	20.42
20-Mar-25	170	68	35	13.35	27.75
26-Mar-25	201	79	43	17.96	23.55
27-Mar-25	175	70	36	17.94	22.37
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	234	96	58	29.20	43.98
Minimum	131	62	25	8.15	10.00
Average	189.41	82.20	41.90	15.43	23.91
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



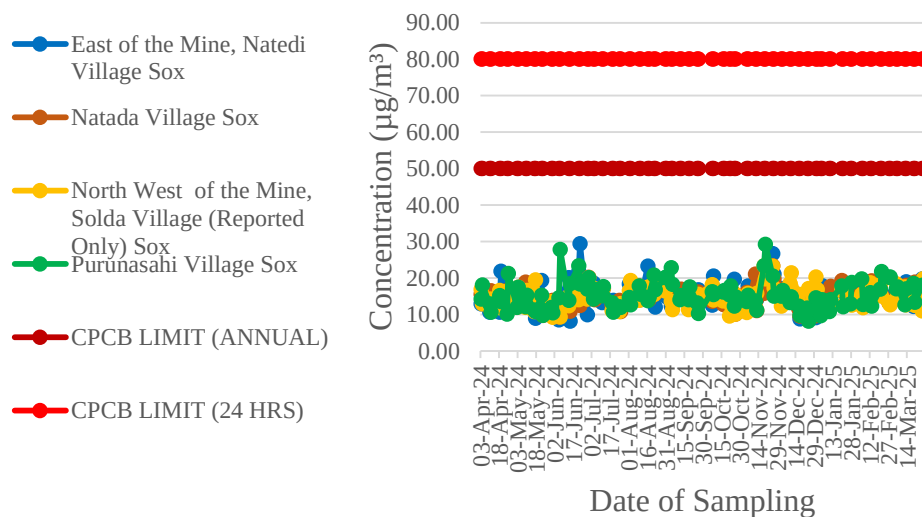
Graph Showing PM10 for Balram OCP



Graph Showing PM2.5 for Balram OCP



Graph Showing SO₂ for Balram OCP



Graph Showing NO_x for Balram OCP

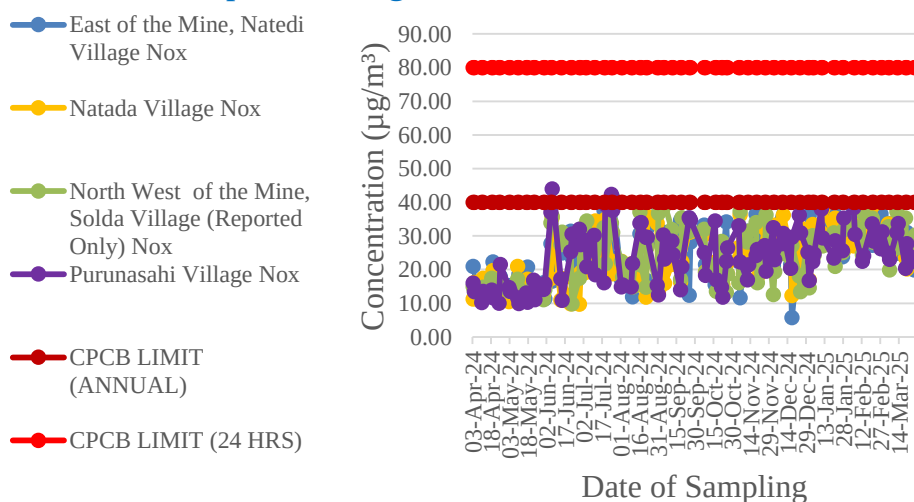


Table: 8.5.44

Area: Talcher**Project:** Talcher Colliery**Monitoring Station:** Near Canteen Talcher CollieryAll values are in $\mu\text{g}/\text{m}^3$

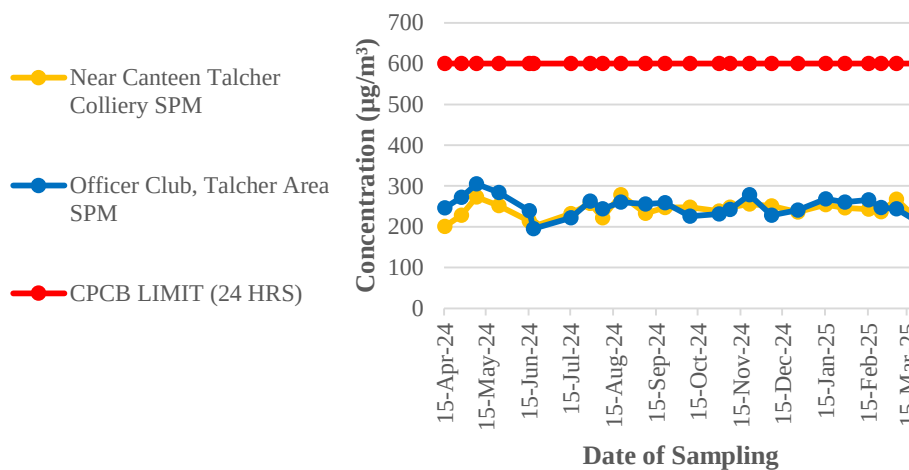
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
15-Apr-24	201	96	38	14.68	11.38
27-Apr-24	228	142	60	19.38	20.96
08-May-24	273	142	67	14.01	8.69
24-May-24	252	133	72	13.65	14.73
15-Jun-24	214	100	55	9.53	12.92
18-Jun-24	201	104	56	22.66	30.80
15-Jul-24	232	146	67	15.49	27.88
29-Jul-24	257	138	63	11.09	35.85
07-Aug-24	222	134	60	11.32	20.09
20-Aug-24	278	122	56	17.84	34.86
07-Sep-24	233	132	66	9.96	15.98
21-Sep-24	247	162	76	14.18	32.43
09-Oct-24	248	128	65	13.23	28.99
30-Oct-24	238	141	67	11.09	20.54
07-Nov-24	248	136	65	14.30	16.90
21-Nov-24	256	145	68	15.02	11.73
07-Dec-24	251	148	67	12.79	21.46
26-Dec-24	236	137	62	18.62	35.77
15-Jan-25	254	158	67	11.76	29.04
29-Jan-25	246	150	64	11.59	22.27
15-Feb-25	243	135	61	18.21	31.26
24-Feb-25	237	84	58	14.90	27.73
07-Mar-25	267	159	63	18.37	23.17
22-Mar-25	219	94	51	11.81	28.76
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	278	162	76	22.66	35.85
Minimum	201	84	38	9.53	8.69
Average	240.88	131.92	62.25	14.40	23.51
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.45

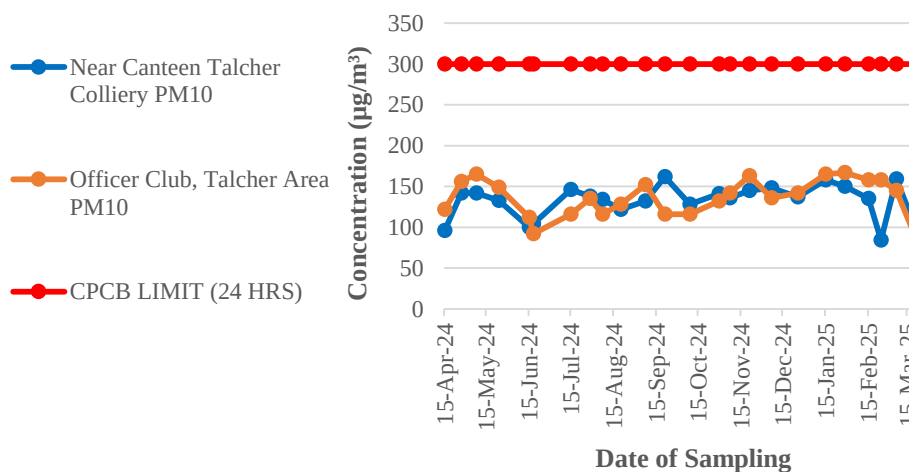
Area: Talcher**Project:** Talcher Colliery**Monitoring Station:** Officer Club, Talcher AreaAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
15-Apr-24	246	122	52	13.57	13.43
27-Apr-24	272	156	68	15.73	14.17
08-May-24	305	165	72	14.38	11.35
24-May-24	284	149	63	15.12	13.76
15-Jun-24	239	112	44	12.86	14.11
18-Jun-24	195	92	52	18.33	29.33
15-Jul-24	222	116	58	17.53	24.54
29-Jul-24	263	135	68	13.94	30.32
07-Aug-24	244	116	63	15.30	18.26
20-Aug-24	260	128	57	17.64	22.99
07-Sep-24	256	152	69	13.45	29.66
21-Sep-24	259	116	54	12.69	22.13
09-Oct-24	226	116	58	14.58	27.83
30-Oct-24	231	132	60	10.54	19.51
07-Nov-24	242	142	65	9.10	38.86
21-Nov-24	278	163	70	23.27	29.04
07-Dec-24	228	136	62	15.12	27.01
26-Dec-24	241	142	64	19.74	30.66
14-Jan-25	268	165	69	10.98	22.41
29-Jan-25	260	167	66	14.93	30.36
14-Feb-25	266	158	65	16.30	33.80
24-Feb-25	247	158	62	16.05	22.94
07-Mar-25	244	145	60	15.41	19.78
22-Mar-25	213	83	46	12.73	29.05
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	305	167	72	23.27	38.86
Minimum	195	83	44	9.10	11.35
Average	249.54	136.08	61.13	14.97	23.97
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

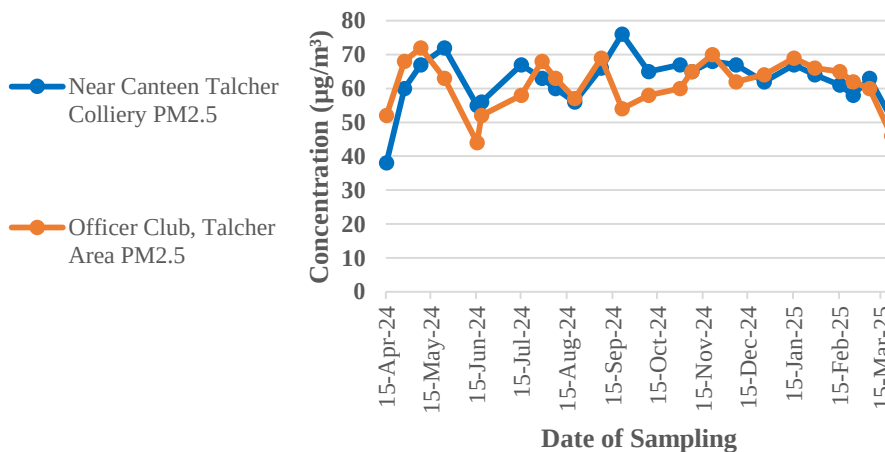
Graph Showing SPM for Talcher Colliery



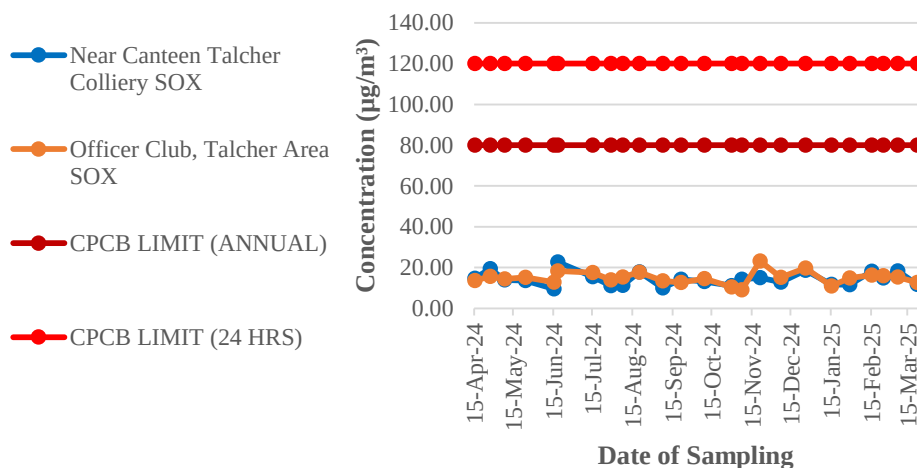
Graph Showing PM10 for Talcher Colliery



Graph Showing PM2.5 for Talcher Colliery



Graph Showing SO₂ for Talcher Colliery



Graph Showing NO_x for Talcher Colliery

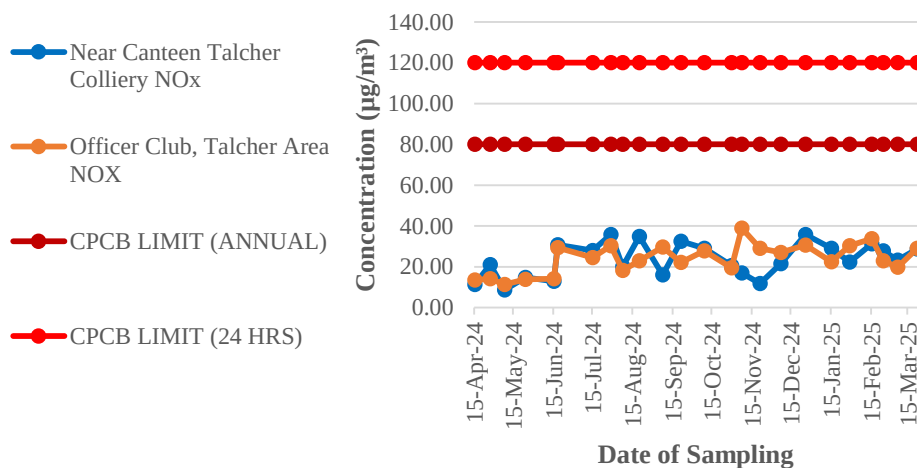


Table: 8.5.46

Area: Talcher**Project:** Nandira Colliery**Monitoring Station:** Project OfficeAll values are in $\mu\text{g}/\text{m}^3$

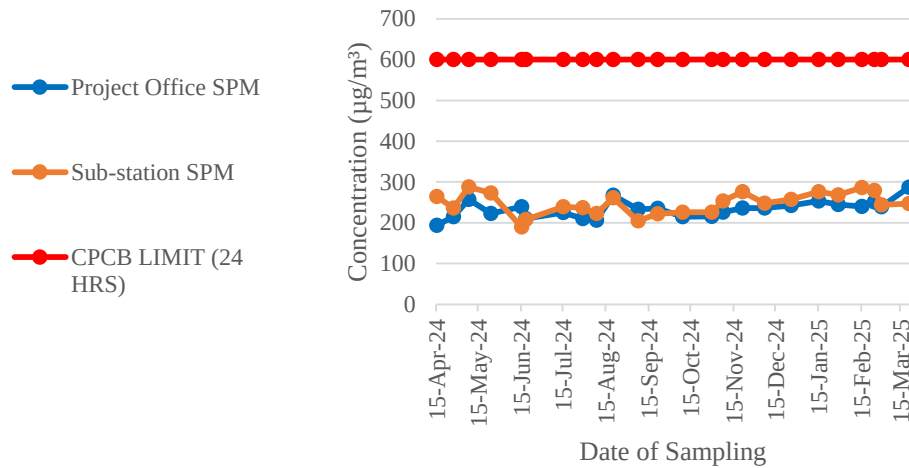
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
15-Apr-24	194	108	43	14.86	16.48
27-Apr-24	215	116	48	12.24	12.34
08-May-24	257	132	58	9.96	9.17
24-May-24	223	131	66	18.07	11.11
15-Jun-24	239	102	50	12.25	24.22
18-Jun-24	210	114	50	11.33	33.60
15-Jul-24	225	106	50	12.80	38.02
29-Jul-24	210	112	54	12.08	32.73
08-Aug-24	206	128	62	16.23	12.56
20-Aug-24	267	125	62	15.45	19.70
07-Sep-24	233	125	57	13.11	31.96
21-Sep-24	235	137	58	14.31	26.96
09-Oct-24	215	106	56	14.99	13.57
30-Oct-24	216	108	54	9.58	17.65
07-Nov-24	226	118	57	14.36	14.03
21-Nov-24	236	128	60	18.93	28.76
07-Dec-24	236	130	62	14.99	35.25
26-Dec-24	242	133	66	16.08	37.87
15-Jan-25	253	149	65	10.10	31.81
29-Jan-25	245	177	62	10.54	29.64
15-Feb-25	240	135	60	15.18	20.64
24-Feb-25	251	128	57	14.12	31.31
01-Mar-25	239	138	59	12.08	28.91
21-Mar-25	287	118	56	13.92	18.88
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	287	177	66	18.93	38.02
Minimum	194	102	43	9.58	9.17
Average	233.33	125.17	57.17	13.65	24.05
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

Table: 8.5.47

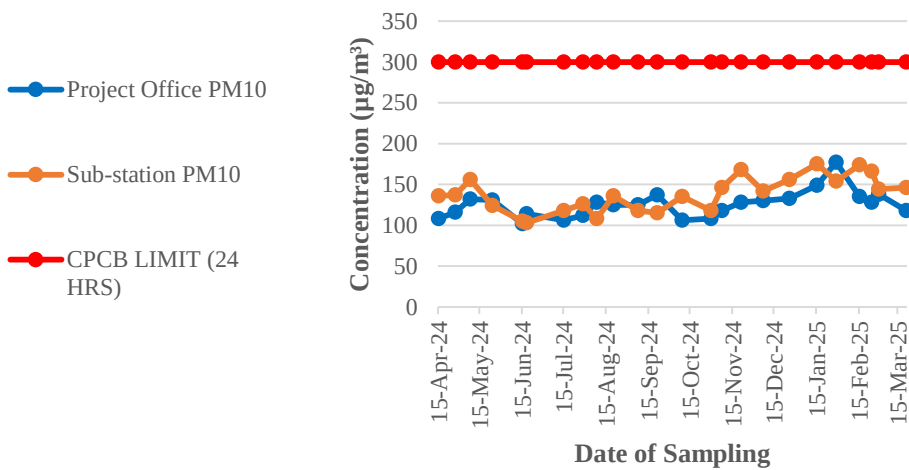
Area: Talcher**Project:** Nandira Colliery**Monitoring Station:** Sub-stationAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
15-Apr-24	264	136	55	11.63	16.33
27-Apr-24	236	137	55	14.61	13.98
08-May-24	288	156	63	12.17	11.59
24-May-24	273	124	71	9.59	15.69
15-Jun-24	190	105	53	12.28	11.33
18-Jun-24	208	103	56	18.50	20.39
15-Jul-24	239	118	55	17.10	31.30
29-Jul-24	237	126	64	11.65	32.93
07-Aug-24	223	108	64	14.34	12.10
20-Aug-24	261	136	68	15.73	26.34
07-Sep-24	205	118	56	12.91	16.67
21-Sep-24	222	115	64	12.39	19.32
05-Oct-24	226	135	68	22.35	37.29
30-Oct-24	226	118	58	13.89	13.27
07-Nov-24	253	146	65	17.84	18.94
21-Nov-24	276	168	71	15.02	37.64
07-Dec-24	248	142	65	14.70	37.47
26-Dec-24	257	156	68	17.64	32.19
15-Jan-25	276	175	70	18.90	27.66
29-Jan-25	268	154	67	17.39	34.19
15-Feb-25	286	174	70	13.21	22.48
24-Feb-25	279	166	67	14.75	31.34
01-Mar-25	244	144	58	13.92	27.60
21-Mar-25	247	146	60	11.25	31.20
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	288	175	71	22.35	37.64
Minimum	190	103	53	9.59	11.33
Average	247.17	137.75	62.96	14.74	24.14
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

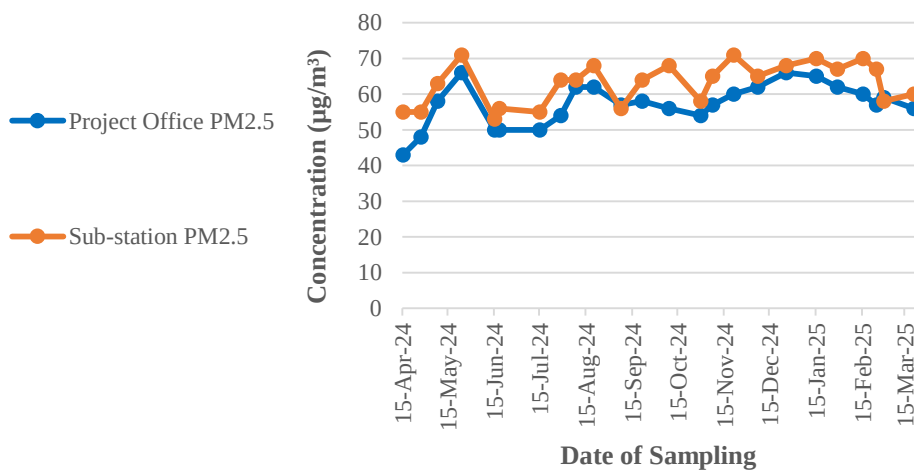
Graph Showing SPM for Nandira Colliery



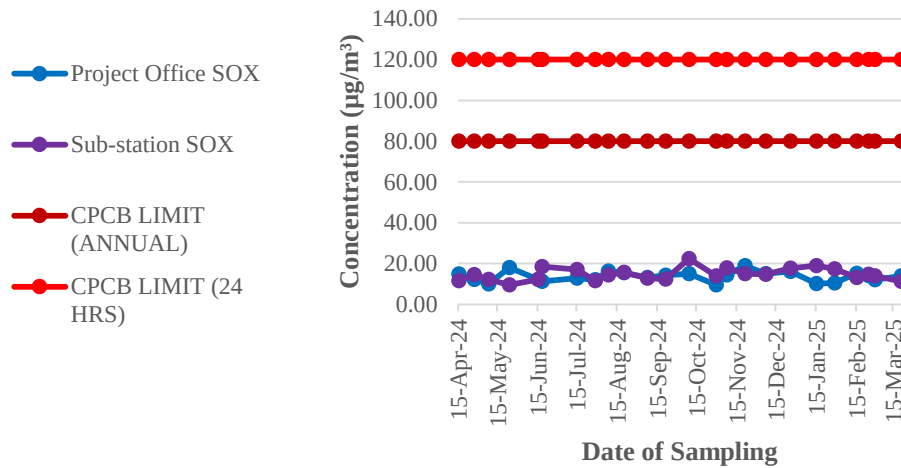
Graph Showing PM10 for Nandira Colliery



Graph Showing PM2.5 for Nandira Colliery



Graph Showing SO₂ for Nandira Colliery



Graph Showing NO_x for Nandira Colliery

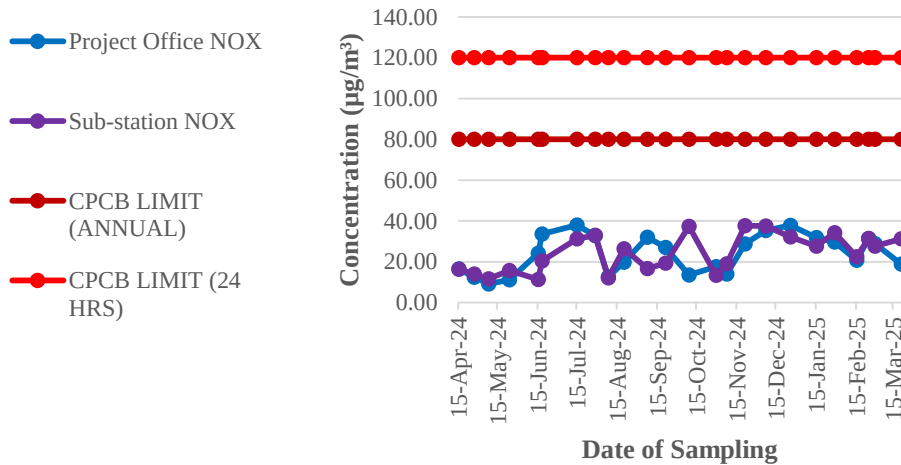


Table: 8.5.48

Area: Talcher**Project:** Nandira Colliery**Monitoring Station:** East of the Mine, Natedi Village
(Reported Only)All values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	178	82	33	12.92	21.02
04-Apr-24	195	87	39	13.51	16.09
10-Apr-24	215	85	42	10.57	14.01
11-Apr-24	188	66	37	14.21	12.97
18-Apr-24	215	91	46	10.57	15.12
19-Apr-24	204	89	38	21.80	22.32
24-Apr-24	186	74	34	15.61	12.21
25-Apr-24	175	84	30	16.51	17.97
02-May-24	221	90	48	14.84	15.27
03-May-24	196	81	39	15.42	11.86
09-May-24	203	75	42	12.72	14.44
10-May-24	235	95	47	14.42	18.60
16-May-24	190	92	41	14.84	16.66
17-May-24	157	70	31	8.91	20.82
22-May-24	149	80	53	19.32	13.57
23-May-24	173	83	43	10.60	14.44
30-May-24	191	71	33	11.45	16.10
31-May-24	143	75	29	9.59	11.35
05-Jun-24	160	86	38	8.50	27.72
06-Jun-24	155	94	41	13.98	16.58
13-Jun-24	154	87	38	20.09	26.57
14-Jun-24	139	74	42	8.17	25.02
21-Jun-24	180	81	45	21.79	31.46
22-Jun-24	173	85	39	29.36	23.67
28-Jun-24	156	76	33	9.92	20.30
29-Jun-24	175	82	37	18.33	30.66
03-Jul-24	200	88	46	18.58	28.66
04-Jul-24	196	95	53	15.04	20.91
10-Jul-24	194	84	42	13.21	30.06
11-Jul-24	167	78	40	15.04	18.59
18-Jul-24	171	78	39	11.65	37.64
19-Jul-24	174	84	46	13.89	30.11
24-Jul-24	183	80	44	13.44	23.52
25-Jul-24	170	78	36	12.10	41.40
01-Aug-24	173	76	32	18.33	17.08
02-Aug-24	132	64	27	18.66	17.59
09-Aug-24	165	74	33	15.71	14.50
10-Aug-24	148	68	28	14.06	12.00
16-Aug-24	181	94	53	23.26	30.70
17-Aug-24	161	84	44	15.78	16.89
21-Aug-24	143	82	38	14.16	16.89
22-Aug-24	166	82	38	12.03	32.40

30-Aug-24	155	81	43	19.28	39.48
31-Aug-24	136	68	33	14.80	28.48
04-Sep-24	158	74	36	12.30	31.16
05-Sep-24	154	78	40	15.69	22.37
11-Sep-24	157	85	46	15.81	28.33
12-Sep-24	163	82	41	15.75	22.07
18-Sep-24	180	80	44	14.26	34.66
19-Sep-24	167	76	35	12.58	23.71
25-Sep-24	177	86	43	13.20	12.43
26-Sep-24	168	70	29	16.73	28.19
07-Oct-24	180	80	38	12.49	33.26
08-Oct-24	172	75	34	20.53	21.56
16-Oct-24	168	76	35	13.74	15.61
17-Oct-24	178	84	41	14.58	17.65
21-Oct-24	200	85	43	14.62	13.97
22-Oct-24	216	88	49	12.91	23.08
25-Oct-24	188	81	43	19.61	34.19
26-Oct-24	172	74	33	12.24	22.55
04-Nov-24	181	85	46	12.23	22.40
05-Nov-24	195	80	44	17.80	11.65
11-Nov-24	202	87	48	15.52	31.46
12-Nov-24	190	77	42	14.22	28.02
18-Nov-24	196	83	45	16.60	36.51
19-Nov-24	187	78	41	22.13	30.56
25-Nov-24	204	89	47	26.69	28.68
26-Nov-24	210	92	50	21.02	22.58
02-Dec-24	194	78	42	15.04	21.29
03-Dec-24	206	83	45	17.09	32.53
09-Dec-24	212	86	48	15.85	39.30
10-Dec-24	218	91	50	14.02	28.36
16-Dec-24	187	77	44	14.54	21.56
17-Dec-24	193	80	46	8.75	5.76
23-Dec-24	203	85	51	10.19	27.95
24-Dec-24	192	82	48	12.02	14.58
30-Dec-24	189	81	47	9.08	31.13
31-Dec-24	214	87	50	14.19	36.18
03-Jan-25	205	83	46	15.18	25.75
04-Jan-25	230	90	52	17.87	25.63
10-Jan-25	242	93	54	15.94	32.60
11-Jan-25	223	88	50	16.64	29.16
20-Jan-25	228	88	51	16.27	31.81
21-Jan-25	212	84	48	12.35	36.23
27-Jan-25	196	79	44	16.43	23.86
28-Jan-25	223	86	49	17.80	29.30
05-Feb-25	205	82	46	18.72	37.46
06-Feb-25	214	86	48	15.69	33.89
12-Feb-25	186	77	43	17.76	34.52
13-Feb-25	187	74	40	15.18	35.68
20-Feb-25	184	71	38	18.67	27.29
21-Feb-25	206	84	46	19.13	33.71
27-Feb-25	195	78	42	14.67	36.57
28-Feb-25	211	87	48	14.12	34.52
05-Mar-25	186	74	40	16.53	33.73
06-Mar-25	197	81	44	14.87	25.57

12-Mar-25	186	76	41	13.61	24.86
13-Mar-25	202	84	45	18.96	27.52
19-Mar-25	185	72	40	12.15	29.29
20-Mar-25	193	76	41	12.64	31.07
26-Mar-25	184	73	38	19.69	19.97
27-Mar-25	203	80	43	15.20	26.07
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	242	95	54	29.36	41.40
Minimum	132	64	27	8.17	5.76
Average	186.03	81.31	41.90	15.27	24.76
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.49

Area: Talcher**Project:** Nandira Colliery**Monitoring Station:** Nandira ColonyAll values are in $\mu\text{g}/\text{m}^3$

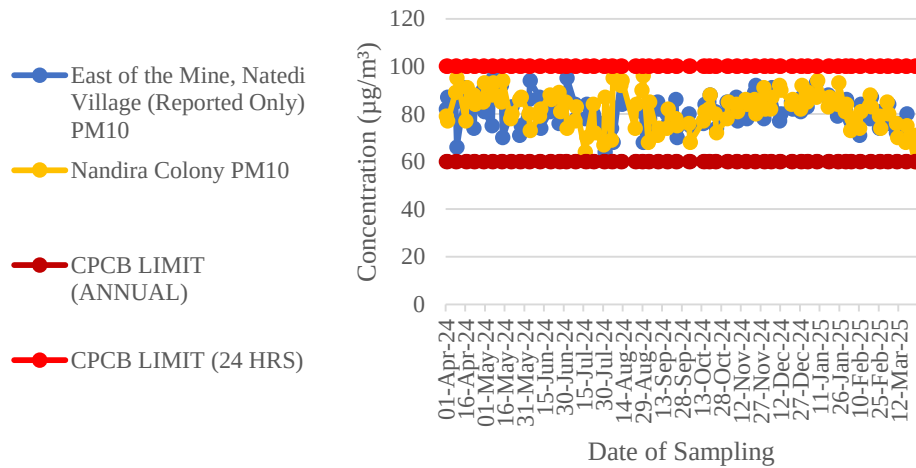
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	164	79	29	14.86	16.63
02-Apr-24	191	77	38	12.92	14.95
08-Apr-24	196	89	36	11.63	12.97
09-Apr-24	224	95	42	9.40	10.68
16-Apr-24	152	77	27	19.38	20.05
17-Apr-24	165	91	34	11.80	11.28
22-Apr-24	175	88	37	22.47	11.41
23-Apr-24	186	84	41	16.85	16.32
29-Apr-24	205	85	44	12.92	18.95
30-Apr-24	224	93	48	15.38	15.35
06-May-24	222	88	46	16.12	13.33
07-May-24	192	93	41	15.69	13.60
13-May-24	183	85	39	13.57	15.55
14-May-24	233	94	47	11.88	13.05
20-May-24	168	78	49	6.64	14.97
21-May-24	166	80	40	16.60	14.24
27-May-24	199	86	30	11.45	15.83
28-May-24	178	87	40	13.28	11.11
03-Jun-24	146	80	49	11.38	16.88
04-Jun-24	143	73	41	11.38	21.94
11-Jun-24	176	79	37	16.37	10.52
12-Jun-24	151	82	34	19.06	11.30
19-Jun-24	213	88	48	9.89	19.55
20-Jun-24	176	86	42	9.96	18.98
26-Jun-24	187	89	36	35.39	15.47
27-Jun-24	180	81	33	21.78	16.82
01-Jul-24	186	85	42	17.09	37.58
02-Jul-24	160	74	33	16.07	29.54
08-Jul-24	184	77	36	13.61	38.78
09-Jul-24	186	83	41	12.03	16.97
16-Jul-24	152	64	32	10.52	27.82
17-Jul-24	175	70	35	10.91	17.18
22-Jul-24	174	84	45	12.80	34.05
23-Jul-24	161	72	38	10.91	29.46
30-Jul-24	170	67	36	9.78	27.37
31-Jul-24	194	87	44	12.26	39.62
05-Aug-24	157	69	28	16.88	22.47
06-Aug-24	199	95	47	14.16	22.39
12-Aug-24	194	92	50	17.36	19.17
13-Aug-24	157	94	52	18.23	17.59
23-Aug-24	152	74	36	12.62	35.13
24-Aug-24	173	84	42	18.34	32.43
28-Aug-24	155	90	48	17.51	24.80

29-Aug-24	169	96	53	18.22	16.11
02-Sep-24	145	68	35	13.33	39.57
03-Sep-24	161	85	46	14.94	24.35
09-Sep-24	148	71	36	12.30	30.36
10-Sep-24	138	74	37	15.18	21.02
16-Sep-24	175	74	35	16.21	28.06
17-Sep-24	171	82	44	11.69	33.78
23-Sep-24	179	78	43	20.64	22.47
24-Sep-24	171	75	41	11.19	26.54
03-Oct-24	176	76	40	13.50	35.48
04-Oct-24	159	68	35	14.58	20.36
14-Oct-24	168	77	38	11.24	33.94
15-Oct-24	182	81	40	15.33	17.95
18-Oct-24	188	82	40	26.21	45.19
19-Oct-24	195	88	46	19.64	34.34
23-Oct-24	179	80	41	13.33	16.97
24-Oct-24	168	72	32	10.49	19.33
01-Nov-24	196	78	42	15.81	22.07
02-Nov-24	208	85	46	12.51	36.30
08-Nov-24	202	84	44	16.13	43.02
09-Nov-24	198	81	43	17.02	32.26
15-Nov-24	212	86	48	13.20	16.13
16-Nov-24	205	84	45	20.02	12.29
22-Nov-24	198	86	45	17.06	26.40
23-Nov-24	192	80	43	20.02	26.89
29-Nov-24	206	91	48	18.02	39.52
30-Nov-24	195	82	44	21.02	23.39
04-Dec-24	193	82	41	11.90	21.46
05-Dec-24	206	87	48	13.23	21.46
11-Dec-24	218	92	53	14.11	22.23
12-Dec-24	214	90	49	18.13	17.03
20-Dec-24	204	84	50	17.64	20.90
21-Dec-24	209	86	53	11.22	29.26
27-Dec-24	198	82	48	14.19	27.99
28-Dec-24	223	92	56	12.65	27.99
01-Jan-25	198	85	47	13.34	30.29
02-Jan-25	224	89	50	15.94	34.99
08-Jan-25	199	87	49	11.50	25.75
09-Jan-25	236	94	53	14.49	27.83
17-Jan-25	196	83	45	18.76	26.19
18-Jan-25	214	87	48	12.88	34.46
24-Jan-25	208	84	47	13.96	31.81
25-Jan-25	226	93	50	14.70	20.05
30-Jan-25	187	81	42	15.46	32.60
31-Jan-25	198	84	46	14.98	27.83
03-Feb-25	191	73	40	19.23	33.89
04-Feb-25	203	78	44	16.85	25.69
10-Feb-25	194	74	41	15.61	23.70
11-Feb-25	208	81	46	17.76	22.48
18-Feb-25	217	88	49	19.73	29.43
19-Feb-25	203	83	45	14.38	28.73
25-Feb-25	196	79	44	14.38	32.95
26-Feb-25	188	74	41	14.86	36.33
03-Mar-25	207	85	46	15.75	27.16

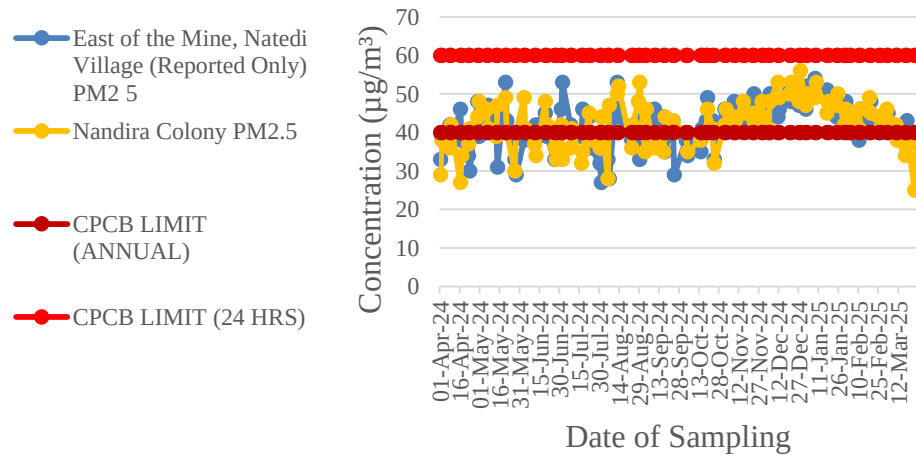
04-Mar-25	194	80	43	14.87	28.76
10-Mar-25	187	76	42	16.62	29.56
11-Mar-25	180	70	38	11.81	27.96
17-Mar-25	172	68	34	16.66	21.31
18-Mar-25	187	75	40	18.37	26.37
24-Mar-25	168	60	25	19.69	31.16
25-Mar-25	178	71	37	19.80	36.16
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	236	96	56	35.39	45.19
Minimum	138	60	25	6.64	10.52
Average	186.85	81.82	42.05	15.23	24.52
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



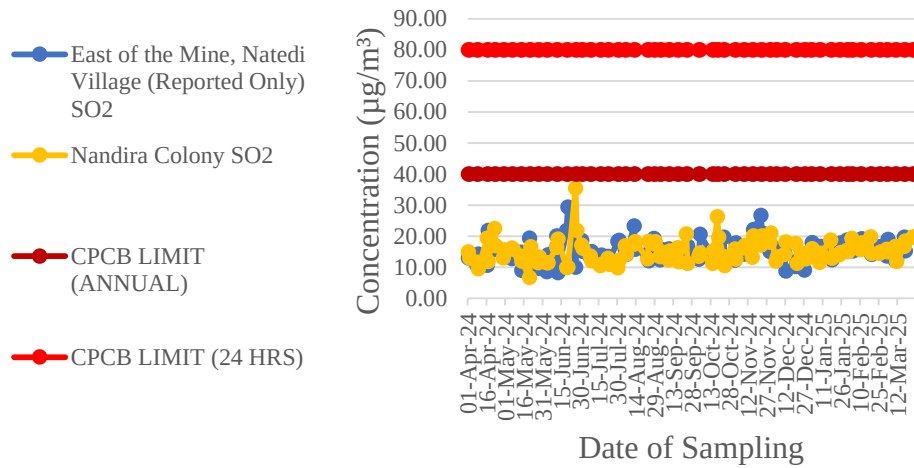
Graph Showing PM10 for Nandira Colliery



Graph Showing PM2.5 for Nandira Colliery



Graph Showing SO₂ for Nandira Colliery



Graph Showing NO_x for Nandira Colliery

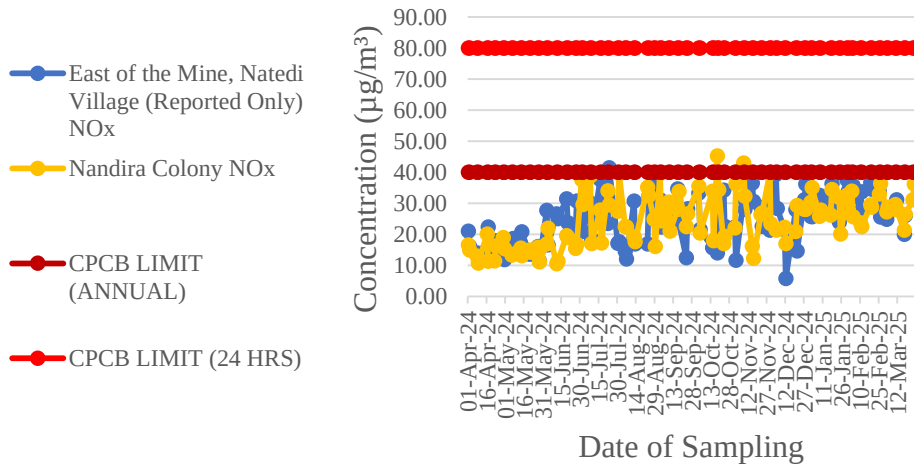
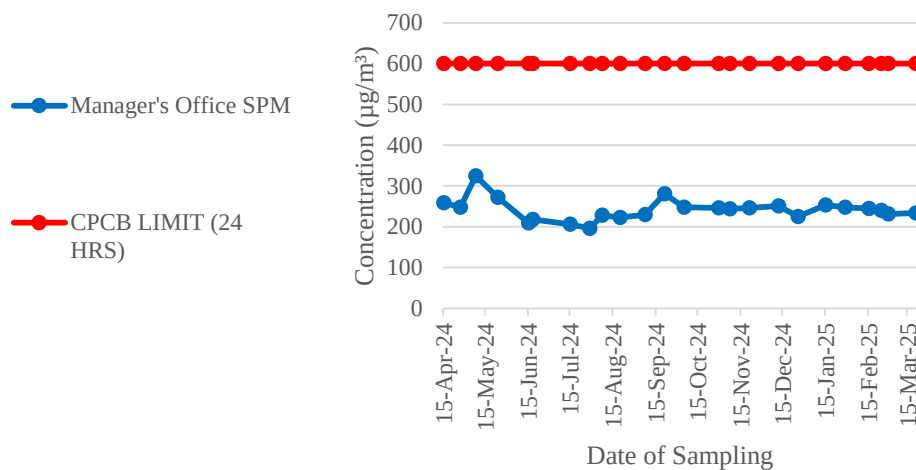


Table: 8.5.50

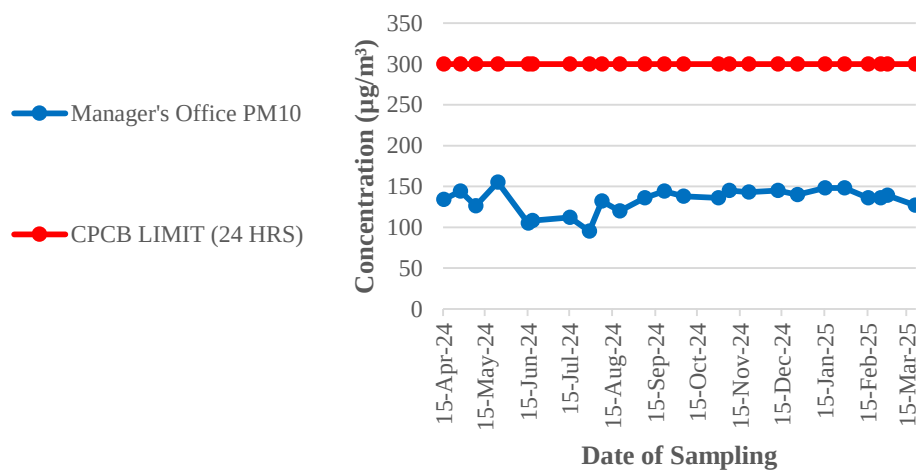
Area: Talcher**Project:** Handhidhua Colliery**Monitoring Station:** Manager's OfficeAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
15-Apr-24	259	134	56	13.48	11.28
27-Apr-24	248	144	61	11.80	11.94
08-May-24	325	126	56	14.01	14.00
24-May-24	272	155	66	13.65	16.66
15-Jun-24	209	105	56	8.19	22.65
18-Jun-24	218	108	53	12.69	14.63
15-Jul-24	206	112	52	17.88	25.85
29-Jul-24	196	95	49	12.63	22.24
07-Aug-24	228	132	65	14.60	18.14
20-Aug-24	223	120	59	17.39	33.87
07-Sep-24	230	136	63	14.75	18.06
21-Sep-24	281	144	70	15.96	20.62
05-Oct-24	248	138	71	14.99	28.51
30-Oct-24	246	136	65	20.17	35.33
07-Nov-24	244	145	68	11.44	9.99
21-Nov-24	246	143	65	18.93	29.46
12-Dec-24	251	145	68	12.79	28.36
26-Dec-24	225	140	66	18.56	20.17
15-Jan-25	253	148	67	16.78	28.46
29-Jan-25	248	148	64	15.94	22.27
15-Feb-25	245	136	61	17.76	24.88
24-Feb-25	240	136	59	13.46	27.22
01-Mar-25	231	139	59	15.00	19.78
21-Mar-25	234	127	58	17.50	26.87
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	325	155	71	20.17	35.33
Minimum	196	95	49	8.19	9.99
Average	241.92	133.00	61.54	15.01	22.14
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

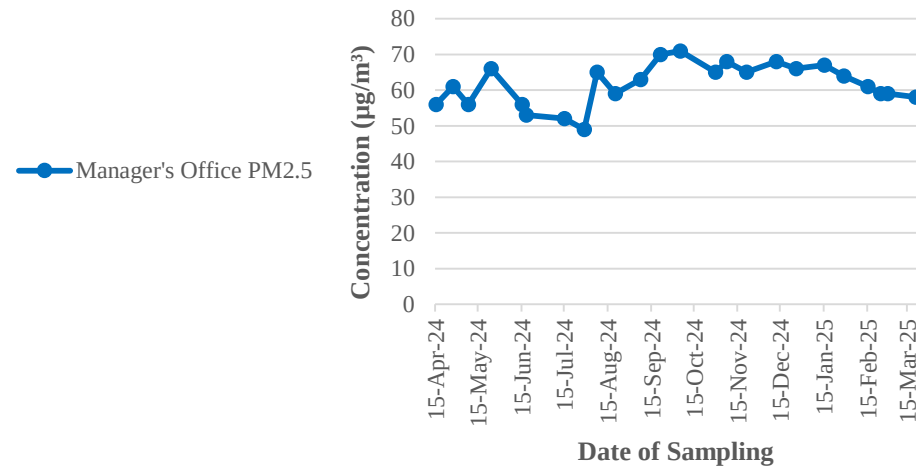
Graph Showing SPM for Handhidhua Colliery



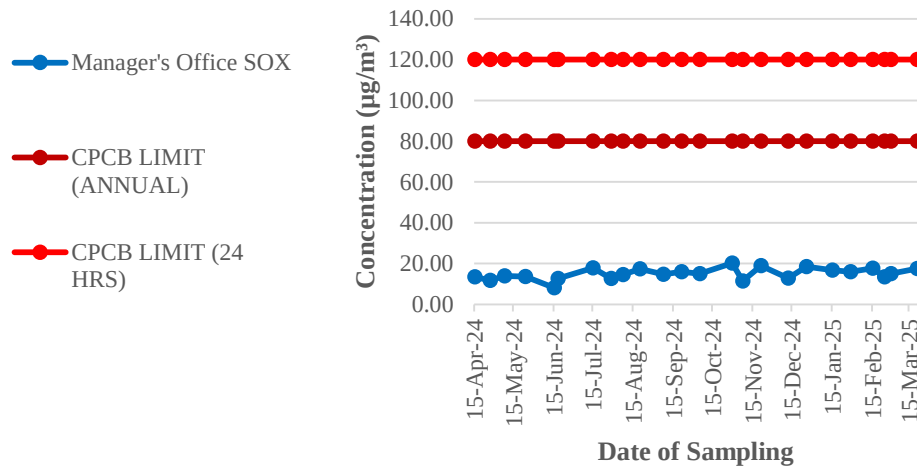
Graph Showing PM10 for Handhidhua Colliery



Graph Showing PM2.5 for Handhidhua Colliery



Graph Showing SO₂ for Handhidhua Colliery



Graph Showing NO_x for Handhidhua Colliery

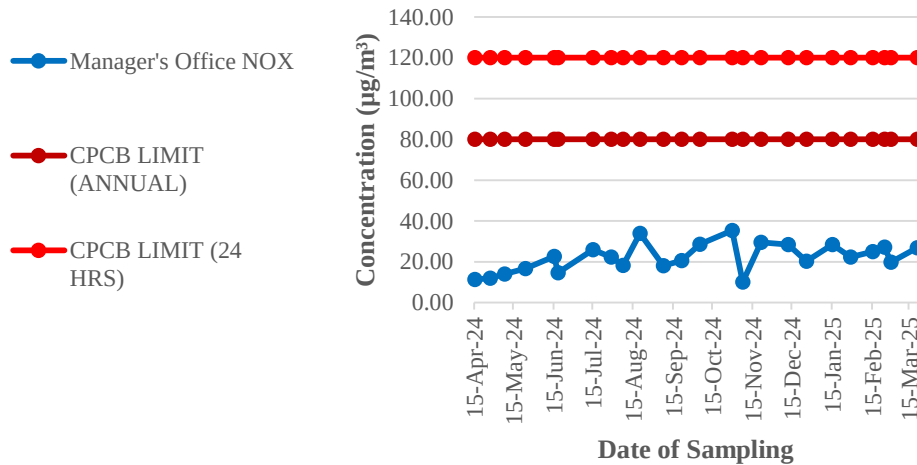
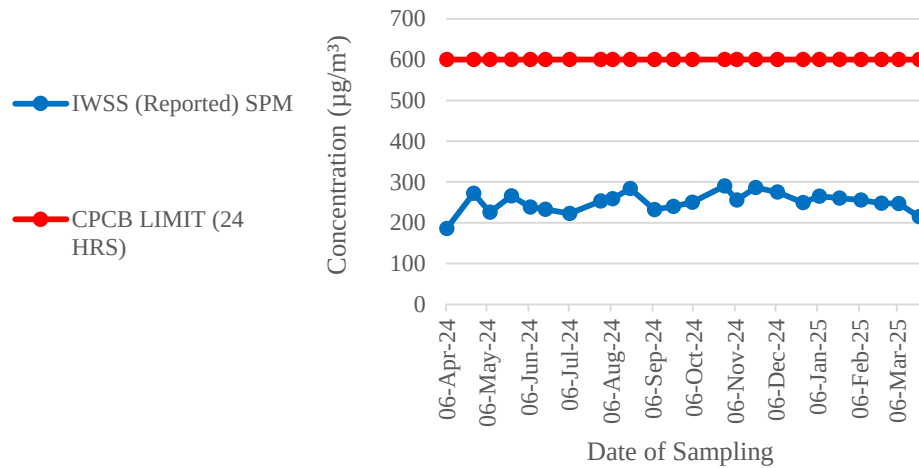


Table: 8.5.51

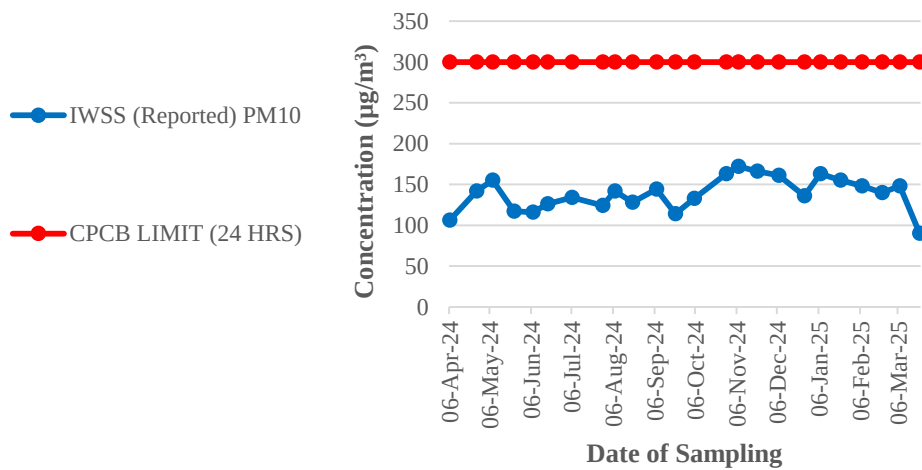
Area: Talcher**Project:** Deulbera**Monitoring Station:** IWSS (Reported)All values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
06-Apr-24	186	106	45	18.09	12.21
26-Apr-24	272	142	64	12.92	14.53
08-May-24	226	155	70	10.69	13.52
24-May-24	266	117	65	13.28	14.00
07-Jun-24	238	116	57	10.89	26.64
18-Jun-24	233	126	69	29.95	14.13
06-Jul-24	223	134	60	13.58	31.23
29-Jul-24	253	124	57	11.00	35.93
07-Aug-24	259	142	68	16.54	14.25
20-Aug-24	284	128	63	18.50	27.23
07-Sep-24	232	144	65	14.94	21.31
21-Sep-24	240	114	51	16.40	15.01
05-Oct-24	250	133	68	14.58	28.51
29-Oct-24	290	163	75	12.77	17.35
07-Nov-24	256	172	77	13.51	20.97
21-Nov-24	286	166	74	20.48	11.73
07-Dec-24	275	161	70	14.19	31.99
26-Dec-24	249	136	67	15.19	21.29
07-Jan-25	265	163	69	12.60	27.66
22-Jan-25	260	155	66	12.88	29.16
07-Feb-25	256	148	64	13.44	24.46
22-Feb-25	248	140	62	16.05	29.82
07-Mar-25	247	148	61	13.92	30.51
22-Mar-25	215	90	48	14.71	21.79
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	290	172	77	29.95	35.93
Minimum	186	90	45	10.69	11.73
Average	250.38	138.46	63.96	15.05	22.30
Standard (24 Hrs)	500	250	-	120	120
Standard (Annual)	360	180	-	80	80

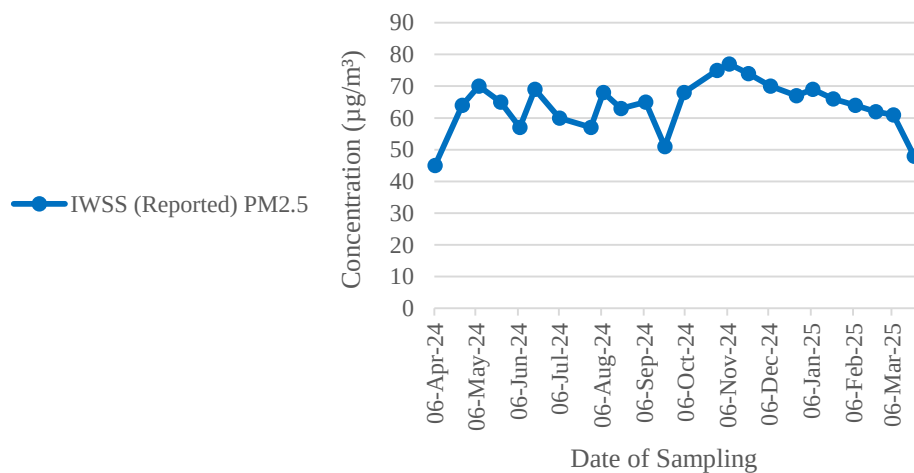
Graph Showing SPM for Deulbera Colliery



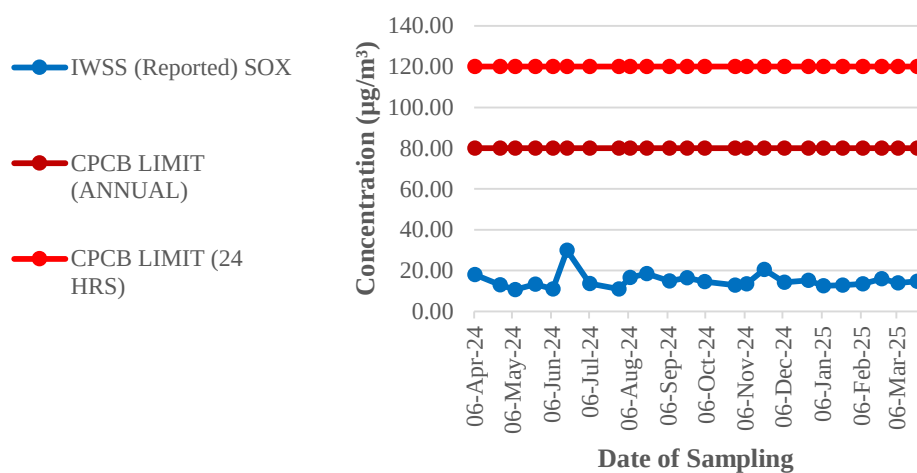
Graph Showing PM10 for Deulbera Colliery



Graph Showing PM2.5 for Deulbera Colliery



Graph Showing SO₂ for Deulbera Colliery



Graph Showing NO_x for Deulbera Colliery

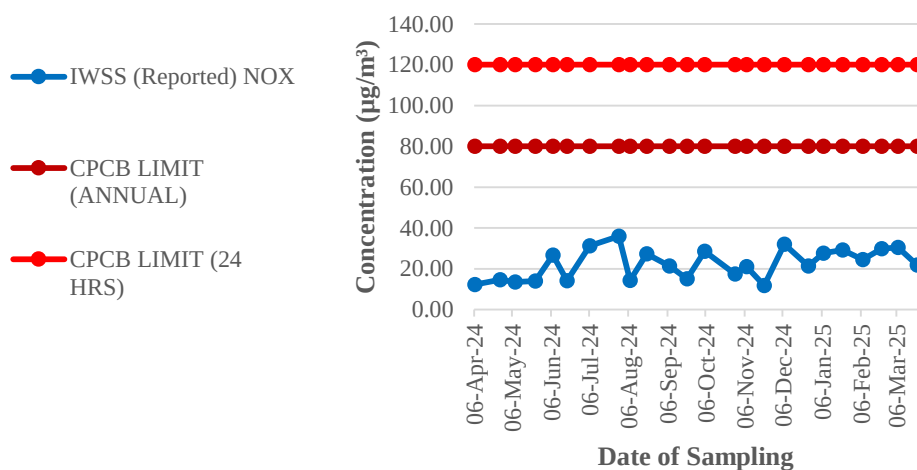


Table: 8.5.52

Area: Talcher**Project:** Mandapal Sand Mine**Monitoring Station:** Near Pachismeshwar TempleAll values are in $\mu\text{g}/\text{m}^3$

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	178	70	35	11.75	14.01
02-Apr-24	165	85	28	12.92	13.00
08-Apr-24	186	76	32	15.73	9.82
09-Apr-24	178	84	30	11.80	13.00
16-Apr-24	178	85	38	16.85	10.35
17-Apr-24	194	84	40	15.86	14.84
22-Apr-24	178	91	33	14.09	10.54
23-Apr-24	168	80	30	13.54	12.50
29-Apr-24	158	71	28	16.00	15.52
30-Apr-24	168	78	32	15.73	13.53
06-May-24	208	94	42	9.64	13.12
07-May-24	195	87	38	14.84	13.05
13-May-24	176	81	32	10.60	10.83
14-May-24	164	73	29	11.88	10.83
20-May-24	159	96	40	15.27	18.60
21-May-24	158	68	32	10.80	13.38
27-May-24	145	71	35	11.80	14.00
28-May-24	161	75	30	9.96	10.62
03-Jun-24	146	90	41	8.54	20.25
04-Jun-24	146	82	43	11.38	27.00
11-Jun-24	207	93	48	13.91	8.25
12-Jun-24	148	81	51	13.98	14.73
19-Jun-24	175	73	36	37.00	39.38
20-Jun-24	166	83	34	18.63	11.51
26-Jun-24	180	75	39	34.03	13.45
27-Jun-24	183	85	42	14.23	22.50
01-Jul-24	171	72	34	16.15	26.84
02-Jul-24	149	84	39	14.19	36.90
08-Jul-24	185	88	41	13.99	21.77
09-Jul-24	192	93	45	14.74	31.91
16-Jul-24	197	86	49	10.75	38.58
17-Jul-24	187	84	46	12.10	24.47
22-Jul-24	182	77	40	13.23	33.16
23-Jul-24	216	81	44	11.95	40.78
30-Jul-24	171	74	39	10.75	25.41
31-Jul-24	189	78	43	12.26	37.64
05-Aug-24	259	84	35	22.67	21.59
06-Aug-24	250	93	49	19.77	21.30
12-Aug-24	191	88	43	20.26	23.34
13-Aug-24	176	96	50	19.29	17.21
23-Aug-24	174	83	40	16.91	29.16
24-Aug-24	162	78	35	17.41	34.69
28-Aug-24	137	80	38	15.29	17.08

29-Aug-24	166	85	42	19.41	19.91
02-Sep-24	160	78	42	13.57	31.96
03-Sep-24	142	86	49	15.27	27.96
09-Sep-24	148	75	36	17.39	36.75
10-Sep-24	184	86	44	16.96	24.86
16-Sep-24	170	66	28	14.73	14.80
17-Sep-24	178	96	49	15.34	19.27
23-Sep-24	174	85	43	16.60	25.32
24-Sep-24	171	74	36	18.50	22.04
03-Oct-24	172	75	32	13.06	34.77
04-Oct-24	167	79	36	14.80	36.90
14-Oct-24	188	85	40	16.98	31.22
15-Oct-24	170	82	38	14.16	17.65
18-Oct-24	196	86	46	21.07	36.69
19-Oct-24	179	78	39	10.00	18.33
23-Oct-24	174	90	48	21.07	36.69
24-Oct-24	210	94	57	12.45	15.61
01-Nov-24	191	79	42	16.02	25.81
02-Nov-24	204	82	45	15.81	16.13
08-Nov-24	210	86	48	14.22	19.53
09-Nov-24	203	83	45	12.23	22.40
15-Nov-24	212	92	50	15.02	24.20
16-Nov-24	198	88	49	18.52	31.46
22-Nov-24	178	77	39	21.69	34.95
23-Nov-24	198	83	44	24.19	27.78
29-Nov-24	204	88	46	16.38	30.80
30-Nov-24	210	91	48	15.02	23.39
04-Dec-24	195	78	42	17.15	18.73
05-Dec-24	208	85	47	17.64	30.66
11-Dec-24	196	84	45	17.20	25.29
12-Dec-24	210	86	48	17.12	21.64
20-Dec-24	212	82	52	14.43	25.08
21-Dec-24	224	86	55	17.64	25.50
27-Dec-24	210	83	52	16.60	29.67
28-Dec-24	231	92	58	27.71	25.55
01-Jan-25	207	85	48	17.39	27.04
02-Jan-25	223	91	50	14.75	30.13
08-Jan-25	205	84	47	13.86	29.04
09-Jan-25	229	77	52	12.56	26.24
17-Jan-25	229	89	51	11.81	37.11
18-Jan-25	203	85	47	19.32	37.99
24-Jan-25	219	83	46	14.98	29.42
25-Jan-25	201	79	44	12.88	28.78
30-Jan-25	186	75	41	15.76	32.64
31-Jan-25	195	78	43	11.81	35.34
03-Feb-25	217	91	49	13.16	24.97
04-Feb-25	198	79	43	20.24	25.87
10-Feb-25	193	75	40	19.17	32.11
11-Feb-25	204	84	45	18.21	32.11
18-Feb-25	196	84	47	14.12	32.11
19-Feb-25	234	94	51	17.71	32.11
25-Feb-25	189	78	43	21.25	33.00
26-Feb-25	208	83	45	14.86	27.04
03-Mar-25	187	80	44	14.58	36.40

04-Mar-25	214	86	48	18.88	32.80
10-Mar-25	190	73	41	12.64	27.52
11-Mar-25	195	75	42	18.42	31.96
17-Mar-25	165	66	34	14.10	30.18
18-Mar-25	180	71	38	20.41	23.08
24-Mar-25	159	59	29	15.31	29.56
25-Mar-25	186	78	40	14.87	18.38
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	259	96	58	37.00	40.78
Minimum	137	59	28	8.54	8.25
Average	187.61	82.09	41.88	15.88	24.64
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



Table: 8.5.53

Area: Talcher**Project:** Mandapal Sand Mine**Monitoring Station:** Near Mandapal ChowkAll values are in $\mu\text{g}/\text{m}^3$

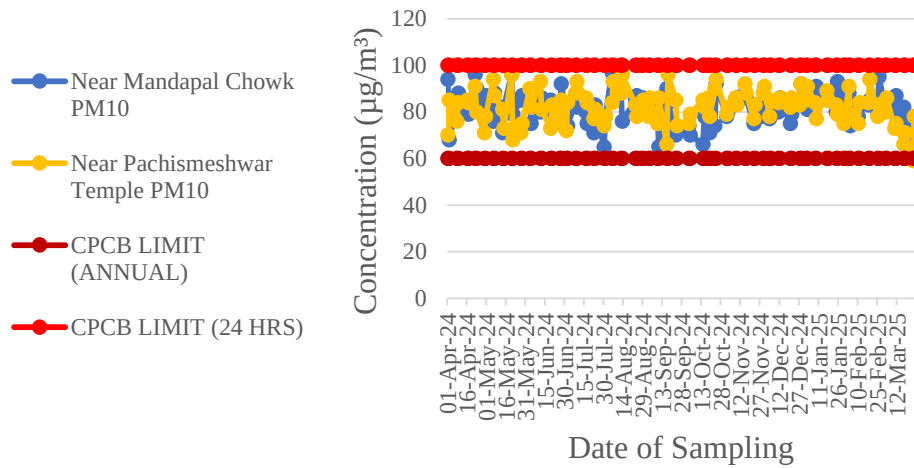
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	229	94	45	10.67	12.74
02-Apr-24	175	68	24	12.36	14.33
08-Apr-24	187	82	36	15.17	14.86
09-Apr-24	156	88	25	14.04	15.26
16-Apr-24	212	82	40	14.15	11.19
17-Apr-24	175	79	36	12.92	18.82
22-Apr-24	208	96	44	16.00	12.50
23-Apr-24	202	90	38	16.61	15.70
29-Apr-24	182	84	34	12.92	18.31
30-Apr-24	186	87	39	13.60	18.50
06-May-24	189	76	37	12.30	16.10
07-May-24	210	88	49	15.27	13.05
13-May-24	173	71	36	9.97	14.99
14-May-24	230	82	48	15.27	11.38
20-May-24	176	96	38	9.75	14.44
21-May-24	202	79	22	16.96	15.65
27-May-24	163	85	28	8.11	10.62
28-May-24	218	87	37	11.80	13.52
03-Jun-24	168	85	39	12.81	21.94
04-Jun-24	109	75	36	14.23	10.97
11-Jun-24	210	80	40	16.37	24.27
12-Jun-24	146	86	43	15.45	25.66
19-Jun-24	196	85	46	26.91	39.90
20-Jun-24	165	78	42	37.00	26.02
26-Jun-24	166	79	40	10.91	26.97
27-Jun-24	204	92	48	13.64	20.22
01-Jul-24	170	79	37	15.00	14.90
02-Jul-24	159	74	33	16.55	20.49
08-Jul-24	196	86	41	13.19	21.73
09-Jul-24	183	82	38	14.77	39.46
16-Jul-24	180	80	41	10.52	13.91
17-Jul-24	171	75	39	11.52	21.51
22-Jul-24	174	71	34	12.94	38.68
23-Jul-24	193	83	40	11.30	22.09
30-Jul-24	144	65	32	10.13	39.28
31-Jul-24	179	78	42	13.44	33.88
05-Aug-24	182	97	55	18.28	14.93
06-Aug-24	190	93	54	17.84	16.92
12-Aug-24	194	88	44	14.62	16.58
13-Aug-24	164	76	31	18.66	17.86
23-Aug-24	165	85	48	15.66	18.16
24-Aug-24	186	87	49	15.10	22.10
28-Aug-24	156	82	40	18.99	27.08

29-Aug-24	176	86	45	22.98	35.35
02-Sep-24	168	85	46	17.44	34.62
03-Sep-24	165	80	42	13.11	23.24
09-Sep-24	153	82	44	13.15	15.18
10-Sep-24	138	65	31	15.69	25.57
16-Sep-24	199	90	48	16.04	19.86
17-Sep-24	184	84	41	17.15	28.16
23-Sep-24	170	70	29	14.49	17.71
24-Sep-24	186	72	35	17.19	17.58
03-Oct-24	176	74	32	17.64	30.40
04-Oct-24	175	70	35	13.33	20.36
14-Oct-24	168	66	31	12.08	11.54
15-Oct-24	184	78	40	15.24	21.29
18-Oct-24	194	78	40	18.09	12.14
19-Oct-24	166	71	33	19.69	34.69
23-Oct-24	172	74	35	14.14	25.27
24-Oct-24	203	92	54	15.12	27.11
01-Nov-24	179	78	39	11.75	10.52
02-Nov-24	189	80	43	18.35	29.57
08-Nov-24	196	84	47	18.02	16.94
09-Nov-24	192	86	45	12.12	22.07
15-Nov-24	206	88	50	15.25	29.96
16-Nov-24	201	86	48	16.68	31.37
22-Nov-24	177	75	37	21.45	19.97
23-Nov-24	189	83	42	21.02	16.94
29-Nov-24	186	78	40	17.27	14.52
30-Nov-24	202	85	46	22.88	21.51
04-Dec-24	182	77	39	14.70	25.55
05-Dec-24	196	82	44	12.53	27.43
11-Dec-24	189	80	41	14.99	32.19
12-Dec-24	210	86	49	16.80	17.52
20-Dec-24	192	75	44	17.64	12.10
21-Dec-24	196	79	48	14.43	29.26
27-Dec-24	217	84	54	14.64	19.93
28-Dec-24	226	92	58	14.28	18.98
01-Jan-25	195	85	47	12.20	37.67
02-Jan-25	190	81	44	10.63	29.42
08-Jan-25	181	88	49	12.74	22.41
09-Jan-25	184	91	50	12.56	26.24
17-Jan-25	217	87	49	14.49	27.83
18-Jan-25	208	85	48	12.08	32.60
24-Jan-25	186	80	43	17.18	37.99
25-Jan-25	227	93	51	16.64	27.39
30-Jan-25	195	82	44	12.56	22.27
31-Jan-25	203	83	46	13.73	26.79
03-Feb-25	223	88	49	13.21	26.49
04-Feb-25	195	74	41	18.21	32.11
10-Feb-25	205	78	44	17.76	25.69
11-Feb-25	208	83	46	15.69	32.11
18-Feb-25	204	83	45	13.66	32.11
19-Feb-25	213	85	48	18.67	33.71
25-Feb-25	198	80	44	18.67	30.50
26-Feb-25	227	95	52	20.74	28.54
03-Mar-25	195	81	43	15.55	31.07

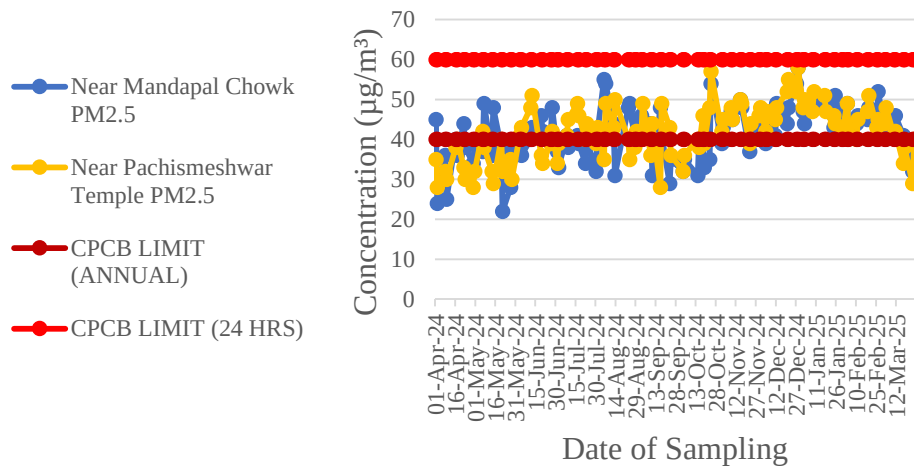
04-Mar-25	203	84	45	20.41	31.07
10-Mar-25	189	80	42	16.53	38.17
11-Mar-25	210	87	46	19.93	30.18
17-Mar-25	203	82	41	12.64	20.42
18-Mar-25	193	77	40	15.55	33.73
24-Mar-25	152	60	32	19.44	31.07
25-Mar-25	188	76	38	17.01	38.17
Brief Statistics	SPM	PM10	PM2.5	SO2	NOX
Maximum	230	97	58	37.00	39.90
Minimum	109	60	22	8.11	10.52
Average	187.66	81.71	41.63	15.48	23.46
Standard (24 Hrs)		100	60	80	80
Standard (Annual)		60	40	50	40



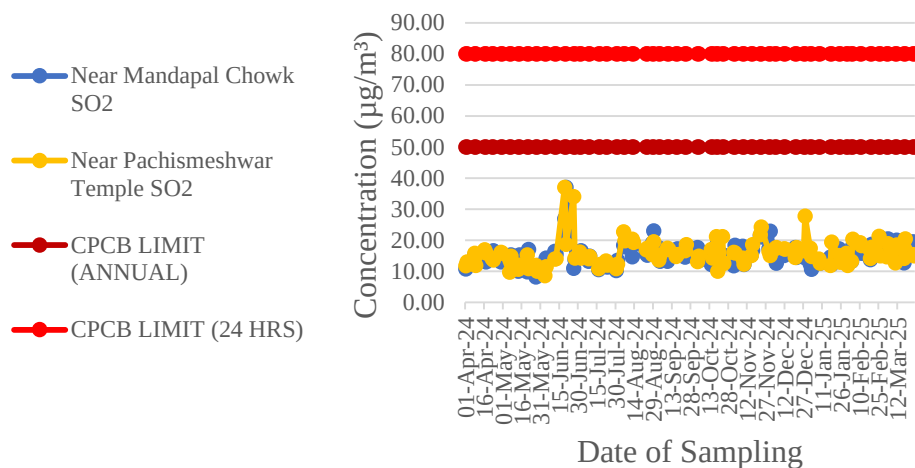
Graph Showing PM10 for Mandapal Sand Mine



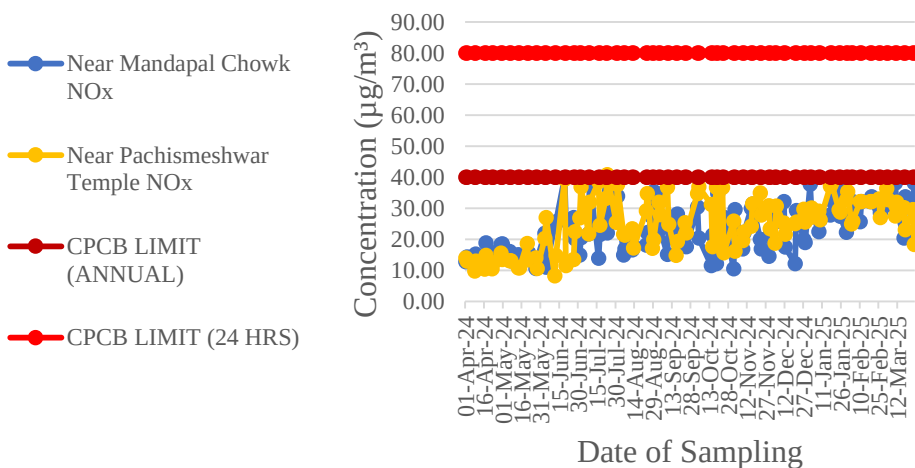
Graph Showing PM2.5 for Mandapal Sand Mine



Graph Showing SO₂ for Mandapal Sand Mine



Graph Showing NO_x for Mandapal Sand Mine



8.6 EXECUTIVE SUMMARY OF AAQM

Observation for PM10

PM10 at Compliance stations ranges from 69.0 $\mu\text{g}/\text{m}^3$ (Balaram OCP in Hingula area) to 176.0 $\mu\text{g}/\text{m}^3$ (Ananta OCP, Jagannath Area). As per Coal Mine Standard, (GSR 742(E) the annual average limit is 250 $\mu\text{g}/\text{m}^3$. The values are well within the permissible limits. For reference stations, PM10 varies from minimum 58.0 $\mu\text{g}/\text{m}^3$ (Hingula OCP, Hingula Area) to maximum 112.0 $\mu\text{g}/\text{m}^3$ (Hingula OCP, Hingula Area).

Observation for PM2.5

PM2.5 at Compliance stations varies from 38.0 $\mu\text{g}/\text{m}^3$ (Talcher Colliery, Talcher Area) to 78.0 $\mu\text{g}/\text{m}^3$ (Ananta OCP, Jagannath Area). At reference stations, PM2.5 varies from 18.0 $\mu\text{g}/\text{m}^3$ (Bharatpur OCP, Bharatpur Area) to 56.0 $\mu\text{g}/\text{m}^3$ (Hingula OCP, Hingula Area).

Observation for SO₂ and NO_x

Values of both SO₂ and NO_x was observed very low compared to the limits of Coal mine Standard (80 $\mu\text{g}/\text{m}^3$) and NAAQS-2009 (50 $\mu\text{g}/\text{m}^3$ & 40 $\mu\text{g}/\text{m}^3$). The minimum value in core zone for SO₂ was 8.17 $\mu\text{g}/\text{m}^3$ (Kaniha OCP, Kaniha Area) and maximum was 29.95 $\mu\text{g}/\text{m}^3$ (Lingraj OCP, Lingraj Area). Likewise, for NO_x minimum was 7.28 $\mu\text{g}/\text{m}^3$ (Kaniha OCP, Kaniha Area) and maximum was 42.77 $\mu\text{g}/\text{m}^3$ (Ananta OCP, Jagannath Area). For reference stations, SO₂ ranges from 6.64 $\mu\text{g}/\text{m}^3$ at (Nandira Colliery, Talcher Area) to 37 $\mu\text{g}/\text{m}^3$ at (Mandapal Sand Mine, Talcher Area). Similarly NO_x, varies from minimum 8.25 $\mu\text{g}/\text{m}^3$ (Mandapal Sand Mine, Talcher Area) to maximum 49.24 $\mu\text{g}/\text{m}^3$ ((Ananta OCP, Jagannath Area)).

HALF YEARLY HEAVY METALS



TABLE FOR HEAVY METAL QUANTITY DATA

Table: 8.8.1
Area: Jagannath

Project	Jagannath OCP				
Monitoring Station	Near NBVL Station				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
04-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.2
Area: Jagannath

Project	Jagannath OCP				
Monitoring Station	Near NBVL Station				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
06-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.3
Area: Jagannath

Project	Jagannath OCP				
Monitoring Station	Near MDTP				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
04-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.4
Area: Jagannath

Project	Jagannath OCP				
Monitoring Station	Near MDTP				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
06-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.5
Area: Jagannath

Project	Ananta OCP				
Monitoring Station	North-East of Mine				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
18-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.6
Area: Jagannath

Project	Ananta OCP				
Monitoring Station	North-East of Mine				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
06-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.7
Area: Jagannath

Project	Ananta OCP				
Monitoring Station	Central Nursery				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
18-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.8
Area: Jagannath

Project	Ananta OCP				
Monitoring Station	Central Nursery				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
06-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.9
Area: Bharatpur

Project	Bharatpur OCP			
Monitoring Station	Near ETP/Workshop			
Date of sampling	Lead (Pb)	Arsenic (As)	Mercury (Hg)	Chromium (Cr)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
18-May-2024	<0.1	<1.0	<1.0	<0.1
Standard	1.0(24hours)	6.0(Annual)	-	-

Table: 8.8.10
Area: Bharatpur

Project	Bharatpur OCP			
Monitoring Station	Near ETP/Workshop			
Date of sampling	Lead (Pb)	Arsenic (As)	Mercury (Hg)	Chromium (Cr)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
06-Dec-2024	<0.1	<1.0	<1.0	<0.1
Standard	1.0(24hours)	6.0(Annual)	-	-

Table: 8.8.11
Area: Bharatpur

Project	Bharatpur OCP			
Monitoring Station	North-West Point of the Mine			
Date of sampling	Lead (Pb)	Arsenic (As)	Mercury (Hg)	Chromium (Cr)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
18-May-2024	<0.1	<1.0	<1.0	<0.1
Standard	1.0(24hours)	6.0(Annual)	-	-

Table: 8.8.12
Area: Bharatpur

<i>Project</i>	Bharatpur OCP			
<i>Monitoring Station</i>	North-West Point of the Mine			
<i>Date of sampling</i>	Lead (Pb)	Arsenic (As)	Mercury (Hg)	Chromium (Cr)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
06-Dec-2024	<0.1	<1.0	<1.0	<0.1
Standard	1.0(24hours)	6.0(Annual)	-	-

Table: 8.8.13
Area: Bharatpur

<i>Project</i>	Bharatpur OCP			
<i>Monitoring Station</i>	Near MGR-RLS of Bharatpur			
<i>Date of sampling</i>	Lead (Pb)	Arsenic (As)	Mercury (Hg)	Chromium (Cr)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
18-May-2024	<0.1	<1.0	<1.0	<0.1
Standard	1.0(24hours)	6.0(Annual)	-	-

Table: 8.8.14
Area: Bharatpur

<i>Project</i>	Bharatpur OCP			
<i>Monitoring Station</i>	Near MGR-RLS of Bharatpur			
<i>Date of sampling</i>	Lead (Pb)	Arsenic (As)	Mercury (Hg)	Chromium (Cr)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
06-Dec-2024	<0.1	<1.0	<1.0	<0.1
Standard	1.0(24hours)	6.0(Annual)	-	-

Table: 8.8.15
Area: Bharatpur

Project	Bharatpur OCP			
Monitoring Station	Near Regional Store			
Date of sampling	Lead (Pb)	Arsenic (As)	Mercury (Hg)	Chromium (Cr)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
18-May-2024	<0.1	<1.0	<1.0	<0.1
Standard	1.0(24hours)	6.0(Annual)	-	-

Table: 8.8.16
Area: Bharatpur

Project	Bharatpur OCP			
Monitoring Station	Near Regional Store			
Date of sampling	Lead (Pb)	Arsenic (As)	Mercury (Hg)	Chromium (Cr)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
06-Dec-2024	<0.1	<1.0	<1.0	<0.1
Standard	1.0(24hours)	6.0(Annual)	-	-

Table: 8.8.17
Area: Lingaraj

Project	Lingaraj OCP				
Monitoring Station	Near OB Dump no. 5 (South Side of the Mine)				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m^3)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
08-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	

Table: 8.8.18
Area: Lingaraj

<i>Project</i>	Lingaraj OCP				
<i>Monitoring Station</i>	Near OB Dump no. 5 (South Side of the Mine)				
<i>Date of sampling</i>	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
07-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	

Table: 8.8.19
Area: Lingaraj

<i>Project</i>	Lingaraj OCP				
<i>Monitoring Station</i>	Near OB Dump no. 10 (North Side of the Mine)				
<i>Date of sampling</i>	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
08-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	

Table: 8.8.20
Area: Lingaraj

<i>Project</i>	Lingaraj OCP				
<i>Monitoring Station</i>	Near OB Dump no. 10 (North Side of the Mine)				
<i>Date of sampling</i>	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
07-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	

Table: 8.8.21
Area: Lingaraj

Project	Lingaraj OCP				
Monitoring Station	IWSS				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(µg/m3)</i>	<i>(µg/m3)</i>
08-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	

Table: 8.8.22
Area: Lingaraj

Project	Lingaraj OCP				
Monitoring Station	IWSS				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(µg/m3)</i>	<i>(µg/m3)</i>
07-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	

Table: 8.8.23
Area: Lingaraj

Project	Lingaraj OCP				
Monitoring Station	Near Lingraj to Dera Road				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(µg/m3)</i>	<i>(µg/m3)</i>
08-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	

Table: 8.8.24
Area: Lingaraj

Project	Lingaraj OCP				
Monitoring Station	Near Lingraj to Dera Road				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(µg/m3)</i>	<i>(µg/m3)</i>
07-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	

Table: 8.8.25
Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	Project Office				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(µg/m3)</i>	<i>(µg/m3)</i>
11-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.26
Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	Project Office				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(ng/m3)</i>	<i>(µg/m3)</i>	<i>(µg/m3)</i>
13-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.27

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	New Time Office (Near Z-Patch)				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
11-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.28

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	New Time Office (Near Z-Patch)				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
13-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.29

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	Old Site Office				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
11-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.30

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	Old Site Office				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
13-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.31

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	Near Jatra Padia, Jarada				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
11-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.32

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	Near Jatra Padia, Jarada				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
13-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.33

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	Near External OB Dump Jamania				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
11-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.34

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	Near External OB Dump Jamania				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
13-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.35

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	North of the mine				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(μg/m ³)	(μg/m ³)
11-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.36

Area: Kaniha

Project	Kaniha OCP				
Monitoring Station	North of the mine				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(µg/m ³)	(µg/m ³)
13-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.37

Area: Hingula

Project	Hingula OCP				
Monitoring Station	Time Office				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(µg/m ³)	(µg/m ³)
15-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.38

Area: Hingula

Project	Hingula OCP				
Monitoring Station	Time Office				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m ³)	(ng/m ³)	(ng/m ³)	(µg/m ³)	(µg/m ³)
14-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.39
Area: Hingula

Project	Hingula OCP				
Monitoring Station	South West Side of the Mine				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
15-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.40
Area: Hingula

Project	Hingula OCP				
Monitoring Station	South West Side of the Mine				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
14-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.41
Area: Hingula

Project	Balram OCP				
Monitoring Station	Near Project Office				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
15-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.42
Area: Hingula

Project	Balram OCP				
Monitoring Station	Near Project Office				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
14-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.43
Area: Hingula

Project	Balram OCP				
Monitoring Station	Pump House near Outsourcing Working Patch & Coal Transport Road				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
15-May-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.44
Area: Hingula

Project	Balram OCP				
Monitoring Station	Pump House near Outsourcing Working Patch & Coal Transport Road				
Date of sampling	Arsenic (As)	Nickel (Ni)	Mercury (Hg)	Chromium (Cr)	Cadmium (Cd)
	(ng/m3)	(ng/m3)	(ng/m3)	(µg/m3)	(µg/m3)
14-Dec-2024	<1.0	<1.0	<1.0	<0.1	<0.1
Standard	6.0(Annual)	20(Annual)	-	-	-

Table: 8.8.45

Area: Talcher

Project	Talcher				
Monitoring Station	Near Canteen Talcher Colliery				
Date of sampling	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
08-May-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-

Table: 8.8.46

Area: Talcher

Project	Talcher				
Monitoring Station	Near Canteen Talcher Colliery				
Date of sampling	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
07-Dec-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-

Table: 8.8.47

Area: Talcher

Project	Talcher				
Monitoring Station	Officer Club, Talcher Area				
Date of sampling	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
08-May-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-

Table: 8.8.48

Area: Talcher

Project	Talcher				
Monitoring Station	Officer Club, Talcher Area				
Date of sampling	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
07-Dec-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-

Table: 8.8.49

Area: Talcher

Project	Nandira				
Monitoring Station	Project Office				
Date of sampling	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
08-May-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-

Table: 8.8.50

Area: Talcher

Project	Nandira				
Monitoring Station	Project Office				
Date of sampling	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
07-Dec-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-

Table: 8.8.51
Area: Talcher

Project	Nandira				
Monitoring Station	Sub-station				
Date of sampling	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
08-May-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-

Table: 8.8.52
Area: Talcher

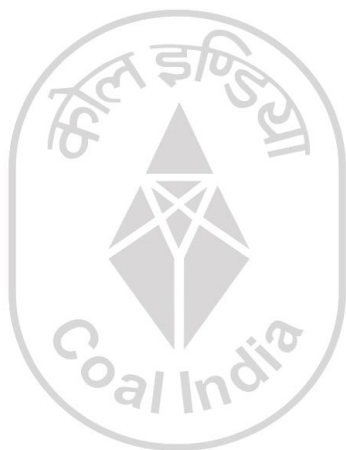
Project	Nandira				
Monitoring Station	Sub-station				
Date of sampling	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
07-Dec-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-

Table: 8.8.53
Area: Talcher

Project	Handhidhua Colliery				
Monitoring Station	Manager's Office				
Date of sampling	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
08-May-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-

Table: 8.8.54
Area: Talcher

<i>Project</i>	Handhidhua Colliery				
<i>Monitoring Station</i>	Manager's Office				
<i>Date of sampling</i>	Lead (Pb)	Arsenic (As)	Nickel (Ni)	Chromium (Cr)	Cadmium (Cd)
	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)
07-Dec-2024	<0.1	<1.0	<1.0	<0.1	<0.1
Standard	1.0(24hours)	6.0(Annual)	20(Annual)	-	-





HEAVY METALS



TABLE FOR HEAVY METAL QUANTITY DATA

Table: 8.7.1
Area: Jagannath Area

Project	Jagannath OCP							
Monitoring Station	CWS Colony, Meeti							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	26.97	<0.1	<1.0	<1.0	1.4	BQL (0.7)	BQL
Average	<20.0	16.66	<0.1	<1.0	<1.0	0.52	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.2
Area: Jagannath Area

Project	Ananta OCP							
Monitoring Station	Guthasahi Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	27.83	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	17.82	<0.1	<1.0	<1.0	0.69	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.3
Area: Jagannath Area

Project	Ananta OCP							
Monitoring Station	Sibarampur Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	25.67	<0.1	<1.0	<1.0	0.7	BQL (0.7)	BQL
Average	<20.0	16.88	<0.1	<1.0	<1.0	0.43	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.4
Area: Jagannath Area

Project	Ananta OCP							
Monitoring Station	Asanabahali Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.2	BQL (0.7)	BQL
Maximum	<20.0	27.50	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	17.75	<0.1	<1.0	<1.0	0.81	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.5
Area: Bharatpur Area

Project	Bharatpur OCP							
Monitoring Station	Near Joragadia Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.50	<0.1	<1.0	<1.0	1.7	BQL (0.7)	BQL
Average	<20.0	17.94	<0.1	<1.0	<1.0	0.63	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.6
Area: Bharatpur Area

Project	Bharatpur OCP							
Monitoring Station	Sakasinga Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.83	<0.1	<1.0	<1.0	1.5	BQL (0.7)	BQL
Average	<20.0	18.52	<0.1	<1.0	<1.0	0.60	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.7
Area: Bharatpur Area

Project	Bharatpur OCP							
Monitoring Station	Bantol Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.17	<0.1	<1.0	<1.0	0.6	BQL (0.7)	BQL
Average	<20.0	17.26	<0.1	<1.0	<1.0	0.42	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.8
Area: Bharatpur Area

Project	Bharatpur OCP							
Monitoring Station	Near Natedi Village(Reported Only)							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.2	BQL (0.7)	BQL
Maximum	<20.0	28.80	<0.1	<1.0	<1.0	1.3	BQL (0.7)	BQL
Average	<20.0	18.35	<0.1	<1.0	<1.0	0.66	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.9
Area: Lingraj Area

Project	Lingaraj OCP							
Monitoring Station	Near Kankili Community Centre							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.2	BQL (0.7)	BQL
Maximum	<20.0	28.67	<0.1	<1.0	<1.0	1.4	BQL (0.7)	BQL
Average	<20.0	18.25	<0.1	<1.0	<1.0	0.69	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.10
Area: Kaniha Area

Project	Kaniha OCP							
Monitoring Station	South West of the Mine							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	10.33	<0.1	<1.0	<1.0	0.3	BQL (0.7)	BQL
Maximum	<20.0	29.17	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	19.04	<0.1	<1.0	<1.0	0.88	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.11
Area: Kaniha Area

Project	Kaniha OCP							
Monitoring Station	South of Proposed Quarry Limit of KOCP							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	27.28	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	17.83	<0.1	<1.0	<1.0	0.85	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.12
Area: Hingula Area

Project	Hingula OCP							
Monitoring Station	North of the Mine, Purnapi, Kumunda Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	29.12	<0.1	<1.0	<1.0	1.1	BQL (0.7)	BQL
Average	<20.0	18.90	<0.1	<1.0	<1.0	0.70	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.13
Area: Hingula Area

Project	Hingula OCP							
Monitoring Station	North East of the Mine, Solada Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.00	<0.1	<1.0	<1.0	0.9	BQL (0.7)	BQL
Average	<20.0	17.20	<0.1	<1.0	<1.0	0.57	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.14
Area: Hingula Area

Project	Hingula OCP							
Monitoring Station	Banabaspur Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.00	<0.1	<1.0	<1.0	1.2	BQL (0.7)	BQL
Average	<20.0	18.93	<0.1	<1.0	<1.0	0.67	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.15
Area: Hingula Area

Project	Hingula OCP							
Monitoring Station	Sanamahitala Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.4	BQL (0.7)	BQL
Maximum	<20.0	27.28	<0.1	<1.0	<1.0	1.3	BQL (0.7)	BQL
Average	<20.0	18.91	<0.1	<1.0	<1.0	0.75	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.16
Area: Hingula Area

Project	Balram OCP							
Monitoring Station	North West of the Mine, Solada Village (Reported)							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.00	<0.1	<1.0	<1.0	0.9	BQL (0.7)	BQL
Average	<20.0	17.20	<0.1	<1.0	<1.0	0.57	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.17
Area: Hingula Area

Project	Balram OCP							
Monitoring Station	East of the Mine, Natedi Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.2	BQL (0.7)	BQL
Maximum	<20.0	28.80	<0.1	<1.0	<1.0	1.3	BQL (0.7)	BQL
Average	<20.0	18.35	<0.1	<1.0	<1.0	0.66	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.18
Area: Hingula Area

Project	Balram OCP							
Monitoring Station	East of the Mine, Natedi Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.2	BQL (0.7)	BQL
Maximum	<20.0	28.80	<0.1	<1.0	<1.0	1.3	BQL (0.7)	BQL
Average	<20.0	18.35	<0.1	<1.0	<1.0	0.66	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.19
Area: Hingula Area

Project	Balram OCP							
Monitoring Station	Natada Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	10.93	<0.1	<1.0	<1.0	0.2	BQL (0.7)	BQL
Maximum	<20.0	29.80	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	18.68	<0.1	<1.0	<1.0	0.72	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.20
Area: Hingula Area

Project	Balram OCP							
Monitoring Station	Purunasahi Village							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.50	<0.1	<1.0	<1.0	1.5	BQL (0.7)	BQL
Average	<20.0	17.26	<0.1	<1.0	<1.0	0.58	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.21
Area: Talcher Area

Project	Nandira UG							
Monitoring Station	Nandira Colony							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
Minimum	<20.0	10.33	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	26.15	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	16.76	<0.1	<1.0	<1.0	0.74	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

Table: 8.7.22
Area: Talcher Area

Project	Nandira UG							
Monitoring Station	Near Natedi Village (Reported)							
Annual for the year 2024-25	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(μg/m ³)	(μg/m ³)	(μg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(μg/m ³)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.2	BQL (0.7)	BQL
Maximum	<20.0	28.80	<0.1	<1.0	<1.0	1.3	BQL (0.7)	BQL
Average	<20.0	18.35	<0.1	<1.0	<1.0	0.66	BQL (0.7)	BQL
Standard	400 (24hours)	180 (1 hour)	1.0 (24hours)	-	-	2.0 (8 hours)	-	-
Standard Annual	100 (Annual)	-	0.50 (Annual)	6.0 (Annual)	20 (Annual)	-	01 (Annual)	05 (Annual)

**AMBIENT AIR QUALITY DATA
(CARBON MONOXIDE (CO)
COMPLIANCE STATIONS)**

TABLE FOR HEAVY METAL QUANTITY DATA

Table:8.9.1
Area: Jagannath

<i>Project</i>	Ananta OCP
<i>Monitoring Station</i>	Central Nursery
<i>Date of sampling</i>	CO
	(mg/m ³)
05-Apr-2024	0.4
20-Apr-2024	0.5
04-May-2024	0.4
18-May-2024	0.5
01-Jun-2024	0.5
17-Jun-2024	0.4
05-Jul-2024	0.6
20-Jul-2024	0.4
03-Aug-2024	0.8
19-Aug-2024	0.7
06-Sep-2024	0.68
20-Sep-2024	0.47
01-Oct-2024	0.64
28-Oct-2024	0.66
06-Nov-2024	0.8
20-Nov-2024	0.9
06-Dec-2024	1.2
18-Dec-2024	1.3
06-Jan-2025	1.8
16-Jan-2025	1.6
01-Feb-2025	1.2
17-Feb-2025	0.9
01-Mar-2025	1.2
21-Mar-2025	1.4
Standard	02(8 Hours)

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Table:8.9.2
Area: Jagannath

<i>Project</i>	Ananta OCP
<i>Monitoring Station</i>	North East of Mine
<i>Date of sampling</i>	CO
	(mg/m ³)
05-Apr-2024	0.3
20-Apr-2024	0.2
04-May-2024	0.6
18-May-2024	0.7
01-Jun-2024	0.5
17-Jun-2024	0.6
05-Jul-2024	0.4
20-Jul-2024	0.5
03-Aug-2024	0.6
19-Aug-2024	0.7
06-Sep-2024	0.79
20-Sep-2024	0.51
01-Oct-2024	0.76
28-Oct-2024	0.81
06-Nov-2024	1.1
20-Nov-2024	1.4
06-Dec-2024	1.7
18-Dec-2024	1.5
06-Jan-2025	2.2
16-Jan-2025	2.1
01-Feb-2025	1.1
17-Feb-2025	1.0
01-Mar-2025	1.3
21-Mar-2025	1.5
Standard	02(8 Hours)

Table: 8.9.3
Area: Lingraj

Project	Lingraj OCP
Monitoring Station	Near OB Dump no. 5 (South Side of the Mine)
Date of sampling	CO
	(mg/m ³)
06-Apr-2024	0.1
20-Apr-2024	0.2
11-May-2024	0.6
25-May-2024	0.6
07-Jun-2024	0.6
18-Jun-2024	0.6
06-Jul-2024	0.6
29-Jul-2024	0.5
07-Aug-2024	0.6
20-Aug-2024	0.7
07-Sep-2024	1.14
21-Sep-2024	1.27
05-Oct-2024	0.67
28-Oct-2024	0.71
13-Nov-2024	1.6
27-Nov-2024	1.5
06-Dec-2024	1.5
26-Dec-2024	1.3
07-Jan-2025	2.4
22-Jan-2025	2.2
07-Feb-2025	1.8
22-Feb-2025	1.9
07-Mar-2025	1.6
22-Mar-2025	1.7
Standard	02(8 Hours)

Table:8.9.4
Area: Lingraj

Project	Lingraj OCP
Monitoring Station	Near OB Dump no. 10 (North Side of the Mine)
Date of sampling	CO
	(mg/m ³)
06-Apr-2024	0.1
26-Apr-2024	0.2
11-May-2024	0.7
25-May-2024	0.6
07-Jun-2024	0.6
18-Jun-2024	0.5
06-Jul-2024	0.5
29-Jul-2024	0.6
07-Aug-2024	0.6
20-Aug-2024	0.7
07-Sep-2024	1.18
21-Sep-2024	0.97
05-Oct-2024	0.81
28-Oct-2024	0.96
13-Nov-2024	1.2
27-Nov-2024	1.3
07-Dec-2024	1.2
26-Dec-2024	1.1
07-Jan-2025	2.1
22-Jan-2025	2.2
07-Feb-2025	1.6
22-Feb-2025	1.4
07-Mar-2025	1.7
22-Mar-2025	1.9
Standard	02(8 Hours)

Table:8.9.5
Area: Lingraj

<i>Project</i>	Lingraj OCP
<i>Monitoring Station</i>	IWSS
<i>Date of sampling</i>	CO
	(mg/m ³)
06-Apr-2024	0.1
26-Apr-2024	0.2
11-May-2024	0.5
25-May-2024	0.6
07-Jun-2024	0.5
18-Jun-2024	0.5
06-Jul-2024	0.5
29-Jul-2024	0.5
07-Aug-2024	0.7
20-Aug-2024	0.6
07-Sep-2024	1.07
21-Sep-2024	1.24
05-Oct-2024	0.54
29-Oct-2024	0.92
07-Nov-2024	0.9
21-Nov-2024	0.8
07-Dec-2024	1.6
26-Dec-2024	1.5
07-Jan-2025	1.8
22-Jan-2025	1.6
07-Feb-2025	1.7
22-Feb-2025	1.5
07-Mar-2025	1.4
22-Mar-2025	1.6
Standard	02(8 Hours)

Table:8.9.6
Area: Lingraj

<i>Project</i>	Lingraj OCP
<i>Monitoring Station</i>	Near Lingaraj to Dera Road
<i>Date of sampling</i>	CO
	(mg/m ³)
06-Apr-2024	0.1
26-Apr-2024	0.2
11-May-2024	0.4
25-May-2024	0.5
07-Jun-2024	0.6
18-Jun-2024	0.6
06-Jul-2024	0.6
29-Jul-2024	0.6
07-Aug-2024	0.8
20-Aug-2024	0.7
07-Sep-2024	1.19
21-Sep-2024	1.07
05-Oct-2024	0.62
29-Oct-2024	0.81
07-Nov-2024	1.2
21-Nov-2024	1.4
07-Dec-2024	1.6
26-Dec-2024	1.5
07-Jan-2025	2.4
22-Jan-2025	1.9
07-Feb-2025	2.1
22-Feb-2025	1.8
07-Mar-2025	1.3
22-Mar-2025	1.4
Standard	02(8 Hours)

Table:8.9.7
Area: Kaniha

<i>Project</i>	Kaniha OCP
<i>Monitoring Station</i>	Near Project Office
<i>Date of sampling</i>	CO
	(mg/m ³)
12-Apr-2024	0.3
26-Apr-2024	0.2
15-May-2024	0.3
29-May-2024	0.4
08-Jun-2024	0.6
24-Jun-2024	0.6
12-Jul-2024	0.4
26-Jul-2024	0.4
14-Aug-2024	0.8
27-Aug-2024	0.7
13-Sep-2024	0.52
27-Sep-2024	0.57
05-Oct-2024	0.68
29-Oct-2024	0.63
14-Nov-2024	1.5
28-Nov-2024	1.3
13-Dec-2024	1.5
19-Dec-2024	1.4
13-Jan-2025	2.4
23-Jan-2025	2.2
08-Feb-2025	1.7
22-Feb-2025	1.6
08-Mar-2025	1.2
28-Mar-2025	1.1
Standard	04(1hours)

Table:8.9.8
Area: Kaniha

<i>Project</i>	Kaniha OCP
<i>Monitoring Station</i>	New Time Office (Near Z-Patch)
<i>Date of sampling</i>	CO
	(mg/m ³)
12-Apr-2024	0.1
26-Apr-2024	0.1
15-May-2024	0.4
29-May-2024	0.5
08-Jun-2024	0.7
24-Jun-2024	0.6
12-Jul-2024	0.4
26-Jul-2024	0.5
14-Aug-2024	0.7
27-Aug-2024	0.6
13-Sep-2024	0.51
27-Sep-2024	0.57
05-Oct-2024	0.78
29-Oct-2024	0.76
14-Nov-2024	1.8
28-Nov-2024	1.7
13-Dec-2024	1.5
19-Dec-2024	1.4
13-Jan-2025	1.8
23-Jan-2025	2.1
08-Feb-2025	1.6
22-Feb-2025	1.5
08-Mar-2025	1.4
28-Mar-2025	1.1
Standard	02(8 Hours)

Table:8.9.9
Area: Kaniha

Project	Kaniha OCP
Monitoring Station	Old Site Office
Date of sampling	CO
	(mg/m ³)
12-Apr-2024	0.3
26-Apr-2024	0.2
15-May-2024	0.5
29-May-2024	0.5
08-Jun-2024	0.6
24-Jun-2024	0.6
12-Jul-2024	0.4
26-Jul-2024	0.4
14-Aug-2024	0.7
27-Aug-2024	0.6
13-Sep-2024	0.66
27-Sep-2024	0.5
05-Oct-2024	0.81
29-Oct-2024	0.84
14-Nov-2024	1.4
28-Nov-2024	1.0
13-Dec-2024	1.6
19-Dec-2024	1.5
13-Jan-2025	1.9
23-Jan-2025	2.1
08-Feb-2025	1.8
22-Feb-2025	1.7
08-Mar-2025	1.6
28-Mar-2025	1.4
Standard	02(8 Hours)

Table:8.9.10
Area: Kaniha

<i>Project</i>	Kaniha OCP
<i>Monitoring Station</i>	Near Jatra Padia, Jarada
<i>Date of sampling</i>	CO
	(mg/m ³)
12-Apr-2024	0.2
26-Apr-2024	0.2
08-Jun-2024	0.5
24-Jun-2024	0.6
12-Jul-2024	0.4
26-Jul-2024	0.6
14-Aug-2024	0.8
27-Aug-2024	0.7
13-Sep-2024	0.52
27-Sep-2024	0.59
05-Oct-2024	0.78
29-Oct-2024	0.92
14-Nov-2024	1.2
28-Nov-2024	0.9
13-Dec-2024	1.5
19-Dec-2024	1.4
13-Jan-2025	1.8
23-Jan-2025	2.0
08-Feb-2025	1.4
22-Feb-2025	1.6
08-Mar-2025	1.3
28-Mar-2025	1.4
Standard	02(8 Hours)

Table:8.9.11
Area: Kaniha

<i>Project</i>	Kaniha OCP
<i>Monitoring Station</i>	Near External OB Dump, Jamania
<i>Date of sampling</i>	CO
	(mg/m ³)
12-Apr-2024	0.1
26-Apr-2024	0.2
08-Jun-2024	0.7
24-Jun-2024	0.6
12-Jul-2024	0.5
26-Jul-2024	0.5
14-Aug-2024	0.8
27-Aug-2024	0.6
13-Sep-2024	0.64
27-Sep-2024	0.55
09-Oct-2024	0.82
29-Oct-2024	0.96
14-Nov-2024	0.8
28-Nov-2024	1.2
13-Dec-2024	1.5
19-Dec-2024	1.2
13-Jan-2025	2.3
23-Jan-2025	2.1
08-Feb-2025	1.5
22-Feb-2025	1.4
08-Mar-2025	1.5
28-Mar-2025	1.2
Standard	02(8 Hours)

Table:8.9.12
Area: Kaniha

<i>Project</i>	Kaniha OCP
<i>Monitoring Station</i>	North of the Mine
<i>Date of sampling</i>	CO
	(mg/m ³)
12-Apr-2024	0.1
26-Apr-2024	0.3
08-Jun-2024	0.5
24-Jun-2024	0.6
12-Jul-2024	0.6
26-Jul-2024	0.4
14-Aug-2024	0.7
27-Aug-2024	0.6
13-Sep-2024	0.68
27-Sep-2024	0.52
09-Oct-2024	0.73
29-Oct-2024	0.98
14-Nov-2024	1.6
28-Nov-2024	1.4
13-Dec-2024	1.2
19-Dec-2024	1.4
13-Jan-2025	1.8
23-Jan-2025	1.7
08-Feb-2025	1.6
22-Feb-2025	1.8
08-Mar-2025	1.6
28-Mar-2025	1.4
Standard	02(8 Hours)

Table:8.9.13
Area: Hingula

<i>Project</i>	Hingula OCP
<i>Monitoring Station</i>	Time Office
<i>Date of sampling</i>	CO
	(mg/m ³)
13-Apr-2024	0.1
27-Apr-2024	0.2
15-May-2024	0.4
29-May-2024	0.5
10-Jun-2024	0.5
25-Jun-2024	0.5
13-Jul-2024	0.4
27-Jul-2024	0.4
08-Aug-2024	0.7
26-Aug-2024	0.4
14-Sep-2024	0.67
28-Sep-2024	0.75
09-Oct-2024	0.67
29-Oct-2024	0.92
14-Nov-2024	0.8
28-Nov-2024	0.7
14-Dec-2024	1.3
18-Dec-2024	1.5
14-Jan-2025	2.1
22-Jan-2025	2.4
14-Feb-2025	1.2
24-Feb-2025	1.4
14-Mar-2025	1.2
29-Mar-2025	1.3
Standard	02(8 Hours)

Table:8.9.14
Area: Hingula

<i>Project</i>	Hingula OCP
<i>Monitoring Station</i>	South West Side of the Mine
<i>Date of sampling</i>	CO
	(mg/m ³)
13-Apr-2024	0.1
27-Apr-2024	0.2
10-Jun-2024	0.5
25-Jun-2024	0.6
13-Jul-2024	0.4
27-Jul-2024	0.5
08-Aug-2024	0.8
26-Aug-2024	0.4
14-Sep-2024	0.5
28-Sep-2024	0.6
09-Oct-2024	0.62
30-Oct-2024	0.86
14-Nov-2024	0.9
28-Nov-2024	0.7
14-Dec-2024	1.6
18-Dec-2024	1.2
14-Jan-2025	2.2
22-Jan-2025	1.8
14-Feb-2025	0.9
24-Feb-2025	1.2
14-Mar-2025	1.4
29-Mar-2025	1.3
Standard	02(8 Hours)

NOISE LEVEL



AMBIENT NOISE MONITORING REPORT

9.1 CONCEPT & SCOPE

The noise monitoring report encompasses the results and statistical evaluation of the data monitored at 37 different locations in IB coalfield of MCL. Ambient Noise monitoring is carried out on routine basis at a particular location. The data generated by the method is compared with prescribed noise level standards. The stations are located away from the direct source and vibration and obstructions.

9.2 FREQUENCY OF SAMPLING

Frequency of noise level measurement is fortnightly for all stations

Parameters	Frequency of each location
Day Leq (dBA)	fortnightly
Night Leq (dBA)	fortnightly

9.3 SAMPLING DURATION

The monitoring is being carried out minimum 75% of the prescribed Day time (06.00 am to 22.00 pm) and Night time (22.00 pm to 06.00 am). The exercise is carried out at least for 6 to 8 hrs.

9.4 NOISE LEVEL MONITORING AT DIFFERENT LOCATIONS

During ambient noise monitoring sound comes from more than one direction, it is important to choose a microphone and mounting which gives the best possible Omni directional characteristics. Noise level measurements are being carried out at various locations like industrial, commercial, and residential and silence zones.



TABLE NO 9 FOR NOISE LEVEL MONITORING DATA

Table:9.5.1

Area: Jagannath

Project: Jagannath OCP

Monitoring Station: Central Nursery (Reported only)

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	50.1	35.1	47.2
18-Apr-24	50.8	35.2	47.9
09-May-24	69.2	54.5	66.3
20-May-24	62.2	47.4	59.3
05-Jun-24	59.5	44.5	56.6
24-Jun-24	65.8	50.8	62.9
04-Jul-24	61.9	55.3	59.7
25-Jul-24	55.7	39.2	52.8
06-Aug-24	70.3	66.9	68.9
27-Aug-24	69.7	44.3	66.7
09-Sep-24	68.4	46.1	65.4
19-Sep-24	66.9	45.9	63.9
07-Oct-24	69.1	44.9	66.1
21-Oct-24	65.4	46.9	62.5
07-Nov-24	59.7	40.2	56.7
21-Nov-24	66.3	56.1	63.7
09-Dec-24	64.3	52.2	61.5
18-Dec-24	63.7	48.4	60.8
09-Jan-25	68.7	49.7	65.7
20-Jan-25	64.9	48.2	62.0
05-Feb-25	65.8	51.8	63.0
19-Feb-25	66.7	58.6	64.3
06-Mar-25	50.07	45.7	48.4
24-Mar-25	52.1	42.3	49.5
MIN	50.07	35.1	47.2
MAX	70.3	66.9	68.9
MEAN	62.80	47.93	60.1
Noise Standard	75	70	

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

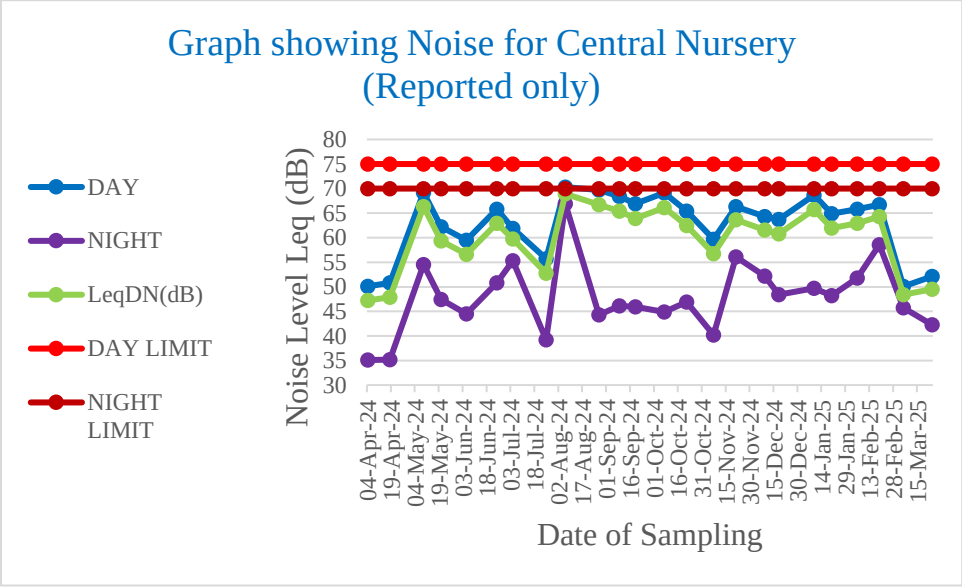


Table: 9.5.2
Area: Jagannath
Project: Jagannath OCP
Monitoring Station: CWS Colony, MEETI
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	54	39.7	51.1
18-Apr-24	54.1	39.2	51.2
09-May-24	50.1	35.1	47.2
20-May-24	50.1	35	47.2
05-Jun-24	50.1	35.1	47.2
24-Jun-24	50.1	35	47.2
04-Jul-24	51.2	42.7	48.8
25-Jul-24	54.1	44.9	51.6
06-Aug-24	54.3	44.2	51.7
27-Aug-24	54.1	39.7	51.2
09-Sep-24	54.3	40.1	51.5
19-Sep-24	53.6	40.8	50.8
07-Oct-24	52.6	44.1	50.2
21-Oct-24	54.1	43.6	51.5
07-Nov-24	54.3	44.3	51.7
21-Nov-24	51.6	43.9	49.3
09-Dec-24	51.2	43.4	48.9
18-Dec-24	54.9	30.1	51.9
09-Jan-25	51.9	43.2	49.4
20-Jan-25	51.7	43.2	49.3
05-Feb-25	68.7	51.6	65.8
19-Feb-25	51.7	43.2	49.3
06-Mar-25	50.1	39.2	47.4
24-Mar-25	52.1	39.8	49.3
MIN	50.1	30.1	47.2
MAX	68.7	51.6	65.8
MEAN	53.13	40.88	50.45
Noise Standard	75	70	

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for CWS Colony, MEETI

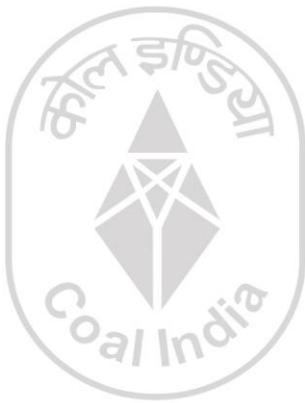
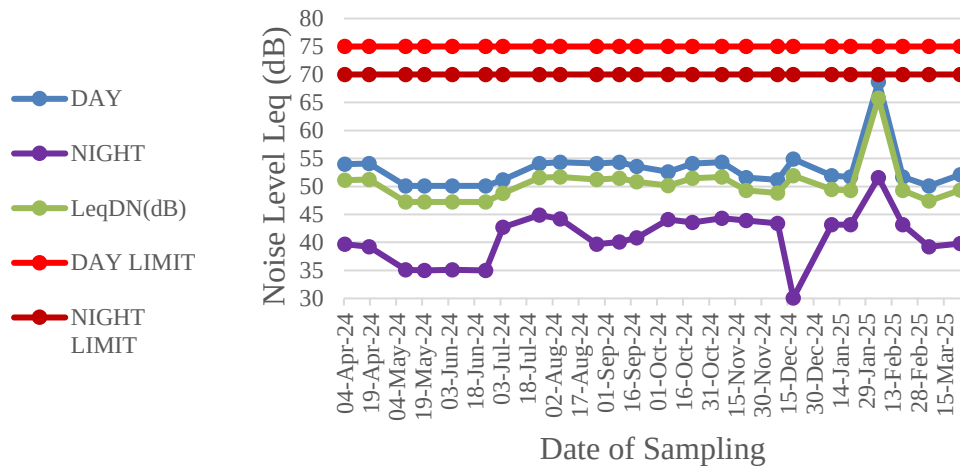


Table: 9.5.3
Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Near MDTP
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	63.1	48.1	60.2
18-Apr-24	70	59.2	67.3
09-May-24	71.4	57.4	68.6
20-May-24	71.4	56.1	68.5
05-Jun-24	69	54	66.1
24-Jun-24	68	53.1	65.1
04-Jul-24	63.7	47.1	60.8
25-Jul-24	72.3	65.4	70.1
06-Aug-24	70.7	64.3	68.6
27-Aug-24	64.3	49.7	61.4
09-Sep-24	65.1	49.8	62.2
19-Sep-24	65.3	48.6	62.4
07-Oct-24	64.6	48.1	61.7
21-Oct-24	64.8	51.9	62.0
07-Nov-24	69.7	53.2	66.8
21-Nov-24	68.2	53.4	65.3
09-Dec-24	68.7	56.2	65.9
18-Dec-24	68.2	54.3	65.4
09-Jan-25	74.7	62.3	71.9
20-Jan-25	74.7	55.3	71.7
05-Feb-25	71.6	56.7	68.7
19-Feb-25	72.3	61.2	69.6
06-Mar-25	71.3	61.2	68.7
24-Mar-25	71.1	59.3	68.4
MIN	63.1	47.1	60.2
MAX	74.7	65.4	71.9
MEAN	68.93	55.25	66.1
Noise Standard	75	70	

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

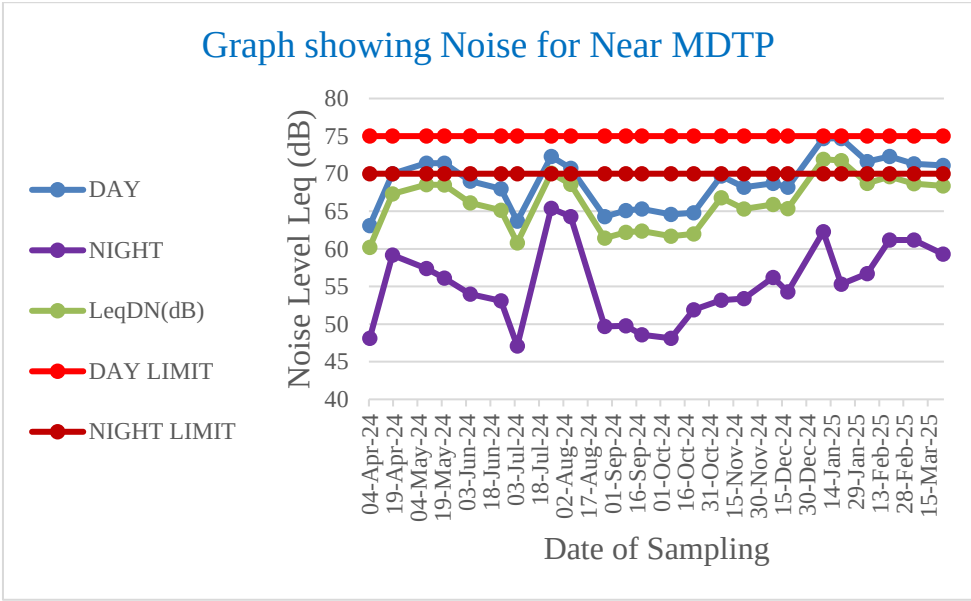


Table: 9.5.4
Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Near NBVL Station

DATE	DAY	NIGHT	Leq DN
04-Apr-24	63.2	48.2	60.3
18-Apr-24	73.1	58.4	70.2
09-May-24	71.2	56.2	68.3
20-May-24	70.1	55.9	67.3
05-Jun-24	70.1	55.1	67.2
24-Jun-24	69.2	54.2	66.3
04-Jul-24	61.4	48.6	58.6
25-Jul-24	59.5	44.7	56.6
06-Aug-24	72.4	65.7	70.2
27-Aug-24	69.3	56.7	66.5
09-Sep-24	66.4	57.1	63.9
19-Sep-24	64.8	54.7	62.2
07-Oct-24	63.6	54.6	61.1
21-Oct-24	63.6	52.6	60.9
07-Nov-24	70.2	59.2	67.5
21-Nov-24	70.2	55.6	67.3
09-Dec-24	70.3	59.7	67.7
18-Dec-24	71.4	56.9	68.5
09-Jan-25	70.3	52.7	67.4
20-Jan-25	71.7	56.2	68.8
05-Feb-25	68.2	50.1	65.3
19-Feb-25	71.1	53.1	68.2
06-Mar-25	69.3	59.3	66.7
24-Mar-25	69.3	56.3	66.5
MIN	59.5	44.7	56.6
MAX	73.1	65.7	70.2
MEAN	68.33	55.08	65.6

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

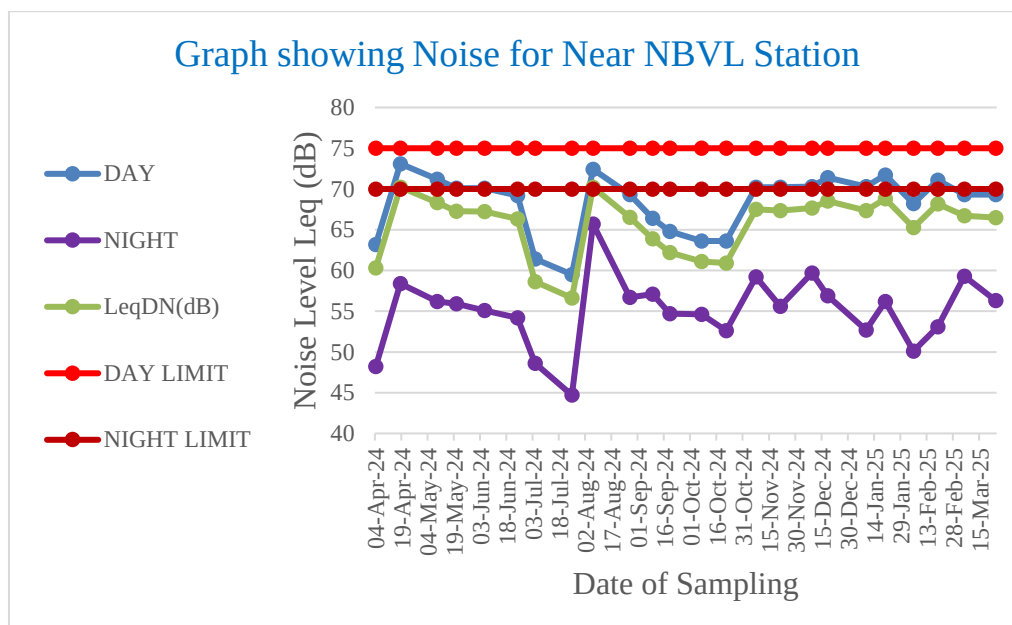
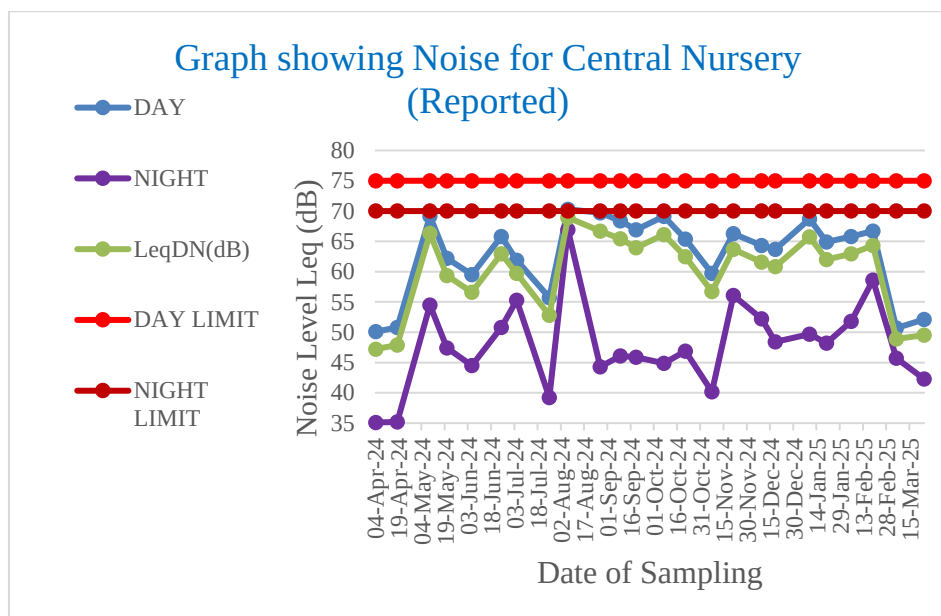


Table: 9.5.5
Area: Jagannath
Project: Ananta OCP
Monitoring Station: Central Nursery
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	50.1	35.1	47.2
18-Apr-24	50.8	35.2	47.9
09-May-24	69.2	54.5	66.3
20-May-24	62.2	47.4	59.3
05-Jun-24	59.5	44.5	56.6
24-Jun-24	65.8	50.8	62.9
04-Jul-24	61.9	55.3	59.7
25-Jul-24	55.7	39.2	52.8
06-Aug-24	70.3	66.9	68.9
27-Aug-24	69.7	44.3	66.7
09-Sep-24	68.4	46.1	65.4
19-Sep-24	66.9	45.9	63.9
07-Oct-24	69.1	44.9	66.1
21-Oct-24	65.4	46.9	62.5
07-Nov-24	59.7	40.2	56.7
21-Nov-24	66.3	56.1	63.7
09-Dec-24	64.3	52.2	61.5
18-Dec-24	63.7	48.4	60.8
09-Jan-25	68.7	49.7	65.7
20-Jan-25	64.9	48.2	62.0
05-Feb-25	65.8	51.8	63.0
19-Feb-25	66.7	58.6	64.3
06-Mar-25	50.7	45.7	48.9
24-Mar-25	52.1	42.3	49.5
MIN	50.1	35.1	47.2
MAX	70.3	66.9	68.9
MEAN	62.83	47.93	60.1

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)



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Table: 9.5.6
Area: Jagannath
Project: Ananta OCP
Monitoring Station: Guthasahi Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	52.5	37.7	49.6
18-Apr-24	51.2	36.2	48.3
09-May-24	49.6	36.4	46.8
20-May-24	49.2	34.1	46.3
05-Jun-24	43.2	28.2	40.3
24-Jun-24	47	32.1	44.1
04-Jul-24	50.3	40.9	47.8
25-Jul-24	50.1	36.3	47.3
06-Aug-24	54.7	37.7	51.8
27-Aug-24	52.3	36.3	49.4
09-Sep-24	53.2	39.1	50.4
19-Sep-24	54.1	38.9	51.2
07-Oct-24	53.9	39.4	51.0
21-Oct-24	54.8	41.3	52.0
07-Nov-24	54.6	39.3	51.7
21-Nov-24	54.3	45.4	51.8
09-Dec-24	51.6	39.8	48.9
18-Dec-24	56.3	48.2	53.9
09-Jan-25	54.3	41.2	51.5
20-Jan-25	59.7	42.1	56.8
05-Feb-25	49.9	36.7	47.1
19-Feb-25	50.4	39.8	47.8
06-Mar-25	49.8	38.6	47.1
24-Mar-25	50.6	40.1	48.0
MIN	43.2	28.2	40.3
MAX	59.7	48.2	56.8
MEAN	51.98	38.58	49.2

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Guthasahi Village

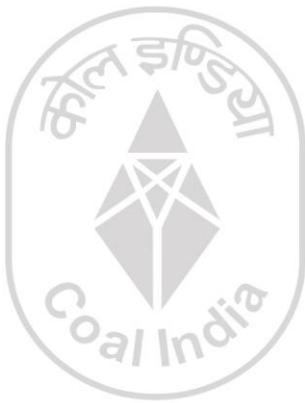
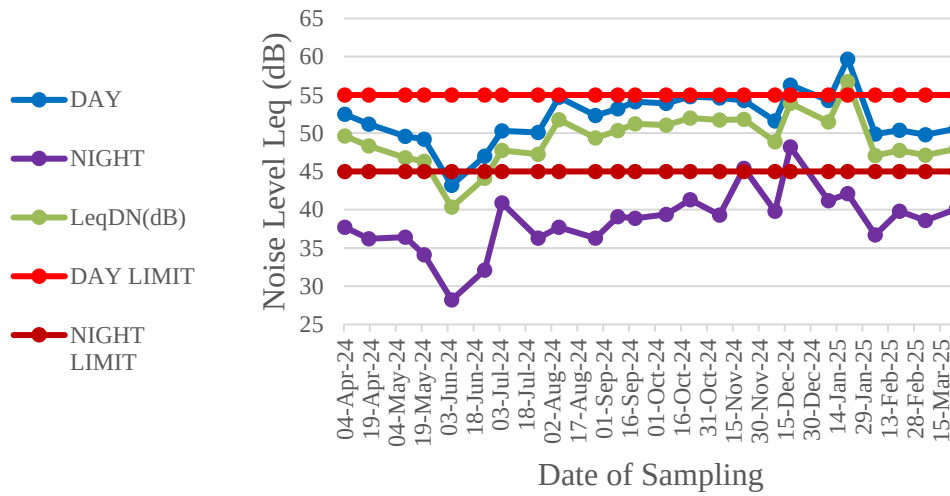


Table: 9.5.7
Area: Jagannath
Project: Ananta OCP
Monitoring Station: Near NBVL Station (Reported)
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	63.2	48.2	60.3
18-Apr-24	73.1	58.4	70.2
09-May-24	71.2	56.2	68.3
20-May-24	70.1	55.9	67.3
05-Jun-24	70.1	55.1	67.2
24-Jun-24	69.2	54.2	66.3
04-Jul-24	61.4	48.6	58.6
25-Jul-24	59.5	44.7	56.6
06-Aug-24	72.4	65.7	70.2
27-Aug-24	69.3	56.7	66.5
09-Sep-24	66.4	57.1	63.9
19-Sep-24	64.8	54.7	62.2
07-Oct-24	63.6	54.6	61.1
21-Oct-24	63.6	52.6	60.9
07-Nov-24	70.2	59.2	67.5
21-Nov-24	70.2	55.6	67.3
09-Dec-24	70.3	59.7	67.7
18-Dec-24	71.4	56.9	68.5
09-Jan-25	70.3	52.7	67.4
20-Jan-25	71.7	56.2	68.8
05-Feb-25	68.2	50.1	65.3
19-Feb-25	71.1	53.1	68.2
06-Mar-25	69.3	59.3	66.7
24-Mar-25	69.3	56.3	66.5
MIN	59.5	44.7	56.6
MAX	73.1	65.7	70.2
MEAN	68.33	55.08	65.6

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

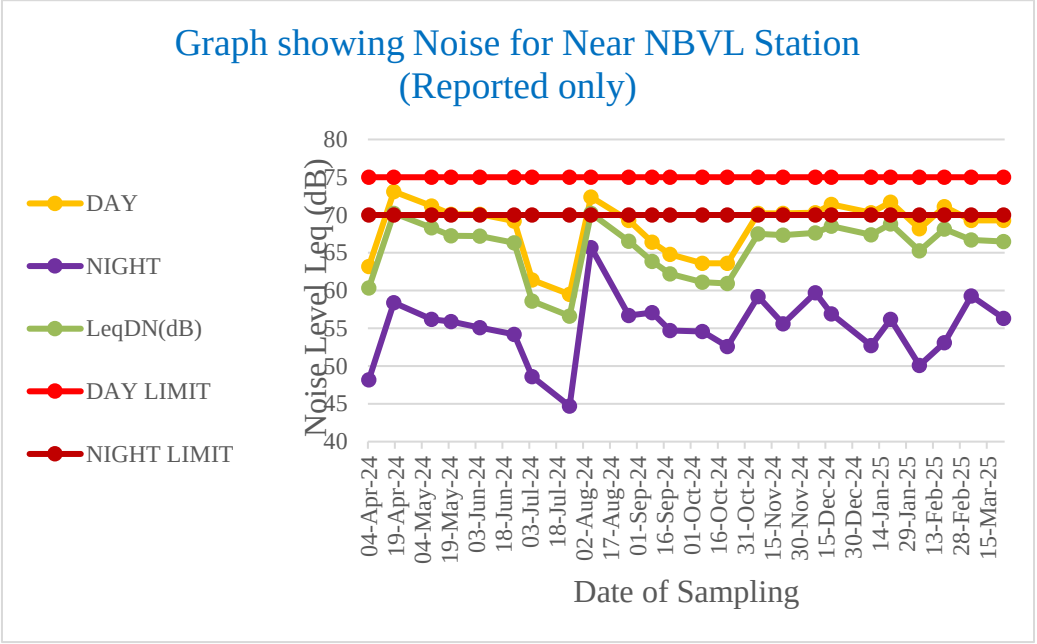


Table: 9.5.8
Area: Jagannath
Project: Ananta OCP
Monitoring Station: North East of the Mine
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	72.1	57.7	69.2
18-Apr-24	70.2	59.4	67.5
09-May-24	70.1	55.1	67.2
20-May-24	69.4	54.2	66.5
05-Jun-24	68.1	53.1	65.2
24-Jun-24	69.9	54.9	67.0
04-Jul-24	59.7	42.8	56.8
25-Jul-24	67.4	44.1	64.4
06-Aug-24	65.3	50.9	62.4
27-Aug-24	67.9	55.7	65.1
09-Sep-24	61.6	56.1	59.7
19-Sep-24	66.7	55.4	64.0
07-Oct-24	68.1	54.2	65.3
21-Oct-24	64.3	54.8	61.8
07-Nov-24	70.7	56.7	67.9
21-Nov-24	65.7	55.3	63.1
09-Dec-24	71.2	55.3	68.3
18-Dec-24	70.2	56.7	67.4
09-Jan-25	72.3	56.2	69.4
20-Jan-25	65.3	46.9	62.4
05-Feb-25	66.7	49.7	63.8
19-Feb-25	62.3	46.2	59.4
06-Mar-25	71.3	60.9	68.7
24-Mar-25	60.9	47.2	58.1
MIN	59.7	42.8	56.8
MAX	72.3	60.9	69.4
MEAN	67.39	53.31	64.6

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for North East of the Mine

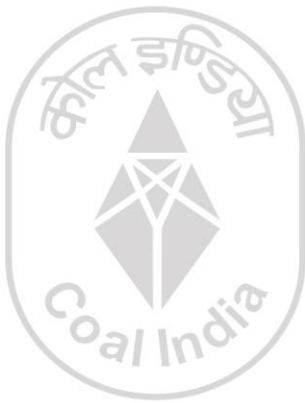
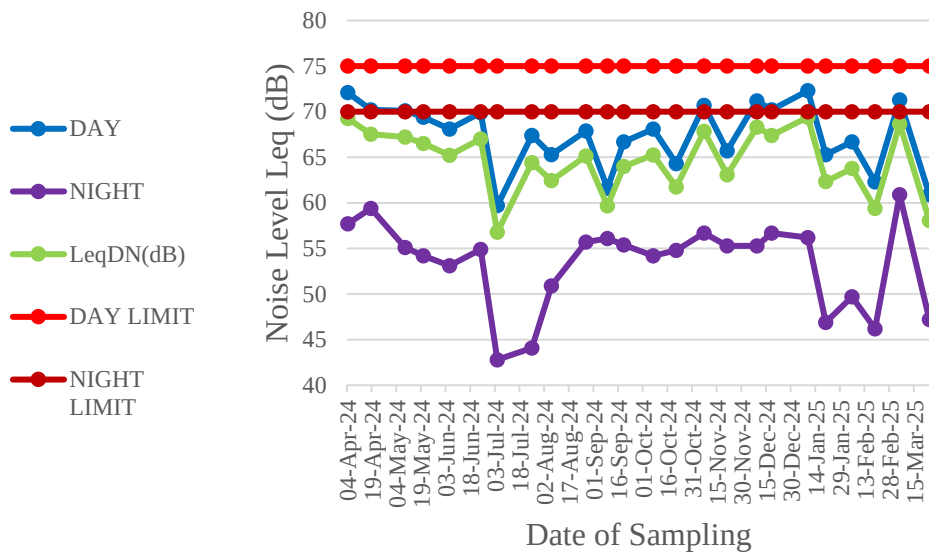


Table: 9.5.9
Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Near MGR-RLS of Bharatpur
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	72.5	57.5	69.6
18-Apr-24	72.1	57.4	69.2
09-May-24	70.4	55.4	67.5
20-May-24	69.4	54.4	66.5
05-Jun-24	69.4	54.7	66.5
24-Jun-24	70.1	55.7	67.2
04-Jul-24	60.5	47.8	57.7
25-Jul-24	70.9	51.3	67.9
06-Aug-24	71.7	62.7	69.2
27-Aug-24	70.3	44.7	67.3
09-Sep-24	69.4	45.4	66.4
19-Sep-24	68.3	46.2	65.3
07-Oct-24	68.4	46.1	65.4
21-Oct-24	66.3	49.6	63.4
07-Nov-24	60.3	49.2	57.6
21-Nov-24	64.4	55.2	61.9
09-Dec-24	64.7	52.3	61.9
18-Dec-24	63.3	46.2	60.4
09-Jan-25	67.3	49.2	64.4
20-Jan-25	59.7	40.1	56.7
05-Feb-25	69.6	50.3	66.6
19-Feb-25	72.1	59.2	69.3
06-Mar-25	67.3	49.7	64.4
24-Mar-25	69.3	49.2	66.3
MIN	59.7	40.1	56.7
MAX	72.5	62.7	69.6
MEAN	67.82	51.23	65.0

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

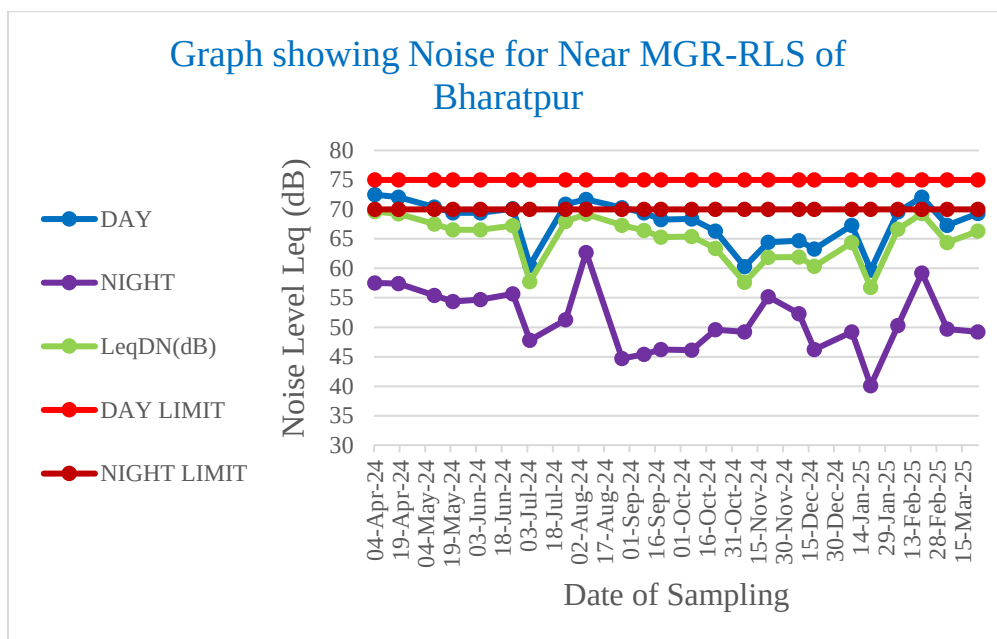


Table: 9.5.10
Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Near Regional Store
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	64	49	61.1
18-Apr-24	70.5	56.2	67.6
09-May-24	48.2	33.2	45.3
20-May-24	68.2	53.1	65.3
05-Jun-24	50.4	35.8	47.5
24-Jun-24	68	53.1	65.1
04-Jul-24	61.7	45.3	58.8
25-Jul-24	52.7	34.2	49.8
06-Aug-24	70.8	56.7	68.0
27-Aug-24	68.7	44.9	65.7
09-Sep-24	67.6	43.2	64.6
19-Sep-24	68.1	41.8	65.1
07-Oct-24	66.5	44.2	63.5
21-Oct-24	63.6	43.9	60.6
07-Nov-24	59.3	40.1	56.3
21-Nov-24	68.6	53.8	65.7
09-Dec-24	67.8	47.2	64.8
18-Dec-24	63.9	47.3	61.0
09-Jan-25	69.7	50.3	66.7
20-Jan-25	62.3	42.7	59.3
05-Feb-25	68.7	48.2	65.7
19-Feb-25	67.2	50.1	64.3
06-Mar-25	62.9	47.5	60.0
24-Mar-25	60.2	44.9	57.3
MIN	48.2	33.2	45.3
MAX	70.8	56.7	68.0
MEAN	64.15	46.11	61.2
Noise Standard	75	70	

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

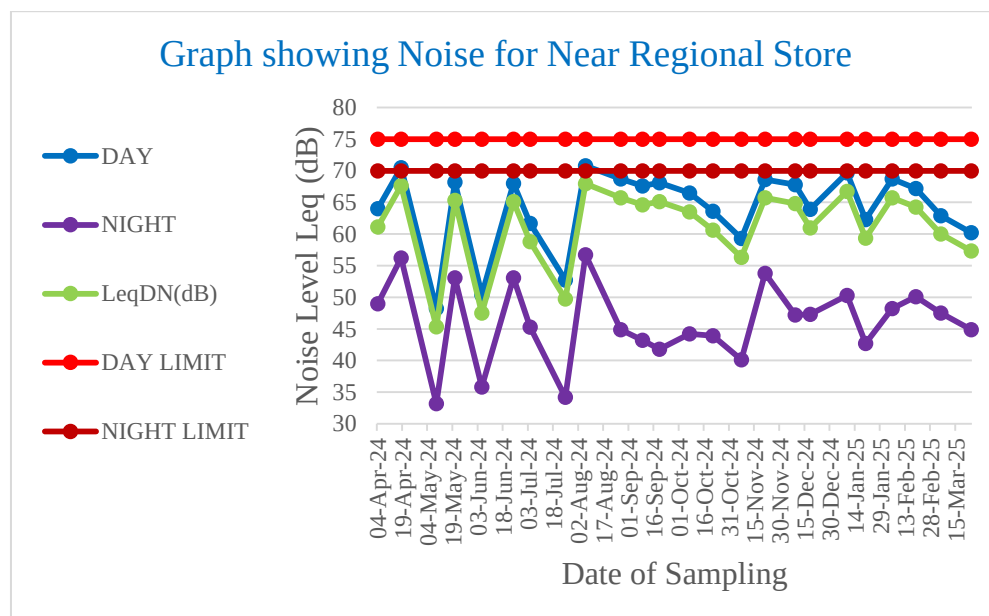


Table: 9.5.11
Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Near Workshop
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	72.4	57.4	69.5
18-Apr-24	73.1	58.1	70.2
09-May-24	46.2	33.2	43.4
20-May-24	71.4	56.2	68.5
05-Jun-24	68	53.1	65.1
24-Jun-24	70.1	55	67.2
04-Jul-24	58.2	50.7	55.9
25-Jul-24	71.7	49.7	68.7
06-Aug-24	72.5	60.7	69.8
27-Aug-24	72.1	46.7	69.1
09-Sep-24	69.4	49.2	66.4
19-Sep-24	68.2	50.1	65.3
07-Oct-24	66.1	48.1	63.2
21-Oct-24	66.9	51.6	64.0
07-Nov-24	69.9	53.2	67.0
21-Nov-24	73.7	58.3	70.8
09-Dec-24	72.3	58.2	69.5
18-Dec-24	74.3	49.2	71.3
09-Jan-25	71.2	60.9	68.6
20-Jan-25	73.7	56.2	70.8
05-Feb-25	70.6	52.3	67.7
19-Feb-25	72.1	59.1	69.3
06-Mar-25	72.7	53.8	69.7
24-Mar-25	74.9	52.3	71.9
MIN	46.2	33.2	43.4
MAX	74.9	60.9	71.9
MEAN	69.65	53.05	66.8

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Near Wokshop

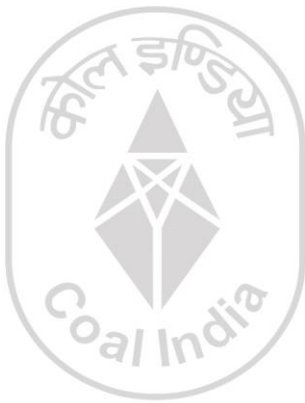
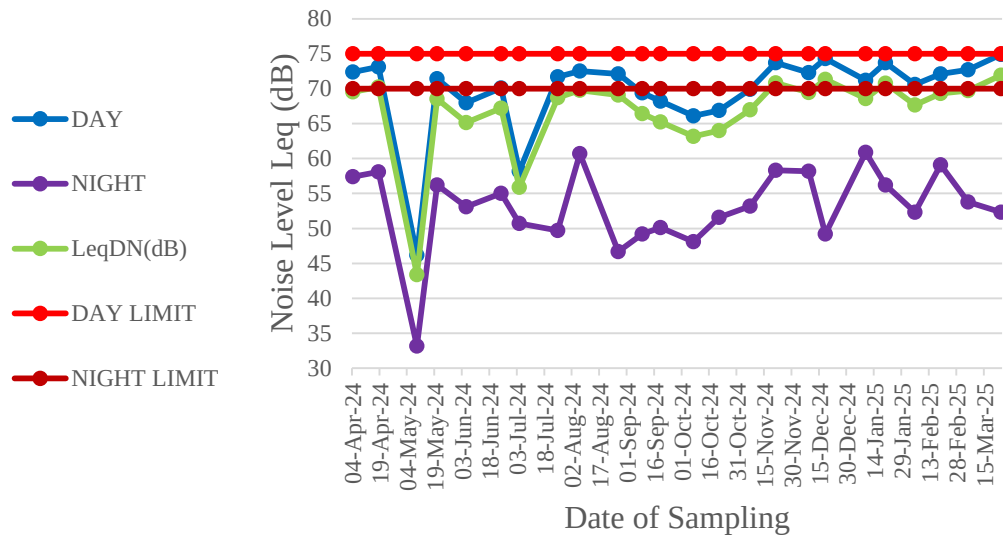


Table: 9.5.12
Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: North-West Point of the Mine
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
04-Apr-24	73.1	58.1	70.2
18-Apr-24	74	59.2	71.1
09-May-24	69.5	54.5	66.6
20-May-24	70.1	55.1	67.2
05-Jun-24	67.1	52	64.2
24-Jun-24	71.5	56.5	68.6
04-Jul-24	59.1	49.6	56.6
25-Jul-24	68.7	44.5	65.7
06-Aug-24	66.7	42.5	63.7
27-Aug-24	65.7	49.7	62.8
09-Sep-24	64.8	45.6	61.8
19-Sep-24	66.1	46.1	63.1
07-Oct-24	64.6	46.1	61.7
21-Oct-24	65.4	50.7	62.5
07-Nov-24	65.7	39.7	62.7
21-Nov-24	72.6	53.8	69.6
09-Dec-24	70.2	56.3	67.4
18-Dec-24	68.2	48.2	65.2
09-Jan-25	69.7	52.3	66.8
20-Jan-25	64.3	49.1	61.4
05-Feb-25	68.9	49.2	65.9
19-Feb-25	64.2	42.1	61.2
06-Mar-25	60.3	45.9	57.4
24-Mar-25	72.1	56.2	69.2
MIN	59.1	39.7	56.6
MAX	74.0	59.2	71.1
MEAN	67.61	50.13	64.7

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for North West Point of the Mine

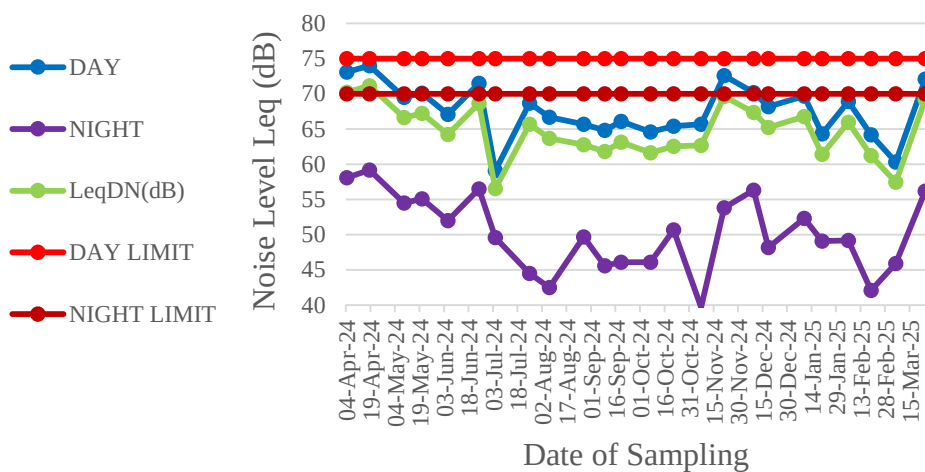
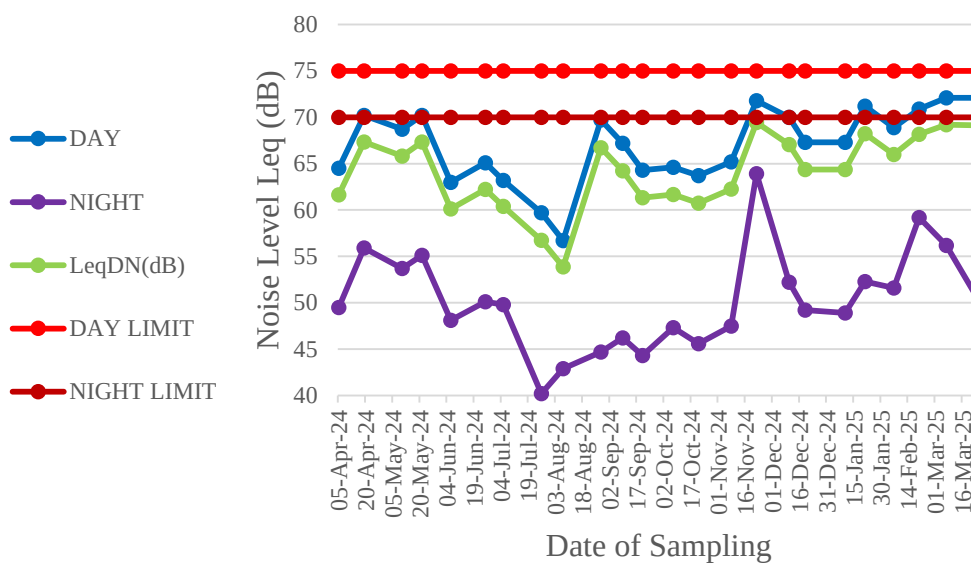


Table: 9.5.13
Area: Lingaraj
Project: Lingaraj OCP
Monitoring Station: IWSS
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
05-Apr-24	64.5	49.5	61.6
19-Apr-24	70.2	55.9	67.3
10-May-24	68.7	53.7	65.8
21-May-24	70.2	55.1	67.3
06-Jun-24	63	48.1	60.1
25-Jun-24	65.1	50.1	62.2
05-Jul-24	63.2	49.8	60.4
26-Jul-24	59.7	40.2	56.7
07-Aug-24	56.7	42.9	53.9
28-Aug-24	69.7	44.7	66.7
09-Sep-24	67.2	46.2	64.2
20-Sep-24	64.3	44.3	61.3
07-Oct-24	64.6	47.3	61.7
21-Oct-24	63.7	45.6	60.8
08-Nov-24	65.2	47.5	62.3
22-Nov-24	71.8	63.9	69.4
10-Dec-24	70	52.2	67.1
19-Dec-24	67.3	49.2	64.4
10-Jan-25	67.3	48.9	64.4
21-Jan-25	71.2	52.3	68.2
06-Feb-25	68.9	51.6	66.0
20-Feb-25	70.9	59.2	68.2
07-Mar-25	72.1	56.2	69.2
25-Mar-25	72.1	50.2	69.1
MIN	56.7	40.2	53.9
MAX	72.1	63.9	69.4
MEAN	66.98	50.19	64.1

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for IWSS



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Table: 9.5.14
Area: Lingaraj
Project: Lingaraj OCP
Monitoring Station: Near Lingaraj to Dera Road
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
05-Apr-24	63.1	50.2	60.3
19-Apr-24	72.4	57.2	69.5
10-May-24	71.4	56.4	68.5
21-May-24	72.4	57.4	69.5
06-Jun-24	70.1	55	67.2
25-Jun-24	73	58.7	70.1
05-Jul-24	64.1	50.9	61.3
26-Jul-24	71.2	56.9	68.3
07-Aug-24	72.7	65.7	70.5
28-Aug-24	74.9	59.7	72.0
09-Sep-24	71.1	54.5	68.2
20-Sep-24	69.6	53.2	66.7
07-Oct-24	69.7	53.2	66.8
22-Oct-24	68.4	53.8	65.5
08-Nov-24	70.2	49.3	67.2
22-Nov-24	72.4	64.5	70.0
10-Dec-24	73.1	56.7	70.2
19-Dec-24	74.2	56.2	71.3
10-Jan-25	72.1	63.7	69.7
21-Jan-25	71.5	62.8	69.0
06-Feb-25	67.9	50.1	65.0
20-Feb-25	69.8	62.1	67.5
07-Mar-25	70.6	59.2	67.9
25-Mar-25	74.9	56.2	71.9
MIN	63.1	49.3	60.3
MAX	74.9	65.7	72.0
MEAN	70.87	56.82	68.1

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Near Lingaraj to Dera Road

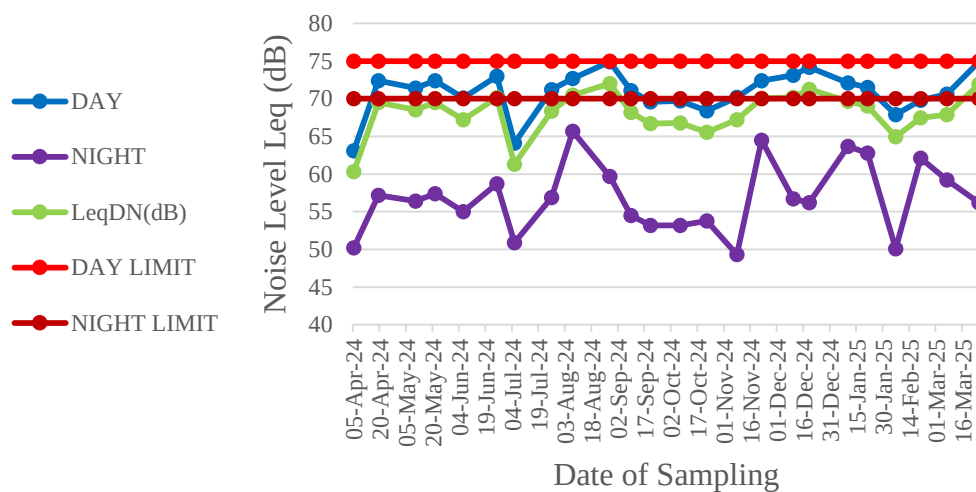


Table: 9.5.15

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring Station:** Near OB Dump no. 10 (North Side of the Mine)

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
05-Apr-24	72.4	57.4	69.5
19-Apr-24	71.8	56.7	68.9
10-May-24	70.4	55.4	67.5
21-May-24	71	56	68.1
06-Jun-24	67.5	52.9	64.6
25-Jun-24	68	53.2	65.1
05-Jul-24	61.4	48.9	58.6
26-Jul-24	65.7	39.9	62.7
07-Aug-24	65.9	49.7	63.0
28-Aug-24	70.4	39.7	67.4
09-Sep-24	68.5	41.9	65.5
20-Sep-24	67.6	43.1	64.6
07-Oct-24	65.8	45.1	62.8
21-Oct-24	66.5	51.6	63.6
08-Nov-24	66.3	42.3	63.3
22-Nov-24	70.4	64.8	68.4
10-Dec-24	72.1	60.2	69.4
19-Dec-24	64.3	51.1	61.5
10-Jan-25	68.2	49.8	65.3
21-Jan-25	63.9	44.1	60.9
06-Feb-25	66.9	55.1	64.2
20-Feb-25	71.3	56.3	68.4
07-Mar-25	60.7	47.3	57.9
25-Mar-25	64.5	41.3	61.5
MIN	60.7	39.7	57.9
MAX	72.4	64.8	69.5
MEAN	67.56	50.16	64.7

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Near OB Dump No.10 (North Side of the Mine)

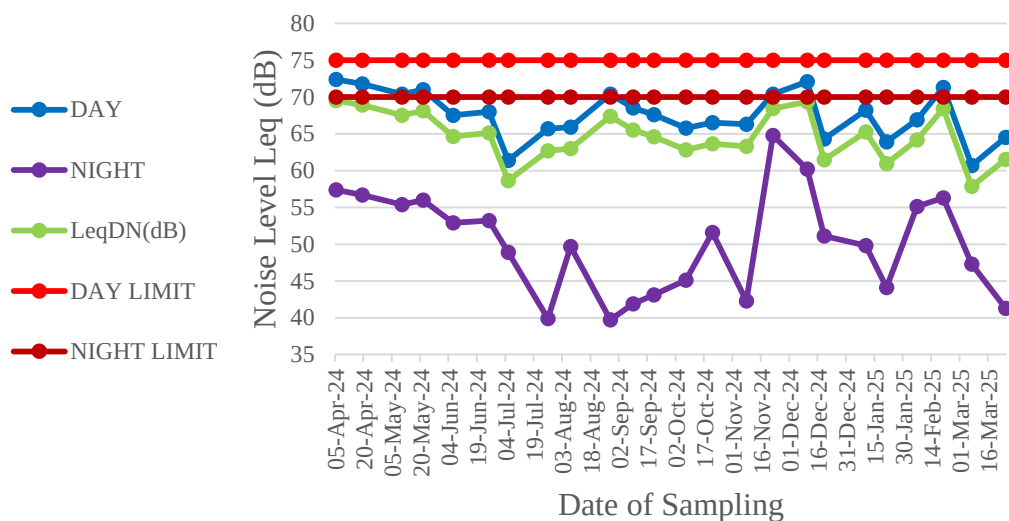


Table: 9.5.16

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring Station:** Near OB Dump no. 5 (South Side of the Mine)

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
05-Apr-24	71.2	58.2	68.4
19-Apr-24	71.2	56.1	68.3
10-May-24	69	54.2	66.1
21-May-24	71.7	56.7	68.8
06-Jun-24	66.1	51	63.2
25-Jun-24	69.1	54.5	66.2
05-Jul-24	63.8	47.2	60.9
26-Jul-24	56.1	37.9	53.2
07-Aug-24	69.7	60.7	67.2
28-Aug-24	70.3	56.9	67.5
09-Sep-24	69.2	49.6	66.2
20-Sep-24	68.4	50.1	65.5
07-Oct-24	68.6	46.2	65.6
21-Oct-24	64.7	50.4	61.8
08-Nov-24	70.1	50.12	67.1
22-Nov-24	72.8	65.4	70.5
10-Dec-24	64.7	58.2	62.6
19-Dec-24	69.2	49.3	66.2
10-Jan-25	68.2	51.3	65.3
21-Jan-25	56.7	41.3	53.8
06-Feb-25	69.2	51.2	66.3
20-Feb-25	71.2	53.1	68.3
07-Mar-25	63.7	39.2	60.7
25-Mar-25	60.2	41.2	57.2
MIN	56.1	37.9	53.2
MAX	72.8	65.4	70.5
MEAN	67.30	51.25	64.5

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Near OB Dump No.5 (South Side of the Mine)

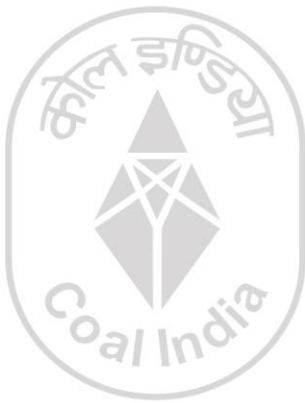
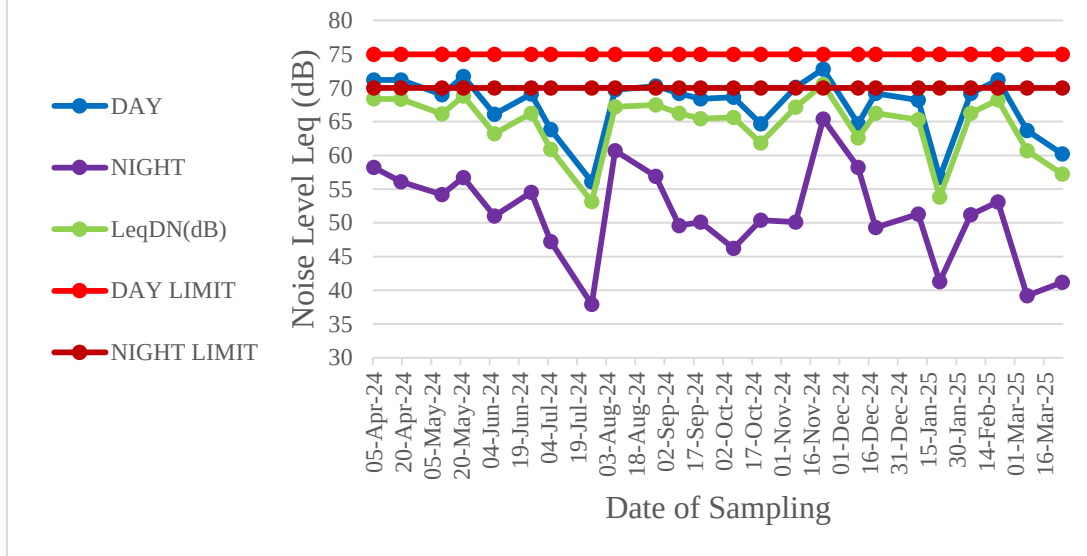


Table: 9.5.17
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Near Jarda Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	53	38.7	50.1
20-Apr-24	51	36.2	48.1
11-May-24	47.8	32.8	44.9
22-May-24	50.2	35.2	47.3
07-Jun-24	50.4	35.4	47.5
26-Jun-24	49	34.7	46.1
06-Jul-24	63.1	50.8	60.3
27-Jul-24	50.1	33.4	47.2
08-Aug-24	49.7	34.6	46.8
29-Aug-24	44.7	33.7	42.0
09-Sep-24	49.8	34.6	46.9
20-Sep-24	49.1	33.6	46.2
08-Oct-24	49.7	35.1	46.8
22-Oct-24	51.6	39.2	48.8
09-Nov-24	54.6	40.9	51.8
23-Nov-24	53.8	42.2	51.1
11-Dec-24	54.3	45.2	51.8
20-Dec-24	56.2	44.2	53.5
11-Jan-25	51.9	41.2	49.2
22-Jan-25	51.9	39.1	49.1
07-Feb-25	51.6	40.7	48.9
21-Feb-25	51.2	41.9	48.7
08-Mar-25	49.8	36.9	47.0
26-Mar-25	51.3	41.1	48.7
MIN	44.7	32.8	42.0
MAX	63.1	50.8	60.3
MEAN	51.49	38.39	48.7

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Near Jarda Village

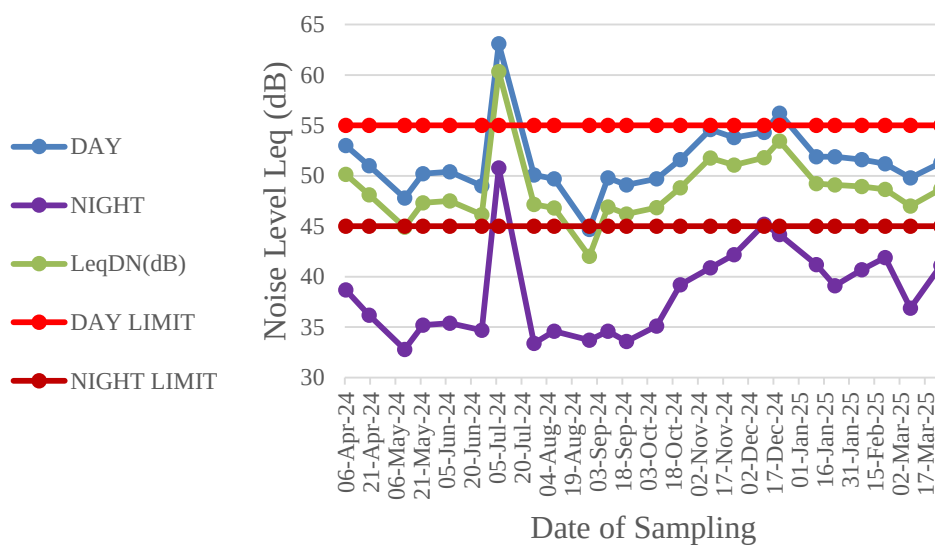


Table: 9.5.18
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Patharmunda Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	52.2	37.4	49.3
20-Apr-24	50.2	54	52.5
11-May-24	50.8	35.8	47.9
22-May-24	48.9	33.9	46.0
07-Jun-24	49	34.7	46.1
26-Jun-24	48.1	33.2	45.2
06-Jul-24	51.9	43.7	49.5
27-Jul-24	49.7	33.9	46.8
08-Aug-24	55.7	36.7	52.7
29-Aug-24	52.3	35.7	49.4
09-Sep-24	51.9	36.7	49.0
20-Sep-24	52.1	35.2	49.2
08-Oct-24	54.3	39.4	51.4
22-Oct-24	53.6	41.6	50.9
09-Nov-24	53.9	38.2	51.0
23-Nov-24	55	43.5	52.3
11-Dec-24	53.2	43.2	50.6
20-Dec-24	53.3	46.2	51.1
11-Jan-25	53.1	42.1	50.4
22-Jan-25	53.1	41.1	50.4
07-Feb-25	51.6	40.2	48.9
21-Feb-25	52.1	43.1	49.6
08-Mar-25	49.8	38.6	47.1
26-Mar-25	49.9	39.8	47.3
MIN	48.1	33.2	45.2
MAX	55.7	54.0	52.7
MEAN	51.90	39.50	49.4

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Patharmunda Village

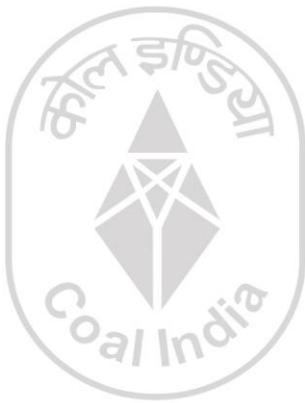
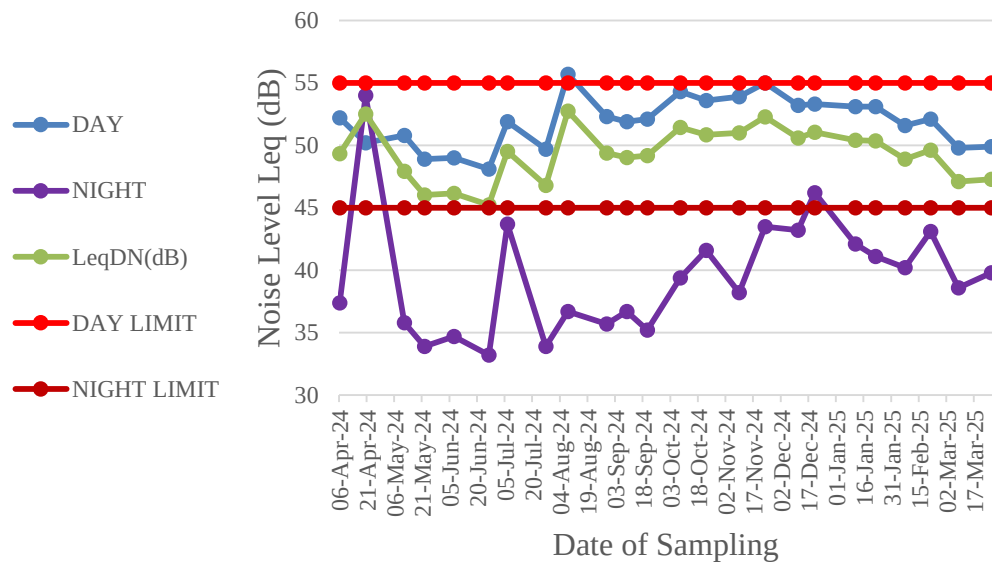


Table: 9.5.19
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Patharmunda Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	52.2	37.4	49.3
20-Apr-24	50.2	54	52.5
11-May-24	50.8	35.8	47.9
22-May-24	48.9	33.9	46.0
07-Jun-24	49	34.7	46.1
26-Jun-24	48.1	33.2	45.2
06-Jul-24	51.9	43.7	49.5
27-Jul-24	49.7	33.9	46.8
08-Aug-24	55.7	36.7	52.7
29-Aug-24	52.3	35.7	49.4
09-Sep-24	51.9	36.7	49.0
20-Sep-24	52.1	35.2	49.2
08-Oct-24	54.3	39.4	51.4
22-Oct-24	53.6	41.6	50.9
09-Nov-24	53.9	38.2	51.0
23-Nov-24	55	43.5	52.3
11-Dec-24	53.2	43.2	50.6
20-Dec-24	53.3	46.2	51.1
11-Jan-25	53.1	42.1	50.4
22-Jan-25	53.1	41.1	50.4
07-Feb-25	51.6	40.2	48.9
21-Feb-25	52.1	43.1	49.6
08-Mar-25	49.8	38.6	47.1
26-Mar-25	49.9	39.8	47.3
MIN	48.1	33.2	45.2
MAX	55.7	54.0	52.7
MEAN	51.90	39.50	49.4

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

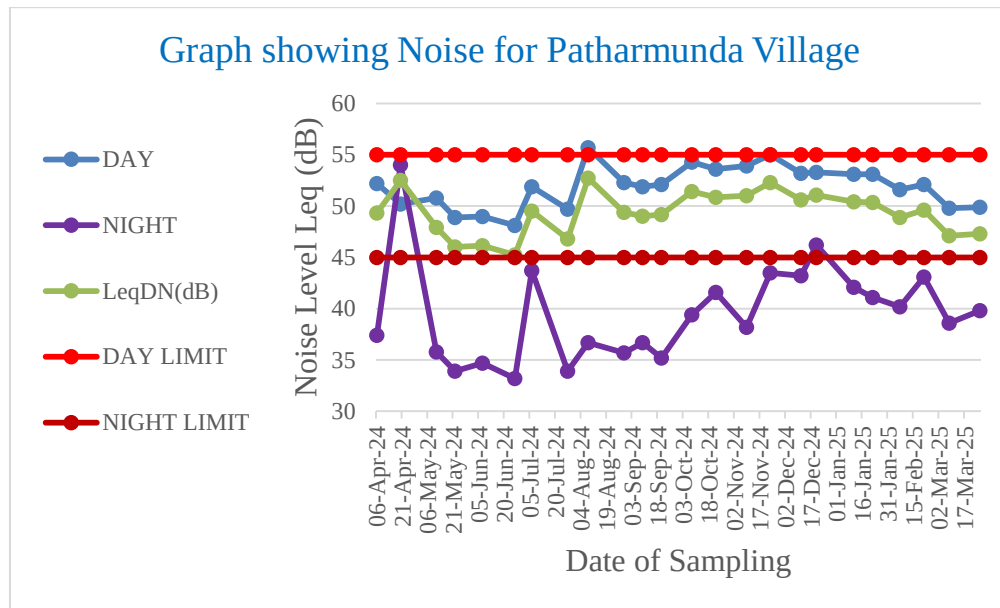


Table: 9.5.20
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Site Office
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	60.4	47.1	57.6
06-Apr-24	61.4	46.4	58.5
11-May-24	68.1	53.1	65.2
22-May-24	70.1	55.7	67.2
07-Jun-24	64	49	61.1
26-Jun-24	69.1	54	66.2
06-Jul-24	54.8	51.6	53.5
27-Jul-24	65.9	49.7	63.0
08-Aug-24	67.9	50.2	65.0
29-Aug-24	65.7	52.3	62.9
09-Sep-24	63.2	52.9	60.6
20-Sep-24	64.2	51.2	61.4
08-Oct-24	64.7	51.6	61.9
22-Oct-24	63.6	50.9	60.8
09-Nov-24	62.3	51.2	59.6
23-Nov-24	71.6	63.4	69.2
11-Dec-24	68.3	47.3	65.3
20-Dec-24	67.7	56.2	65.0
11-Jan-25	71.3	62.7	68.9
22-Jan-25	67.9	59.1	65.4
07-Feb-25	71.8	56.2	68.9
21-Feb-25	70.6	62.9	68.3
08-Mar-25	72.3	50.7	69.3
26-Mar-25	69.8	52.3	66.9
MIN	54.8	46.4	53.5
MAX	72.3	63.4	69.3
MEAN	66.53	53.24	63.8

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Site Office

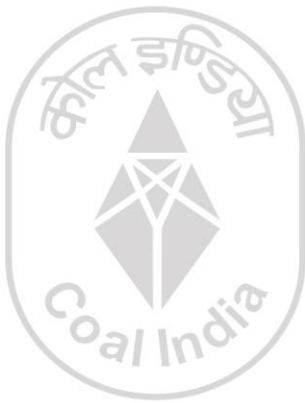
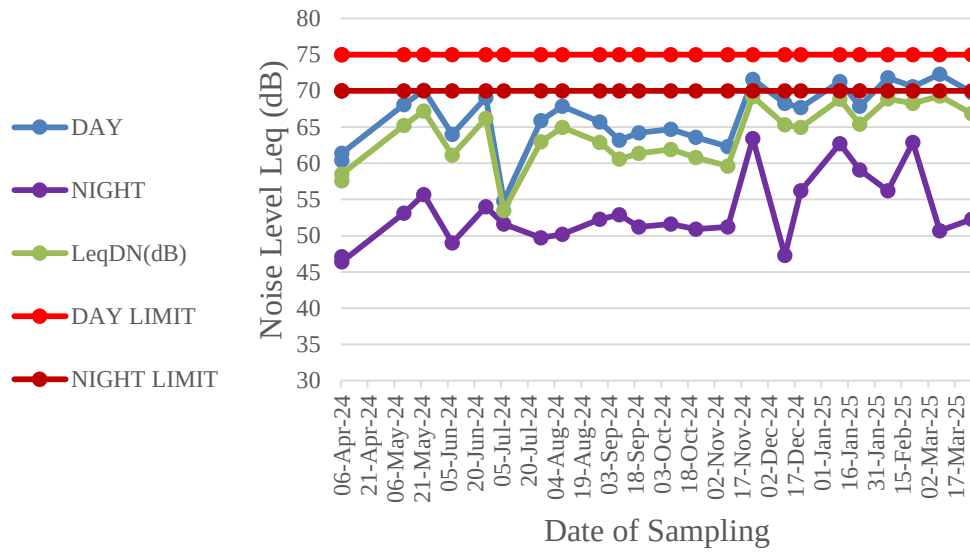


Table: 9.5.21
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Telisingha Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	52.1	37.1	49.2
20-Apr-24	41.2	36	39.3
11-May-24	48.2	33.2	45.3
22-May-24	49	34	46.1
07-Jun-24	48.1	33	45.2
26-Jun-24	48.2	33.2	45.3
06-Jul-24	48.8	40.7	46.4
27-Jul-24	51.9	34.7	49.0
08-Aug-24	55.7	37.7	52.8
29-Aug-24	54.3	34.2	51.3
09-Sep-24	53.6	36.3	50.7
20-Sep-24	54.2	39.2	51.3
08-Oct-24	52.9	38.1	50.0
22-Oct-24	53.9	36.9	51.0
09-Nov-24	59.2	35.3	56.2
23-Nov-24	54.6	44.4	52.0
11-Dec-24	53.3	44.1	50.8
20-Dec-24	54.7	45.3	52.2
11-Jan-25	54.3	40.3	51.5
22-Jan-25	52.1	40.3	49.4
07-Feb-25	52.1	41.2	49.4
21-Feb-25	53.6	43.7	51.0
08-Mar-25	50.1	38.4	47.4
26-Mar-25	50.2	39.8	47.6
MIN	41.2	33	39.3
MAX	59.2	45.3	56.2
MEAN	51.93	38.21	49.2

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Telisingha Village

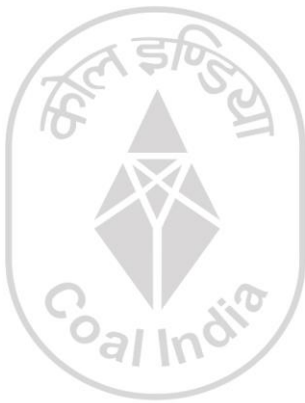
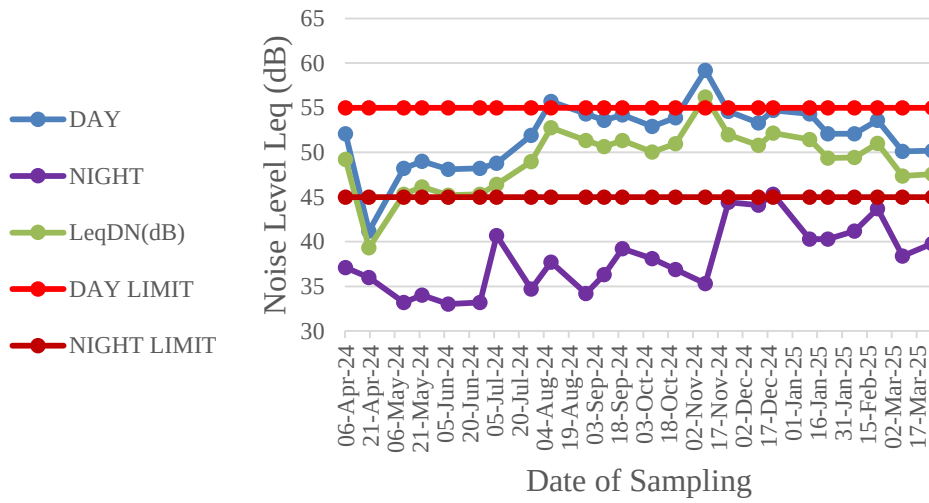


Table: 9.5.22
Area: Hingula
Project: Hingula OCP
Monitoring Station: North East of the Mine, Solda Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	51.4	36.7	48.5
20-Apr-24	51	36.2	48.1
11-May-24	52.2	41.6	49.6
22-May-24	50.1	35.9	47.3
08-Jun-24	48.1	33.1	45.2
27-Jun-24	49.2	34.8	46.3
06-Jul-24	49.8	41.1	47.3
27-Jul-24	47.9	33.5	45.0
09-Aug-24	55.1	37.1	52.2
30-Aug-24	50.1	35.9	47.3
09-Sep-24	49.4	42.1	47.1
20-Sep-24	51.2	44.2	49.0
08-Oct-24	52.1	44.1	49.7
22-Oct-24	52.9	43.9	50.4
09-Nov-24	53.9	39.2	51.0
23-Nov-24	54.9	44.5	52.3
11-Dec-24	52.9	39.8	50.1
20-Dec-24	55.9	43.7	53.1
11-Jan-25	52.9	41.9	50.2
22-Jan-25	54.1	41.1	51.3
08-Feb-25	48.7	38.6	46.1
22-Feb-25	49.9	39.8	47.3
08-Mar-25	50.6	41.2	48.1
26-Mar-25	49.6	40.7	47.1
MIN	47.9	33.1	45.0
MAX	55.9	44.5	53.1
MEAN	51.41	39.61	48.7

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

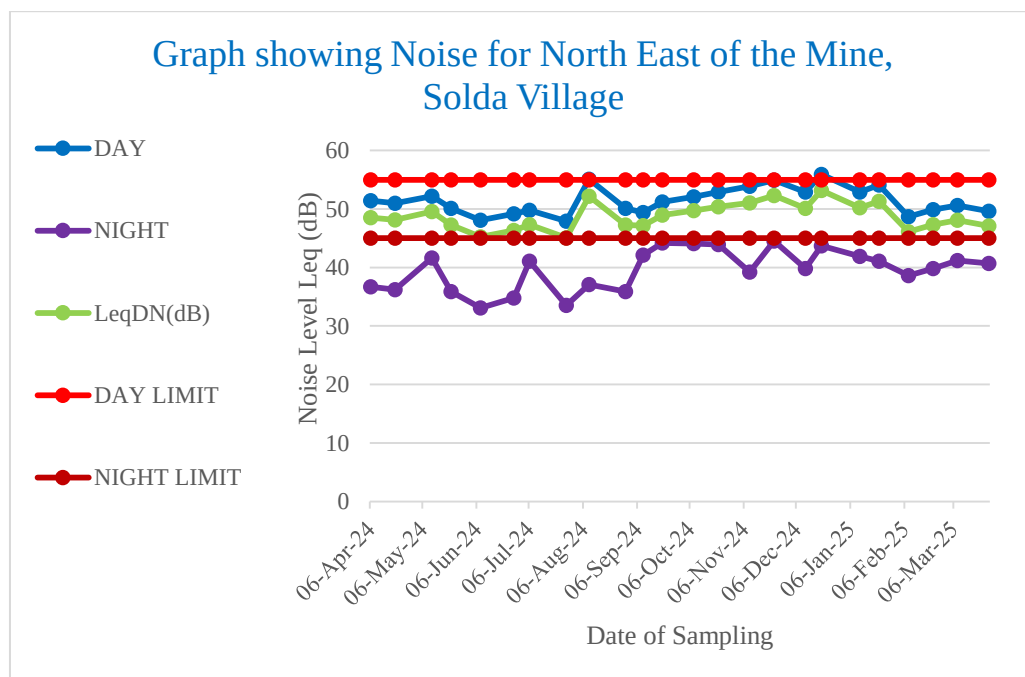
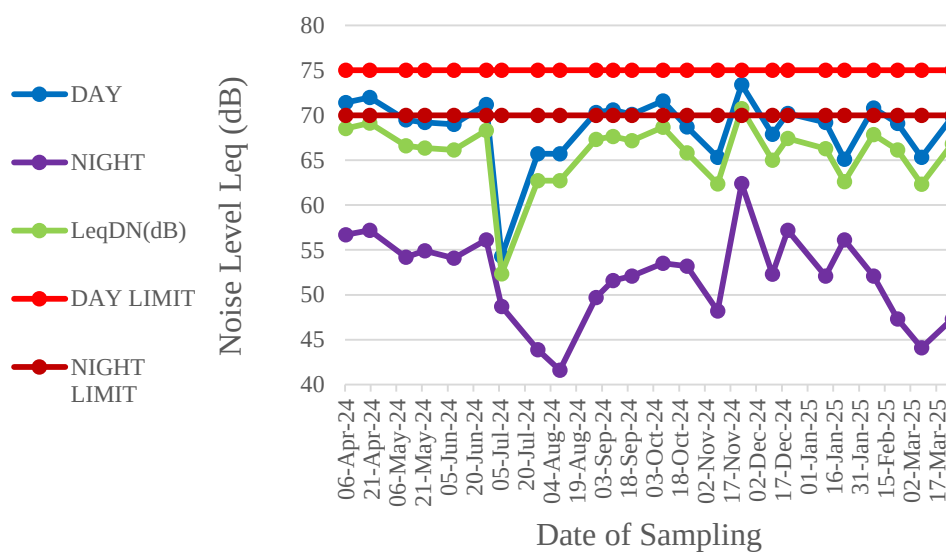


Table: 9.5.23
Area: Hingula
Project: Hingula OCP
Monitoring Station: South West Side of the Mine
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	71.4	56.7	68.5
20-Apr-24	72	57.2	69.1
11-May-24	69.5	54.2	66.6
22-May-24	69.2	54.9	66.3
08-Jun-24	69	54.1	66.1
27-Jun-24	71.2	56.1	68.3
06-Jul-24	54.3	48.7	52.3
27-Jul-24	65.7	43.9	62.7
09-Aug-24	65.7	41.6	62.7
30-Aug-24	70.3	49.7	67.3
09-Sep-24	70.6	51.6	67.6
20-Sep-24	70.1	52.1	67.2
08-Oct-24	71.6	53.5	68.7
22-Oct-24	68.7	53.2	65.8
09-Nov-24	65.3	48.2	62.4
23-Nov-24	73.4	62.4	70.7
11-Dec-24	67.9	52.3	65.0
20-Dec-24	70.2	57.2	67.4
11-Jan-25	69.2	52.1	66.3
22-Jan-25	65.1	56.1	62.6
08-Feb-25	70.8	52.1	67.8
22-Feb-25	69.1	47.3	66.1
08-Mar-25	65.3	44.1	62.3
26-Mar-25	69.8	47.3	66.8
MIN	54.3	41.6	52.3
MAX	73.4	62.4	70.7
MEAN	68.56	51.94	65.7

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for South West Side of the Mine



सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna

Table: 9.5.24

Area: Hingula**Project:** Hingula OCP**Monitoring Station:** North of the Mine, Purnapani, Kumunda Village

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	51	51	51.0
20-Apr-24	52.1	37.4	49.2
11-May-24	44.1	34.5	41.5
22-May-24	48.7	33.4	45.8
08-Jun-24	48.7	33.7	45.8
27-Jun-24	46	31.2	43.1
06-Jul-24	63.7	42.8	60.7
27-Jul-24	47.3	36.7	44.7
09-Aug-24	52.9	34.1	49.9
30-Aug-24	49.2	33.7	46.3
09-Sep-24	50.2	41.6	47.8
20-Sep-24	52.1	43.1	49.6
08-Oct-24	53.4	43.6	50.8
22-Oct-24	53.6	42.6	50.9
09-Nov-24	51.3	35.3	48.4
23-Nov-24	53.8	43.2	51.2
11-Dec-24	55.3	43.8	52.6
20-Dec-24	54.2	45.2	51.7
11-Jan-25	53.7	43.2	51.1
22-Jan-25	54.1	41.2	51.3
08-Feb-25	50.6	39.8	47.9
22-Feb-25	50.9	39.3	48.2
08-Mar-25	51.6	39.8	48.9
26-Mar-25	50.4	38.7	47.7
MIN	44.1	31.2	41.5
MAX	63.7	51.0	60.7
MEAN	51.62	39.54	49.0

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for North of the Mine, Purnapi
Kumunda Village

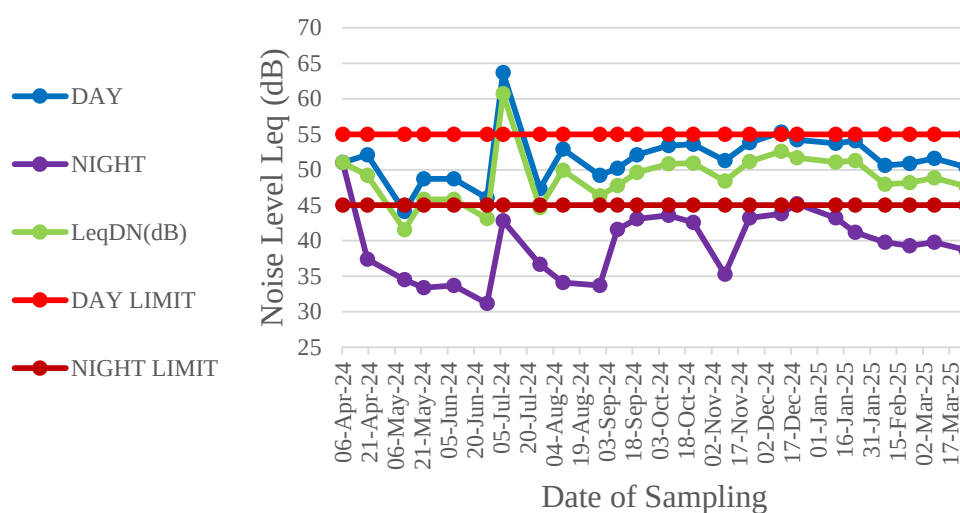
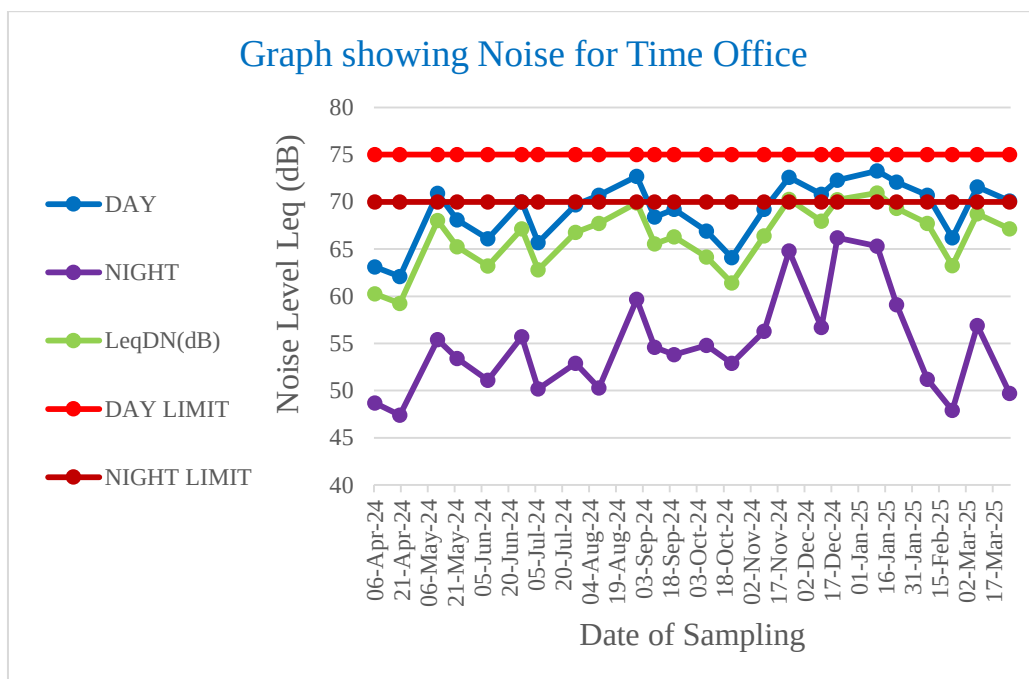


Table: 9.5.25
Area: Hingula
Project: Hingula OCP
Monitoring Station: Time Office
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	63.1	48.7	60.2
20-Apr-24	62.1	47.4	59.2
11-May-24	70.9	55.4	68.0
22-May-24	68.1	53.4	65.2
08-Jun-24	66.1	51.1	63.2
27-Jun-24	70	55.7	67.1
06-Jul-24	65.7	50.2	62.8
27-Jul-24	69.7	52.9	66.8
09-Aug-24	70.7	50.3	67.7
30-Aug-24	72.7	59.7	69.9
09-Sep-24	68.4	54.6	65.6
20-Sep-24	69.2	53.8	66.3
08-Oct-24	66.9	54.8	64.1
22-Oct-24	64.1	52.9	61.4
09-Nov-24	69.2	56.3	66.4
23-Nov-24	72.6	64.8	70.3
11-Dec-24	70.8	56.7	68.0
20-Dec-24	72.3	66.2	70.2
11-Jan-25	73.3	65.3	70.9
22-Jan-25	72.1	59.1	69.3
08-Feb-25	70.7	51.2	67.7
22-Feb-25	66.2	47.9	63.3
08-Mar-25	71.6	56.9	68.7
26-Mar-25	70.1	49.7	67.1
MIN	62.1	47.4	59.2
MAX	73.3	66.2	70.9
MEAN	69.03	54.79	66.2

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)



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Table: 9.5.26
Area: Hingula
Project: Balaram OCP
Monitoring Station: Natada Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	51.8	36.7	48.9
20-Apr-24	52	37.1	49.1
11-May-24	49.2	34.5	46.3
22-May-24	48.1	33.9	45.3
08-Jun-24	46	46.7	46.4
27-Jun-24	47	32.1	44.1
06-Jul-24	50.5	42.8	48.2
27-Jul-24	51.4	45.7	49.4
09-Aug-24	55.7	40.1	52.8
30-Aug-24	51.7	35.7	48.8
10-Sep-24	52.1	38.1	49.3
20-Sep-24	54.6	43.4	51.9
08-Oct-24	51.6	39.1	48.8
22-Oct-24	53.2	43.2	50.6
09-Nov-24	52.9	41.6	50.2
23-Nov-24	53.4	42.3	50.7
11-Dec-24	53.6	43.2	51.0
20-Dec-24	51.9	45.7	49.8
11-Jan-25	53.8	42.1	51.1
22-Jan-25	52.1	41.9	49.5
08-Feb-25	50.8	36.7	48.0
22-Feb-25	51.6	41.3	49.0
08-Mar-25	48.7	38.6	46.1
26-Mar-25	49.8	37.8	47.1
MIN	46	32.1	44.1
MAX	55.7	46.7	52.8
MEAN	51.40	40.01	48.8

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Ntada Village

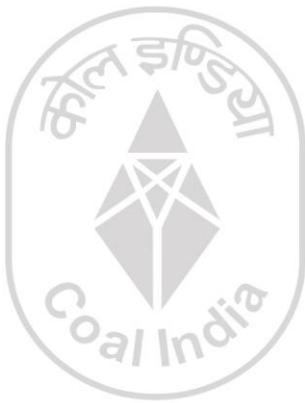
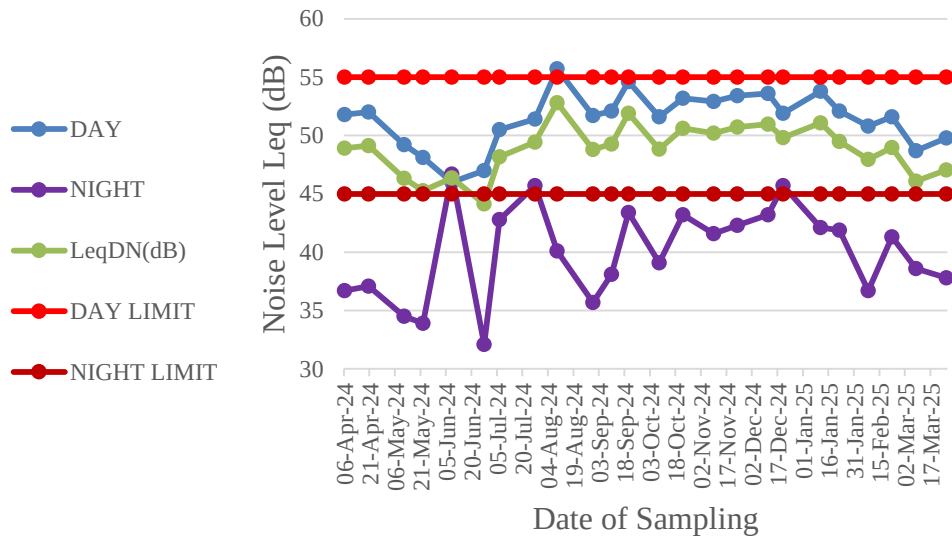


Table: 9.5.27
Area: Hingula
Project: Balaram OCP
Monitoring Station: Natedi Village

All units are in dB(A)

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	51	36	48.1
20-Apr-24	51.4	36.4	48.5
11-May-24	48.8	33.8	45.9
22-May-24	49.7	34.7	46.8
08-Jun-24	51.1	36.1	48.2
27-Jun-24	48.1	33	45.2
06-Jul-24	48.4	41.6	46.2
27-Jul-24	51.7	32.7	48.7
09-Aug-24	49.7	39.6	47.1
30-Aug-24	49.2	33.7	46.3
09-Sep-24	43.9	36.1	41.6
20-Sep-24	44.1	34.5	41.5
08-Oct-24	48.1	34.9	45.3
22-Oct-24	53.9	39.6	51.0
09-Nov-24	53.7	39.4	50.8
23-Nov-24	54.2	40.2	51.4
11-Dec-24	54.1	41.9	51.3
20-Dec-24	55.2	44.7	52.6
11-Jan-25	52.1	41.4	49.4
22-Jan-25	51.1	41.1	48.5
08-Feb-25	51.6	38.9	48.8
22-Feb-25	52.9	38.9	50.1
08-Mar-25	49.8	39.6	47.2
26-Mar-25	48.6	36.7	45.9
MIN	43.9	32.7	41.5
MAX	55.2	44.7	52.6
MEAN	50.52	37.73	47.8

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

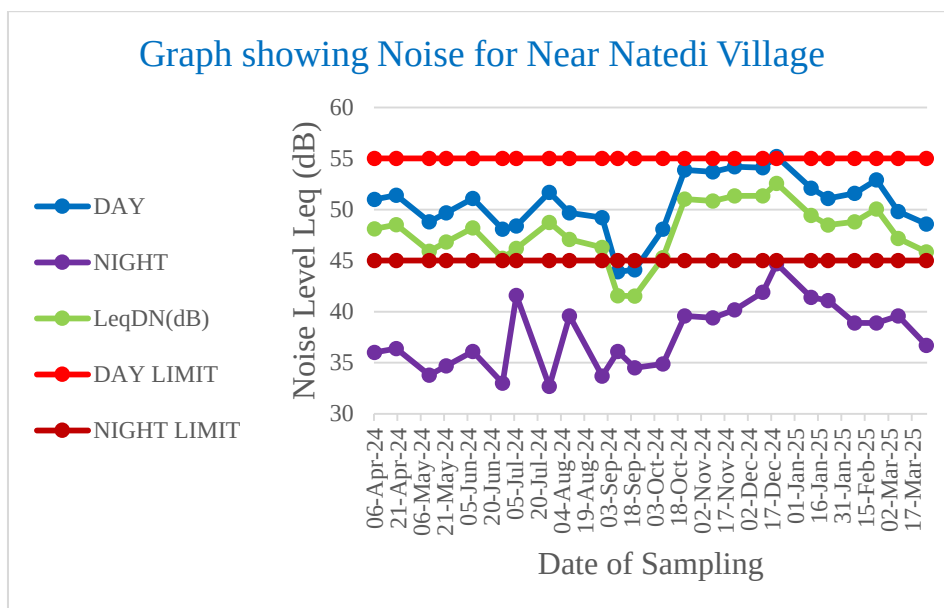


Table: 9.5.28
Area: Hingula
Project: Balaram OCP
Monitoring Station: Near Project Office, Balaram OCP
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	71	56	68.1
20-Apr-24	70.2	55.1	67.3
11-May-24	70.8	53.2	67.9
22-May-24	69.7	54.4	66.8
08-Jun-24	62	47	59.1
27-Jun-24	68.7	53.4	65.8
06-Jul-24	63.5	50.9	60.7
27-Jul-24	70.7	51.7	67.7
09-Aug-24	72.1	49.7	69.1
30-Aug-24	70.1	53.7	67.2
09-Sep-24	68.4	54.1	65.5
20-Sep-24	67.2	55.6	64.5
08-Oct-24	69.2	51.6	66.3
22-Oct-24	66.8	56.1	64.1
09-Nov-24	65.3	50.2	62.4
23-Nov-24	71.4	64.8	69.2
11-Dec-24	64.3	44.2	61.3
20-Dec-24	65.2	50.1	62.3
11-Jan-25	70.1	51.2	67.1
22-Jan-25	71.2	52.1	68.2
08-Feb-25	70.2	51.2	67.2
22-Feb-25	72.3	62.1	69.7
08-Mar-25	72.3	50.1	69.3
26-Mar-25	72.1	47.2	69.1
MIN	62	44.2	59.1
MAX	72.3	64.8	69.7
MEAN	68.95	52.74	66.1

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

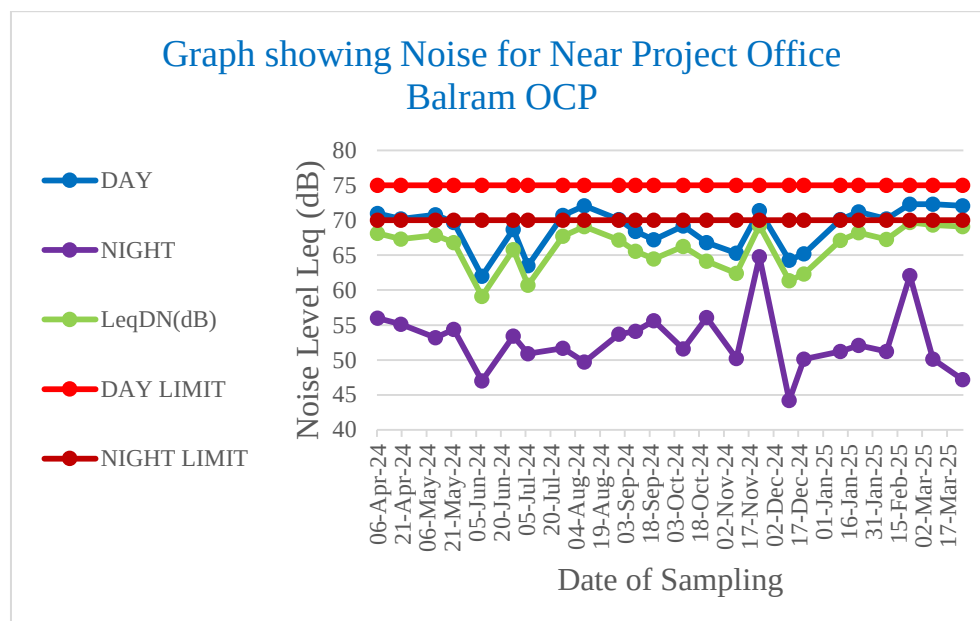


Table: 9.5.29

Area: Hingula**Project:** Balaram OCP**Monitoring Station:** North West of the Mine, Solada Village (Reported only)

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	51.4	36.7	48.5
20-Apr-24	51	36.2	48.1
11-May-24	52.7	41.6	50.0
22-May-24	50.1	35.9	47.3
08-Jun-24	48.1	33.1	45.2
27-Jun-24	49.2	34.8	46.3
06-Jul-24	49.8	41.1	47.3
27-Jul-24	47.9	33.5	45.0
09-Aug-24	55.1	37.1	52.2
30-Aug-24	50.1	35.9	47.3
09-Sep-24	49.4	42.1	47.1
20-Sep-24	51.2	44.2	49.0
08-Oct-24	52.1	44.1	49.7
22-Oct-24	52.9	43.9	50.4
09-Nov-24	53.9	39.2	51.0
23-Nov-24	54.9	44.5	52.3
11-Dec-24	52.9	39.8	50.1
20-Dec-24	55.9	43.7	53.1
11-Jan-25	52.9	41.9	50.2
22-Jan-25	54.1	41.1	51.3
08-Feb-25	48.7	38.6	46.1
22-Feb-25	49.9	39.8	47.3
08-Mar-25	50.6	41.2	48.1
26-Mar-25	49.6	40.7	47.1
MIN	47.9	33.1	45.0
MAX	55.9	44.5	53.1
MEAN	51.43	39.61	48.8

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

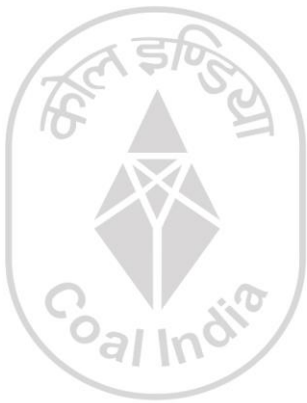
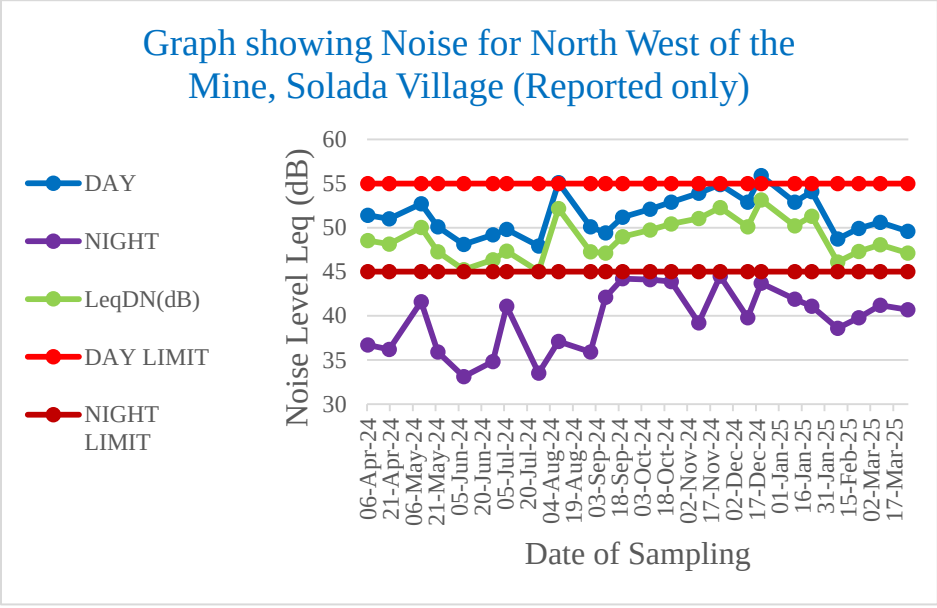


Table: 9.5.30
Area: Hingula
Project: Balaram OCP
Monitoring Station: Pump House near Outsourcing Working Patch
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
06-Apr-24	72.1	57.7	69.2
20-Apr-24	71.1	56.2	68.2
11-May-24	69.1	55.4	66.3
22-May-24	70.1	55.1	67.2
08-Jun-24	66.1	51.7	63.2
27-Jun-24	69	54.7	66.1
06-Jul-24	61.8	49.8	59.1
27-Jul-24	65.9	39.7	62.9
09-Aug-24	69.7	54.7	66.8
30-Aug-24	72.1	46.7	69.1
09-Sep-24	69.8	46.5	47.8
20-Sep-24	68.2	45.2	49.6
08-Oct-24	68.7	45.6	65.7
22-Oct-24	66.1	47.2	63.1
09-Nov-24	69.3	52.3	66.4
23-Nov-24	70.6	58.2	67.8
11-Dec-24	71.3	58.2	68.5
20-Dec-24	69.7	49.2	66.7
11-Jan-25	72.1	62.1	69.5
22-Jan-25	75.1	65.1	72.5
08-Feb-25	74.2	56.2	71.3
22-Feb-25	72.9	62.3	70.3
08-Mar-25	69.8	50.3	66.8
26-Mar-25	74.9	55.1	71.9
MIN	61.8	39.7	47.8
MAX	75.1	65.1	72.5
MEAN	69.99	53.13	65.7

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

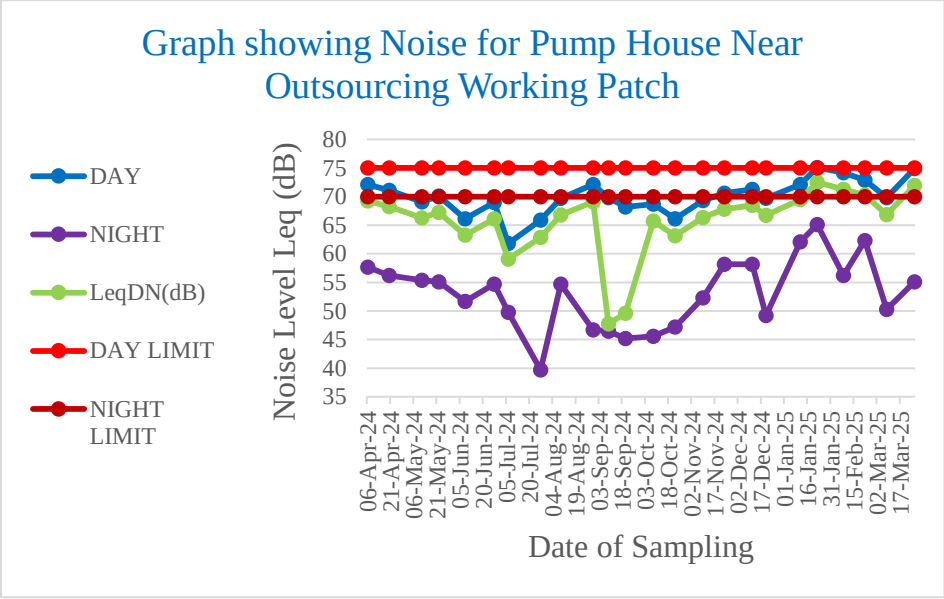


Table: 9.5.31
Area: Talcher
Project: Talcher Colliery
Monitoring Station: Officer's Club, Talcher Area
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
05-Apr-24	62	47	59.1
19-Apr-24	60.5	45.5	57.6
10-May-24	54.6	43.6	51.9
21-May-24	53.9	42.9	51.2
06-Jun-24	60.1	45	57.2
25-Jun-24	68.1	53.7	65.2
05-Jul-24	57.8	47.8	55.2
26-Jul-24	59.3	39.9	56.3
07-Aug-24	69.7	55.1	66.8
28-Aug-24	65.7	44.7	62.7
10-Sep-24	64.8	43.9	61.8
21-Sep-24	65.2	44.2	62.2
09-Oct-24	64.6	44.2	61.6
23-Oct-24	63.6	51.6	60.9
08-Nov-24	62.1	43.9	59.2
22-Nov-24	65.4	52.4	62.6
10-Dec-24	70.3	58.1	67.5
19-Dec-24	67.2	49.2	64.3
10-Jan-25	70.9	60.1	68.2
21-Jan-25	71.1	52.1	68.1
06-Feb-25	72.1	50.1	69.1
20-Feb-25	65.3	47.2	62.4
07-Mar-25	70.3	56.2	67.5
25-Mar-25	72.1	47.2	69.1
MIN	53.9	39.9	51.2
MAX	72.1	60.1	69.1
MEAN	64.86	48.57	62.0

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq 75 dB(A) (Industrial)	10.00 PM -6.00 AM Leq 70 dB(A) (Industrial)
	6.00 AM -10.00 PM Leq 55 dB(A) (Residential)	10.00 PM -6.00 AM Leq 45dB(A) (Residential)
	6.00 AM -10.00 PM Leq 65 dB(A) (Commercial)	10.00 PM -6.00 AM Leq 55 dB(A) (Commercial)
	6.00 AM -10.00 PM Leq 50 dB(A) (Silence Zone)	10.00 PM -6.00 AM Leq 40 dB(A) (Silence Zone)

Graph showing Noise for Officers Club, Talcher Area

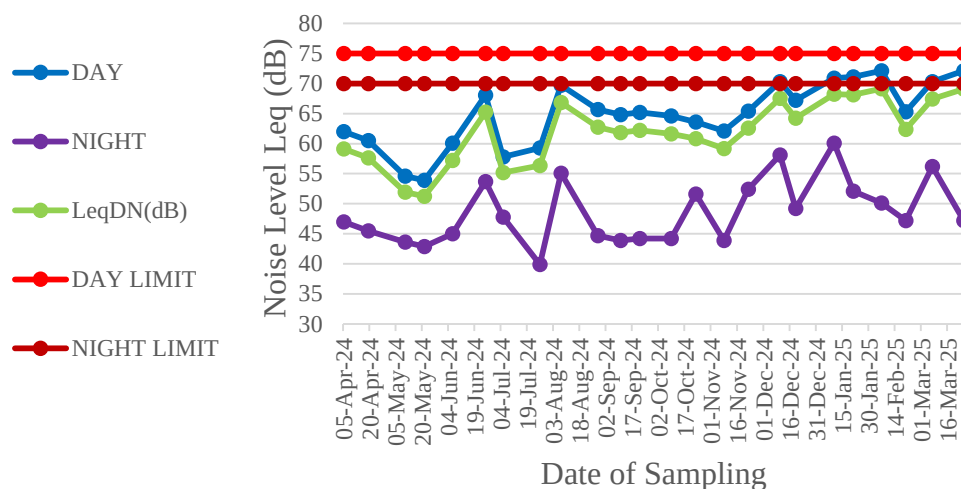


Table: 9.5.32
Area: Talcher
Project: Talcher Colliery
Monitoring Station: Near Canteen, Talcher Colliery
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
05-Apr-24	63.4	48.7	60.5
19-Apr-24	61.2	46.2	58.3
10-May-24	60.7	52.7	58.3
21-May-24	61	51.5	58.5
06-Jun-24	61.7	46.2	58.8
25-Jun-24	67.2	52.1	64.3
05-Jul-24	55	46.2	52.5
26-Jul-24	62.3	39.7	59.3
07-Aug-24	69.9	49.7	66.9
28-Aug-24	60.7	39.2	57.7
10-Sep-24	62.1	40.1	59.1
21-Sep-24	63.6	41.2	60.6
09-Oct-24	61.6	40.6	58.6
23-Oct-24	64.2	50.9	61.4
08-Nov-24	59.3	39.5	56.3
22-Nov-24	64.2	54.2	61.6
10-Dec-24	69.3	49.2	66.3
19-Dec-24	70.2	52.1	67.3
10-Jan-25	72.3	60.7	69.6
21-Jan-25	70.9	51.9	67.9
06-Feb-25	72.1	48.2	69.1
20-Feb-25	67.2	55.1	64.4
07-Mar-25	70.4	49.1	67.4
25-Mar-25	70.3	45.9	67.3
MIN	55	39.2	52.5
MAX	72.3	60.7	69.6
MEAN	65.03	47.95	62.2

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Near Canteen, Talcher Colliery

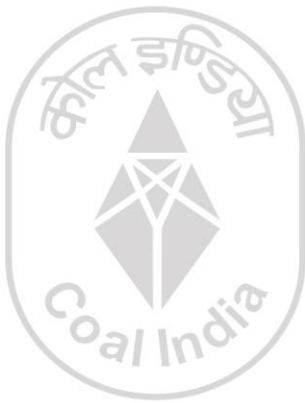
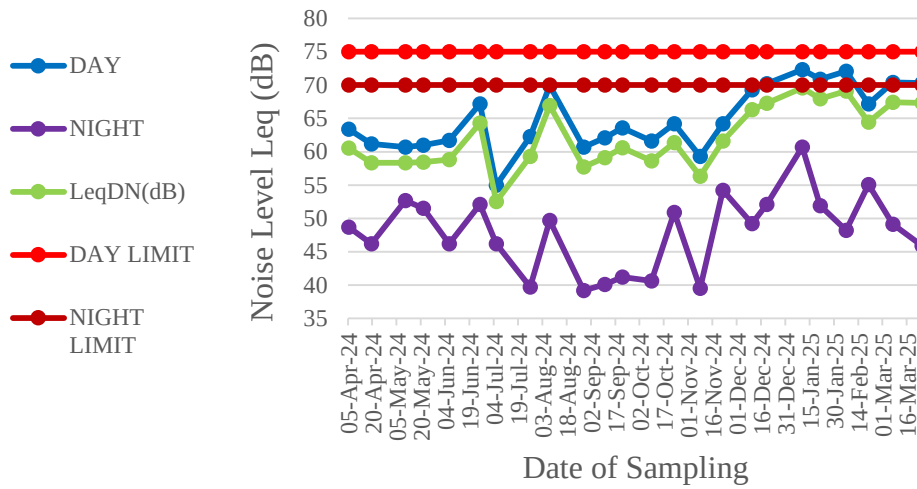


Table: 9.5.33
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Project Office
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
05-Apr-24	64.1	49.1	61.2
19-Apr-24	68.6	56.4	65.8
10-May-24	68.2	54.2	65.4
21-May-24	67.4	52.4	64.5
06-Jun-24	64.5	49.5	61.6
25-Jun-24	66.7	51	63.8
05-Jul-24	51.6	49.3	50.6
26-Jul-24	70.3	56.7	67.5
07-Aug-24	73.2	36.9	70.2
28-Aug-24	72.7	52.7	69.7
10-Sep-24	69.2	54.3	66.3
21-Sep-24	68.6	53.2	65.7
09-Oct-24	68.6	53.9	65.7
23-Oct-24	66.1	52.9	63.3
08-Nov-24	68.7	41.2	65.7
22-Nov-24	71.2	55	68.3
10-Dec-24	72.1	59.7	69.3
19-Dec-24	69.2	49.7	66.2
10-Jan-25	69.3	56.7	66.5
21-Jan-25	71.3	51.2	68.3
06-Feb-25	71.2	53.2	68.3
20-Feb-25	72.7	47.7	69.7
07-Mar-25	72.3	55.2	69.4
25-Mar-25	72.1	44.2	69.1
MIN	51.6	36.9	50.6
MAX	73.2	59.7	70.2
MEAN	68.75	51.51	65.9

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

Graph showing Noise for Project Office

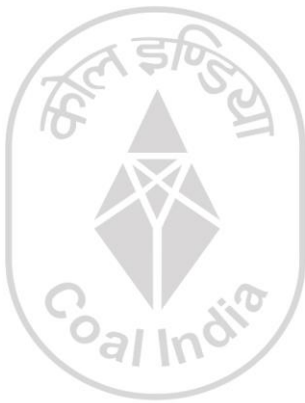
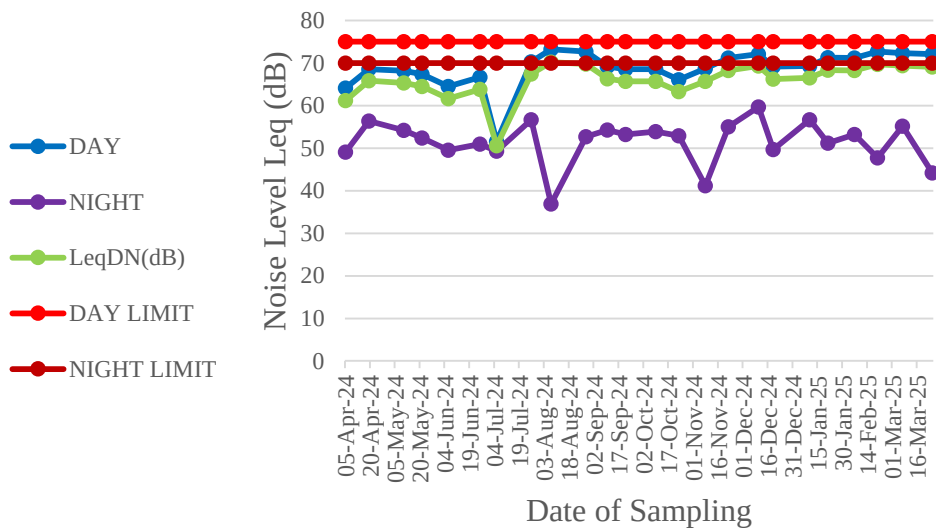


Table: 9.5.34
Area: Talcher
Project: Deulbera Colliery
Monitoring Station: Managers office
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
05-Apr-24	64.1	49.7	61.2
19-Apr-24	62.1	47.4	59.2
10-May-24	65.9	50.2	63.0
21-May-24	65.1	50.1	62.2
06-Jun-24	63.1	48.1	60.2
25-Jun-24	68	53.4	65.1
05-Jul-24	51.8	47.6	50.2
26-Jul-24	65.7	40.9	62.7
07-Aug-24	69.9	49.3	66.9
28-Aug-24	67.8	39.2	64.8
10-Sep-24	66.7	41.1	63.7
21-Sep-24	67.1	42.3	64.1
09-Oct-24	66.8	49.9	63.9
23-Oct-24	68.2	54.1	65.4
08-Nov-24	72.3	52.9	69.3
22-Nov-24	72.2	61.2	69.5
10-Dec-24	69.3	50.1	66.3
19-Dec-24	66.8	49.2	63.9
10-Jan-25	71.2	52.7	68.3
21-Jan-25	71.3	52.1	68.3
06-Feb-25	69.8	52.1	66.9
20-Feb-25	72.1	50.2	69.1
07-Mar-25	66.2	45.9	63.2
25-Mar-25	71.3	50.1	68.3
MIN	51.8	39.2	50.2
MAX	72.3	61.2	69.5
MEAN	67.28	49.16	64.4

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)

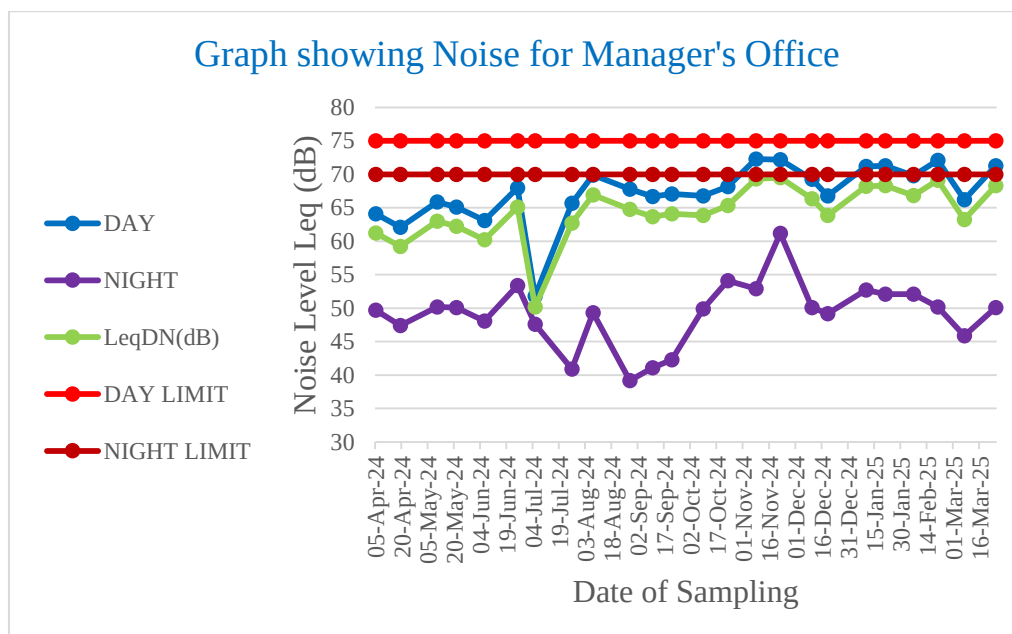
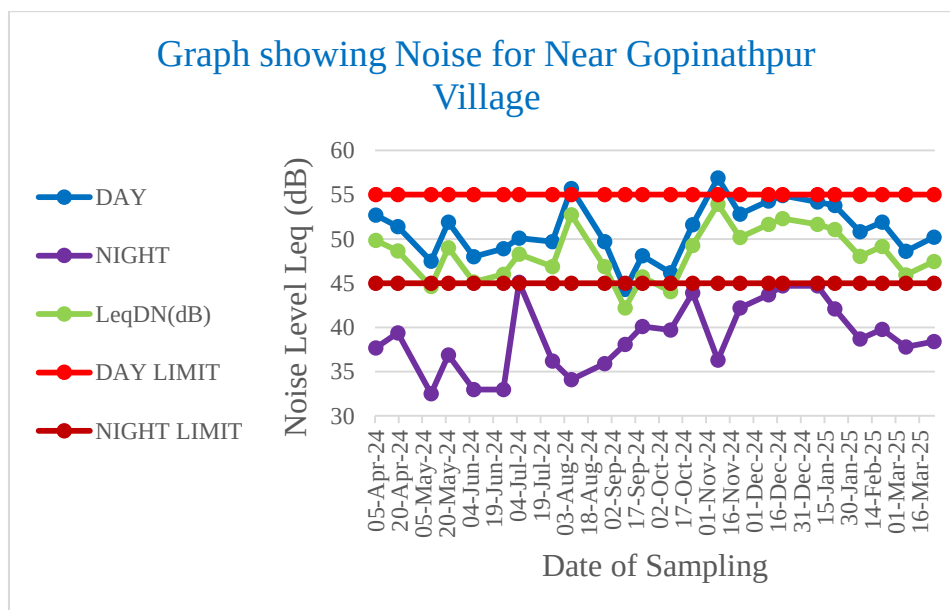


Table: 9.5.35
Area: Talcher
Project: Mandapal Sand Mine
Monitoring Station: Near Gopinathpur Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
05-Apr-24	52.7	37.7	49.8
19-Apr-24	51.4	39.4	48.7
10-May-24	47.5	32.5	44.6
21-May-24	51.9	36.9	49.0
06-Jun-24	48	33	45.1
25-Jun-24	48.9	33	46.0
05-Jul-24	50.1	45.1	48.3
26-Jul-24	49.7	36.2	46.9
07-Aug-24	55.7	34.1	52.7
28-Aug-24	49.7	35.9	46.9
10-Sep-24	44.3	38.1	42.2
21-Sep-24	48.1	40.1	45.7
09-Oct-24	46.2	39.7	44.1
23-Oct-24	51.6	43.9	49.3
08-Nov-24	56.9	36.3	53.9
22-Nov-24	52.8	42.2	50.2
10-Dec-24	54.3	43.7	51.7
19-Dec-24	54.9	44.7	52.3
10-Jan-25	54.2	44.7	51.7
21-Jan-25	53.8	42.1	51.1
06-Feb-25	50.8	38.7	48.0
20-Feb-25	51.9	39.8	49.1
07-Mar-25	48.6	37.8	45.9
25-Mar-25	50.2	38.4	47.5
MIN	44.3	32.5	42.2
MAX	56.9	45.1	53.9
MEAN	51.01	38.92	48.4

MoEF Standard Notification dated 25 th September, 2000	6.00 AM -10.00 PM Leq	10.00 PM -6.00 AM Leq
	75 dB(A) (Industrial)	70 dB(A) (Industrial)
	65 dB(A) (Commercial)	55 dB(A) (Commercial)
	55 dB(A) (Residential)	45dB(A) (Residential)
	50 dB(A) (Silence Zone)	40 dB(A) (Silence Zone)



SECTION 10: WATER ANALYSIS REPORT

10.1: CONCEPT & SCOPE

The Water quality of the project area plays an important role on the socio economy of the Project. The higher concentrations of the water pollutants have serious impacts on the environment. Hence, it becomes important to assess the water quality periodically in the project vicinity.

Keeping this in the mind, different types of water samples viz, Drinking Water Sample from village wells, Surface Water Sample from Ib River & its tributaries (Up-Stream & Down-Stream), Ponds and Effluent water sample from OCP mine sump water & domestic& effluent treatment plants were collected. Well water level was measured quarterly. Qualitative & quantitative analysis of samples from piezometers was also done.

The quality of drinking water samples were compared with respect to IS 10500:2012 specification and subsequent amendments & the surface water quality was compared with respect to Class-C and found that the concentration of the target analysts are within the prescribed limits.

Bacterial examination was also carried out to find out the Coliform contamination at water sources.





EFFLUENT QUALITY (STP)



TABLE NO 10 FOR EFFLUENT QUALITY DATA

Table:10.2.1.1

Area: Jagannath

Project: Jagannath OCP

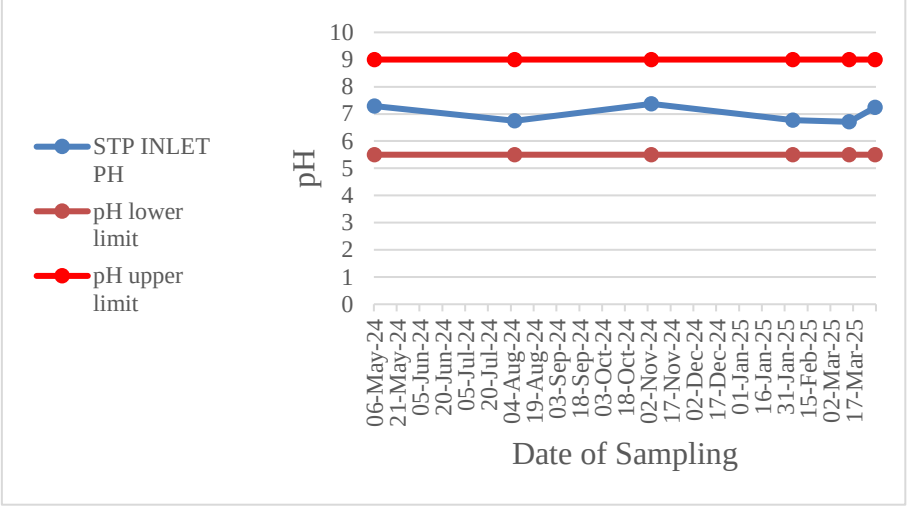
Monitoring station: STP Inlet

Date of Sampling	pH	TSS	BOD	MPN/100mL
06-May-24	7.29	52	<2	130
06-Aug-24	6.75	36	<2	126
04-Nov-24	7.37	46	<2	140
05-Feb-25	6.77	39	<2	130
14-Mar-25	6.71	29	<2	140
31-Mar-25	7.24	33	<2	120

All dimensions are in mg/l unless otherwise stated except pH & Fecal Coliform

G.S.R. 126 5 (E) Effluent discharge standards (applicable to all modes of disposal), Sewage treatment plants (STPs)	pH	TSS	BOD	Fecal Coliform (MPN/100mL)
	6.5-9.5	<100	30	<1000

Graph showing for pH STP INLET



Graph showing for TSS STP INLET

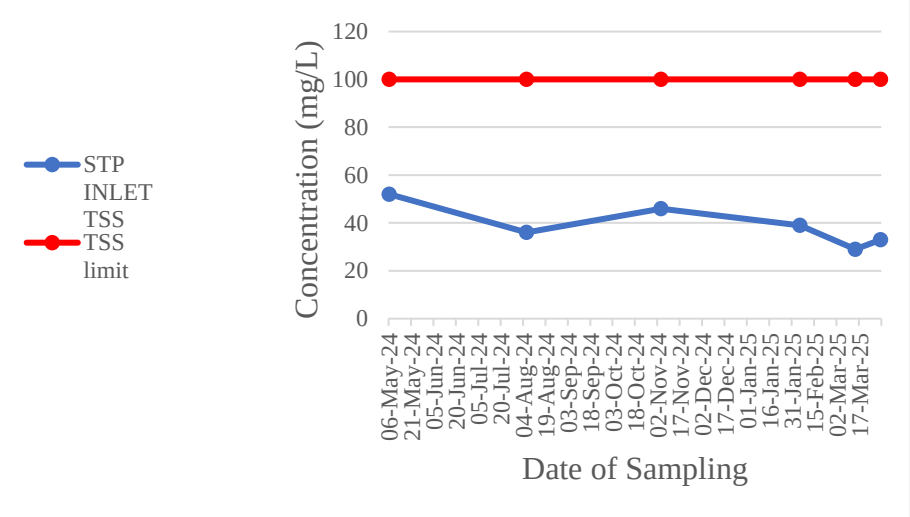


Table:10.2.1.2

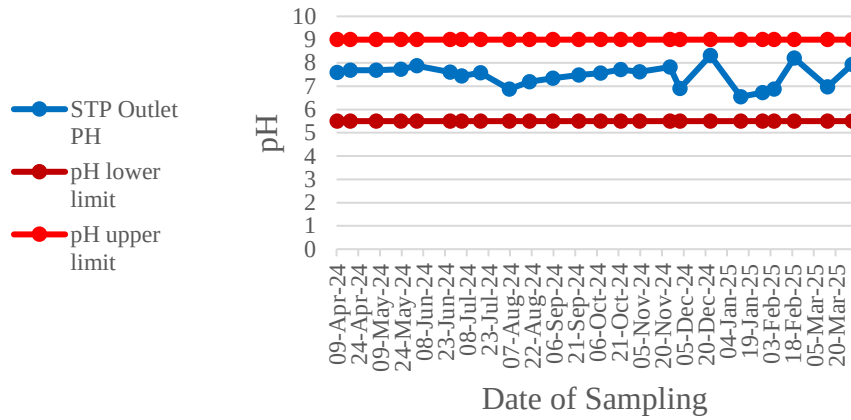
Area: Jagannath**Project:** Jagannath OCP**Monitoring station:** STP Outlet

Date of Sampling	pH	TSS	BOD	MPN/100mL
09-Apr-24	7.59	34	<2.0	63
18-Apr-24	7.68	36	<2.0	48
06-May-24	7.68	34	<2	58
23-May-24	7.73	30	<2	43
03-Jun-24	7.88	34	<2	33
26-Jun-24	7.61	30	<2	27
04-Jul-24	7.44	34	<2	64
17-Jul-24	7.58	40	<2	52
06-Aug-24	6.87	30	<2	68
20-Aug-24	7.19	36	<2	68
05-Sep-24	7.34	30	<2	64
23-Sep-24	7.48	44	<2	72
08-Oct-24	7.56	36	<2	63
22-Oct-24	7.71	32	<2	58
04-Nov-24	7.62	34	<2	94
25-Nov-24	7.83	28	<2	84
02-Dec-24	6.9	22	<2	62
23-Dec-24	8.32	26	<2	52
13-Jan-25	6.55	39	<2	58
28-Jan-25	6.73	45	<2	63
05-Feb-25	6.88	32	<2	63
19-Feb-25	8.21	35	<2	48
14-Mar-25	6.97	34	<2	47
31-Mar-25	7.94	21	<2	58

All dimensions are in mg/l unless otherwise stated except pH & Fecal Coliform

G.S.R. 126 5 (E) Effluent discharge standards (applicable to all modes of disposal), Sewage treatment plants (STPs)	pH	TSS	BOD	Fecal Coliform (MPN/100mL)
	6.5-9.5	<100	30	<1000

Graph showing for pH STP OUTLET



Graph showing for TSS STP OUTLET

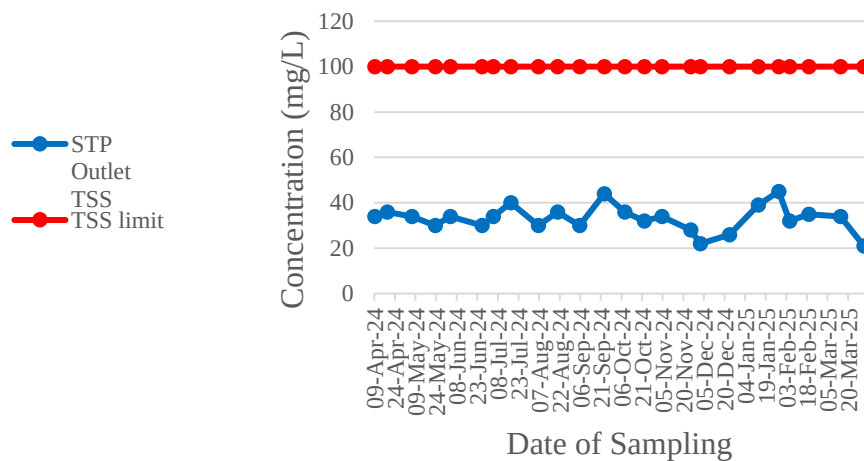


Table: 10.2.1.3

Area: Jagannath**Project:** Ananta OCP**Monitoring station:** STP INLET

Date of Sampling	pH	TSS	BOD	MPN/100ml
06-May-24	6.09	42	<2	120
06-Aug-24	6.96	46	<2	112
04-Nov-24	7.42	42	<2	140
05-Feb-25	6.35	30	<2	110
14-Mar-25	6.59	34	<2	110
31-Mar-25	7.74	39	<2	110

All dimensions are in mg/l unless otherwise stated except pH & Fecal Coliform

G.S.R. 126 5 (E) Effluent discharge standards (applicable to all modes of disposal), Sewage treatment plants (STPs)	pH	TSS	BOD	Fecal Coliform (MPN/100mL)
	6.5-9.5	<100	30	<1000



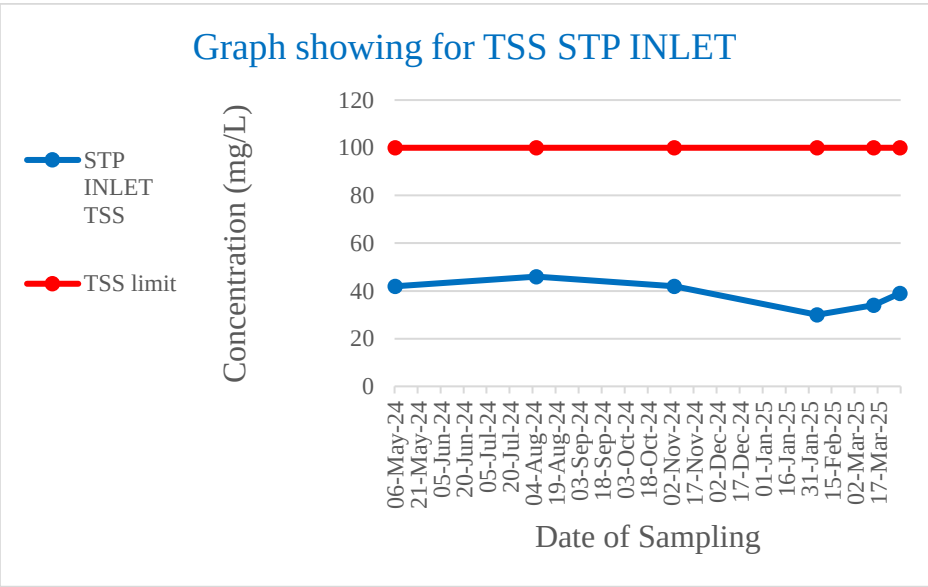
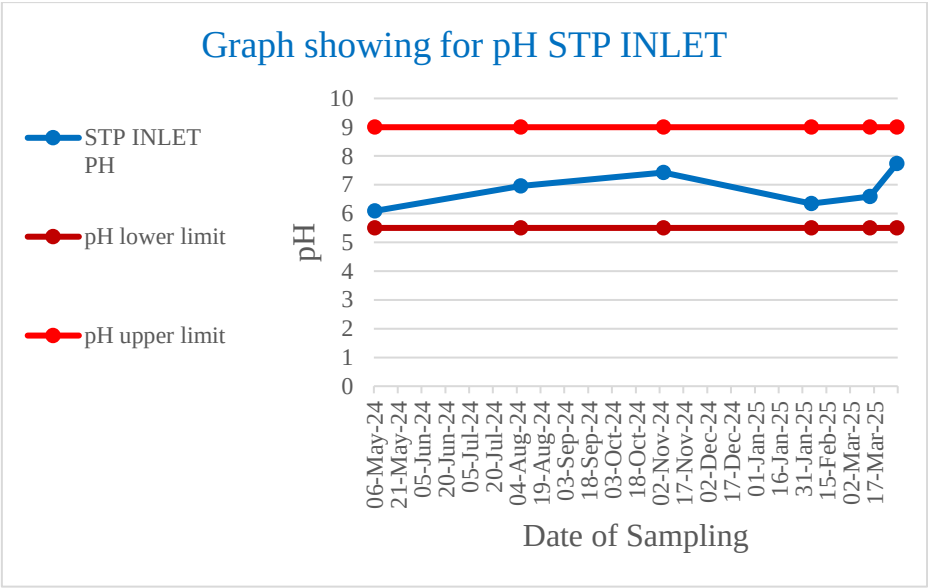


Table: 10.2.1.4

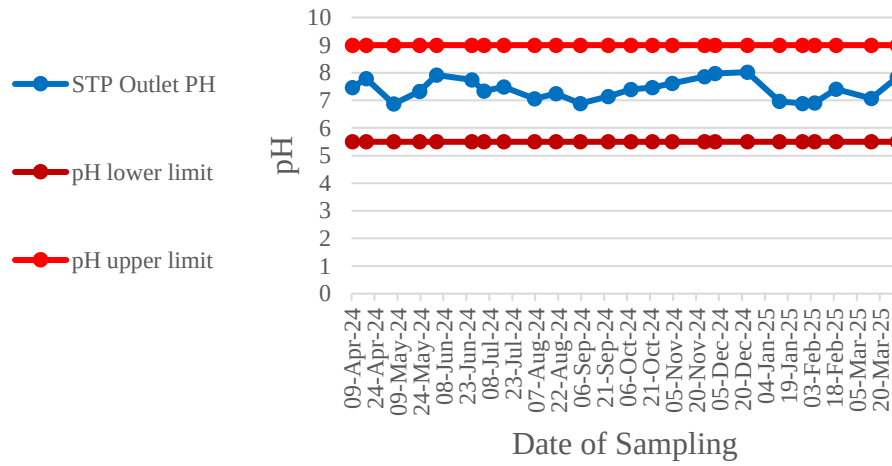
Area: Jagannath**Project:** Ananta OCP**Monitoring station:** STP Outlet

Date of Sampling	pH	TSS	BOD	MPN/100ml
09-Apr-24	7.47	42	<2.0	84
18-Apr-24	7.79	44	<2.0	70
06-May-24	6.87	38	<2	79
23-May-24	7.33	34	<2	70
03-Jun-24	7.92	30	<2	26
26-Jun-24	7.74	34	<2	17
04-Jul-24	7.34	38	<2	60
17-Jul-24	7.49	44	<2	64
06-Aug-24	7.06	34	<2	62
20-Aug-24	7.25	28	<2	56
05-Sep-24	6.88	26	<2	58
23-Sep-24	7.14	36	<2	62
08-Oct-24	7.39	30	<2	58
22-Oct-24	7.47	28	<2	43
04-Nov-24	7.61	32	<2	84
25-Nov-24	7.86	26	<2	79
02-Dec-24	7.97	26	<2	68
23-Dec-24	8.02	25	<2	56
13-Jan-25	6.97	44	<2	41
28-Jan-25	6.88	40	<2	43
05-Feb-25	6.91	22	<2	49
19-Feb-25	7.41	26	<2	41
14-Mar-25	7.07	27	<2	41
31-Mar-25	7.84	27	<2	48

All dimensions are in mg/l unless otherwise stated except pH & Fecal Coliform

G.S.R. 126 5 (E) Effluent discharge standards (applicable to all modes of disposal), Sewage treatment plants (STPs)	pH	TSS	BOD	Fecal Coliform (MPN/100mL)
	6.5-9.5	<100	30	<1000

Graph showing for pH STP OUTLET



Graph showing for TSS STP OUTLET

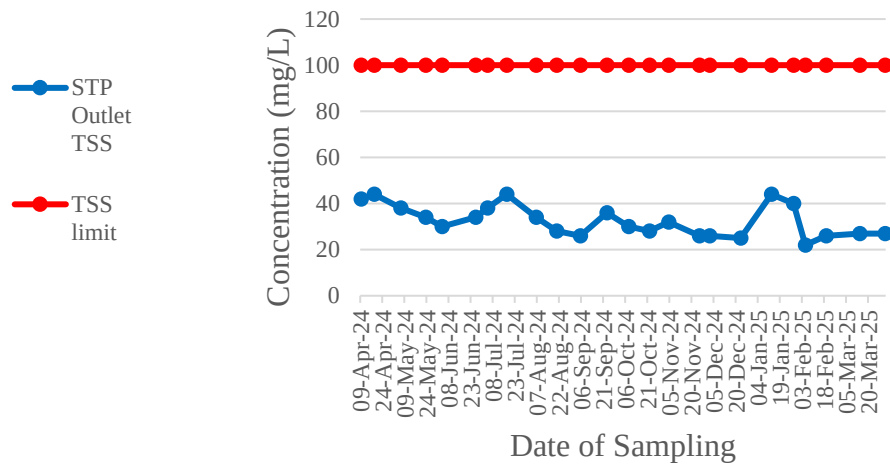


Table: 10.2.1.5

Area: Bharatpur**Project:** Bharatpur OCP**Monitoring station:** STP Inlet

Date of Sampling	pH	TSS	BOD	MPN/100ml
06-May-24	7.21	46	<2	110
04-Nov-24	7.33	44	<2	150
14-Mar-25	7.87	27	<2	120
31-Mar-25	8.48	39	<2	140

All dimensions are in mg/l unless otherwise stated except pH & Fecal Coliform

G.S.R. 126 5 (E) Effluent discharge standards (applicable to all modes of disposal), Sewage treatment plants (STPs)	pH	TSS	BOD	Fecal Coliform (MPN/100mL)
	6.5-9.5	<100	30	<1000



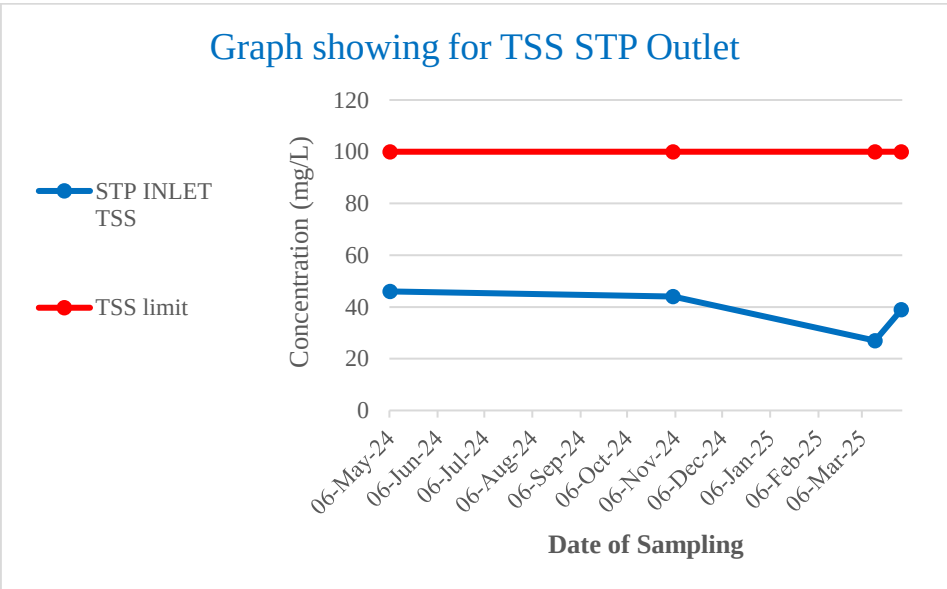
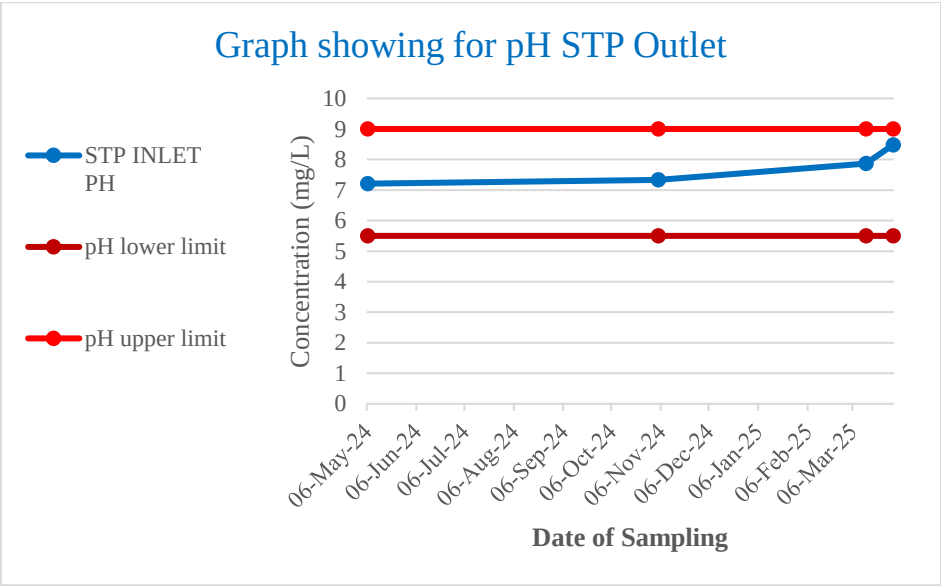


Table: 10.2.1.6

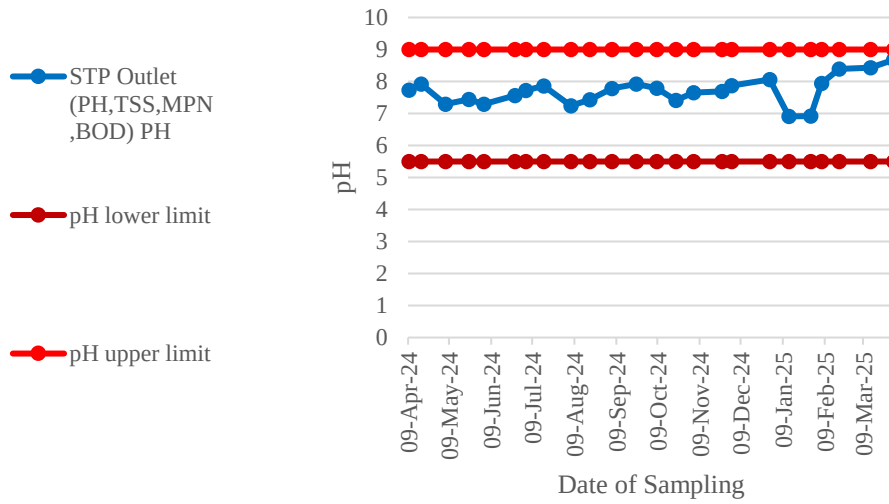
Area: Bharatpur**Project:** Bharatpur OCP**Monitoring station:** STP Outlet

Date of Sampling	pH	TSS	BOD	MPN/100ml
09-Apr-24	7.73	36	<2.0	46
18-Apr-24	7.92	54	<2.0	31
06-May-24	7.29	32	<2	63
23-May-24	7.44	38	<2	70
03-Jun-24	7.29	34	<2	26
26-Jun-24	7.56	42	<2	26
04-Jul-24	7.72	32	<2	96
17-Jul-24	7.86	40	<2	82
06-Aug-24	7.24	26	<2	68
20-Aug-24	7.43	32	<2	52
05-Sep-24	7.78	34	<2	82
23-Sep-24	7.92	42	<2	86
08-Oct-24	7.79	36	<2	58
22-Oct-24	7.41	30	<2	58
04-Nov-24	7.65	32	<2	84
25-Nov-24	7.69	26	<2	63
02-Dec-24	7.87	22	<2	56
30-Dec-24	8.06	32	<2	68
13-Jan-25	6.91	39	<2	48
29-Jan-25	6.92	44	<2	47
06-Feb-25	7.94	30	<2	58
19-Feb-25	8.39	33	<2	46
14-Mar-25	8.43	35	<2	46
31-Mar-25	8.68	27	<2	58

All dimensions are in mg/l unless otherwise stated except pH & Fecal Coliform

G.S.R. 126 5 (E) Effluent discharge standards (applicable to all modes of disposal), Sewage treatment plants (STPs)	pH	TSS	BOD	Fecal Coliform (MPN/100mL)
	6.5-9.5	<100	30	<1000

Graph showing for pH STP Outlet



Graph showing for TSS STP Outlet

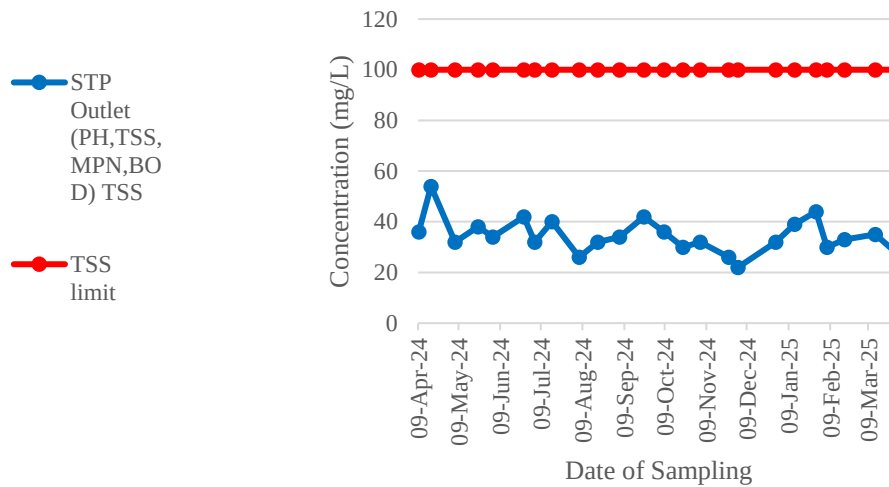


Table: 10.2.1.7

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** STP Inlet at Lingaraj Township

Date of Sampling	pH	TSS	BOD	MPN/100mL
07-May-24	7.27	40	<2	110
07-Aug-24	7.03	36	<2	112
05-Nov-24	7.52	40	<2	120
06-Feb-25	7.1	48	<2	94
14-Mar-25	6.76	27	<2	-
31-Mar-25	7.59	44	42	-

All dimensions are in mg/l unless otherwise stated except pH & Fecal Coliform

G.S.R. 126 5 (E) Effluent discharge standards (applicable to all modes of disposal), Sewage treatment plants (STPs)	pH	TSS	BOD	Fecal Coliform (MPN/100mL)
	6.5-9.5	<100	30	<1000



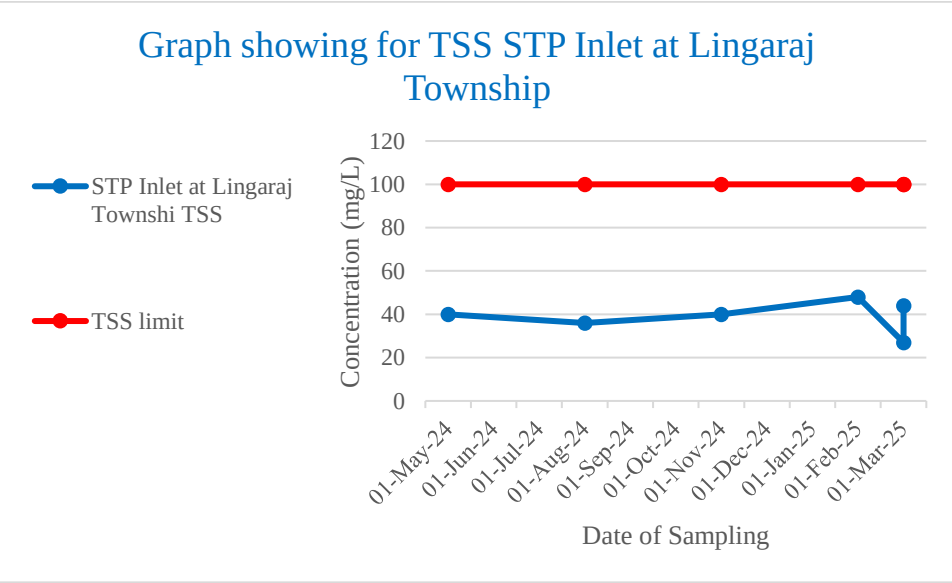
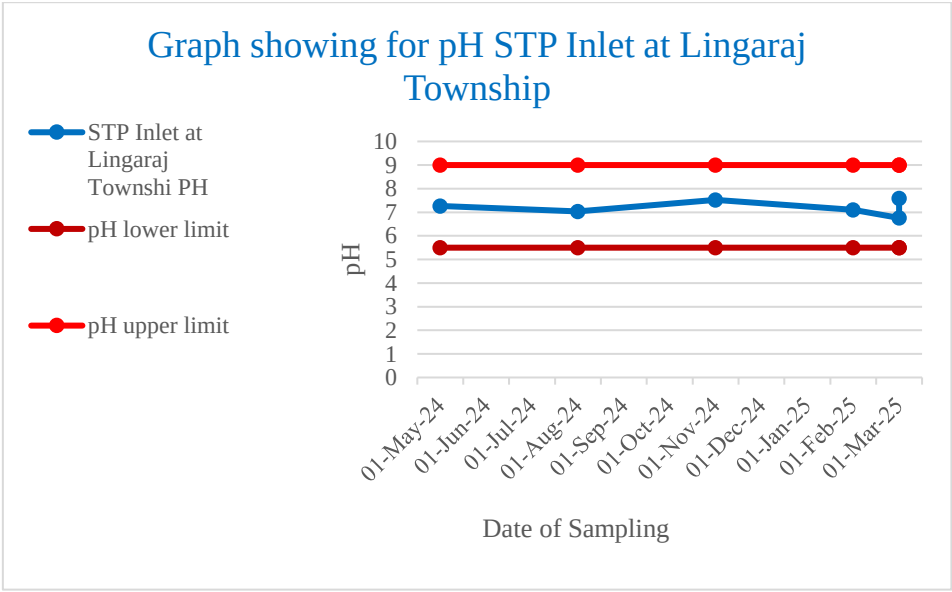


Table: 10.2.1.8

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** STP Outlet at Lingaraj township

Date of Sampling	pH	TSS	BOD	MPN/100ml
10-Apr-24	7.51	28	<2.0	70
19-Apr-24	7.75	34	<2.0	58
07-May-24	7.15	28	<2	46
24-May-24	7.29	34	<2	49
04-Jun-24	7.66	40	<2	33
27-Jun-24	7.54	24	<2	27
05-Jul-24	7.8	28	<2	84
18-Jul-24	7.93	36	<2	86
07-Aug-24	7.1	28	<2	38
21-Aug-24	7.29	36	<2	32
06-Sep-24	7.09	26	<2	48
24-Sep-24	7.23	34	<2	46
08-Oct-24	7.57	38	<2	46
22-Oct-24	7.69	34	<2	41
05-Nov-24	7.87	28	<2	58
26-Nov-24	7.67	32	<2	58
02-Dec-24	7.01	16	<2	62
31-Dec-24	7.82	34	<2	68
14-Jan-25	7.22	62	<2	32
29-Jan-25	6.83	66	<2	39
06-Feb-25	7.29	38	<2	41
21-Feb-25	8.21	41	<2	33
14-Mar-25	7.23	35	<2	
31-Mar-25	7.91	31	<2	

All dimensions are in mg/l unless otherwise stated except pH & Fecal Coliform

G.S.R. 126 5 (E) Effluent discharge standards (applicable to all modes of disposal), Sewage treatment plants (STPs)	pH	TSS	BOD	Fecal Coliform (MPN/100mL)
	6.5-9.5	<100	30	<1000

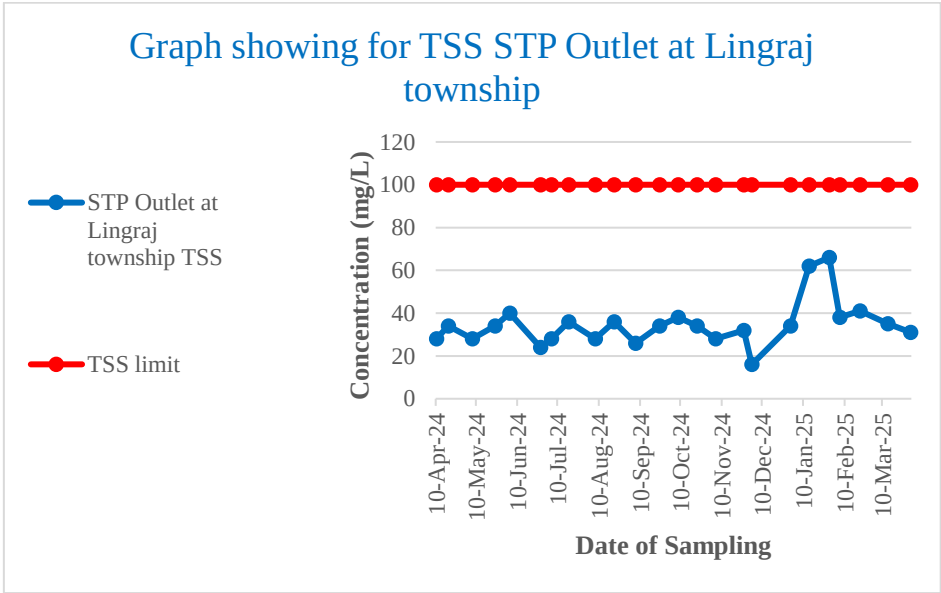
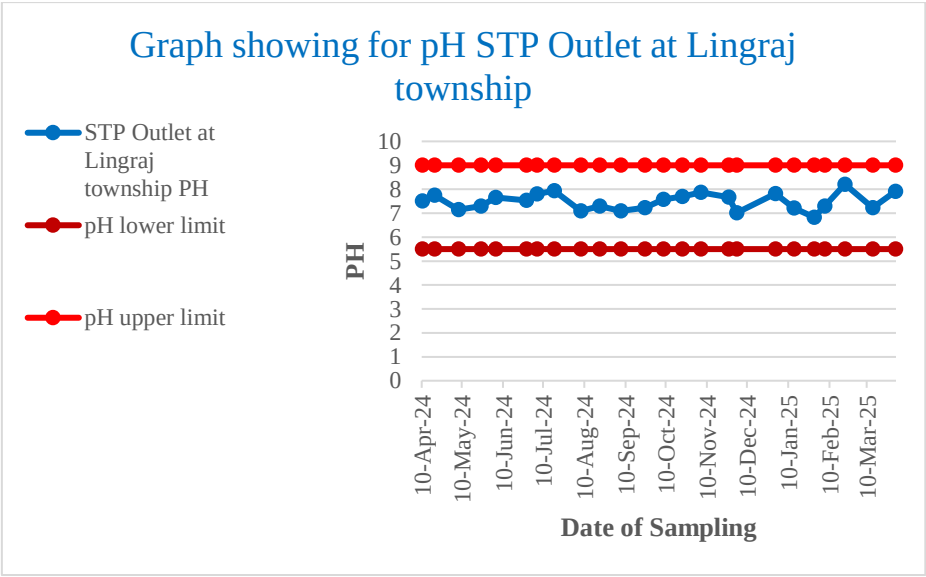


Table: 10.2.1.9

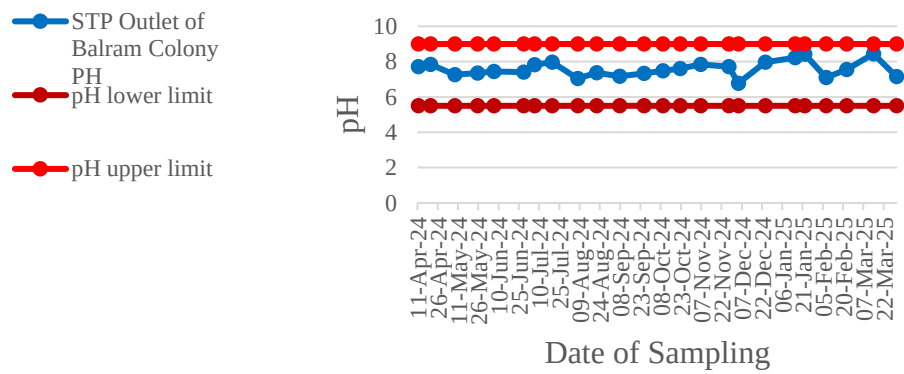
Area: Hingula**Project:** Balram OCP**Monitoring station:** STP Outlet of Balram Colony

Date of Sampling	pH	TSS	BOD	MPN/100ml
11-Apr-24	7.71	32	<2.0	34
20-Apr-24	7.84	42	<2.0	39
08-May-24	7.26	36	<2	58
25-May-24	7.35	28	<2	63
06-Jun-24	7.45	28	<2	22
28-Jun-24	7.4	36	<2	27
06-Jul-24	7.83	40	<2	96
19-Jul-24	7.96	42	<2	84
07-Aug-24	7.05	22	<2	52
21-Aug-24	7.38	30	<2	62
07-Sep-24	7.18	38	<2	68
25-Sep-24	7.34	32	<2	72
09-Oct-24	7.48	30	<2	58
22-Oct-24	7.61	34	<2	48
06-Nov-24	7.84	30	<2	79
27-Nov-24	7.71	26	<2	70
04-Dec-24	6.78	41	<2	68
24-Dec-24	7.96	43	<2	62
15-Jan-25	8.22	29	<2	58
22-Jan-25	8.42	24	<2	48
07-Feb-25	7.1	39	<2	48
22-Feb-25	7.56	36	<2	58
14-Mar-25	8.44	48	<2	58
31-Mar-25	7.15	39	<2	48

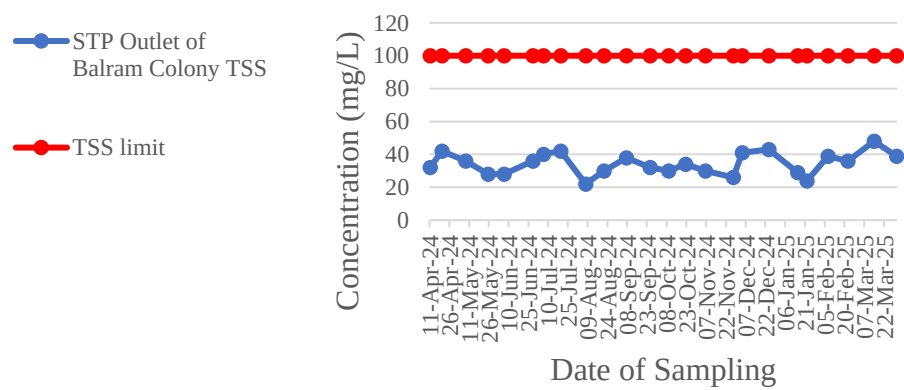
All dimensions are in mg/l unless otherwise stated except pH & Fecal Coliform

G.S.R. 126 5 (E) Effluent discharge standards (applicable to all modes of disposal), Sewage treatment plants (STPs)	pH	TSS	BOD	Fecal Coliform (MPN/100mL)
	6.5-9.5	<100	30	<1000

Graph showing for pH STP Outlet of Balram Colony



Graph showing for TSS STP Outlet of Balram Colony



EFFLUENT QUALITY (ETP)



TABLE NO 10 FOR EFFLUENT QUALITY DATA

Table:10.2.2.1

Area: Jagannath

Project: Jagannath OCP

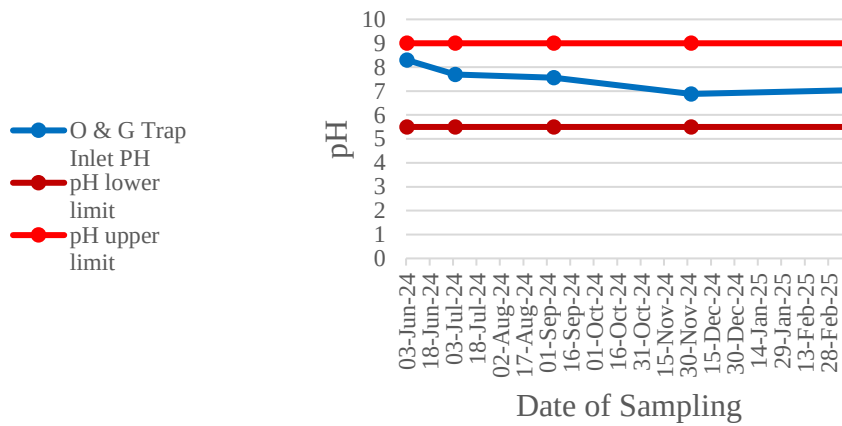
Monitoring station: O & G Trap Inlet

Date of Sampling	pH	Oil & Grease	TSS	COD
03-Jun-24	8.3	<4.0	34	28
04-Jul-24	7.7	<4.0	36	40
05-Sep-24	7.56	<4.0	26	24
02-Dec-24	6.88	<4.0	42	24
14-Mar-25	7.04	6.4	87	128

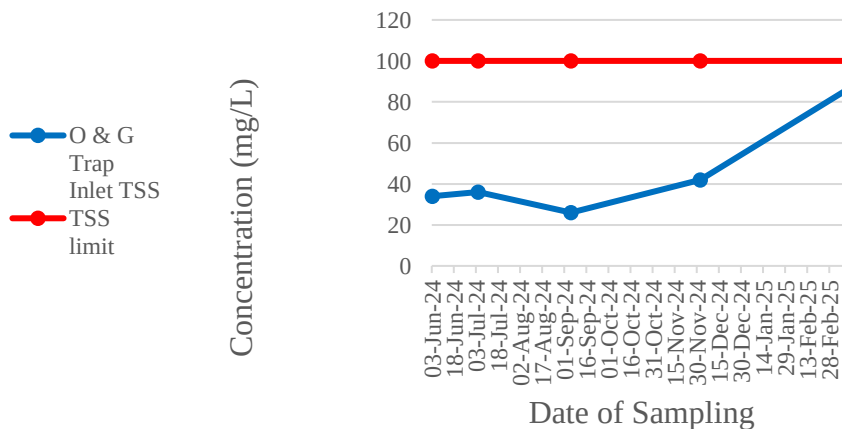
All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

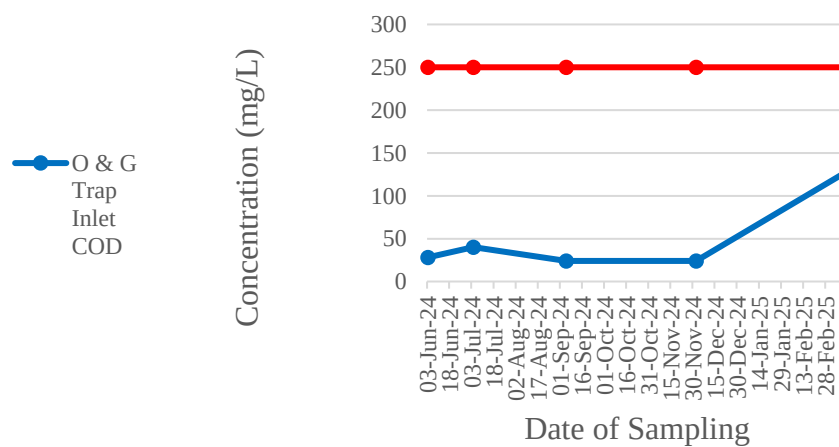
Graph showing for pH O & G Trap Inlet



Graph showing for TSS O & G Trap Inlet



Graph showing for COD O & G Trap Inlet





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Table:10.2.2.2

Area: Jagannath**Project:** Jagannath OCP**Monitoring station:** O & G Trap Outlet

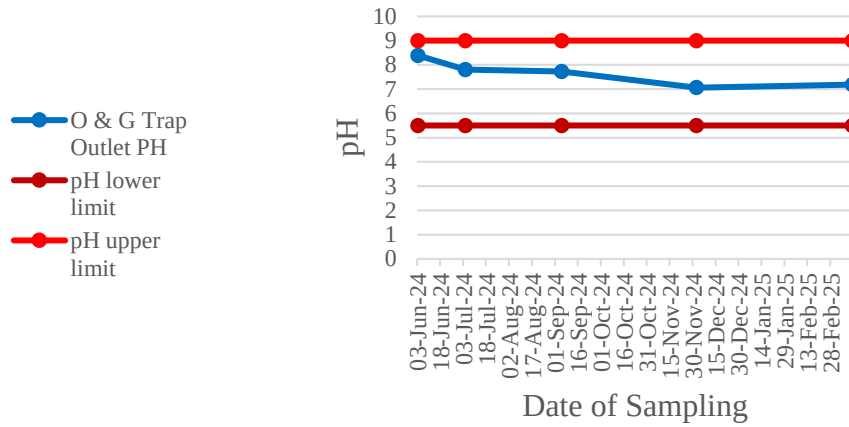
Date of Sampling	pH	Oil & Grease	TSS	COD
03-Jun-24	8.39	<4.0	24	16
04-Jul-24	7.81	<4.0	28	24
05-Sep-24	7.72	<4.0	38	36
02-Dec-24	7.06	<4.0	36	20
14-Mar-25	7.18	<4.0	39	48

All dimensions are in mg/l unless otherwise stated except pH

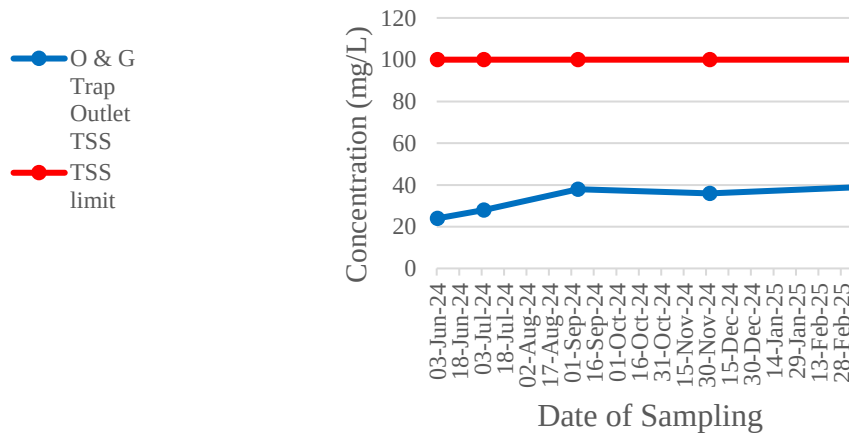
MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



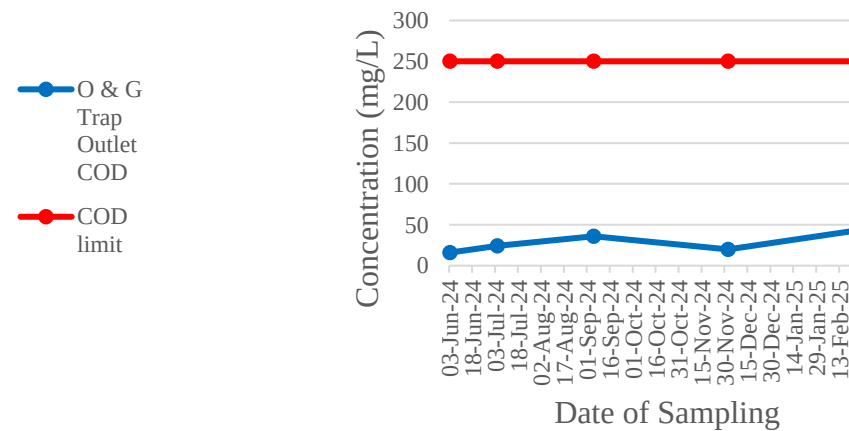
Graph showing for pH O & G Trap Outlet



Graph showing for TSS O & G Trap Outlet



Graph showing for COD O & G Trap Outlet





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मिनी रत्न
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Mini Ratna

Table:10.2.2.3

Area: Jagannath**Project:** Jagannath OCP**Monitoring station:** Face Sump

Date of Sampling	pH	Oil & Grease	TSS	COD
03-Jun-24	8.07	<4.0	18	12
02-Dec-24	3.47	<4.0	68	68

All dimensions are in mg/l unless otherwise stated except pH

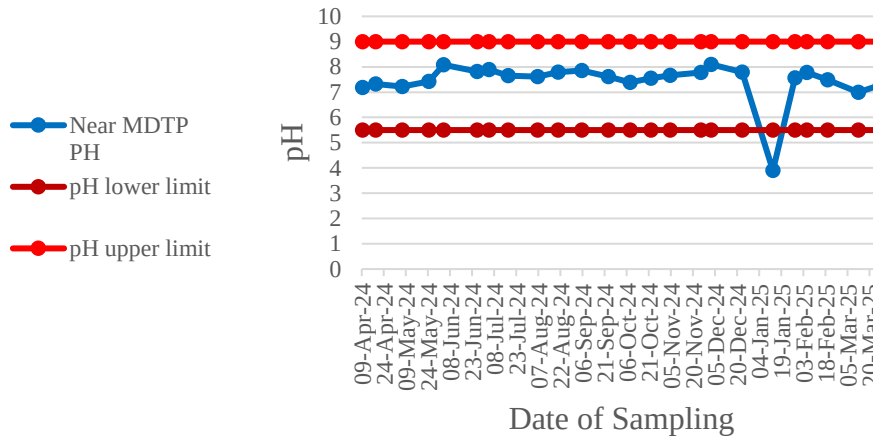
MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



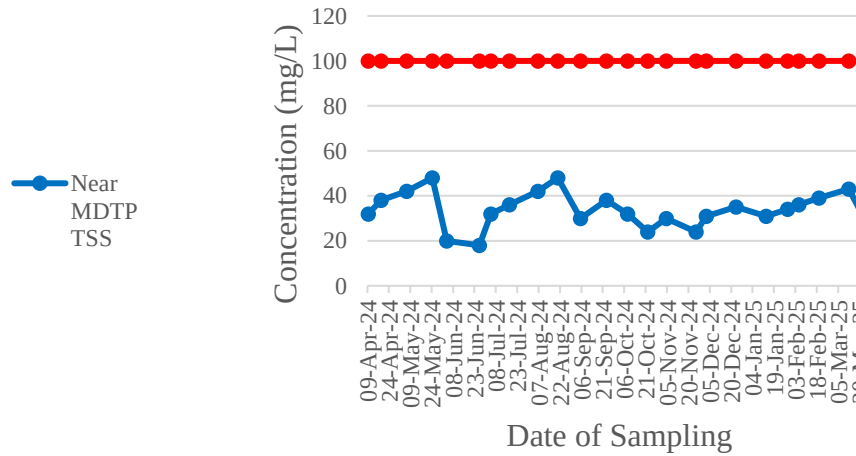
Table: 10.2.2.4**Area:** Jagannath**Project:** Jagannath OCP**Monitoring station:** Near MDTP

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.19	<4.0	32	20
18-Apr-24	7.33	<4.0	38	24
06-May-24	7.22	<4.0	42	28
24-May-24	7.42	<4.0	48	36
03-Jun-24	8.09	<4.0	20	12
26-Jun-24	7.82	<4.0	18	16
04-Jul-24	7.89	<4.0	32	24
17-Jul-24	7.65	<4.0	36	28
06-Aug-24	7.62	<4.0	42	36
20-Aug-24	7.79	<4.0	48	40
05-Sep-24	7.86	<4.0	30	32
23-Sep-24	7.61	<4.0	38	40
08-Oct-24	7.39	<4.0	32	32
22-Oct-24	7.55	<4.0	24	28
04-Nov-24	7.67	<4.0	30	32
25-Nov-24	7.78	<4.0	24	20
02-Dec-24	8.1	<4.0	31	20
23-Dec-24	7.79	<4.0	35	32
13-Jan-25	3.9	<4.0	31	28
28-Jan-25	7.56	<4.0	34	20
05-Feb-25	7.78	<4.0	36	28
19-Feb-25	7.49	<4.0	39	24
12-Mar-25	6.99	<4.0	43	36
27-Mar-25	7.29	<4.0	25	28

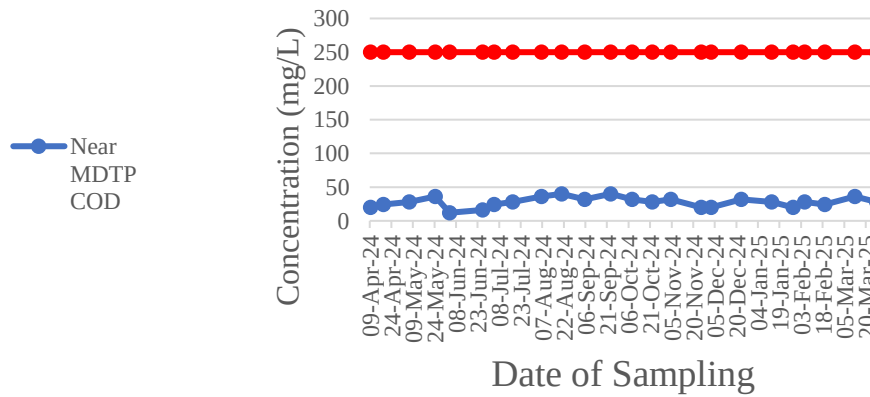
Graph showing for pH Near MDTP



Graph showing for TSS Near MDTP



Graph showing for COD Near MDTP





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Table: 10.2.2.5

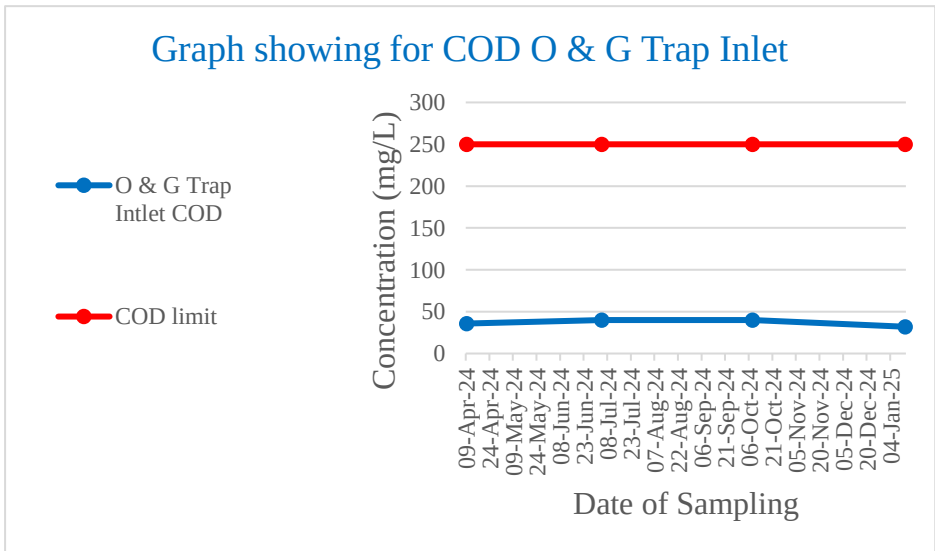
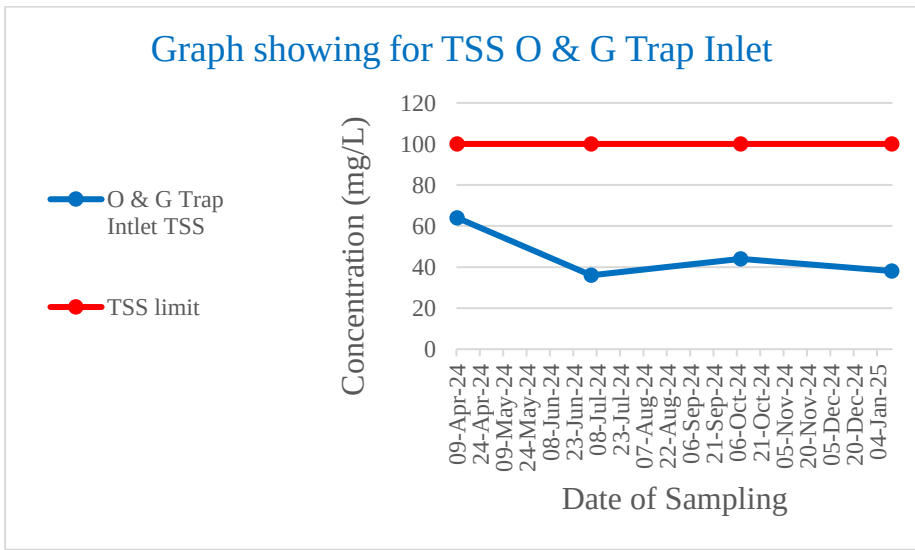
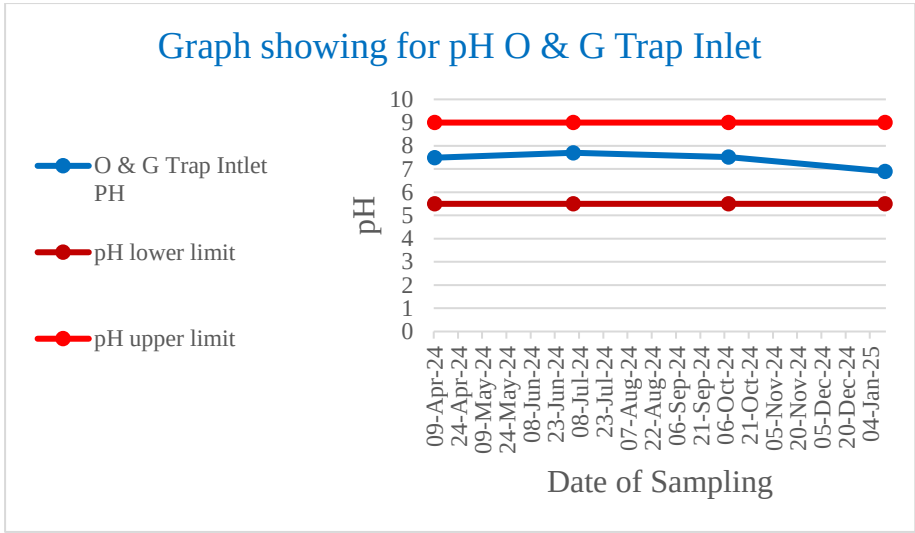
Area: Jagannath**Project:** Ananta OCP**Monitoring station:** O & G Trap Intlet

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.48	<4.0	64	36
04-Jul-24	7.7	<4.0	36	40
08-Oct-24	7.51	<4.0	44	40
13-Jan-25	6.9	4.3	38	32

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30







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Table: 10.2.2.6

Area: Jagannath

Project: Ananta OCP

Monitoring station: O & G Trap Outlet

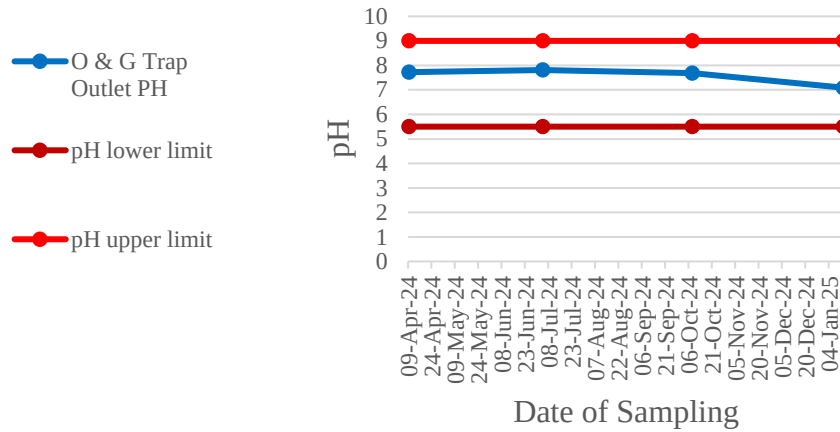
Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.73	<4.0	40	28
04-Jul-24	7.81	<4.0	28	24
08-Oct-24	7.68	<4.0	32	28
13-Jan-25	7.09	<4.0	32	24

All dimensions are in mg/l unless otherwise stated except pH

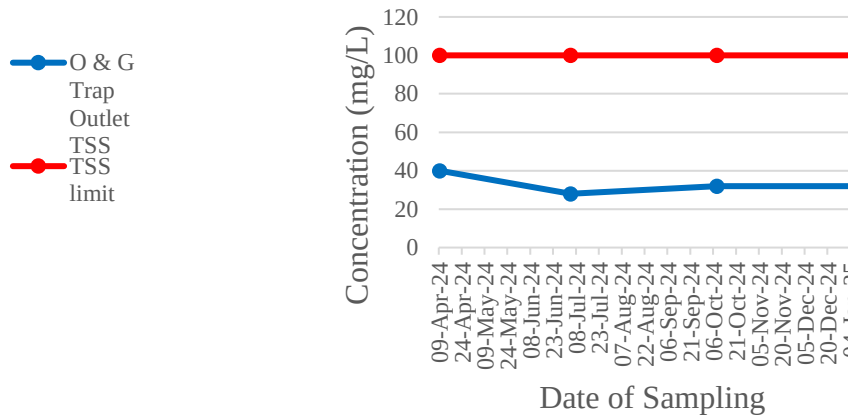
MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



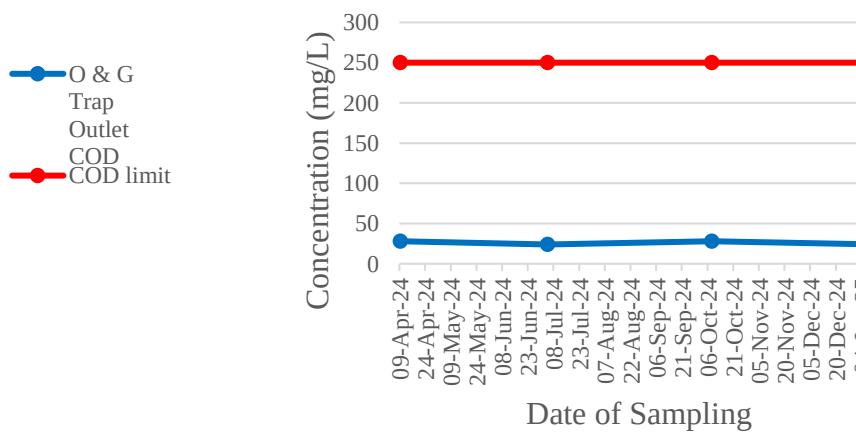
Graph showing for pH O & G Trap Outlet



Graph showing for TSS O & G Trap Outlet



Graph showing for COD O & G Trap Outlet





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Table: 10.2.2.7

Area: Jagannath

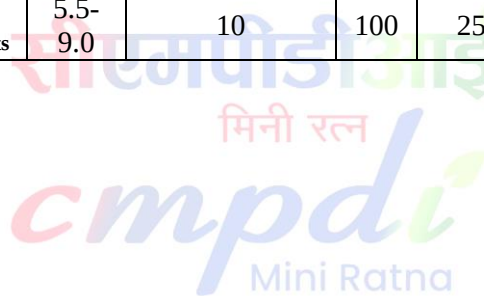
Project: Ananta OCP

Monitoring station: ETP Inlet

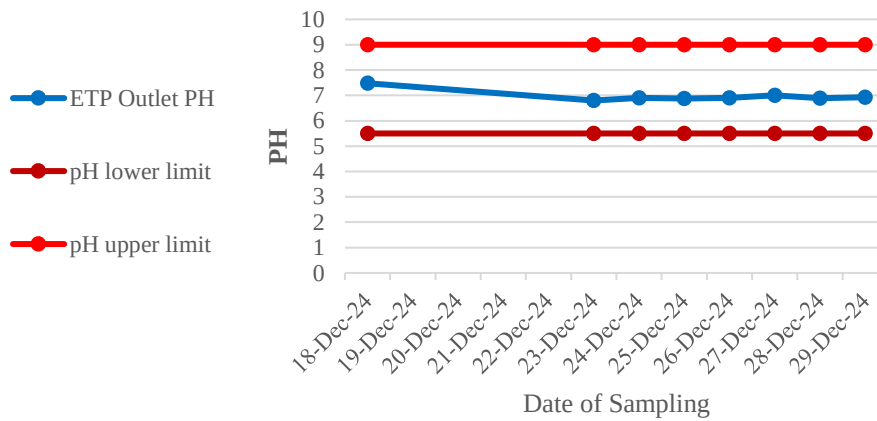
Date of Sampling	pH	Oil & Grease	TSS	COD
18-Dec-24	7.48	<4.0	46	32
23-Dec-24	6.8	<4.0	56	36
24-Dec-24	6.91	<4.0	46	40
25-Dec-24	6.88	<4.0	48	32
26-Dec-24	6.91	<4.0	50	40
27-Dec-24	7.01	<4.0	46	36
28-Dec-24	6.89	<4.0	44	40
29-Dec-24	6.93	<4.0	48	32

All dimensions are in mg/l unless otherwise stated except pH

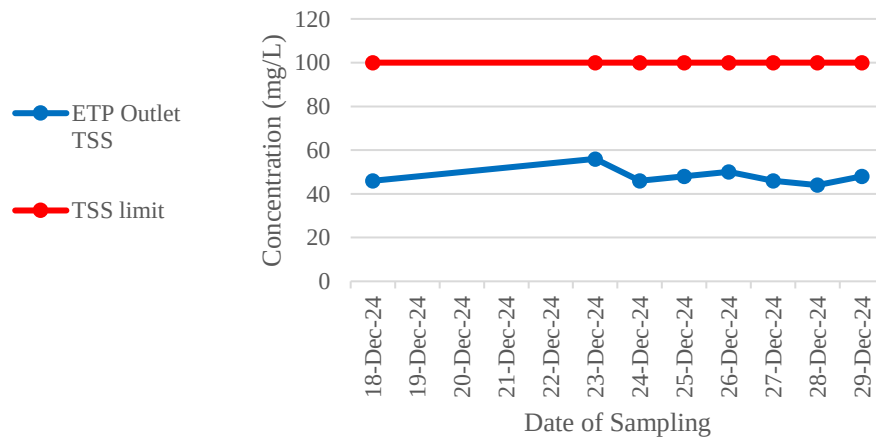
MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



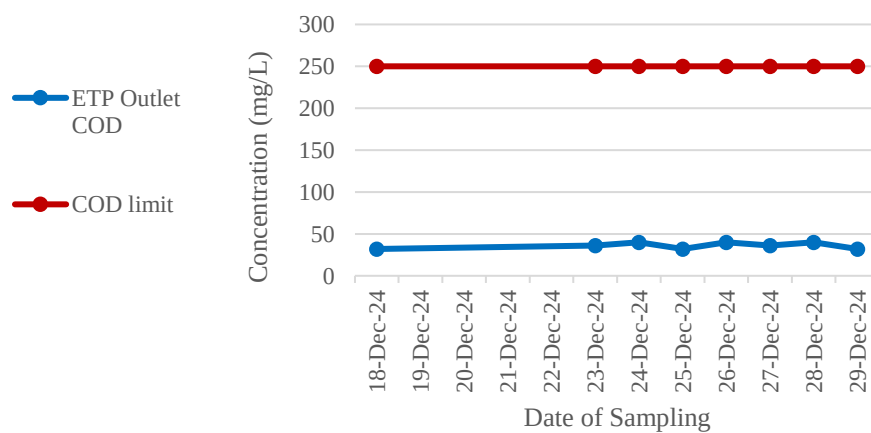
Graph showing pH for ETP Inlet



Graph showing for TSS ETP Inlet



Graph showing for COD ETP Inlet





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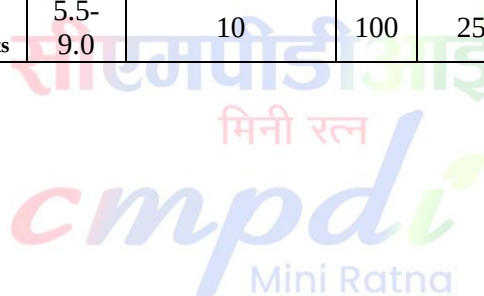
Table: 10.2.2.8

Area: Jagannath**Project:** Ananta OCP**Monitoring station:** ETP Outlet

Date of Sampling	pH	Oil & Grease	TSS	COD
18-Dec-24	7.56	<4	34	20
23-Dec-24	7.65	<4	40	28
24-Dec-24	7.16	<4	32	32
25-Dec-24	7.17	<4	34	24
26-Dec-24	7.22	<4	36	32
27-Dec-24	7.58	<4	32	28
28-Dec-24	7.19	<4	36	28
29-Dec-24	7.26	<4	34	24

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



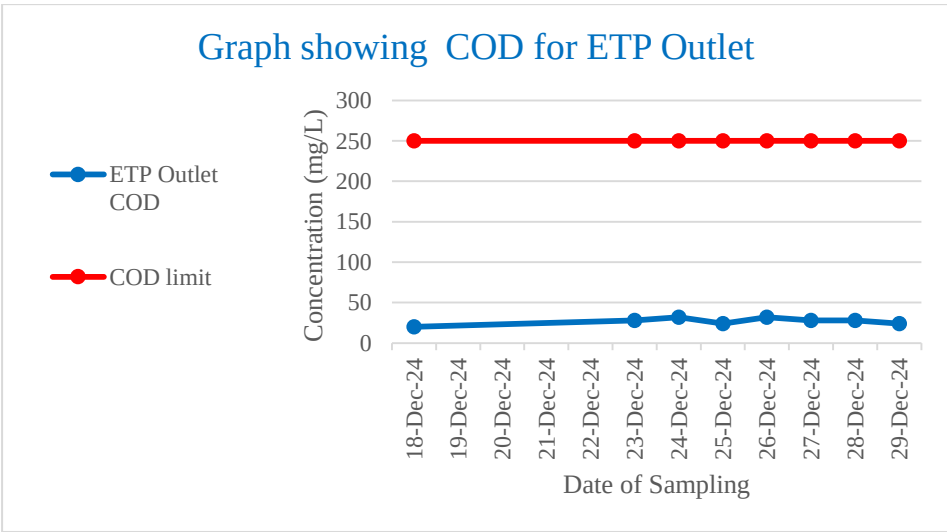
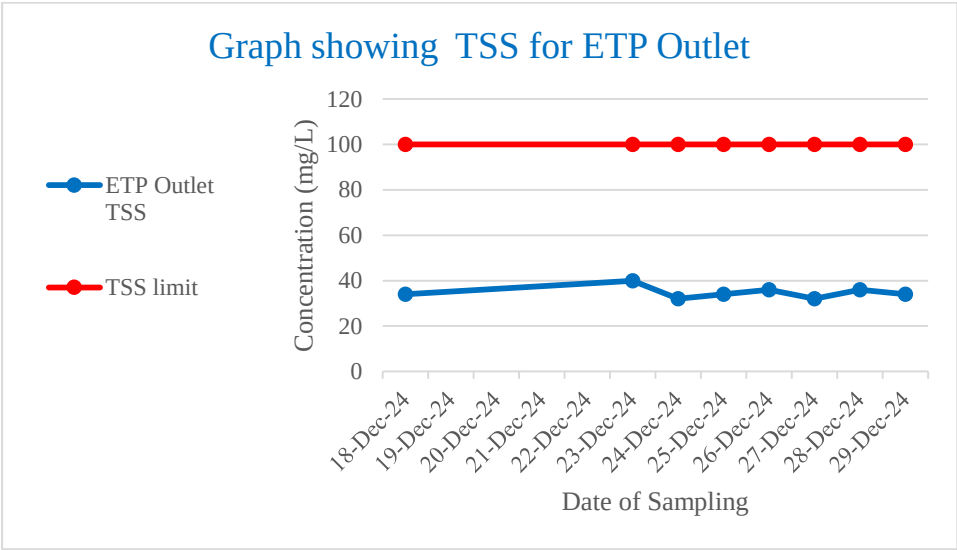
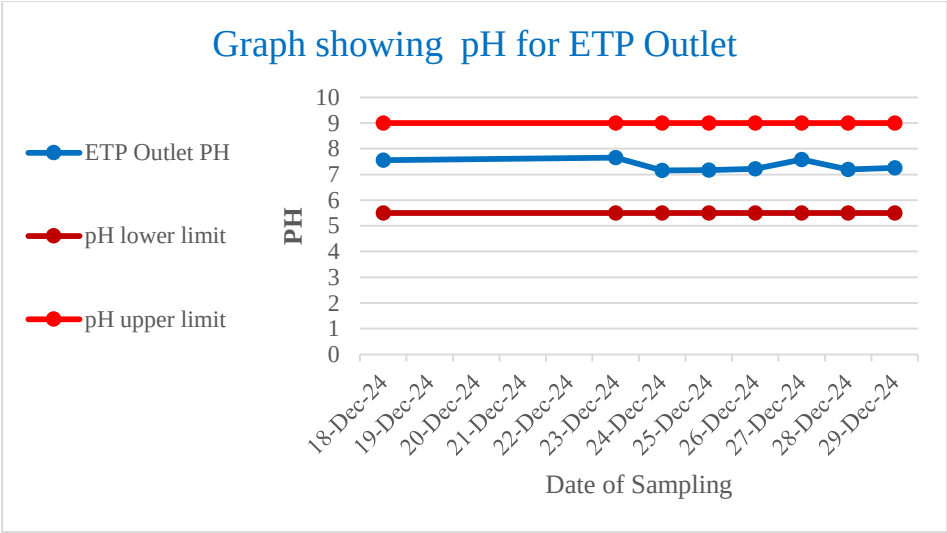


Table: 10.2.2.9

Area: Bharatpur**Project:** Bharatpur OCP**Monitoring station:** Workshop Inlet

Date of Sampling	pH	Oil & Grease	TSS	COD
06-May-24	7.3	<4.0	46	32
04-Nov-24	7.49	<4.0	46	64

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



Table: 10.2.2.10

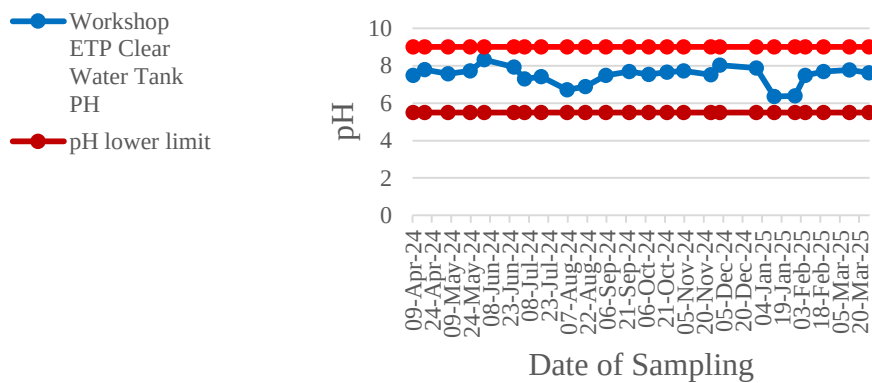
Area: Bharatpur**Project:** Bharatpur OCP**Monitoring station:** Workshop ETP Clear Water Tank

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.48	<4.0	48	40
18-Apr-24	7.79	<4.0	46	36
06-May-24	7.57	<4.0	30	36
23-May-24	7.73	<4.0	26	24
03-Jun-24	8.32	<4.0	30	20
26-Jun-24	7.93	<4.0	34	24
04-Jul-24	7.29	4.4	52	56
17-Jul-24	7.41	<4.0	52	64
06-Aug-24	6.72	<4.0	54	48
20-Aug-24	6.89	<4.0	52	44
05-Sep-24	7.49	<4.0	48	56
23-Sep-24	7.69	<4.0	58	84
08-Oct-24	7.53	<4.0	48	64
22-Oct-24	7.66	<4.0	40	48
04-Nov-24	7.72	<4.0	34	40
25-Nov-24	7.51	<4.0	30	28
02-Dec-24	8.03	<4.0	28	28
30-Dec-24	7.88	<4.0	28	24
13-Jan-25	6.35	4.2	42	28
29-Jan-25	6.38	4.4	46	36
06-Feb-25	7.48	<4.0	19	44
20-Feb-25	7.68	<4.0	20	36
12-Mar-25	7.77	<4.0	21	20
27-Mar-25	7.62	<4.0	43	64

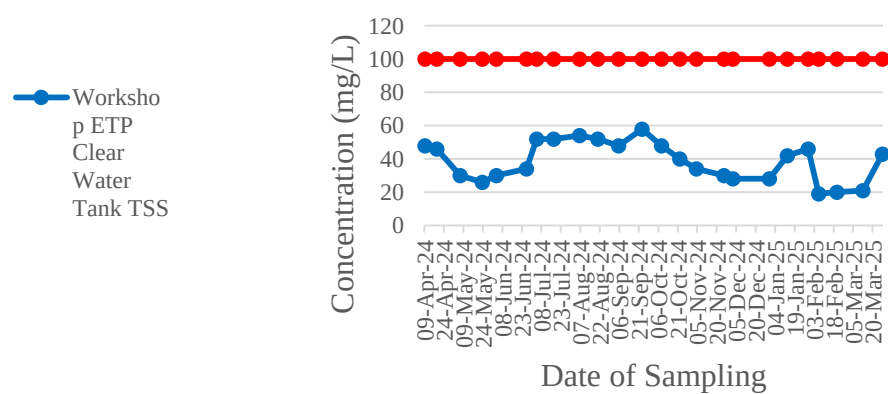
All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Graph showing for pH Workshop ETP Clear Water Tank



Graph showing for TSS Workshop ETP Clear Water Tank



Graph showing for TSS Workshop ETP Clear Water Tank

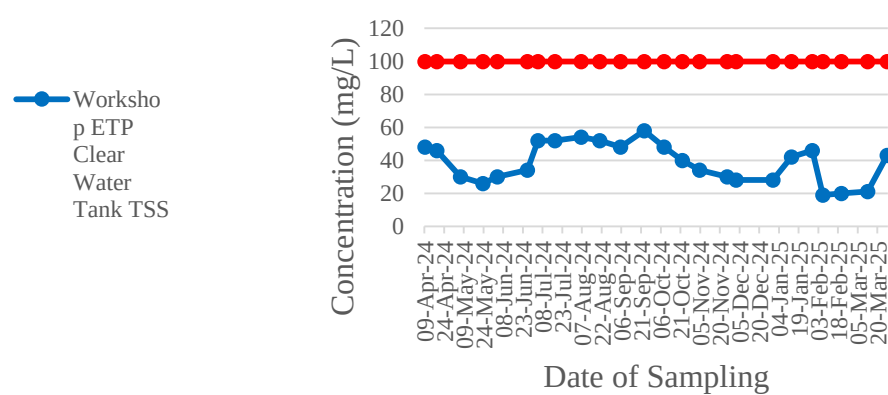


Table: 10.2.2.11

Area: Bharatpur**Project:** Bharatpur OCP**Monitoring station:** Mine Sump Water - Main Sump

Date of Sampling	pH
09-Apr-24	7.32
06-May-24	7.31
03-Jun-24	7.72
04-Jul-24	7.94
06-Aug-24	4.42
05-Sep-24	7.65
08-Oct-24	7.73
04-Nov-24	4.76
02-Dec-24	4.09
13-Jan-25	7.24
05-Feb-25	4.01
12-Mar-25	5.18

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

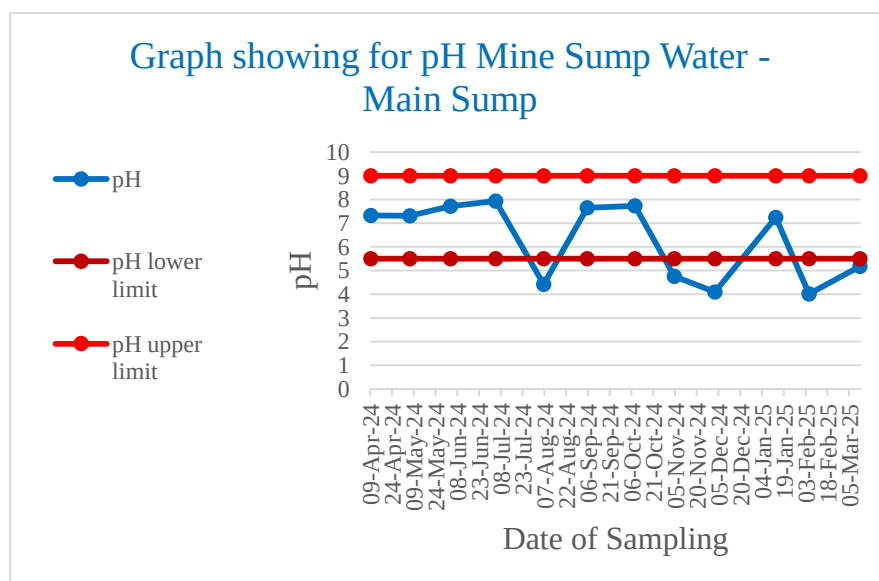


Table: 10.2.2.12

Area: Bharatpur**Project:** Bharatpur OCP**Monitoring station:** Mine Sump Water - Old Quarry Sump

Date of Sampling	pH
09-Apr-24	7.25
06-May-24	7.39
03-Jun-24	7.81
04-Jul-24	7.89
06-Aug-24	6.96
05-Sep-24	7.04
08-Oct-24	7.7
04-Nov-24	6.83
02-Dec-24	7.39
13-Jan-25	7.16
05-Feb-25	6.81
12-Mar-25	6.84

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

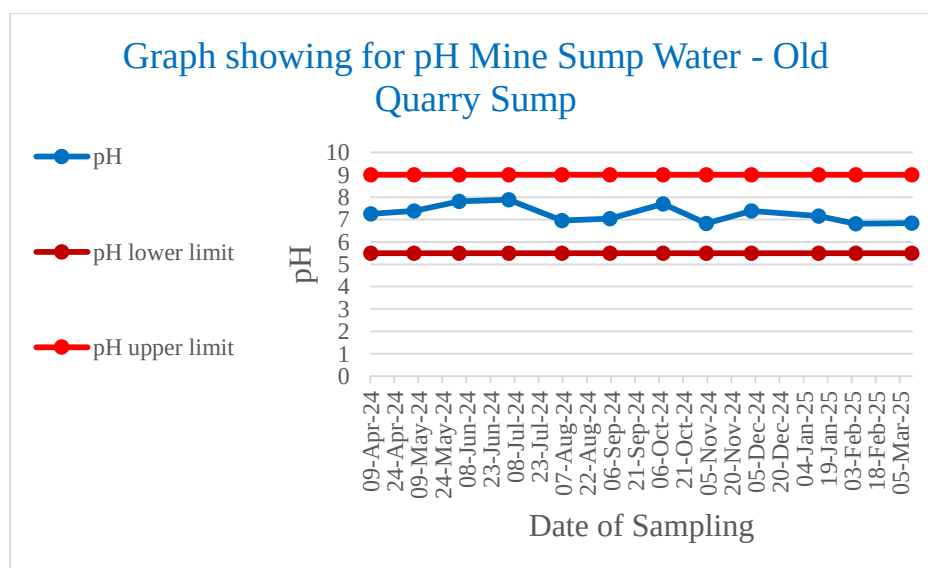


Table: 10.2.2.13

Area: Bharatpur**Project:** Bharatpur OCP**Monitoring station:** Rakas Quarry Sump

Date of Sampling	pH
09-Apr-24	7.12
06-May-24	7.49
03-Jun-24	7.85
04-Jul-24	7.86
06-Aug-24	7.54
09-Sep-24	7.34
08-Oct-24	7.76
04-Nov-24	7.39
02-Dec-24	5.61
13-Jan-25	7.41
05-Feb-25	6.84
12-Mar-25	7.35

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

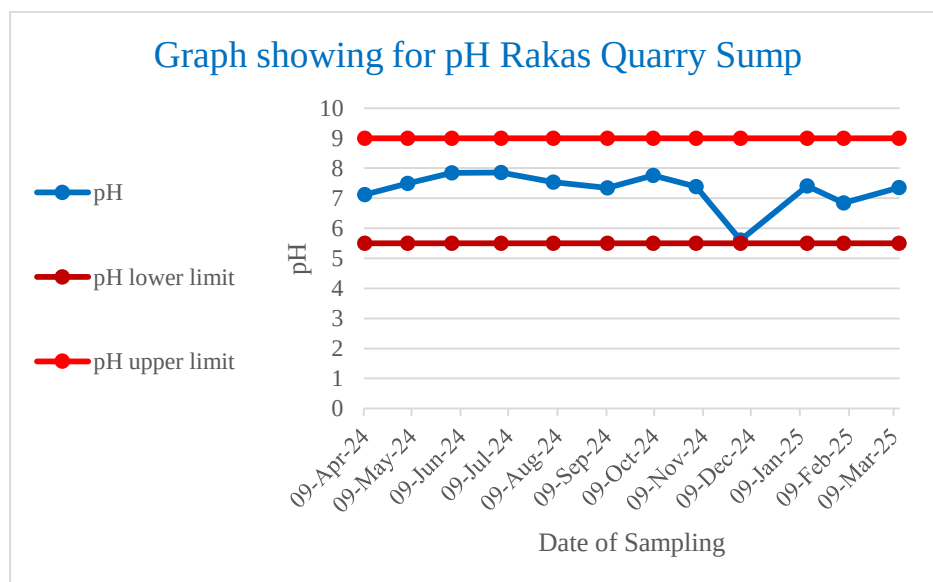


Table: 10.2.2.14

Area: Lingaraj

Project: Lingaraj OCP

Monitoring station: Inlet of Workshop ETP

Date of Sampling	pH	Oil & Grease	TSS	COD
07-May-24	6.76	4.6	68	40

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



Table: 10.2.2.15

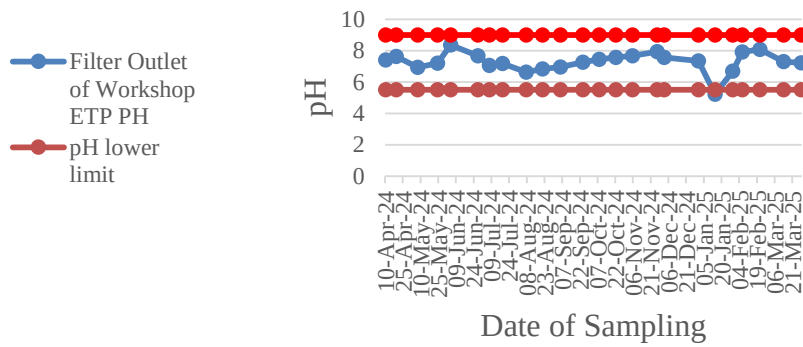
Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** Filter Outlet of Workshop ETP

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.41	<4.0	30	24
19-Apr-24	7.64	<4.0	40	28
07-May-24	6.93	<4.0	56	44
24-May-24	7.21	<4.0	48	40
04-Jun-24	8.36	<4.0	26	20
27-Jun-24	7.68	<4.0	32	40
07-Jul-24	7.06	<4.0	44	48
18-Jul-24	7.19	<4.0	40	52
07-Aug-24	6.63	<4.0	38	32
21-Aug-24	6.84	<4.0	40	36
05-Sep-24	6.96	<4.0	36	32
24-Sep-24	7.26	<4.0	48	44
08-Oct-24	7.45	<4.0	40	44
22-Oct-24	7.56	<4.0	34	36
05-Nov-24	7.67	<4.0	38	44
26-Nov-24	7.93	<4.0	30	32
02-Dec-24	7.56	<4.0	30	96
31-Dec-24	7.35	<4.0	35	44
14-Jan-25	5.22	<4.0	54	32
29-Jan-25	6.7	<4.0	60	40
06-Feb-25	7.91	<4.0	24	48
21-Feb-25	8.08	<4.0	33	28
13-Mar-25	7.3	<4.0	31	24
28-Mar-25	7.22	<4.0	27	28

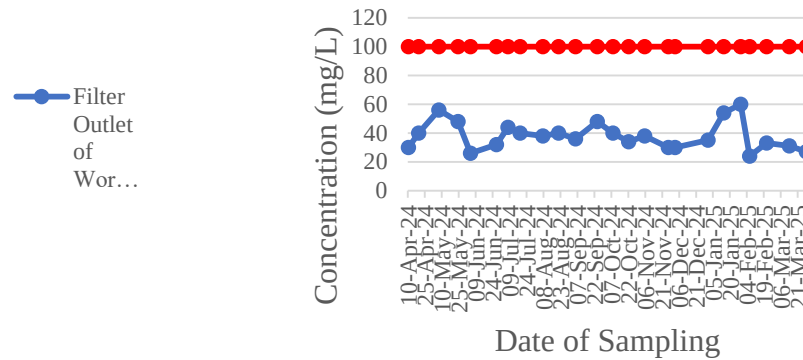
All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Graph showing for pH Filter Outlet of Workshop ETP



Graph showing for TSS Filter Outlet of Workshop ETP



Graph showing for COD Filter Outlet of Workshop ETP

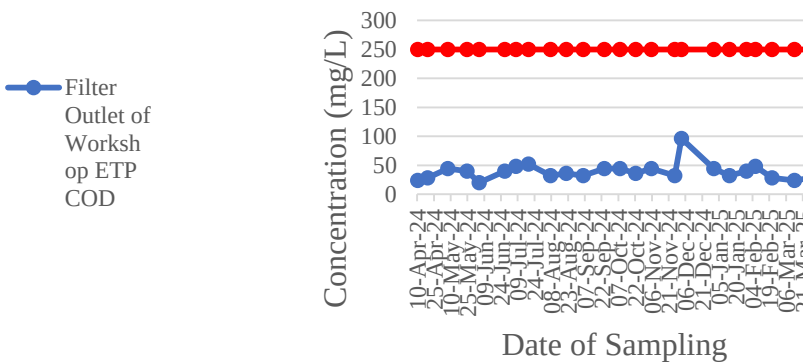


Table: 10.2.2.16

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** Inlet of ETP Near Dumper Parking

Date of Sampling	pH	Oil & Grease	TSS	COD
07-May-24	6.86	4.4	64	48
14-Mar-25	6.65	4.4	35	48
28-Mar-25	7.05	<4.0	36	40

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



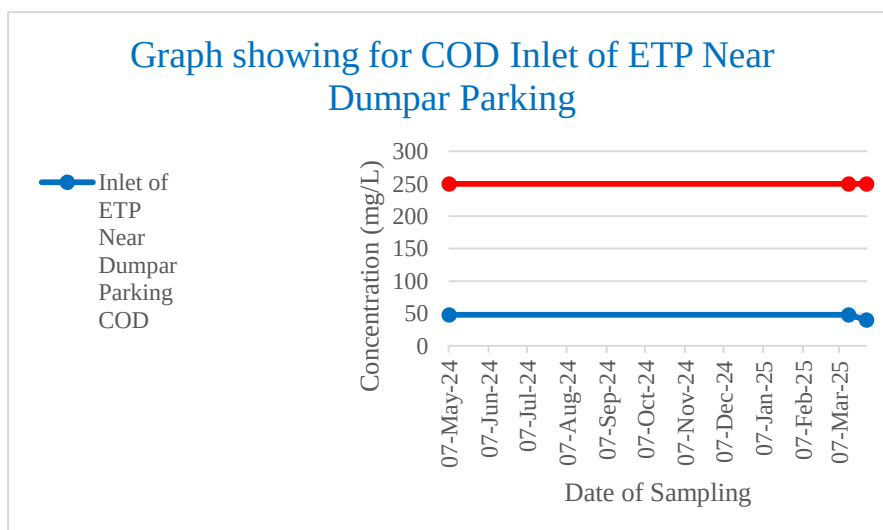
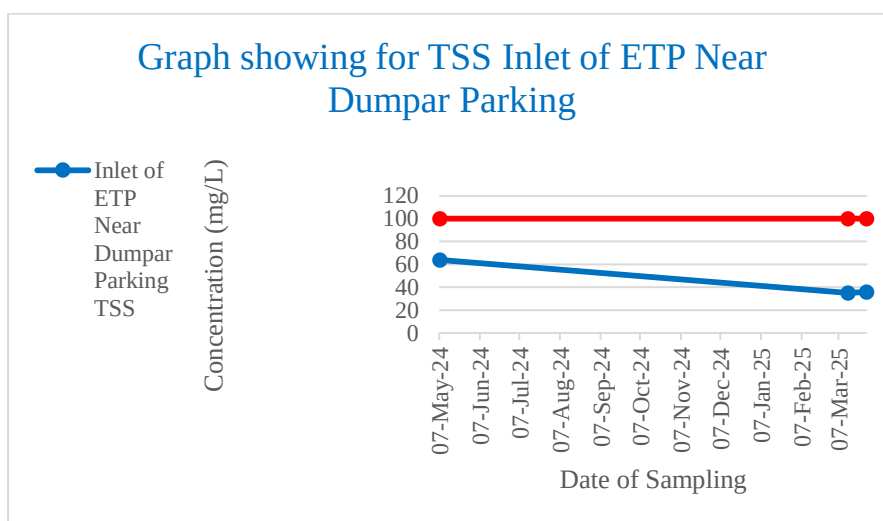
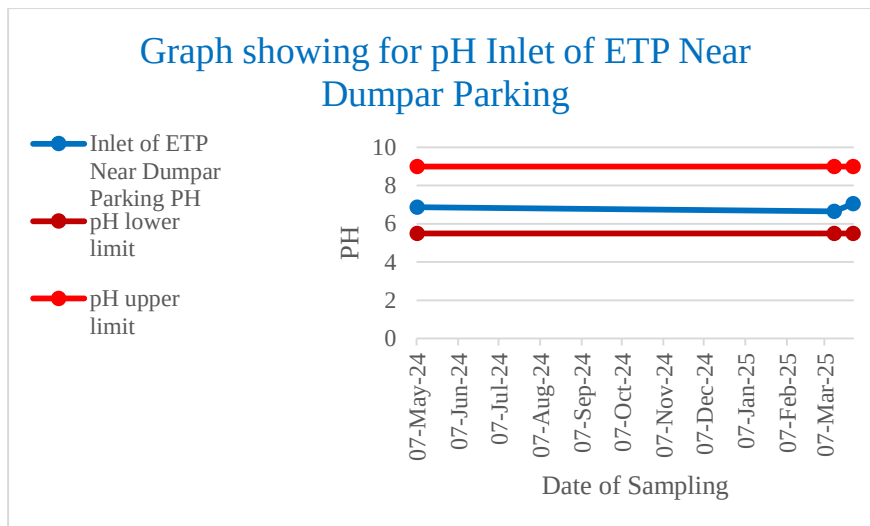


Table: 10.2.2.17

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** Clear Water Reservoir of ETP
Near Dumper Parking

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.53	<4.0	38	32
19-Apr-24	7.37	<4.0	34	32
07-May-24	6.91	<4.0	52	32
24-May-24	7.17	<4.0	40	36
04-Jun-24	8.37	<4.0	34	28
27-Jun-24	7.89	<4.0	38	32
05-Jul-24	6.97	<4.0	40	36
18-Jul-24	7.1	<4.0	34	32
07-Aug-24	6.55	<4.0	54	40
21-Aug-24	6.72	<4.0	44	36
06-Sep-24	6.32	<4.0	40	36
24-Sep-24	6.58	<4.0	54	56
08-Oct-24	6.89	<4.0	46	48
22-Oct-24	6.94	<4.0	40	44
05-Nov-24	6.82	<4.0	44	40
26-Nov-24	6.71	<4.0	34	28
02-Dec-24	7.78	<4.0	26	24
31-Dec-24	7.48	<4.0	22	28
14-Jan-25	6.97	<4.0	58	28
29-Jan-25	6.97	<4.0	52	36
06-Feb-25	7.97	<4.0	39	40
21-Feb-25	7.11	<4.0	44	36
13-Mar-25	7.26	<4.0	37	24
28-Mar-25	7.7	<4.0	33	36

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

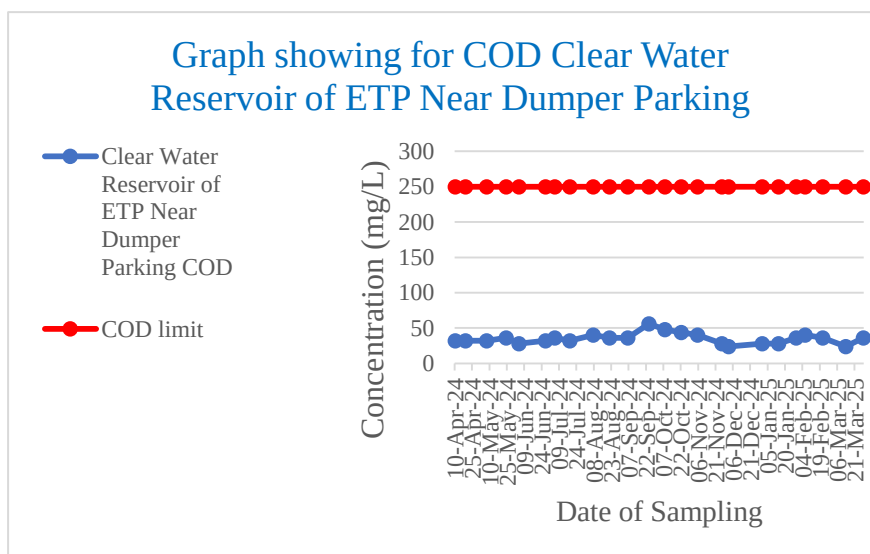
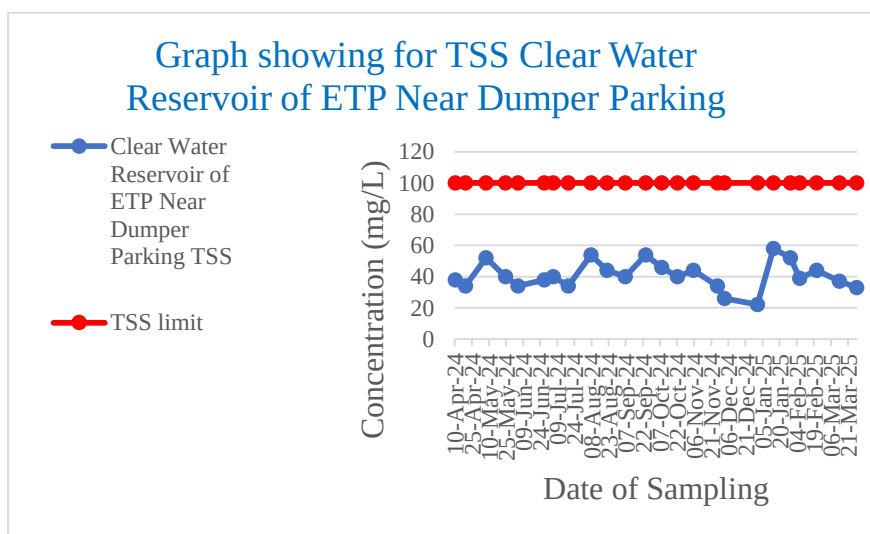
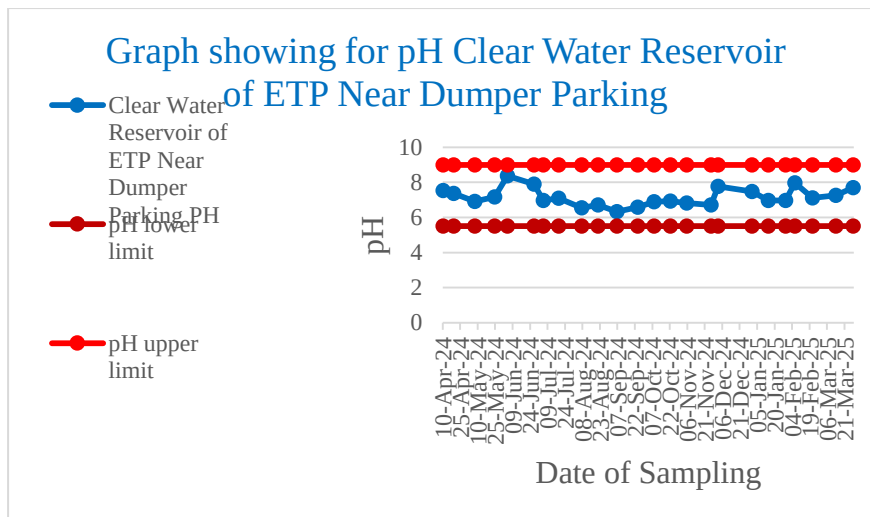


Table: 10.2.2.18

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** Inlet of MDTP Near Stock No. 17

Date of Sampling	pH	Oil & Grease	TSS	COD
07-Aug-24	6.74	<4.0	44	36

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Table: 10.2.2.19

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** Clear Water Reservoir of MDTP
Near Stock No. 17

Date of Sampling	pH	Oil & Grease	TSS	COD
07-Aug-24	6.53	<4.0	52	40

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Table: 10.2.2.20

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** Inlet of Sedimentation Pond Complex
near Lingraj Siding

Date of Sampling	pH	Oil & Grease	TSS	COD
05-Nov-24	6.76	<4.0	32	28

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Table: 10.2.2.21

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** Inlet of Sedimentation Pond
Complex near Project Office

Date of Sampling	pH	Oil & Grease	TSS	COD
05-Nov-24	6.83	<4.0	48	40

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Table: 10.2.2.22

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** Clear Water Reservoir of
Sedimentation Pond Complex near Project Office

Date of Sampling	pH	Oil & Grease	TSS	COD
05-Nov-24	6.7	<4.0	56	48

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Table: 10.2.2.23

Area: Lingaraj**Project:** Lingaraj OCP**Monitoring station:** Inlet of Sedimentaion Pond
Complex Near Deulbera Siding

Date of Sampling	pH	Oil & Grease	TSS	COD
06-Feb-25	7.57	<4.0	42	52

All dimensions are in mg/l unless otherwise stated except pH

	pH	Oil & Grease	TSS	COD	BOD

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	5.5-9.0	10	100	250	30

Table: 10.2.2.24

Area: Lingaraj

Project: Lingaraj OCP

Monitoring station: Clear Water Tank of Sedimentation Pond Complex Near Deulbera Siding

Date of Sampling	pH	Oil & Grease	TSS	COD
06-Feb-25	7.47	4.4	44	84

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



Table: 10.2.2.25

Area: Lingaraj

Project: Lingaraj OCP

Monitoring station: Mine Sump Water

Date of Sampling	pH
07-May-24	7.43
07-Aug-24	7.4
05-Nov-24	7.56

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

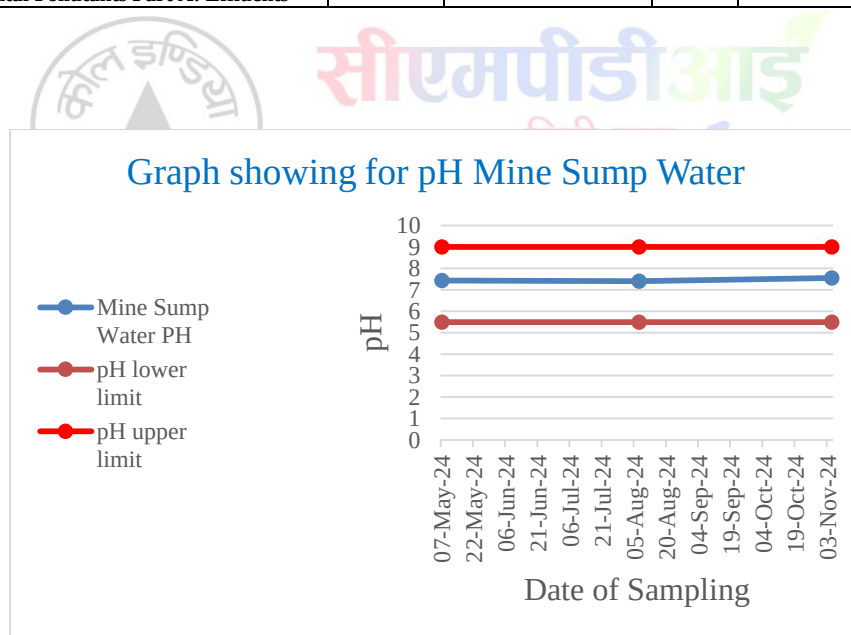


Table: 10.2.2.26

Area: kaniha**Project:** kaniha OCP**Monitoring station:** Pre Sedimentation Pond

Date of Sampling	pH	Oil & Grease	TSS	COD
05-Apr-24	7.33	<4.0	36	40
12-Apr-24	7.39	<4.0	40	44
19-Apr-24	7.54	<4.0	30	20
29-Apr-24	7.58	<4.0	36	24
05-May-24	7.46	<4.0	54	40
13-May-24	7.4	<4.0	48	36
20-May-24	7.25	<4.0	28	20
27-May-24	7.29	<4.0	34	36
05-Jun-24	7.98	<4.0	42	48
12-Jun-24	7.95	<4.0	46	56
20-Jun-24	7.71	<4.0	30	28
27-Jun-24	7.67	<4.0	28	32
06-Jul-24	7.72	<4.0	34	28
13-Jul-24	7.68	<4.0	30	24
22-Jul-24	7.46	<4.0	36	28
30-Jul-24	7.49	<4.0	40	32
05-Aug-24	7.23	<4.0	28	24
12-Aug-24	7.17	<4.0	24	20
19-Aug-24	7.3	<4.0	30	24
26-Aug-24	7.34	<4.0	36	32
05-Sep-24	7.36	<4.0	40	36
12-Sep-24	7.32	<4.0	44	40
18-Sep-24	7.42	<4.0	42	40
24-Sep-24	7.46	<4.0	48	44
07-Oct-24	7.31	<4.0	32	28
14-Oct-24	7.35	<4.0	36	32
21-Oct-24	7.43	<4.0	28	24
28-Oct-24	7.46	<4.0	32	28
04-Nov-24	7.23	<4.0	28	24
12-Nov-24	7.28	<4.0	34	28
19-Nov-24	7.36	<4.0	34	28
23-Nov-24	7.39	<4.0	38	32
04-Dec-24	7.53	<4.0	32	40
13-Dec-24	7.94	<4.0	23	32
24-Dec-24	8.15	<4.0	27	24
30-Dec-24	8.26	<4.0	35	28
07-Jan-25	6.75	<4.0	42	16
15-Jan-25	7.57	<4.0	40	20
22-Jan-25	7.68	<4.0	38	24
30-Jan-25	7.69	<4.0	36	28
05-Feb-25	8.07	<4.0	42	32
12-Feb-25	8.11	<4.0	40	40

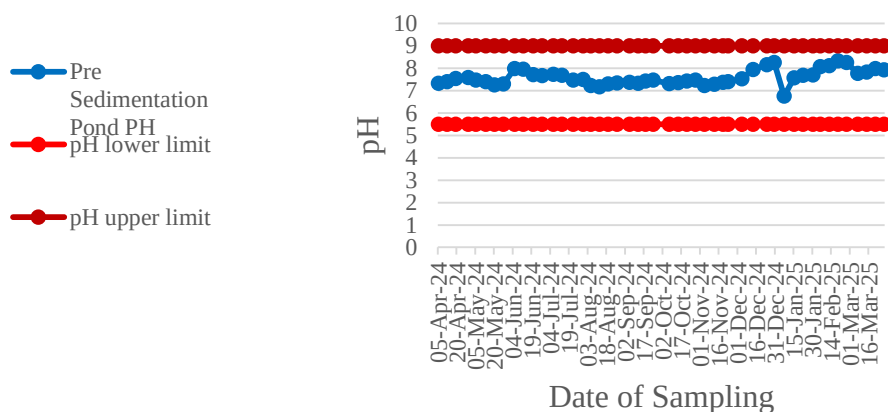
19-Feb-25	8.32	<4.0	45	44
26-Feb-25	8.25	<4.0	42	36
07-Mar-25	7.77	<4.0	40	28
14-Mar-25	7.82	<4.0	38	24
21-Mar-25	7.98	<4.0	41	28
28-Mar-25	7.92	<4.0	32	24
05-Apr-24	7.33	<4.0	36	40
12-Apr-24	7.39	<4.0	40	44
19-Apr-24	7.54	<4.0	30	20
29-Apr-24	7.58	<4.0	36	24
05-May-24	7.46	<4.0	54	40
13-May-24	7.4	<4.0	48	36

All dimensions are in mg/l unless otherwise stated except pH

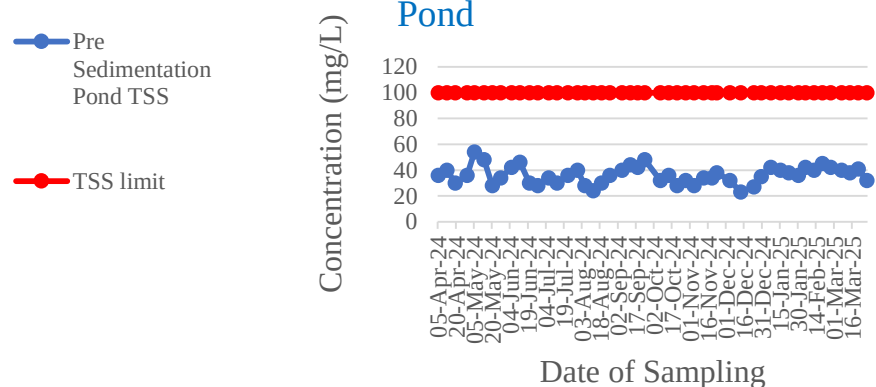
MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



Graph showing for pH Pre Sedimentation Pond



Graph showing for TSS Pre Sedimentation Pond



Graph showing for COD Pre Sedimentation Pond

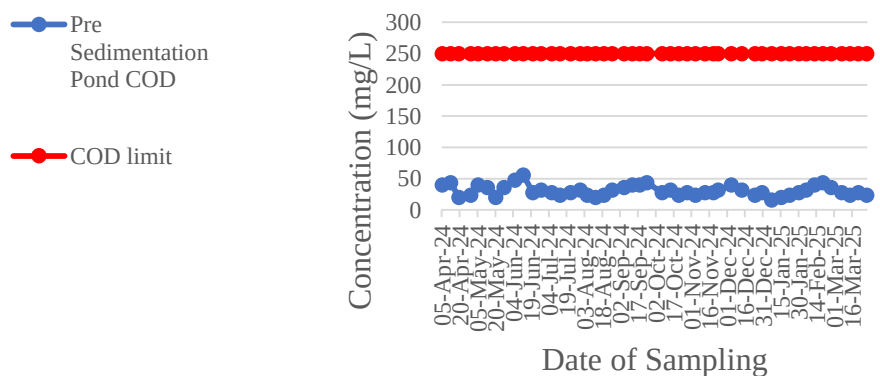


Table: 10.2.2.27

Area: kaniha**Project:** kaniha OCP**Monitoring station:** Clear Water Pond

Date of Sampling	pH	Oil & Grease	TSS	COD
05-Apr-24	7.43	<4.0	42	36
12-Apr-24	7.48	<4.0	38	32
19-Apr-24	7.36	<4.0	44	40
29-Apr-24	7.41	<4.0	48	32
05-May-24	7.43	<4.0	46	28
13-May-24	7.39	<4.0	38	32
20-May-24	7.33	<4.0	30	28
27-May-24	7.4	<4.0	38	40
05-Jun-24	7.99	<4.0	48	52
12-Jun-24	8.02	<4.0	38	36
20-Jun-24	7.56	<4.0	38	40
27-Jun-24	7.59	<4.0	32	48
06-Jul-24	7.74	<4.0	28	20
13-Jul-24	7.7	<4.0	26	20
22-Jul-24	7.55	<4.0	28	24
30-Jul-24	7.51	<4.0	32	28
05-Aug-24	7.13	<4.0	26	20
12-Aug-24	7.1	<4.0	30	24
19-Aug-24	7.37	<4.0	34	28
26-Aug-24	7.42	<4.0	40	32
05-Sep-24	7.47	<4.0	48	52
12-Sep-24	7.42	<4.0	52	60
18-Sep-24	7.53	<4.0	54	48
24-Sep-24	7.57	<4.0	58	52
07-Oct-24	7.37	<4.0	34	32
14-Oct-24	7.4	<4.0	40	36
21-Oct-24	7.48	<4.0	32	32
28-Oct-24	7.45	<4.0	38	36
04-Nov-24	7.31	<4.0	30	32
12-Nov-24	7.35	<4.0	36	36
19-Nov-24	7.31	<4.0	30	28
23-Nov-24	7.37	<4.0	36	32
04-Dec-24	7.74	<4.0	28	28
13-Dec-24	7.76	<4.0	22	32
24-Dec-24	8.26	<4.0	39	32
30-Dec-24	8.22	<4.0	30	28
07-Jan-25	7.69	<4.0	46	20
15-Jan-25	7.8	<4.0	42	24
22-Jan-25	7.61	<4.0	41	20
30-Jan-25	7.77	<4.0	50	24
05-Feb-25	7.92	<4.0	38	36
12-Feb-25	8.06	<4.0	42	48

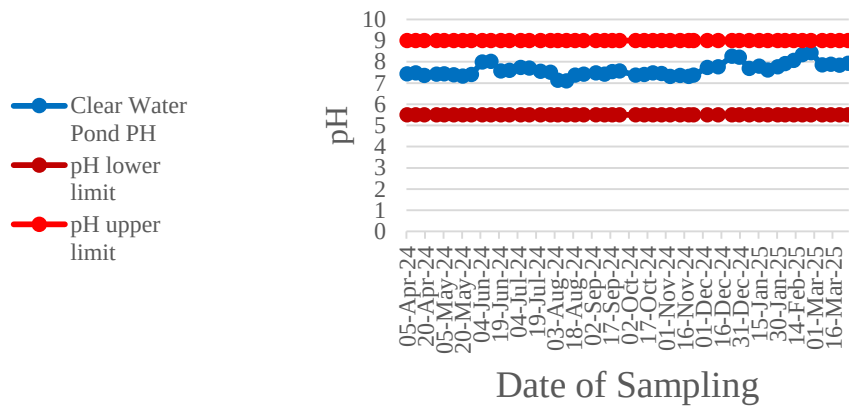
19-Feb-25	8.33	<4.0	40	40
26-Feb-25	8.42	<4.0	42	48
07-Mar-25	7.86	<4.0	33	20
14-Mar-25	7.89	<4.0	35	24
21-Mar-25	7.84	<4.0	27	20
28-Mar-25	7.93	<4.0	33	28

All dimensions are in mg/l unless otherwise stated except pH

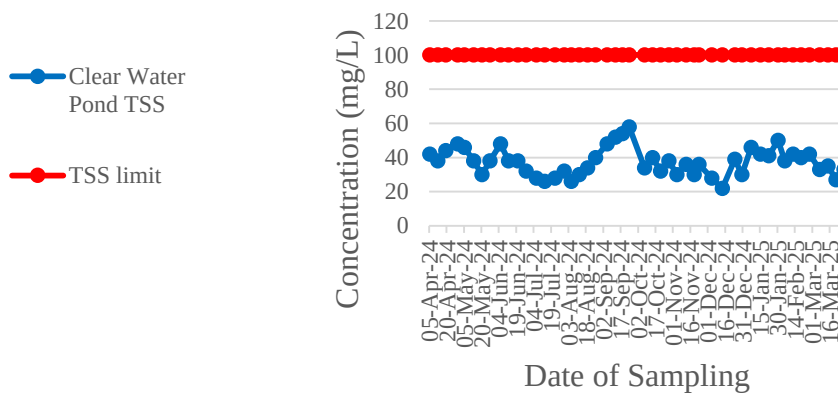
MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



Graph showing for pH Clear Water Pond



Graph showing for TSS Clear Water Pond



Graph showing for COD Clear Water Pond

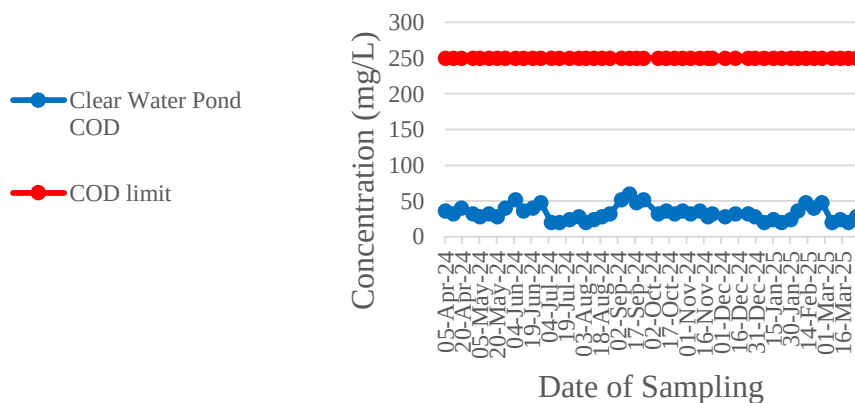


Table: 10.2.2.28

Area: kaniha**Project:** kaniha OCP**Monitoring station:** Kansamunda Sump

Date of Sampling	pH	Oil & Grease	TSS	COD
05-Apr-24	7.52	<4.0	48	40
12-Apr-24	7.5	<4.0	42	28
19-Apr-24	7.62	<4.0	48	36
29-Apr-24	7.68	<4.0	42	40
05-May-24	7.31	<4.0	34	28
13-May-24	7.25	<4.0	40	32
20-May-24	7.38	<4.0	42	32
27-May-24	7.43	<4.0	46	40
05-Jun-24	8.04	<4.0	36	40
12-Jun-24	8.01	<4.0	48	60
20-Jun-24	7.65	<4.0	28	24
27-Jun-24	7.69	<4.0	24	20
06-Jul-24	7.89	<4.0	32	24
13-Jul-24	7.93	<4.0	36	28
22-Jul-24	7.63	<4.0	30	32
30-Jul-24	7.68	<4.0	36	40
05-Aug-24	7.2	<4.0	34	28
12-Aug-24	7.18	<4.0	32	28
19-Aug-24	7.4	<4.0	38	32
26-Aug-24	7.46	<4.0	42	36
05-Sep-24	7.55	<4.0	50	48
12-Sep-24	7.59	<4.0	54	56
18-Sep-24	7.61	<4.0	52	60
24-Sep-24	7.64	<4.0	60	64
07-Oct-24	7.44	<4.0	38	32
14-Oct-24	7.47	<4.0	44	40
21-Oct-24	7.51	<4.0	42	36
28-Oct-24	7.52	<4.0	48	40
04-Nov-24	7.33	<4.0	34	40
12-Nov-24	7.4	<4.0	40	44
19-Nov-24	7.43	<4.0	34	36
23-Nov-24	7.46	<4.0	40	44
04-Dec-24	7.72	<4.0	22	32
13-Dec-24	7.71	<4.0	30	36
24-Dec-24	8.17	<4.0	33	24
30-Dec-24	8.25	<4.0	37	32
07-Jan-25	7.73	<4.0	40	24
15-Jan-25	8.05	<4.0	38	28
22-Jan-25	7.82	<4.0	48	32
30-Jan-25	7.58	<4.0	42	36
05-Feb-25	8.11	<4.0	38	36
12-Feb-25	8.21	<4.0	39	40

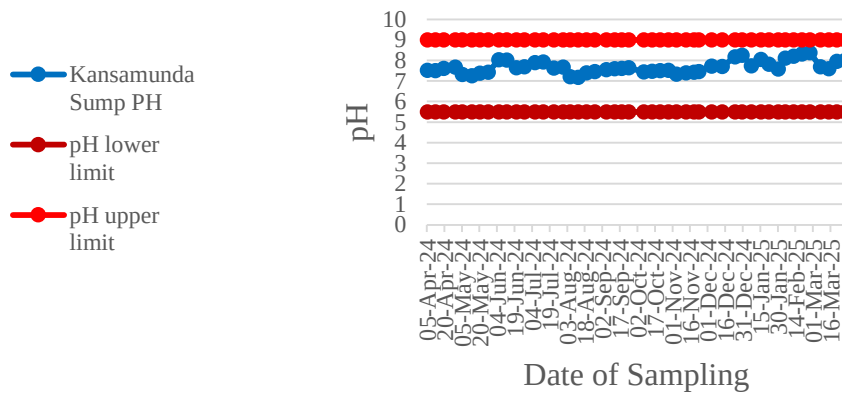
19-Feb-25	8.32	<4.0	48	40
26-Feb-25	8.38	<4.0	39	56
07-Mar-25	7.69	<4.0	46	32
14-Mar-25	7.6	<4.0	41	28
21-Mar-25	7.96	<4.0	30	32
28-Mar-25	8.00	<4.0	35	36

All dimensions are in mg/l unless otherwise stated except pH

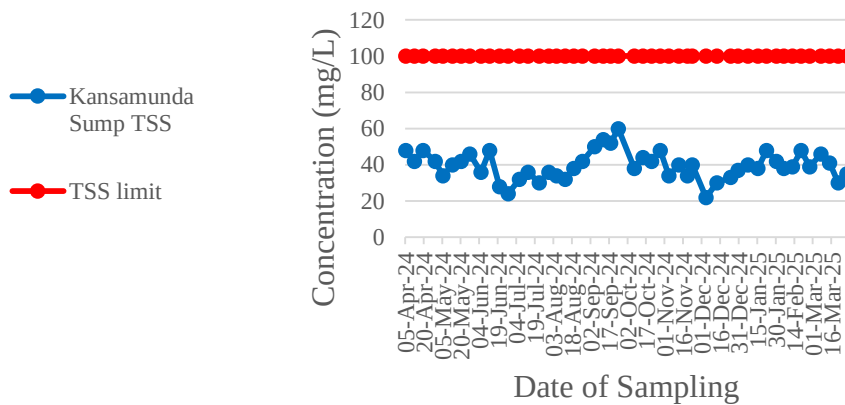
MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



Graph showing for pH Kansamunda Sump



Graph showing for TSS Kansamunda Sump



Graph showing for COD Kansamunda Sump

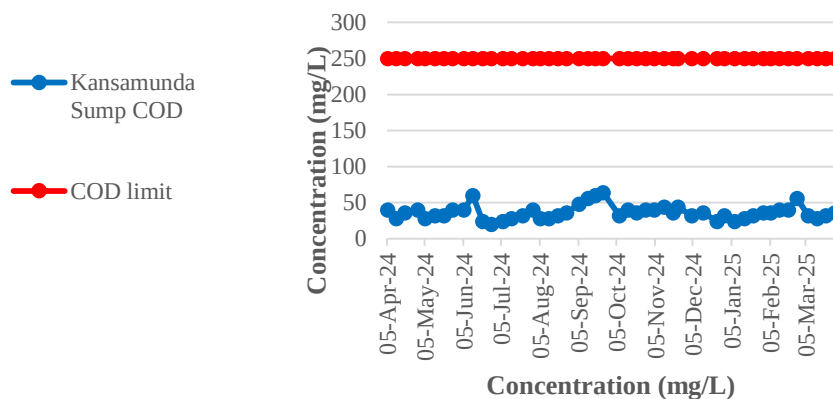


Table: 10.2.2.29

Area: kaniha**Project:** kaniha OCP**Monitoring station:** Z-Patch Sump

Date of Sampling	pH	Oil & Grease	TSS	COD
05-Apr-24	7.55	<4.0	52	44
12-Apr-24	7.59	<4.0	46	32
19-Apr-24	7.51	<4.0	56	48
29-Apr-24	7.55	<4.0	60	52
05-May-24	7.47	<4.0	32	20
13-May-24	7.41	<4.0	24	16
20-May-24	7.45	<4.0	48	32
27-May-24	7.5	<4.0	52	44
05-Jun-24	8	<4.0	40	44
12-Jun-24	7.93	<4.0	44	48
20-Jun-24	7.84	<4.0	20	24
27-Jun-24	7.78	<4.0	16	12
06-Jul-24	7.95	<4.0	34	32
13-Jul-24	7.9	<4.0	38	36
22-Jul-24	7.73	<4.0	34	28
30-Jul-24	7.77	<4.0	40	36
05-Aug-24	7.57	<4.0	38	36
12-Aug-24	7.53	<4.0	34	32
19-Aug-24	7.43	<4.0	40	32
26-Aug-24	7.49	<4.0	46	40
05-Sep-24	7.39	<4.0	56	60
12-Sep-24	7.34	<4.0	48	52
18-Sep-24	7.55	<4.0	52	44
24-Sep-24	7.57	<4.0	56	48
07-Oct-24	7.45	<4.0	48	40
14-Oct-24	7.5	<4.0	52	48
21-Oct-24	7.55	<4.0	46	40
28-Oct-24	7.59	<4.0	42	32
04-Nov-24	7.43	<4.0	42	40
12-Nov-24	7.48	<4.0	48	48
19-Nov-24	7.4	<4.0	38	40
23-Nov-24	7.48	<4.0	44	48
04-Dec-24	7.76	<4.0	78	148
13-Dec-24	7.71	<4.0	84	88
24-Dec-24	8.36	<4.0	50	72
30-Dec-24	8.35	<4.0	56	80
07-Jan-25	7.74	<4.0	42	68
15-Jan-25	7.78	<4.0	46	72
22-Jan-25	7.54	<4.0	26	44
30-Jan-25	7.74	<4.0	30	48
05-Feb-25	8.22	<4.0	43	28
12-Feb-25	8.27	<4.0	40	36

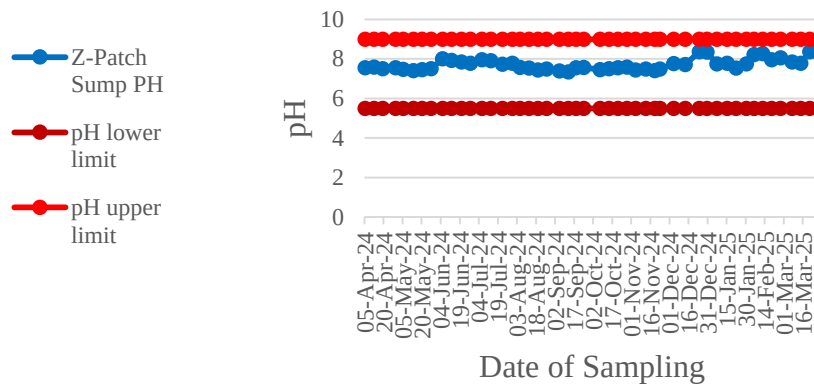
19-Feb-25	7.96	<4.0	42	28
26-Feb-25	8.06	<4.0	45	36
07-Mar-25	7.84	<4.0	31	20
14-Mar-25	7.77	<4.0	26	16
21-Mar-25	8.36	<4.0	25	20
28-Mar-25	8.29	<4.0	31	28

All dimensions are in mg/l unless otherwise stated except pH

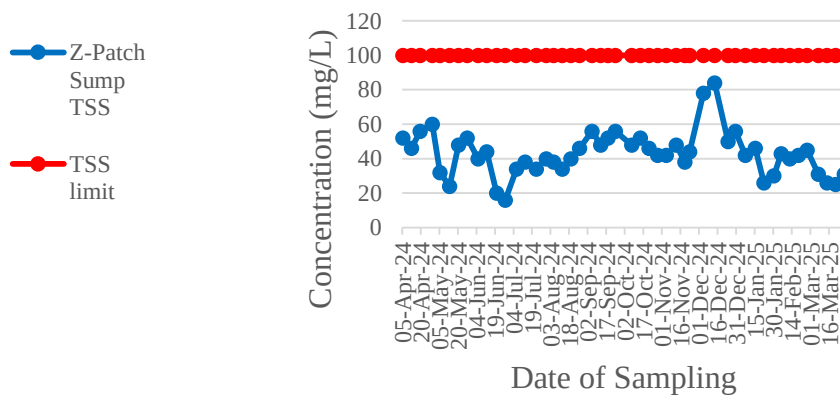
MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



Graph showing for pH Z-Patch Sump



Graph showing for TSS Z-Patch Sump



Graph showing for COD Z-Patch Sump

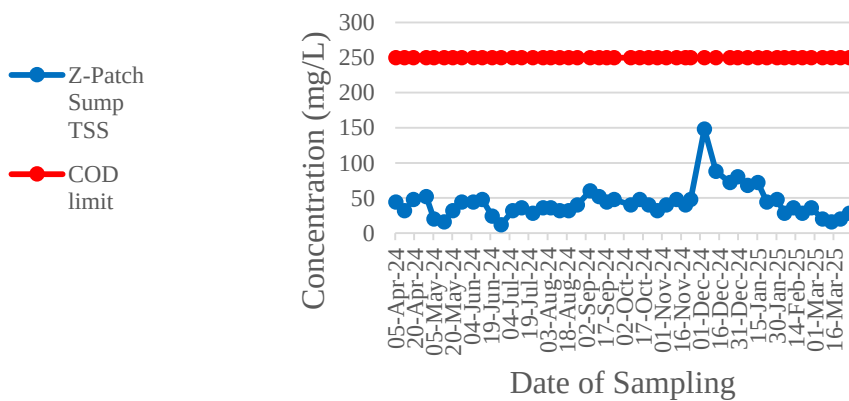


Table: 10.2.2.30

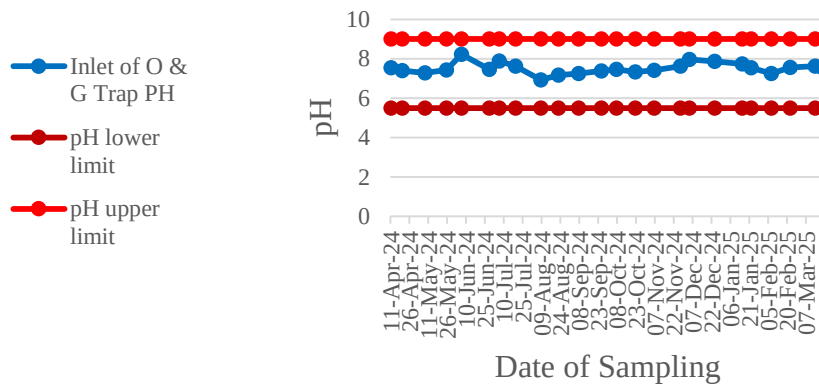
Area: Hingula**Project:** Hingula OCP**Monitoring station:** Inlet of O & G Trap

Date of Sampling	pH	Oil & Grease	TSS	COD
11-Apr-24	7.55	<4.0	66	40
20-Apr-24	7.4	<4.0	54	44
08-May-24	7.28	<4.0	38	40
25-May-24	7.43	<4.0	46	40
06-Jun-24	8.23	<4.0	38	32
28-Jun-24	7.47	<4.0	30	32
06-Jul-24	7.89	<4.0	40	32
19-Jul-24	7.63	<4.0	36	32
08-Aug-24	6.92	<4.0	48	72
22-Aug-24	7.17	<4.0	56	84
07-Sep-24	7.25	<4.0	58	64
25-Sep-24	7.38	<4.0	68	84
07-Oct-24	7.47	<4.0	54	68
22-Oct-24	7.33	<4.0	48	56
06-Nov-24	7.41	<4.0	56	64
27-Nov-24	7.63	<4.0	50	52
04-Dec-24	7.96	<4.0	39	32
24-Dec-24	7.87	<4.0	42	44
15-Jan-25	7.74	4.5	46	28
22-Jan-25	7.54	4.3	42	36
07-Feb-25	7.25	6.2	44	136
22-Feb-25	7.56	6.2	48	72
14-Mar-25	7.62	4.2	37	36
21-Mar-25	7.48	4.2	37	40

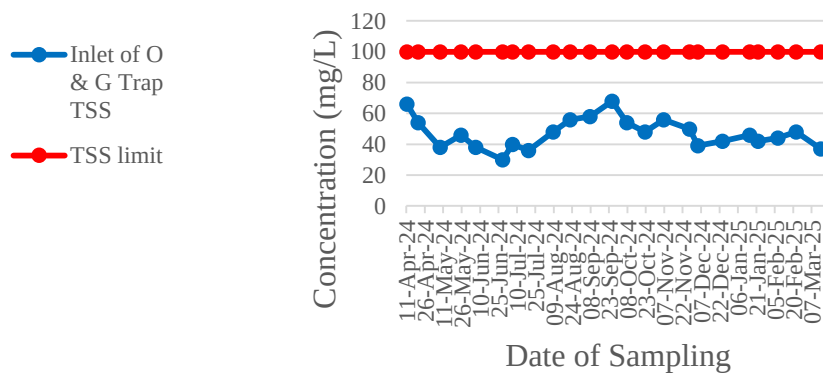
All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Graph showing for pH Inlet of O & G Trap



Graph showing for TSS Inlet of O & G Trap



Graph showing for COD Inlet of O & G Trap

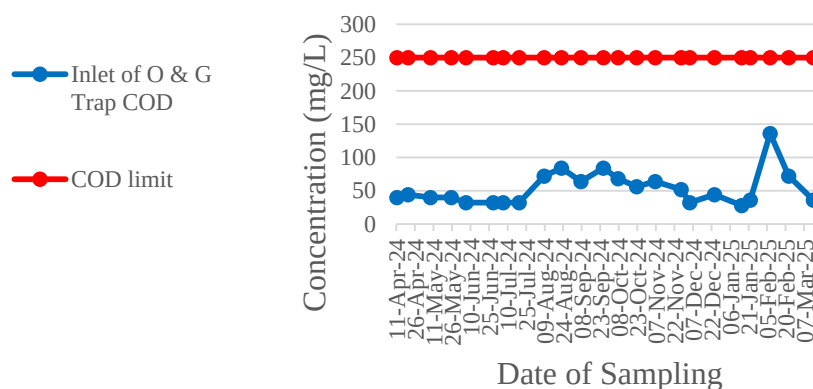


Table: 10.2.2.31

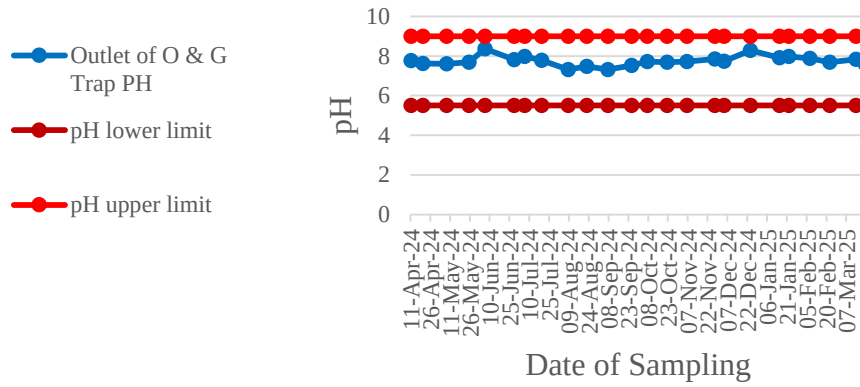
Area: Hingula**Project:** Hingula OCP**Monitoring station:** Outlet of O & G Trap

Date of Sampling	pH	Oil & Grease	TSS	COD
11-Apr-24	7.76	<4.0	42	36
20-Apr-24	7.62	<4.0	36	40
08-May-24	7.61	<4.0	30	32
25-May-24	7.69	<4.0	34	32
06-Jun-24	8.36	<4.0	30	24
28-Jun-24	7.82	<4.0	24	20
06-Jul-24	7.97	<4.0	32	24
19-Jul-24	7.79	<4.0	30	24
08-Aug-24	7.32	<4.0	36	52
22-Aug-24	7.48	<4.0	42	56
07-Sep-24	7.31	<4.0	44	40
25-Sep-24	7.52	<4.0	46	52
07-Oct-24	7.71	<4.0	38	42
22-Oct-24	7.69	<4.0	36	40
06-Nov-24	7.72	<4.0	40	44
27-Nov-24	7.85	<4.0	38	40
04-Dec-24	7.73	<4.0	34	28
24-Dec-24	8.29	<4.0	34	32
15-Jan-25	7.91	<4.0	40	20
22-Jan-25	7.98	<4.0	34	24
07-Feb-25	7.88	4.4	38	56
22-Feb-25	7.69	4.8	43	52
14-Mar-25	7.83	<4.0	29	24
21-Mar-25	7.59	<4.0	25	24

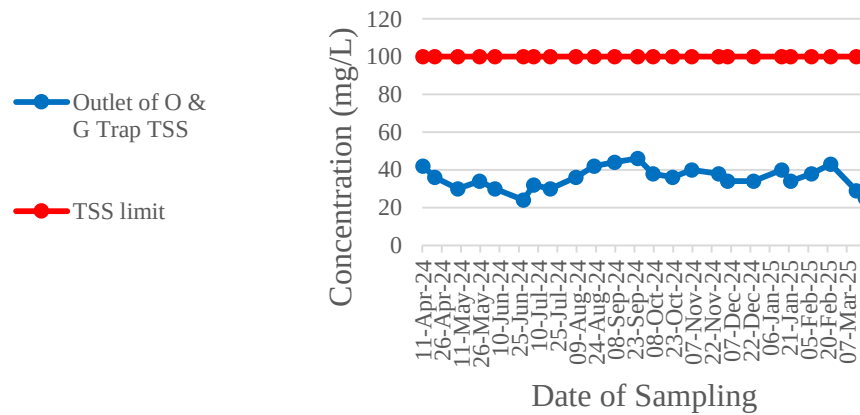
All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Graph showing for pH Outlet of O & G Trap



Graph showing for TSS Outlet of O & G Trap



Graph showing for COD Outlet of O & G Trap

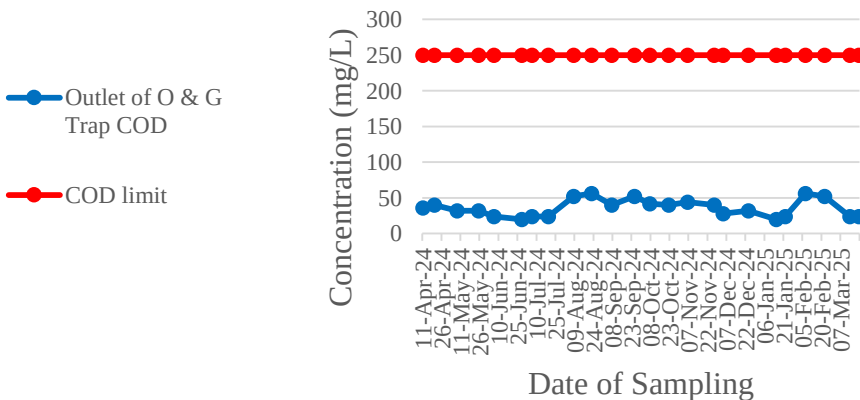


Table: 10.2.2.32

Area: Hingula**Project:** Hingula OCP**Monitoring station:** Mine Sump Water

Date of Sampling	pH	Oil & Grease	TSS	COD
08-May-24	7.45	<4.0	26	12
08-Aug-24	7.54	<4.0	28	32
06-Nov-24	7.55	<4.0	30	32
07-Feb-25	8.11	<4.0	32	32

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



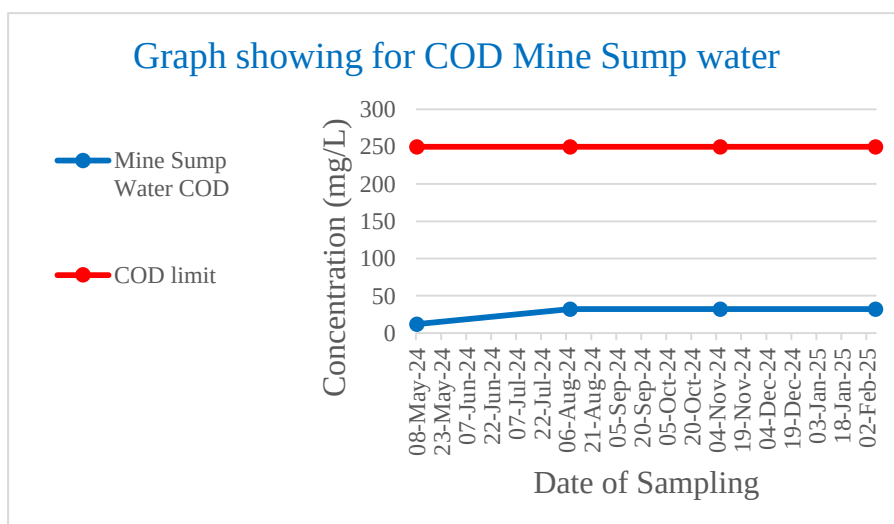
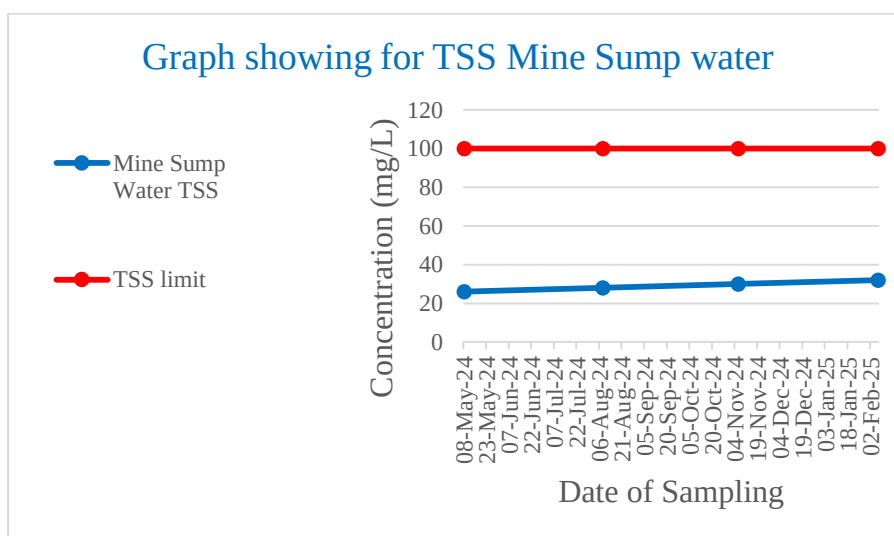
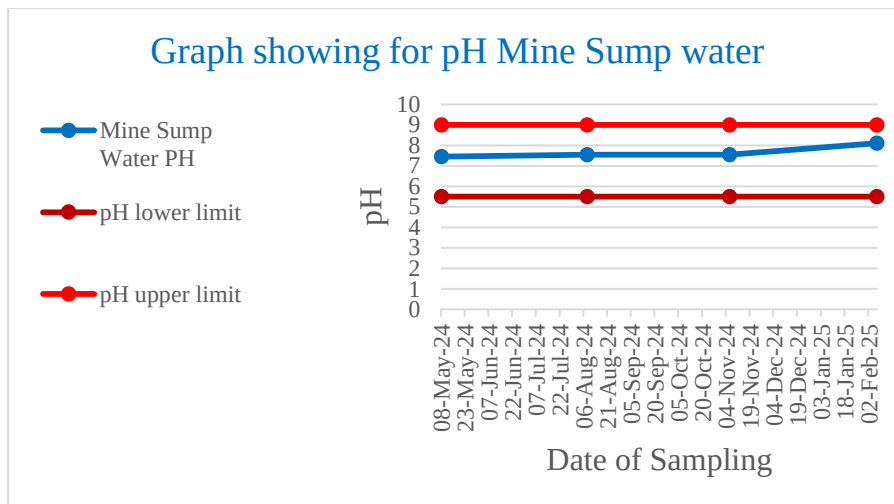


Table: 10.2.2.33

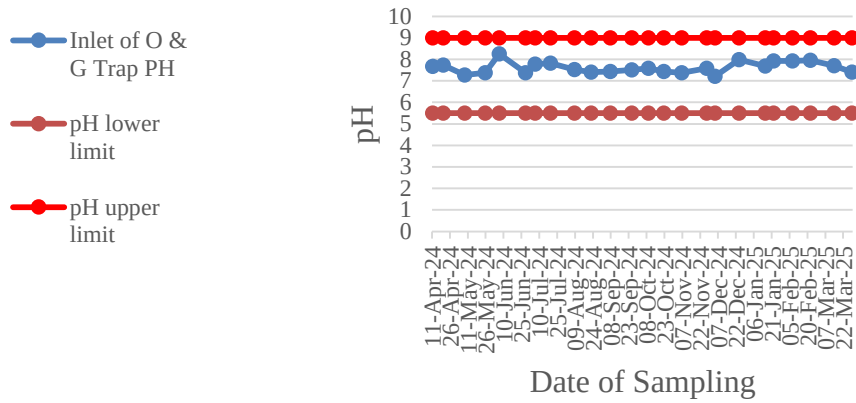
Area: Hingula**Project:** Balram OCP**Monitoring station:** Inlet of O & G Trap

Date of Sampling	pH	Oil & Grease	TSS	COD
11-Apr-24	7.67	<4.0	68	48
20-Apr-24	7.73	<4.0	60	52
08-May-24	7.27	<4.0	36	28
25-May-24	7.37	<4.0	48	44
06-Jun-24	8.25	<4.0	36	28
28-Jun-24	7.38	<4.0	36	48
06-Jul-24	7.78	<4.0	36	40
19-Jul-24	7.83	<4.0	40	48
08-Aug-24	7.52	<4.0	42	40
22-Aug-24	7.41	<4.0	52	56
07-Sep-24	7.43	<4.0	46	40
25-Sep-24	7.51	<4.0	54	48
09-Oct-24	7.59	<4.0	52	52
22-Oct-24	7.43	<4.0	44	48
06-Nov-24	7.37	<4.0	44	40
27-Nov-24	7.59	<4.0	48	56
04-Dec-24	7.22	<4.0	77	80
24-Dec-24	7.99	<4.0	56	64
15-Jan-25	7.69	4.8	36	60
22-Jan-25	7.93	4.4	32	48
07-Feb-25	7.93	4.2	49	40
22-Feb-25	7.96	5.2	53	40
14-Mar-25	7.71	4.4	41	44
29-Mar-25	7.41	4.6	45	48

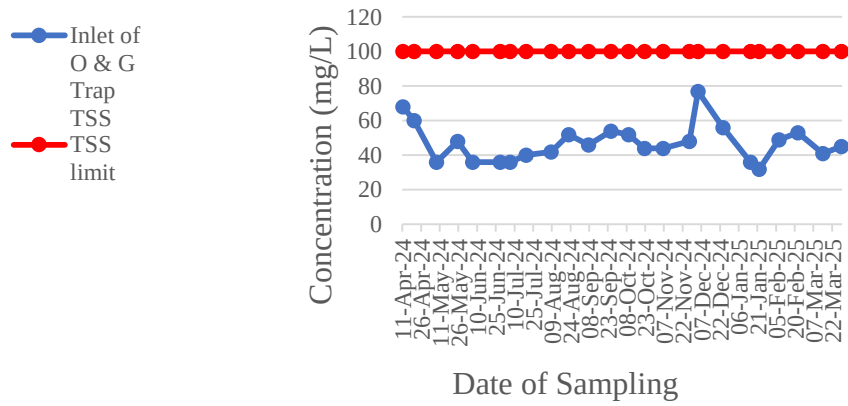
All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Graph showing for pH Inlet of O & G Trap



Graph showing for TSS Inlet of O & G Trap



Graph showing for COD Inlet of O & G Trap

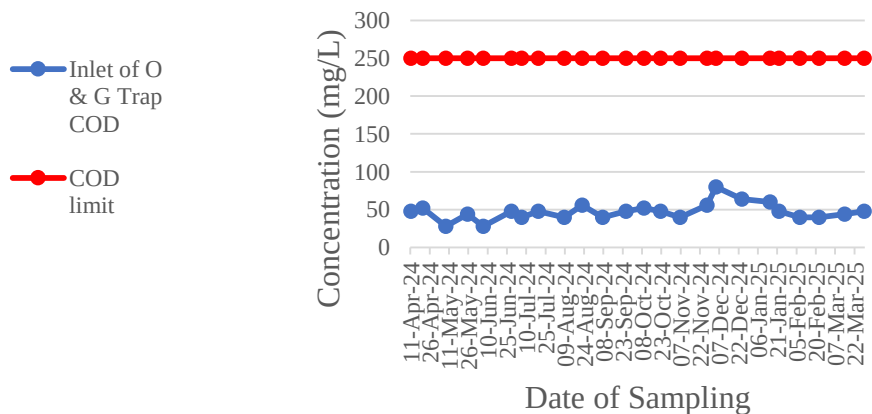


Table: 10.2.2.34

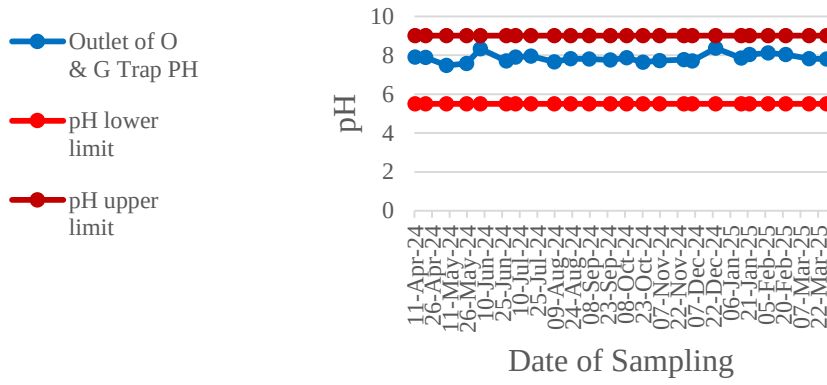
Area: Hingula**Project:** Balram OCP**Monitoring station:** Outlet of O & G Trap

Date of Sampling	pH	Oil & Grease	TSS	COD
11-Apr-24	7.91	<4.0	40	32
20-Apr-24	7.89	<4.0	42	32
08-May-24	7.48	<4.0	28	20
25-May-24	7.58	<4.0	30	28
06-Jun-24	8.33	<4.0	26	20
28-Jun-24	7.71	<4.0	30	32
06-Jul-24	7.91	<4.0	26	20
19-Jul-24	7.96	<4.0	32	36
08-Aug-24	7.65	<4.0	30	24
22-Aug-24	7.82	<4.0	36	40
07-Sep-24	7.81	<4.0	34	28
25-Sep-24	7.76	<4.0	38	32
09-Oct-24	7.87	<4.0	32	36
23-Oct-24	7.64	<4.0	30	28
06-Nov-24	7.73	<4.0	26	28
27-Nov-24	7.77	<4.0	36	40
04-Dec-24	7.7	<4.0	41	40
24-Dec-24	8.37	<4.0	35	36
15-Jan-25	7.85	<4.0	32	44
22-Jan-25	8.04	<4.0	25	32
07-Feb-25	8.12	<4.0	42	28
22-Feb-25	8.04	<4.0	43	24
14-Mar-25	7.83	<4.0	30	28
29-Mar-25	7.81	<4.0	29	28

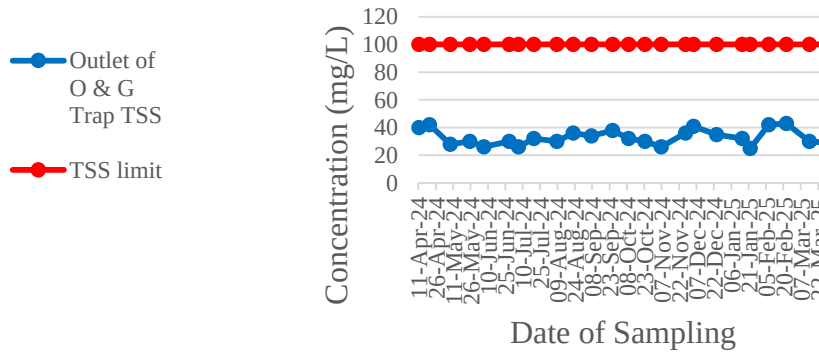
All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Graph showing for pH Outlet of O & G Trap



Graph showing for TSS Outlet of O & G Trap



Graph showing for COD Outlet of O & G Trap

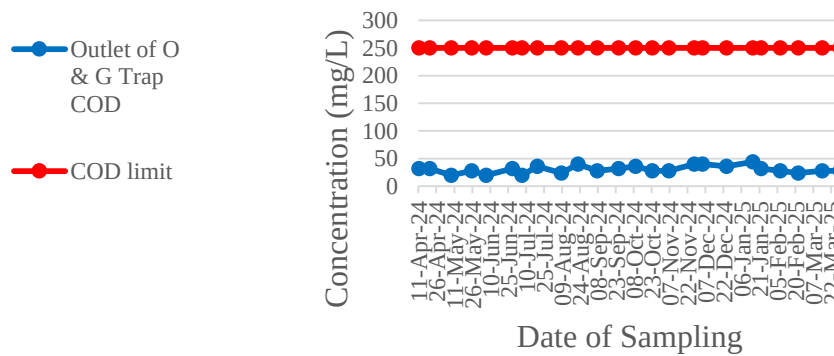


Table: 10.2.2.35

Area: Hingula**Project:** Balram OCP**Monitoring station:** Gandhisagar (Mine Sump)

Date of Sampling	pH	Oil & Grease	TSS	COD
08-May-24	7.38	<4.0	24	12
08-Aug-24	7.87	<4.0	24	16
06-Nov-24	7.39	<4.0	24	24
07-Feb-25	8.09	<4.0	20	16

All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30



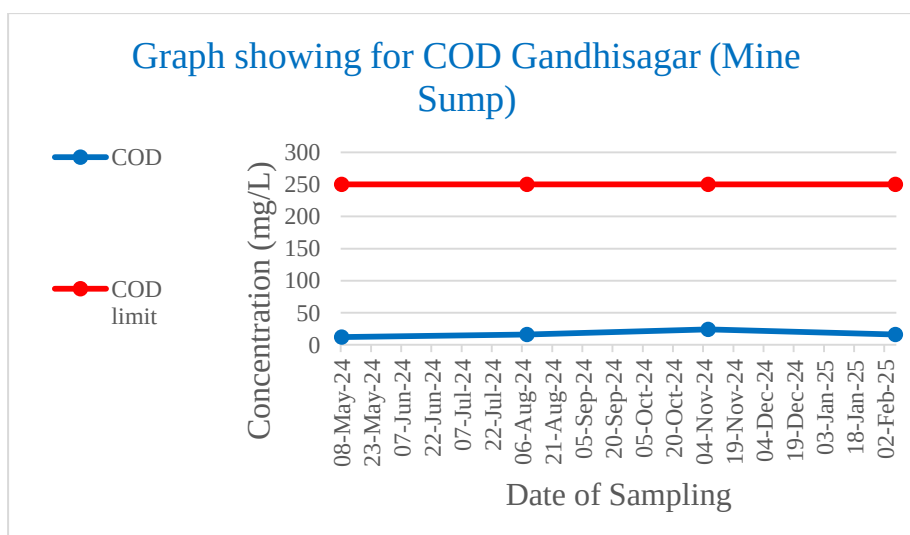
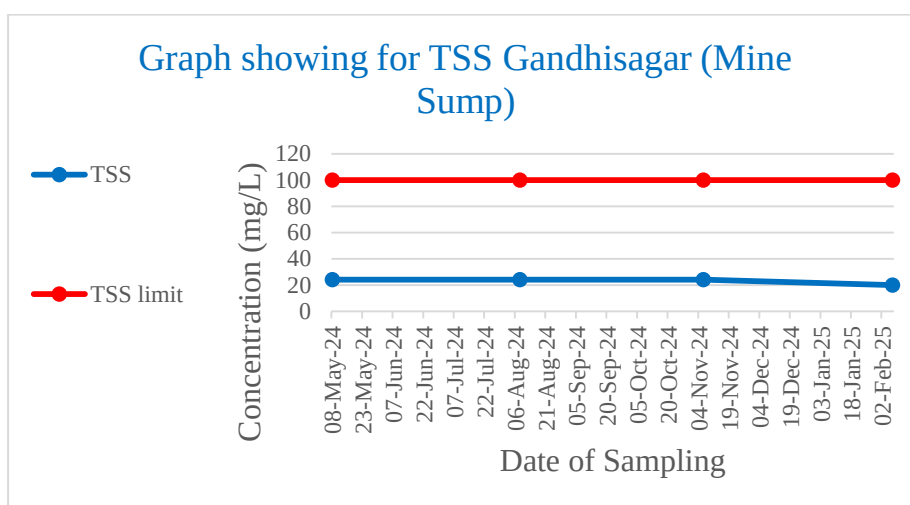
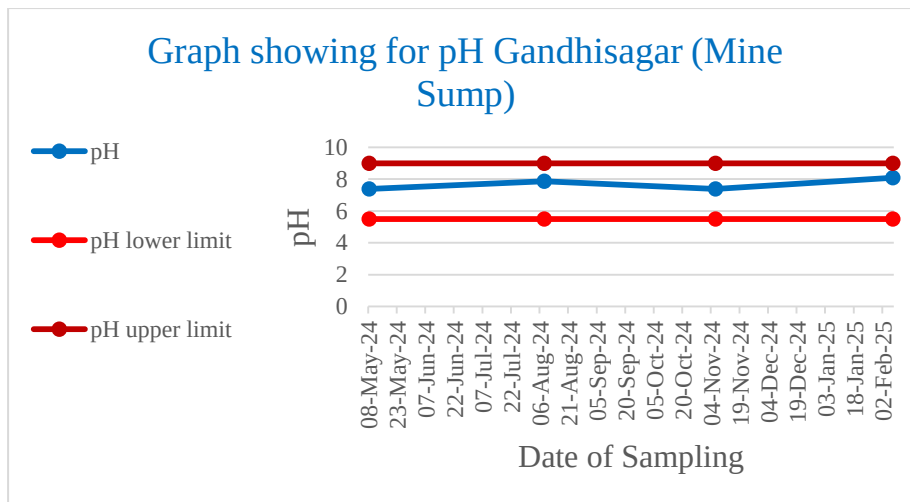


Table: 10.2.2.36

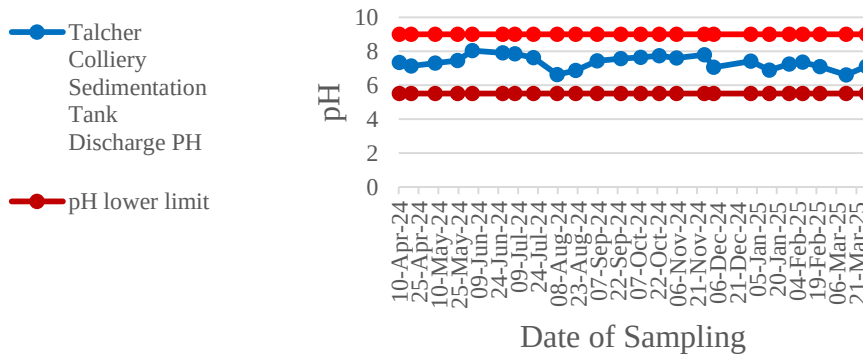
Area: Talcher**Project:** Talcher Colliery**Monitoring station:** Talcher Colliery Sedimentation
Tank Discharge

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.33	<4.0	34	24
19-Apr-24	7.14	<4.0	48	36
07-May-24	7.31	<4.0	30	28
24-May-24	7.46	<4.0	24	12
04-Jun-24	8.04	<4.0	16	12
27-Jun-24	7.9	<4.0	26	20
06-Jul-24	7.85	<4.0	40	36
20-Jul-24	7.62	<4.0	46	40
07-Aug-24	6.63	<4.0	26	20
21-Aug-24	6.87	<4.0	30	24
06-Sep-24	7.44	<4.0	34	28
24-Sep-24	7.57	<4.0	42	36
09-Oct-24	7.65	<4.0	34	28
23-Oct-24	7.73	<4.0	38	32
05-Nov-24	7.6	<4.0	34	32
26-Nov-24	7.79	<4.0	40	32
03-Dec-24	7.05	<4.0	27	16
31-Dec-24	7.41	<4.0	32	24
14-Jan-25	6.88	<4.0	25	16
29-Jan-25	7.24	<4.0	28	28
08-Feb-25	7.35	<4.0	25	28
21-Feb-25	7.1	<4.0	42	24
13-Mar-25	6.6	<4.0	35	28
28-Mar-25	7.11	<4.0	19	16

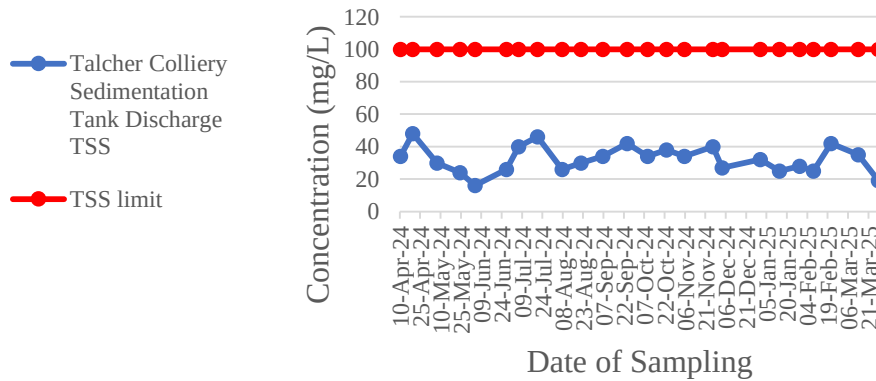
All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

Graph showing for pH Talcher Colliery
Sedimentation Tank Discharge



Graph showing for TSS Talcher Colliery
Sedimentation Tank Discharge



Graph showing for COD Talcher Colliery
Sedimentation Tank Discharge

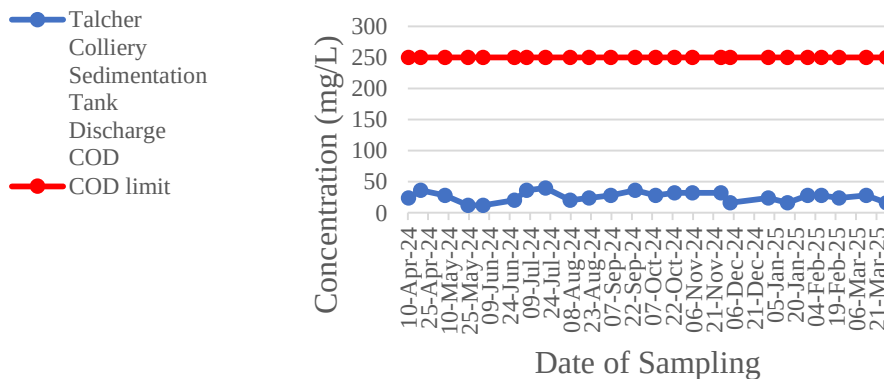


Table: 10.2.2.37

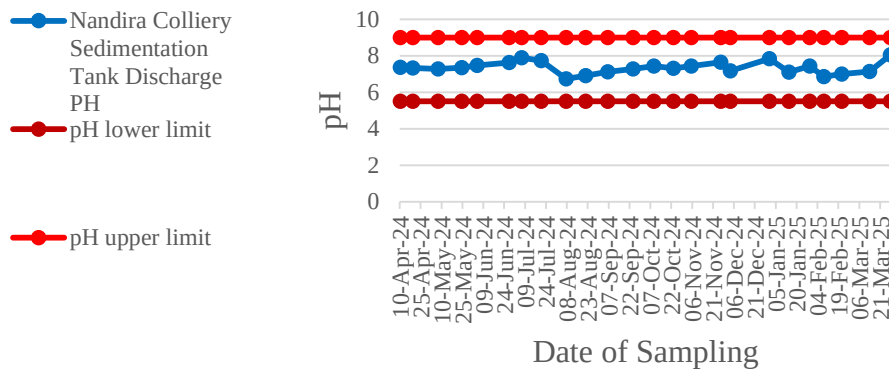
Area: Talcher**Project:** Nandira Colliery**Monitoring station:** Nandira Colliery Sedimentation
Tank Discharge

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.37	<4.0	44	28
19-Apr-24	7.33	<4.0	54	48
07-May-24	7.28	<4.0	34	32
24-May-24	7.35	<4.0	28	32
04-Jun-24	7.48	<4.0	22	12
27-Jun-24	7.63	<4.0	28	24
06-Jul-24	7.89	<4.0	32	24
20-Jul-24	7.74	<4.0	38	32
07-Aug-24	6.73	<4.0	16	12
21-Aug-24	6.91	<4.0	26	24
06-Sep-24	7.12	<4.0	36	32
24-Sep-24	7.28	<4.0	46	40
09-Oct-24	7.43	<4.0	30	24
23-Oct-24	7.31	<4.0	26	20
05-Nov-24	7.44	<4.0	26	28
26-Nov-24	7.65	<4.0	34	40
03-Dec-24	7.17	<4.0	33	12
31-Dec-24	7.84	<4.0	30	20
14-Jan-25	7.11	<4.0	49	20
29-Jan-25	7.43	<4.0	52	32
08-Feb-25	6.86	<4.0	20	36
21-Feb-25	7	<4.0	34	28
13-Mar-25	7.14	<4.0	28	24
28-Mar-25	8.06	<4.0	23	20

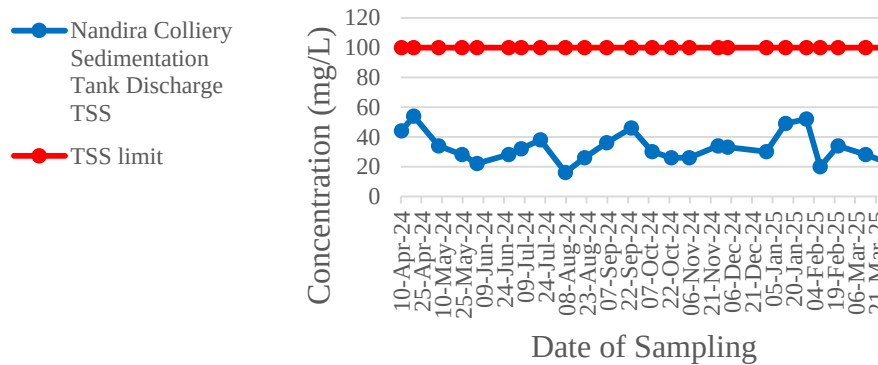
All dimensions are in mg/l unless otherwise stated except pH

MoEF&CC Standard Notification dated 25th September, 2000 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents	pH	Oil & Grease	TSS	COD	BOD
	5.5-9.0	10	100	250	30

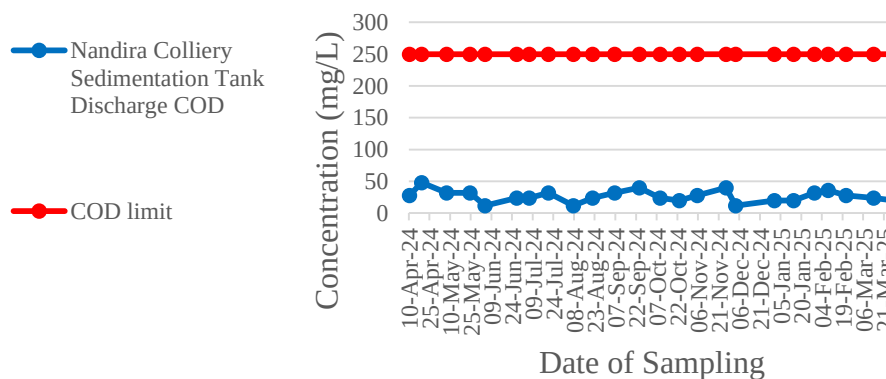
Graph showing for pH Nandira Colliery
Sedimentation Tank Discharge



Graph showing for TSS Nandira Colliery
Sedimentation Tank Discharge



Graph showing for COD Nandira Colliery
Sedimentation Tank Discharge





सीएमपीडीआई
Mini Ratna

EFFLUENT QUALITY (ALL PARAMETERS)

EFFLUENT QUALITY DATA ALL PARAMETERS

Table: 10.2.3.1

Area: Jagannath

Project: Jagannath OCP

Project (OCP / UG)	Jagannath OCP				MoEF- Sch-VI Standards
NAME OF THE STATION	Face Sump				
Date of Sampling	6-May-24	6-Aug-2024	25-Nov-24	5-Feb-25	
Colour(Hazen)	2.0	2.0	3	2.0	–
Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	–
Temperature(°C)	31.4	31.6	26.1	24.3	
Nitrate Nitrogen(mg/L)(As N)	<0.5	<0.5	<0.5	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.44	0.92	0.42	0.76	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.38	3.38	4.44	2.23	100
BOD [3 days at 27oC] (mg/L)	<2	<2	<2	<2	30
Arsenic, mg/l	<0.005	<0.005	<0.005	<0.005	0.2
Lead, mg/l	<0.005	<0.005	<0.005	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	<0.05	<0.05	<0.05	0.1
Total Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	2
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	3
Zinc(mg/L)	0.1	<0.04	<0.04	0.12	5
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	2.0
Nickel(mg/L)	<0.02	<0.02	<0.02	<0.02	3
Fluoride(mg/L)	0.38	0.38	0.98	1.69	2
Sulphide (mg/L)	<0.1	<0.1	<0.1	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	<0.001	<0.001	<0.001	1.0
Manganese(mg/L)	<0.04	<0.04	<0.04	0.38	2
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	3
Dissolved Phosphate(mg/L)	<4	<4	<4	<4	5

Table: 10.2.3.2

Area: Jagannath**Project:** Ananta OCP

Project (OCP / UG)	Ananta OCP		MoEF-Sch-VI Standards
NAME OF THE STATION	Mine Sump Water		
Date of Sampling	5-Feb-25	6-Aug-2024	
Colour(Hazen)	3	2.0	–
Odour	Unobjectionable	Unobjectionable	–
Temperature(°C)	24.5	32.1	
Nitrate Nitrogen(mg/L)(As N)	3.0	<0.5	10
Ammonical Nitrogen , mg/l (As N)	2.09	0.75	50
Total Kjeldhal Nitrogen, mg/l (As N)	4.45	3.33	100
BOD [3 days at 27°C] (mg/L)	<2	<2	30
Arsenic, mg/l	<0.005	<0.005	0.2
Lead, mg/l	<0.005	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	<0.05	0.1
Total Chromium(mg/L)	<0.01	<0.01	2
Copper(mg/L)	<0.03	<0.03	3
Zinc(mg/L)	0.17	<0.04	5
Selenium(mg/L)	<0.005	<0.005	0.05
Cadmium(mg/L)	<0.001	<0.001	2.0
Nickel(mg/L)	<0.02	<0.02	3
Fluoride(mg/L)	0.71	0.54	2
Sulphide (mg/L)	<0.1	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	<0.001	1.0
Manganese(mg/L)	6.35	<0.04	2
Iron(mg/L)	<0.1	<0.1	3
Dissolved Phosphate(mg/L)	<4	<4	5

Table: 10.2.3.3

Area: Bharatpur**Project:** Bharatpur OCP

Project (OCP / UG)	Bharatpur OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Workshop ETP Clear Water Tank Outlet	
Date of Sampling	6-Aug-2024	
Colour(Hazen)	2.0	—
Odour	Unobjectionable	—
Temperature(°C)	31.6	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.54	50
Total Kjeldhal Nitrogen, mg/l (As N)	2.22	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.48	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.4

Area: Bharatpur**Project:** Bharatpur OCP

Project (OCP / UG)	Bharatpur OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Mine Sump (Old Quarry Sump)	
Date of Sampling	6-Aug-2024	
Colour(Hazen)	2.0	—
Odour	Unobjectionable	—
Temperature(°C)	31.8	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.68	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.34	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.5

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Inlet of Workshop ETP	
Date of Sampling	7-May-2024	
Colour(Hazen)	3.0	—
Odour	Unobjectionable	—
Temperature(°C)	32.7	
Nitrate Nitrogen(mg/L)(As N)	0.77	10
Ammonical Nitrogen , mg/l (As N)	0.60	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.38	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.11	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.40	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.6

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Clear water Reservoir of Workshop ETP	
Date of Sampling	2.0	
Colour(Hazen)	Unobjectionable	—
Odour	33.2	—
Temperature(°C)	0.95	
Nitrate Nitrogen(mg/L)(As N)	0.54	10
Ammonical Nitrogen , mg/l (As N)	3.38	50
Total Kjeldhal Nitrogen, mg/l (As N)	<2	100
BOD [3 days at 27°C] (mg/L)	<0.005	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.05	0.1
Hexavalent Chromium(mg/L)	<0.01	0.1
Total Chromium(mg/L)	<0.03	2
Copper(mg/L)	0.09	3
Zinc(mg/L)	<0.005	5
Selenium(mg/L)	<0.001	0.05
Cadmium(mg/L)	<0.02	2.0
Nickel(mg/L)	0.46	3
Fluoride(mg/L)	<0.1	2
Sulphide (mg/L)	<0.001	2.0
Phenolic Compounds(mg/L)	<0.04	1.0
Manganese(mg/L)	<0.1	2
Iron(mg/L)	<4	3
Dissolved Phosphate(mg/L)	2.0	5

Table10.2.3.7

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Inlet of ETP Near Dumper parking	
Date of Sampling	7-May-24	
Colour(Hazen)	2.0	—
Odour	Unobjectionable	—
Temperature(°C)	31.7	
Nitrate Nitrogen(mg/L)(As N)	1.01	10
Ammonical Nitrogen , mg/l (As N)	0.46	50
Total Kjeldhal Nitrogen, mg/l (As N)	2.25	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.06	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.2	3
Fluoride(mg/L)	0.50	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.8

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Clear Water Reservoir of ETP Near Dumper parking	
Date of Sampling	7-May-24	
Colour(Hazen)	1.0	—
Odour	Unobjectionable	—
Temperature(°C)	31.2	
Nitrate Nitrogen(mg/L)(As N)	0.75	10
Ammonical Nitrogen , mg/l (As N)	0.63	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.38	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.05	5
Selenium(mg/L)	<0.0005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.59	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.9

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Inlet of Sedimentaion Pond Complex near Deulbera Siding	
Date of Sampling	6-Feb-25	
Colour(Hazen)	3.0	—
Odour	Unobjectionable	—
Temperature(°C)	23.7	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.87	50
Total Kjeldhal Nitrogen, mg/l (As N)	2.23	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.53	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.10

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Clear Water Tank of Sedimentation Pond Complex Near Deulbera Siding	
Date of Sampling	6-Feb-25	
Colour(Hazen)	2.0	–
Odour	Unobjectionable	–
Temperature(°C)	24.1	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	2.46	50
Total Kjeldhal Nitrogen, mg/l (As N)	5.57	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.70	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	0.11	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.11

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Mine Sump Water	
Date of Sampling	7-May-24	
Colour(Hazen)	2.0	–
Odour	Unobjectionable	–
Temperature(°C)	33.8	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.30	50
Total Kjeldhal Nitrogen, mg/l (As N)	1.13	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.05	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.42	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.12

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Inlet of MDTP Near StoCk No. 17	
Date of Sampling	7-Aug-24	
Colour(Hazen)	2.0	—
Odour	Unobjectionable	—
Temperature(°C)	32.6	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.54	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.34	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.05	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.54	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.13

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Clear Water Reservoir of MDTP Near StoCk No. 17	
Date of Sampling	7-Aug-24	
Colour(Hazen)	2.0	—
Odour	Unobjectionable	—
Temperature(°C)	31.8	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.78	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.05	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.54	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.14

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	
NAME OF THE STATION	Inlet of Sedimentation Pond Complex near Lingaraj Siding	MoEF-Sch-VI Standards
Date of Sampling	26-Nov-2024	
Colour(Hazen)	3	—
Odour	Unobjectionable	—
Temperature(°C)	25.4	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.49	50
Total Kjeldhal Nitrogen, mg/l (As N)	4.44	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.48	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.15

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Clear Water Tank of Sedimentation Pond Complex Near Lingaraj Siding	
Date of Sampling	26-Nov-24	
Colour(Hazen)	2.0	–
Odour	Unobjectionable	–
Temperature(°C)	25.6	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.39	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.2	3
Fluoride(mg/L)	0.45	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.16

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Inlet of Sedimentation Pond Complex near Project Office	
Date of Sampling	26-Nov-24	
Colour(Hazen)	3.0	—
Odour	Unobjectionable	—
Temperature(°C)	27.1	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.50	50
Total Kjeldhal Nitrogen, mg/l (As N)	4.44	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.0005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.63	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.17

Area: Lingaraj

Project: Lingaraj OCP

Project (OCP / UG)	Lingaraj OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Clear Water Reservoir of Sedimentation Pond Complex near Project Office	
Date of Sampling	26-Nov-24	
Colour(Hazen)	4	—
Odour	Unobjectionable	—
Temperature(°C)	27.2	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.49	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.89	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.18

Area: Kaniha**Project:** Kaniha OCP

Project (OCP / UG)	Kaniha OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Clear Water Pond (Inflow)	
Date of Sampling	7-Aug-24	
Colour(Hazen)	2.0	—
Odour	Unobjectionable	—
Temperature(°C)	32.6	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.46	50
Total Kjeldhal Nitrogen, mg/l (As N)	2.22	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.05	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.46	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.19

Area: Kaniha**Project:** Kaniha OCP

Project (OCP / UG)	Kaniha OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Z-Patch Sump	
Date of Sampling	7-Aug-24	
Colour(Hazen)	2.0	–
Odour	Unobjectionable	–
Temperature(°C)	31.7	
Nitrate Nitrogen(mg/L)(As N)	0.68	10
Ammonical Nitrogen , mg/l (As N)	0.49	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.05	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.45	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.20

Area: Hingula

Project: Balaram OCP

Project (OCP / UG)	Balaram OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Mine Sump Water	
Date of Sampling	27-Nov-24	
Colour(Hazen)	3	—
Odour	Unobjectionable	—
Temperature(°C)	26.1	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.41	50
Total Kjeldhal Nitrogen, mg/l (As N)	4.44	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.72	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.21

Area: Hingula

Project: Balaram OCP

Project (OCP / UG)	Balaram OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Mine Sump Water	
Date of Sampling	27-Nov-24	
Colour(Hazen)	4	–
Odour	Unobjectionable	–
Temperature(°C)	26.3	
Nitrate Nitrogen(mg/L)(As N)	0.77	10
Ammonical Nitrogen , mg/l (As N)	1.10	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	0.014	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.48	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.22

Area: Talcher**Project:** Talcher Colliery

Project (OCP / UG)	Talcher Colliery	MoEF-Sch-VI Standards
NAME OF THE STATION	Talcher Colliery Sedimentation Tank Discharge	
Date of Sampling	6-Feb-25	
Colour(Hazen)	2	—
Odour	Unobjectionable	—
Temperature(°C)	25.3	
Nitrate Nitrogen(mg/L)(As N)	0.51	10
Ammonical Nitrogen , mg/l (As N)	1.79	50
Total Kjeldhal Nitrogen, mg/l (As N)	4.45	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.96	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table: 10.2.3.23

Area: Talcher**Project:** Nandira Colliery

Project (OCP / UG)	Nandira Colliery	MoEF-Sch-VI Standards
NAME OF THE STATION	Nandira Colliery Sedimentation Tank Discharge	
Date of Sampling	6-Feb-25	
Colour(Hazen)	1	–
Odour	Unobjectionable	–
Temperature(°C)	24.9	
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	1.13	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.34	100
BOD [3 days at 27°C] (mg/L)	<2	30
Arsenic, mg/l	<0.005	0.2
Lead, mg/l	<0.005	0.1
Hexavalent Chromium(mg/L)	<0.05	0.1
Total Chromium(mg/L)	<0.01	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	<0.04	5
Selenium(mg/L)	<0.005	0.05
Cadmium(mg/L)	<0.001	2.0
Nickel(mg/L)	<0.02	3
Fluoride(mg/L)	0.9	2
Sulphide (mg/L)	<0.1	2.0
Phenolic Compounds(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.04	2
Iron(mg/L)	<0.1	3
Dissolved Phosphate(mg/L)	<4	5

Table:10.2.4.1

Area: Talcher

Project: Jagannath OCP

Project / OCP	Jagannath OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Balanda Colony													
Date of Sampling	10-Apr-2024	6-May-2024	5-Jun-2024	3-Jul-2024	6-Aug-2024	12-Sep-2024	7-Oct-2024	11-Nov-2024	2-Dec-2024	13-Jan-2025	5-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2	3	3	2	2	2	2	3	3	3	3	3	5	15
Turbidity(NTU)	1	2	2	1	2	3	1	2	2	2	3	2	1	5
pH	7.33	7.76	7.85	7.61	7.22	7.34	7.22	7.29	7.69	7.51	7.80	7.74	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	63.6	80.80	60.3	48.24	48.24	40	52	48.24	64.32	63.03	63.03	67.23	200	600
Total Hardness (Ca CO3)(mg/L)	97	167.33	147.02	87.53	174.61	182.55	178.58	218.55	150.80	172.93	217.17	158.74	200	600
Iron(mg/L)	0.12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	23.7	21.68	9.85	9.85	15.77	15.77	19.71	13.8	15.77	13.51	15.44	15.56	250	1000
Total Dissolve Solid(mg/L)	208	238	212	136	244	272	258	284	248	274	314	278	500	2000
Calcium(mg/L)	24.24	43.11	50.90	17.56	52.49	49.30	57.26	49.30	44.53	48.29	46.68	36.58	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.03	0.07	0.04	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	22.08	49.88	38.92	27.87	87.01	91.26	84.6	99.26	92.68	101.34	126.03	126.85	200	400
Nitrate(mg/L)	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	45	No relaxation
Fluoride(mg/L)	<0.3	0.36	0.38	0.35	0.78	0.55	0.35	0.31	0.39	0.50	0.66	0.79	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.16	0.08	<0.04	0.18	<0.04	0.06	<0.04	<0.04	0.04	0.04	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.2

Area: Talcher

Project: Jagannath OCP

Project / OCP	Jagannath OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Jagannath Colony													
Date of Sampling	10-Apr-2024	6-May-2024	5-Jun-2024	3-Jul-2024	6-Aug-2024	12-Sep-2024	7-Oct-2024	11-Nov-2024	2-Dec-2024	13-Jan-2025	5-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2	3	2	3	3	4	1	2	2	2	2	3	5	15
Turbidity(NTU)	1	2	1	3	2	3	2	1	3	3	1	3	1	5
pH	7.44	7.63	7.90	8.18	7.14	7.28	7.10	7.15	8.0	7.11	7.73	7.33	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	67.8	84.84	52.26	156.78	48.24	20	32	48.24	76.38	79.84	54.36	403.39	200	600
Total Hardness (Ca CO ₃)(mg/L)	85	199.20	79.47	266.58	226.20	234.14	210.33	71.52	257.95	233.25	84.45	269.85	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.19	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	21.73	19.71	3.94	23.65	15.77	7.88	13.8	7.88	17.74	19.30	9.65	87.52	250	1000
Total Dissolve Solid(mg/L)	172	340	128	358	308	336	284	112	328	396	118	648	500	2000
Calcium(mg/L)	25.86	62.28	17.50	89.42	65.21	66.80	74.75	19.09	73.16	80.48	30.58	66.80	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	0.07	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.14	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	26.42	21.80	11.82	71.25	122.32	134.18	116.4	24.05	117.07	136.58	20.00	80.96	200	400
Nitrate(mg/L)	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.39	0.41	0.87	0.90	0.65	0.41	0.41	<0.3	0.32	0.44	0.43	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.20	0.08	<0.04	0.31	0.05	0.10	<0.04	1.6	<0.04	0.08	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.3

Area: Talcher

Project: Jagannath OCP

Project / OCP	Jagannath OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Rakas Village Well Water													
Date of Sampling	10-Apr-2024	17-May-2024	5-Jun-2024	3-Jul-2024	6-Aug-2024	12-Sep-2024	7-Oct-2024	11-Nov-2024	2-Dec-2024	13-Jan-2025	5-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	3	2	1	1	4	2	3	1	4	4	3	4	5	15
Turbidity(NTU)	3	2	1	3	3	3	2	2	2	2	2	2	1	5
pH	8.13	7.82	7.96	8.26	7.39	7.56	7.69	7.53	6.51	7.44	7.79	7.85	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	139.9	88.88	52.26	301.5	52.26	52	72	52.26	24.12	63.03	58.83	67.23	200	600
Total Hardness (Ca CO ₃)(mg/L)	230	171.31	75.50	274.54	257.95	246.04	261.91	174.54	123.02	132.71	148.80	357.16	200	600
Iron(mg/L)	0.12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	82.95	17.74	23.65	49.27	17.74	23.65	29.56	13.8	29.56	13.51	17.37	17.50	250	1000
Total Dissolve Solid(mg/L)	596	262	166	448	324	342	278	248	214	224	214	408	500	2000
Calcium(mg/L)	74.34	57.48	27.04	65.47	73.16	66.80	73.16	60.44	38.17	40.24	33.80	128.83	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	0.03	0.04	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	28.72	61.21	15.76	32.41	110.84	118.42	104.4	90.31	59.63	76.10	73.84	125.76	200	400
Nitrate(mg/L)	14.86	<0.5	10.89	0.93	<0.5	<0.5	<0.5	<0.5	11.4	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.44	0.49	0.43	0.88	0.74	0.32	0.48	<0.3	0.37	0.68	0.65	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.24	0.35	<0.04	0.56	<0.04	0.08	<0.04	<0.04	0.38	<0.04	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.4

Area: Talcher

Project: Ananta OCP

Project / OCP	Ananta OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Ananta Colony Tap Water													
Date of Sampling	10-Apr-2024	6-May-2024	5-Jun-2024	3-Jul-2024	6-Aug-2024	12-Sep-2024	7-Oct-2024	11-Nov-2024	2-Dec-2024	13-Jan-2025	5-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2	1.0	2	2	3	3	2	3	5	3	1	2	5	15
Turbidity(NTU)	1	1	1	1	1	1	1	1	1	1	1	1	1	5
pH	7.28	7.58	8.04	7.89	7.32	7.45	7.55	7.66	7.77	7.54	7.87	7.83	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	59.4	92.92	52.26	36.18	40.2	32	40	36.18	52.26	54.63	50.42	50.42	200	600
Total Hardness (Ca CO3)(mg/L)	109	67.73	63.58	79.58	51.59	59.53	67.46	55.63	51.59	76.41	80.43	51.59	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.22	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	15.8	27.59	7.88	9.85	9.85	9.85	13.8	7.88	11.83	11.58	9.65	9.72	250	1000
Total Dissolve Solid(mg/L)	164	254	130	134	104	126	120	98	110	118	122	108	500	2000
Calcium(mg/L)	35.55	19.16	19.09	20.76	17.50	19.09	22.27	17.50	15.90	17.71	14.49	14.31	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	0.04	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	18.72	26.85	12.68	37.24	23.33	29.48	32.48	25.28	19.63	22.68	20.00	14.66	200	400
Nitrate(mg/L)	<2.0	13.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.42	0.78	0.40	0.36	0.67	0.47	<0.30	<0.3	<0.3	0.32	0.44	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.09	0.08	<0.04	0.18	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.5

Area: Talcher

Project: Ananta OCP

Project / OCP	Ananta OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Dera Village Tube Well Water													
Date of Sampling	10-Apr-2024	6-May-2024	5-Jun-2024	3-Jul-2024	6-Aug-2024	12-Sep-2024	7-Oct-2024	11-Nov-2024	2-Dec-2024	13-Jan-2025	5-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2	3.0	3	3	4	4	2	1	1	2	1	2	5	15
Turbidity(NTU)	2	2	1	1	2	2	1	2	2	2	3	1	1	5
pH	7.82	7.43	7.93	7.81	7.34	7.51	7.33	7.48	6.68	6.47	6.48	8.13	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	89	56.56	56.28	56.28	132.66	76	68	92.46	64.32	71.43	67.23	63.03	200	600
Total Hardness (Ca CO ₃)(mg/L)	121	187.25	67.55	63.66	142.86	150.80	130.96	190.73	154.77	140.76	172.93	83.34	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	19.75	25.62	5.91	7.88	13.8	51.25	47.3	49.27	45.33	44.39	44.39	9.72	250	1000
Total Dissolve Solid(mg/L)	214	224	122	110	218	244	220	302	298	340	328	122	500	2000
Calcium(mg/L)	38.79	47.9	15.90	17.56	54.08	55.67	46.12	55.67	54.76	51.51	48.29	22.27	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	0.04	0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	16.24	30.54	13.42	10.47	22.07	32.10	28.6	57.79	59.51	61.10	70.41	13.97	200	400
Nitrate(mg/L)	<2.0	17.59	<0.5	<0.5	1.58	2.08	2.64	3.20	20.36	20.72	20.12	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.44	0.61	0.37	0.78	0.36	0.59	0.47	0.37	0.42	0.30	0.54	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.11	0.44	<0.04	0.16	<0.04	0.14	<0.04	<0.04	0.28	0.26	0.5	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.6

Area: Talcher

Project: Bharatpur OCP

Project / OCP	Bharatpur OCP				Indian Drinking Standard (IS-10500):2012	
Monitoring Station	Tap water in Nehru Satabdi Nagar B Type Quarters					
Date of Sampling	6-May-2024	6-Aug-2024	11-Nov-2024	5-Feb-2025	Acceptable	Permissible
Colour(Hazen)	2.0	3	2	2	5	15
Turbidity(NTU)	2	2	2	2	1	5
pH	7.69	7.16	7.31	7.54	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	52.52	36.18	36.18	46.22	200	600
Total Hardness (Ca CO ₃)(mg/L)	183.26	178.58	162.92	140.76	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	17.74	15.77	11.83	13.51	250	1000
Total Dissolve Solid(mg/L)	292	236	210	238	500	2000
Calcium(mg/L)	67.07	55.67	44.53	43.46	75	200
Copper(mg/L)	0.03	<0.03	<0.03	0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	78.33	98.99	73.01	95.76	200	400
Nitrate(mg/L)	0.56	<0.5	<0.5	10.82	45	No relaxation
Fluoride(mg/L)	0.52	0.54	0.34	0.64	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.27	<0.04	0.06	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.7

Area: Talcher

Project: Bharatpur OCP

Project / OCP	Bharatpur OCP					Indian Drinking Standard (IS- 10500):2012
Monitoring Station	Tap water in Nehru Satabdi Nagar B Type Quarters					
Date of Sampling	6-May-2024	6-Aug-2024	11-Nov-2024	5-Feb-2025	Acceptable	Permissible
Colour(Hazen)	1.0	1	3	1	5	15
Turbidity(NTU)	1	2	1	2	1	5
pH	7.53	7.09	7.27	7.60	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24.24	36.18	36.18	46.22	200	600
Total Hardness (Ca CO3)(mg/L)	79.68	194.45	135.10	189.02	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	37.45	17.74	9.85	13.51	250	1000
Total Dissolve Solid(mg/L)	176	248	198	248	500	2000
Calcium(mg/L)	27.165	54.08	38.17	43.46	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	24.26	88.27	84.54	92.47	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.46	0.61	0.32	0.80	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.31	<0.04	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.8

Area: Talcher

Project: Bharatpur OCP

Project / OCP	Bharatpur OCP				Indian Drinking Standard (IS-10500):2012	
Monitoring Station	Tap water in Nehru Satabdi Nagar C Type Quarters					
Date of Sampling	6-May-2024	6-Aug-2024	11-Nov-2024	5-Feb-2025	Acceptable	Permissible
Colour(Hazen)	3.0	1	2	3	5	15
Turbidity(NTU)	2	3	2	2	1	5
pH	7.61	7.46	7.30	7.62	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	60.6	32.16	36.18	46.22	200	600
Total Hardness (Ca CO ₃)(mg/L)	167.33	198.42	147.02	156.84	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	21.68	13.8	11.83	15.22	250	1000
Total Dissolve Solid(mg/L)	336	256	204	242	500	2000
Calcium(mg/L)	60.68	58.85	42.94	38.63	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	94.21	107.56	80.61	79.18	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.51	0.57	0.41	0.72	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.10	<0.04	0.29	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.9

Area: Talcher

Project: Bharatpur OCP

Project / OCP	Bharatpur OCP					Indian Drinking Standard
Monitoring Station	Tap water in Nehru Satabdi Nagar Transit House					(IS-10500):2012
Date of Sampling	6-May-2024	6-Aug-2024	11-Nov-2024	5-Feb-2025	Acceptable	Permissible
Colour(Hazen)	2.0	2	4	4	5	15
Turbidity(NTU)	1	1	1	1	1	5
pH	8.17	7.34	7.34	7.76	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	173.72	36.18	36.18	50.42	200	600
Total Hardness (Ca CO3)(mg/L)	175.3	63.49	63.58	60.32	200	600
Iron(mg/L)	<0.1	<0.1	0.18	<0.1	1.0	No relaxation
Chloride(mg/L)	23.65	11.82	7.88	11.58	250	1000
Total Dissolve Solid(mg/L)	352	108	94	108	500	2000
Calcium(mg/L)	63.87	17.50	12.72	19.32	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.07	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	13.30	33.04	21.47	17.81	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.57	0.31	<0.30	0.62	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.07	<0.04	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.10

Area: Talcher

Project: Bharatpur OCP

Project / OCP	Bharatpur OCP				Indian Drinking (IS-10500):2012	Standard
Monitoring Station	Joragadia Village Open Well					
Date of Sampling	6-May-2024	6-Aug-2024	11-Nov-2024	5-Feb-2025	Acceptable	Permissible
Colour(Hazen)	2.0	3	2	3	5	15
Turbidity(NTU)	1	1	1	3	1	5
pH	8.19	6.28	6.41	7.79	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	157.56	16.08	20.1	201.70	200	600
Total Hardness (Ca CO3)(mg/L)	151.39	43.65	55.63	144.78	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	19.71	3.94	7.88	32.81	250	1000
Total Dissolve Solid(mg/L)	294	64	72	334	500	2000
Calcium(mg/L)	54.89	6.36	11.13	40.24	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.06	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	12.44	7.06	10.92	38.77	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.41	<0.3	<0.3	0.57	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.15	<0.4	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.11

Area: Talcher

Project: Bharatpur OCP

Project / OCP	Bharatpur OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Time Office, BOCP													
Date of Sampling	11-Apr-2024	6-May-2024	5-Jun-2024	3-Jul-2024	6-Aug-2024	12-Sep-2024	7-Oct-2024	11-Nov-2024	2-Dec-2024	13-Jan-2025	5-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2	4.0	1	2	4	5	2	1	3	3	2	2	5	15
Turbidity(NTU)	1	1	1	3	1	2	1	2	1	1	1	1	1	5
pH	7.57	8.16	7.84	7.63	6.42	6.59	6.74	6.86	6.95	6.49	6.57	6.68	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	84.8	125.24	48.24	28.14	88.44	96	88	84.42	100.5	96.65	100.85	92.44	200	600
Total Hardness (Ca CO3)(mg/L)	109	147.41	63.58	282.49	95.24	10.3.18	111.12	91.39	95.24	104.56	96.52	79.37	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	17.78	17.74	9.85	13.8	9.85	9.85	11.82	9.85	11.83	9.65	11.58	11.67	250	1000
Total Dissolve Solid(mg/L)	226	248	118	320	148	174	188	120	144	154	168	134	500	2000
Calcium(mg/L)	30.71	46.31	14.31	71.86	33.40	36.58	33.40	30.22	33.40	32.19	35.41	27.04	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	0.03	0.05	0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	26.78	11.33	6.40	140.85	2.14	10.54	16.2	2.87	6.00	2.44	3.22	4.93	200	400
Nitrate(mg/L)	<2.0	<0.5	<0.5	0.54	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.45	0.70	0.46	0.49	0.69	0.80	<0.3	<0.3	0.60	0.38	0.48	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.21	0.16	<0.04	0.21	0.15	0.15	<0.04	<0.04	0.28	0.27	0.11	0.09	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.12

Area: Talcher

Project: Bharatpur OCP

Project / OCP	Bharatpur OCP				Indian Drinking (IS-10500):2012	Standard
Monitoring Station	Talepasi Village Open Well					
Date of Sampling	6-May-2024	5-Aug-2024	11-Nov-2024	5-Feb-2025	Acceptable	Permissible
Colour(Hazen)	1.0	4	3	5	5	15
Turbidity(NTU)	2	3	3	2	1	5
pH	8.22	6.84	8.38	6.69	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	165.64	402	486.42	48.04	200	600
Total Hardness (Ca CO3)(mg/L)	211.15	309.54	409.28	116.63	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	51.25	17.74	67.01	40.53	250	1000
Total Dissolve Solid(mg/L)	370	464	660	204	500	2000
Calcium(mg/L)	73.45	66.80	90.66	41.85	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.06	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	18.35	6.68	3.42	13.84	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	8.44	45	No relaxation
Fluoride(mg/L)	0.65	0.88	0.60	<0.3	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.21	1.04	1.91	0.17	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.13

Area: Talcher

Project: Lingraj OCP

Project / OCP	Lingraj OCP											Indian Drinking Standard (IS-10500):2012	
Monitoring Station	GM Office, Lingraj Area Tap Water												
Date of Sampling	11-Apr-2024	7-May-2024	6-Jun-2024	3-Jul-2024	7-Aug-2024	13-Sep-2024	7-Oct-2024	11-Nov-2024	2-Dec-2024	14-Jan-2025	13-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2	1.0	2	4	3	2	1	2	2	2	4	5	15
Turbidity(NTU)	1	1	1	1	1	1	1	2	1	1	1	1	5
pH	7.66	7.80	6.78	7.52	7.22	7.38	7.23	8.18	7.82	7.10	7.65	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	80.6	76.76	20.1	44.22	20.1	28	24	229.14	52.26	54.63	50.42	200	600
Total Hardness (Ca CO3)(mg/L)	113	95.62	103.31	99.47	55.56	51.59	59.53	162.92	55.56	60.32	63.49	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.19	<0.1	1.0	No relaxation
Chloride(mg/L)	15.8	21.68	49.27	11.82	11.82	11.82	9.85	41.39	9.85	11.58	11.67	250	1000
Total Dissolve Solid(mg/L)	216	232	170	142	96	118	110	328	98	112	118	500	2000
Calcium(mg/L)	38.79	31.94	25.45	22.36	19.09	15.9	17.50	42.94	15.90	12.88	14.31	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	22.34	24.88	10.10	32.41	33.29	38.14	32.68	17.30	15.98	15.73	15.48	200	400
Nitrate(mg/L)	<2.0	<0.5	16.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.53	0.42	0.59	0.40	0.80	0.75	0.48	0.72	<0.30	0.55	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	0.01	No relaxation
Zinc(mg/L)	0.09	0.28	<0.04	0.22	<0.04	0.07	<0.04	0.26	<0.04	0.06	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.14

Area: Talcher

Project: Lingraj OCP

Project / OCP	Lingraj OCP				Indian Drinking Standard (IS-10500):2012	
Monitoring Station	Balunga Khamar Village Well					
Date of Sampling	7-Apr-2024	7-Jul-2024	7-Oct-2024	14-Jan-2025	Acceptable	Permissible
Colour(Hazen)	3	3	1	4	5	15
Turbidity(NTU)	1		1	1	1	5
pH	6.94	6.94	7.18	6.58	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	56.28	56.28	68	63.03	200	600
Total Hardness (Ca CO3)(mg/L)	75.60	75.60	91.27	80.43	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	13.8	13.8	17.74	15.44	250	1000
Total Dissolve Solid(mg/L)	116	116	134	118	500	2000
Calcium(mg/L)	20.76	20.76	23.86	22.53	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.04	0.05	1.5
Manganese(mg/L)	0.05	0.05	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	13.49	13.49	8.32	3.00	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.40	0.40	0.47	0.38	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.24	0.24	<0.04	0.16	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.15

Area: Talcher

Project: Lingraj OCP

Project / OCP	Lingraj OCP					Indian Drinking Standard (IS-10500):2012
Monitoring Station	Deulbera Village Well					
Date of Sampling	12-Apr-2024	4-Jul-2024	7-Oct-2024	14-Jan-2025	Acceptable	Permissible
Colour(Hazen)	3	2	4	2	5	15
Turbidity(NTU)	3	2	2	1	1	5
pH	7.78	7.91	7.73	6.01	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	258.56	104.52	116	16.81	200	600
Total Hardness (Ca CO ₃)(mg/L)	305.57	254.64	265.88	60.32	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	84.75	100.52	92.64	38.6	250	1000
Total Dissolve Solid(mg/L)	556	408	458	130	500	2000
Calcium(mg/L)	114.51	86.23	97.02	11.27	75	200
Copper(mg/L)	0.065	<0.03	<0.03	0.03	0.05	1.5
Manganese(mg/L)	0.239	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	58.36	42.12	48.6	15.49	200	400
Nitrate(mg/L)	<0.5	23.0	22.2	11.58	45	No relaxation
Fluoride(mg/L)	0.36	0.49	0.63	0.37	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	0.006	0.01	No relaxation
Zinc(mg/L)	0.16	0.12	<0.04	0.22	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.16

Area: Talcher

Project: Lingraj OCP

Project / OCP	Lingraj OCP				Indian Drinking Standard (IS-10500):2012	
Monitoring Station	Talabera Village Well					
Date of Sampling	12-April-2024	4-Jul-2024	7-Oct-2024	14-Jan-2025	Acceptable	Permissible
Colour(Hazen)	2	1	5	4	5	15
Turbidity(NTU)	3	3	3	3	1	5
pH	8.06	7.73	7.59	7.53	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	294.92	357.78	328	357	200	600
Total Hardness (Ca CO ₃)(mg/L)	309.54	374.01	357.16	357.92	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	80.81	110.38	96.58	108.08	250	1000
Total Dissolve Solid(mg/L)	620	634	652	692	500	2000
Calcium(mg/L)	116.1	103.79	98.61	11.07	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.03	0.05	1.5
Manganese(mg/L)	0.206	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	61.93	70.36	64.2	81.22	200	400
Nitrate(mg/L)	<0.5	19.12	18.6	14.72	45	No relaxation
Fluoride(mg/L)	0.41	0.92	0.41	0.32	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.21	0.26	<0.04	0.08	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.17

Area: Talcher

Project: Lingraj OCP

Project / OCP	Lingraj OCP				Indian Drinking Standard (IS-10500):2012	
Monitoring Station	Kankili Village					
Date of Sampling	4-Jul-2024	7-Oct-2024	14-Jan-2025	6-Feb-2025	Acceptable	Permissible
Colour(Hazen)	2	3	2	1	5	15
Turbidity(NTU)	1	1	2	1	1	5
pH	7.69	7.74	7.25	7.78	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	52.26	60	298.34	45.25	200	600
Total Hardness (Ca CO ₃)(mg/L)	83.55	87.30	233.25	64.35	200	600
Iron(mg/L)	0.18	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	7.88	9.85	19.30	9.65	250	1000
Total Dissolve Solid(mg/L)	130	136	362	102	500	2000
Calcium(mg/L)	19.16	19.09	56.34	14.49	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.31	<0.04	0.1	0.3
Sulphate(mg/L)	14.38	16.44	5.00	15.07	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.57	0.35	0.46	0.44	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.13	<0.04	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.18

Area: Talcher**Project:** Kaniha

Project / OCP	Kaniha				Indian Drinking Standard (IS-10500):2012	
Monitoring Station	Telisinga Well water				Acceptable	Permissible
Date of Sampling	8-May-2024	5-Jul-2024	8-Oct-2024	15-Jan-2025	Acceptable	Permissible
Colour(Hazen)	4.0	1	4	2	5	15
Turbidity(NTU)	1	2	2	2	1	5
pH	8.15	7.12	7.27	7.14	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	121.2	156.78	168	231.11	200	600
Total Hardness (Ca CO ₃)(mg/L)	179.28	230.77	253.98	245.32	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	23.65	63.07	59.13	52.11	250	1000
Total Dissolve Solid(mg/L)	312	342	382	388	500	2000
Calcium(mg/L)	53.08	70.26	73.16	85.31	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.06	<0.04	<0.04	0.20	0.1	0.3
Sulphate(mg/L)	20.2	27.11	30.44	25.37	200	400
Nitrate(mg/L)	<0.5	3.01	3.4	<0.5	45	No relaxation
Fluoride(mg/L)	0.61	0.72	0.52	0.49	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.20	0.28	<0.04	0.53	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.19

Area: Talcher

Project: Kaniha

Project / OCP	Kaniha				Indian Drinking Standard (IS-10500):2012	
Monitoring Station	Jarda Village Well Water					
Date of Sampling	8-May-2024	5-Jul-2024	8-Oct-2024	15-Jan-2025	Acceptable	Permissible
Colour(Hazen)	2.0	2	4	4	5	15
Turbidity(NTU)	1	3	2	4	1	5
pH	8.04	7.86	8.06	7.26	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	68.68	265.32	280	352.97	200	600
Total Hardness (Ca CO ₃)(mg/L)	91.63	274.54	293.66	446.40	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	15.77	43.36	47.30	196.86	250	1000
Total Dissolve Solid(mg/L)	208	382	428	910	500	2000
Calcium(mg/L)	30.34	54.29	58.85	143.26	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	16.4	9.58	16.28	117.93	200	400
Nitrate(mg/L)	<0.5	0.82	1.1	19.24	45	No relaxation
Fluoride(mg/L)	0.46	0.68	0.50	0.65	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.40	0.17	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	—	—
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.20

Area: Talcher

Project: Hingula OCP

Project / OCP	Hingula OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Time Office Water													
Date of Sampling	12-Apr-2024	8-May-2024	7-Jun-2024	5-Jul-2024	8-Aug-2024	14-Sep-2024	8-Oct-2024	13-Nov-2024	4-Dec-2024	15-Jan-2025	8-Feb-2025	13-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2	4.0	1	2	2	1	3	1	1	3	1	2	5	15
Turbidity(NTU)	2	1	1	3	2	3	2	2	2	2	2	2	1	5
pH	7.59	7.75	7.78	8.24	6.85	6.94	7.23	7.40	7.15	6.89	7.01	6.98	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	76.3	109.08	48.24	329.64	108.54	120	136	108.54	120.6	180.69	117.66	109.25	200	600
Total Hardness (Ca CO ₃)(mg/L)	218	123.50	67.55	294.43	170.64	158.74	178.58	166.89	162.70	233.25	189.02	166.67	200	600
Iron(mg/L)	0.11	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	47.4	17.74	9.85	51.25	31.54	35.45	39.42	35.48	39.42	30.88	34.74	33.03	250	1000
Total Dissolve Solid(mg/L)	366	234	136	434	254	288	330	278	288	356	316	318	500	2000
Calcium(mg/L)	69.49	35.13	19.09	63.87	42.94	36.58	47.71	49.30	39.76	70.82	48.29	46.12	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.44	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	23.12	27.46	8.74	25.72	56.75	64.8	68.8	58.04	48.54	60.98	67.81	72.06	200	400
Nitrate(mg/L)	9.46	<0.5	<0.5	0.93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.36	0.34	0.56	0.53	0.43	0.69	0.53	<0.3	0.74	0.45	0.42	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.27	0.36	<0.04	0.31	0.04	0.07	<0.04	0.15	0.09	1.83	0.24	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.21

Area: Talcher

Project: Hingula OCP

Project / OCP	Hingula OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Gopalprasad Village Bore Well Water													
Date of Sampling	12-Apr-2024	8-May-2024	7-Jun-2024	5-Jul-2024	8-Aug-2024	14-Sep-2024	8-Oct-2024	13-Nov-2024	4-Dec-2024	15-Jan-2025	8-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	1	5.0	2	3	1	2	4	2	4	2	2	4	5	15
Turbidity(NTU)	2	2	1	2	2	3	2	2	3	2	3	2	1	5
pH	7.44	8.12	6.72	7.73	8.12	8.21	8.34	8.18	8.35	7.86	6.83	7.86	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	93.3	169.68	12.06	160.8	233.16	232	248	229.14	233.16	247.92	176.48	243.72	200	600
Total Hardness (Ca CO ₃)(mg/L)	161	183.56	63.58	210.88	158.74	150.80	178.58	162.92	162.70	160.86	249.34	202.39	200	600
Iron(mg/L)	0.11	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	29.63	31.54	45.33	68.98	43.36	47.30	43.36	41.39	45.33	40.53	92.64	42.79	250	1000
Total Dissolve Solid(mg/L)	316	348	132	358	304	338	376	328	368	374	442	414	500	2000
Calcium(mg/L)	46.87	43.11	17.50	73.45	36.58	31.81	44.53	42.94	39.76	43.46	83.70	36.58	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.089	0.26	<0.04	<0.04	<0.04	<0.04	0.13	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	31.76	26.48	13.30	26.23	12.86	17.48	24.62	17.30	19.63	14.39	42.06	13.97	200	400
Nitrate(mg/L)	<2.0	1.61	16.65	3.40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	4.36	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.47	0.42	0.49	<0.3	0.33	0.63	0.48	0.33	0.40	0.79	0.90	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.24	0.34	<0.04	0.20	<0.04	0.12	<0.04	0.26	0.24	0.55	0.13	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.22

Area: Talcher

Project: Hingula OCP

Project / OCP	Hingula OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Kumunda Village Bore Well Water													
Date of Sampling	12-Apr-2024	8-May-2024	7-Jun-2024	5-Jul-2024	8-Aug-2024	14-Sep-2024	9-Oct-2024	13-Nov-2024	4-Dec-2024	15-Jan-2025	8-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	1	2.0	3	3	3	2	4	3	5	1	3	3	5	15
Turbidity(NTU)	1	2	3	2	3	3	3	2	3	3	2	1	1	5
pH	7.74	8.21	8.19	7.89	7.78	7.89	7.61	7.83	7.54	7.28	8.09	6.98	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	67.8	153.52	297.48	160.8	542.7	172	158	148.74	80.4	378.18	252.12	100.85	200	600
Total Hardness (Ca CO ₃)(mg/L)	129	171.31	158.94	226.79	515.89	317.47	293.66	282.13	119.05	353.90	184.99	59.53	200	600
Iron(mg/L)	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	23.7	25.62	51.25	68.98	362.66	116.29	106.43	106.43	47.30	73.34	42.46	19.45	250	1000
Total Dissolve Solid(mg/L)	260	362	344	366	884	456	474	426	274	586	378	178	500	2000
Calcium(mg/L)	46.87	49.50	31.81	78.24	89.07	87.48	92.25	87.48	44.53	101.41	37.02	20.68	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	0.05	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.040	0.24	<0.04	<0.04	<0.04	<0.04	<0.04	0.11	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	19.74	54.88	12.22	26.86	67.59	62.8	54.4	46.50	43.17	43.17	16.99	5.49	200	400
Nitrate(mg/L)	<2.0	1.76	<0.5	3.25	<0.5	2.2	1.98	1.74	15.40	7.26	<0.5	1.70	45	No relaxation
Fluoride(mg/L)	<0.3	0.32	0.36	0.45	0.33	0.38	0.58	0.65	0.30	<0.30	0.49	0.62	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.43	0.41	<0.04	0.25	0.11	0.12	<0.04	0.15	<0.04	1.75	0.17	0.27	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.23

Area: Talcher

Project: Balaram OCP

Project / OCP	Balaram OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Danara Village Borewell Water													
Date of Sampling	13-Apr-2024	8-May-2024	7-Jun-2024	5-Jul-2024	8-Aug-2024	14-Sep-2024	8-Oct-2024	13-Nov-2024	4-Dec-2024	15-Jan-2025	08-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	3.0	5.0	4	1	2	3	3	4	3	3	2	3	5	15
Turbidity(NTU)	1	1	1	2	2	2	1	2	1	2	1	3	1	5
pH	7.47	7.39	6.58	7.80	6.59	6.81	6.96	7.16	7.19	7.11	7.07	7.87	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	32.32	52.52	16.08	160.80	68.34	52	60	76.38	122.2	75.64	75.64	197.49	200	600
Total Hardness (Ca CO3)(mg/L)	63.49	71.71	75.50	210.88	162.70	150.80	130.96	170.86	158.94	136.73	144.78	273.82	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	15.77	19.71	35.48	68.98	27.59	11.82	15.77	21.68	25.62	21.23	15.22	68.07	250	1000
Total Dissolve Solid(mg/L)	166	202	138	354	224	208	196	230	202	246	228	534	500	2000
Calcium(mg/L)	19.08	23.95	23.86	76.65	38.17	31.81	30.22	39.76	36.58	43.46	38.63	66.80	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	0.06	<0.04	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	11.68	18.23	14.04	25.72	50.44	46.2	42.6	52.27	45.55	58.54	56.30	76.99	200	400
Nitrate(mg/L)	11.8	12.39	15.20	3.59	15.18	14.2	13.6	14.8	3.2	10.6	6.88	12.49	45	No relaxation
Fluoride(mg/L)	0.31	0.52	0.58	0.77	0.58	0.35	0.52	0.47	0.44	<0.3	<0.3	<0.3	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.26	0.19	<0.04	0.25	0.05	0.10	<0.04	0.18	<0.04	0.09	0.06	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.24

Area: Talcher

Project: Balaram OCP

Project / OCP	Balaram OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Balaram Colony Tap Water													
Date of Sampling	13-Apr-2024	8-May-2024	7-Jun-2024	5-Jul-2024	8-Aug-2024	14-Sep-2024	8-Oct-2024	13-Nov-2024	4-Dec-2024	15-Jan-2025	08-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	3.0	1.0	1	2	3	4	2	3	3	2	2	2	5	15
Turbidity(NTU)	2	3	1	2	2	2	1	2	2	3	3	2	1	5
pH	7.67	7.80	7.86	7.78	7.72	7.89	7.93	7.76	7.61	7.20	8.09	7.74	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	80.8	88.88	60.3	160.8	64.32	48	52	60.3	132.6	75.64	79.84	67.23	200	600
Total Hardness (Ca CO3)(mg/L)	242.07	227.09	75.50	222.81	269.85	253.98	222.23	278.15	270.20	269.45	305.64	293.66	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	17.74	21.68	13.8	67.01	15.77	37.45	31.54	13.8	17.74	19.30	19.30	19.45	250	1000
Total Dissolve Solid(mg/L)	414	394	116	362	316	292	320	328	312	384	430	456	500	2000
Calcium(mg/L)	85.88	83.03	17.5	79.84	74.75	68.39	65.21	71.57	66.80	80.48	88.53	87.48	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	0.03	0.05	1.5
Manganese(mg/L)	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	179.52	168.72	4.43	29.38	109.71	98.7	88.4	94.97	93.64	142.68	153.43	161.92	200	400
Nitrate(mg/L)	<0.5	1.07	<0.5	2.45	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.47	0.57	0.51	0.39	0.47	0.41	0.49	0.74	0.68	0.74	<0.3	0.77	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.2	0.41	<0.04	0.39	0.04	0.06	<0.04	<0.04	<0.04	0.12	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	0.01	No relaxation

Table: 10.2.4.25

Area: Talcher

Project: Balaram OCP

Project / OCP	Balaram OCP													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Nakeipasi Village Bore Well Water													
Date of Sampling	13-Apr-2024	8-May-2024	7-Jun-2024	5-Jul-2024	8-Aug-2024	14-Sep-2024	8-Oct-2024	13-Nov-2024	4-Dec-2024	15-Jan-2025	08-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	4.0	3.0	4	1	2.0	1	5	2	4	3	3	2	5	15
Turbidity(NTU)	2	3	1	2	3	3	2	2	2	3	3	3	1	5
pH	7.73	7.92	6.59	7.83	6.62	6.76	6.86	6.69	6.74	7.15	6.95	6.67	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	109.08	129.28	28.14	164.82	116.58	168	152	120.6	114.4	264.73	126.06	117.66	200	600
Total Hardness (Ca CO3)(mg/L)	277.79	266.93	107.29	210.88	384.93	361.12	341.28	369.54	357.62	522.81	442.38	428.59	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	37.45	41.39	47.30	68.98	53.22	41.39	35.48	55.19	47.30	55.97	38.60	54.46	250	1000
Total Dissolve Solid(mg/L)	456	476	168	374	468	430	488	486	492	706	608	624	500	2000
Calcium(mg/L)	97.01	91.02	22.27	76.65	139.96	127.24	117.70	135.19	128.83	144.87	146.48	147.91	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.059	<0.04	0.044	<0.04	0.09	<0.04	<0.04	6.75	<0.04	0.34	<0.04	0.85	0.1	0.3
Sulphate(mg/L)	155.5	162.56	12.68	25.85	170.24	154.4	140.2	141.11	135.66	151.22	189.94	197.54	200	400
Nitrate(mg/L)	<0.5	1.39	16.09	3.31	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.41	0.74	0.42	0.31	<0.30	0.36	0.80	0.78	0.72	0.50	0.52	0.53	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.21	0.16	<0.04	0.17	1.08	0.05	<0.04	2.66	<0.04	1.88	2.54	0.55	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	—	—
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.26

Area: Talcher

Project: Talcher U/G

Project / OCP	Talcher U/G													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Canteen Water, GM Office													
Date of Sampling	10-Apr-2024		6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2		1	3	3	1	2	3	4	4	4	1	5	15
Turbidity(NTU)	2		2	1	1	1	1	1	1	1	1	1	1	5
pH	7.83		7.18	7.11	6.94	7.09	7.27	7.43	7.94	6.86	7.94	7.68	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	118.7		92.46	40.2	12.06	32	40	40.2	52.26	50.42	50.42	50.42	200	600
Total Hardness (Ca CO ₃)(mg/L)	181		158.94	103.45	63.49	55.56	67.46	51.66	71.43	72.39	60.32	51.59	200	600
Iron(mg/L)	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	29.63		9.85	9.85	11.83	9.85	11.82	9.85	9.85	9.65	11.58	9.72	250	1000
Total Dissolve Solid(mg/L)	326		218	146	106	124	138	98	112	112	108	112	500	2000
Calcium(mg/L)	38.79		39.76	22.36	19.09	14.31	12.72	15.90	22.27	12.88	16.10	15.90	75	200
Copper(mg/L)	<0.03		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	0.03	0.03	0.05	1.5
Manganese(mg/L)	<0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	40.84		26.97	24.21	44.64	36.28	42.78	24.66	17.80	13.90	15.89	14.11	200	400
Nitrate(mg/L)	<2.0		0.59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3		0.37	0.42	0.93	0.43	0.69	<0.3	<0.3	<0.30	0.46	0.56	1	1.5
Arsenic(mg/L)	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.08		<0.04	0.08	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	0.14	5	15
Total Chromium (mg/L)	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected		Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.27

Area: Talcher

Project: Talcher U/G

Project / OCP	Talcher U/G													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Canteen Tap-Water, Talcher Colliery													
Date of Sampling	10-Apr-2024	7-May-2024	6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	Permissible
Colour(Hazen)	3	4.0	2	2	3	2	4	4	2	1	3	1	5	15
Turbidity(NTU)	2	1	1	1	1	2	1	1	1	2	2	2	1	5
pH	7.76	7.73	6.64	7.16	6.80	6.93	7.09	7.25	6.62	7.25	7.49	7.15	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	67.8	105.04	24.12	40.2	44.22	48	56	40.2	36.18	63.03	63.03	58.83	200	600
Total Hardness (Ca CO3)(mg/L)	141	127.49	75.50	31.83	154.77	142.86	150.80	115.23	79.37	164.89	189.02	186.51	200	600
Iron(mg/L)	0.11	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	21.73	17.74	45.33	9.85	23.65	31.54	35.48	17.74	35.48	23.16	22.84	23.34	250	1000
Total Dissolve Solid(mg/L)	192	264	142	104	228	212	262	176	160	284	310	302	500	2000
Calcium(mg/L)	32.32	39.92	25.45	7.98	36.58	38.17	34.99	33.40	27.04	41.85	51.51	42.94	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	0.118	0.041	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	33.48	33.87	7.88	30.39	95.84	87.6	82.6	51.78	18.66	86.22	15.89	91.78	200	400
Nitrate(mg/L)	<2.0	1.01	16.39	<0.5	3.47	3.20	3.48	2.9	13.79	2.06	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.5	0.31	0.56	0.62	0.33	0.63	<0.3	<0.3	<0.30	0.30	0.39	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.19	0.31	<0.04	0.12	<0.04	0.66	<0.04	<0.04	0.09	0.17	0.07	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.28

Area: Talcher

Project: Nandira U/G

Project / OCP	Nandira U/G													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Canteen , Nandira Colliery (Tap Water)													Permissible
Date of Sampling	10-Apr-2024	7-May-2024	6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	
Colour(Hazen)	1	1.0	3	3	1	3	3	3	4	1	2	2	5	15
Turbidity(NTU)	1	1	1	1	2	2	2	2	2	2	2	2	1	5
pH	7.34	7.30	6.62	7.28	7.23	7.41	7.59	7.74	7.52	7.22	7.17	7.49	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	72.1	52.52	24.12	60.3	<0.3	60	68	60.3	64.32	63.03	63.03	67.23	200	600
Total Hardness (Ca CO ₃)(mg/L)	105	67.73	79.47	151.19	178.58	186.51	182.55	182.79	190.48	168.91	189.02	214.29	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	15.8	23.65	45.33	11.82	13.8	13.8	15.77	13.8	13.8	13.51	33.51	13.16	250	1000
Total Dissolve Solid(mg/L)	228	184	148	236	236	258	270	240	258	260	278	310	500	2000
Calcium(mg/L)	29.09	15.97	28.63	49.50	46.12	39.76	33.40	42.94	42.94	46.68	45.07	44.53	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	0.22	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	39.48	17.24	6.90	84.23	82.97	86.4	84.8	70.43	80.85	88.05	93.56	98.77	200	400
Nitrate(mg/L)	<2.0	13.80	16.54	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	<0.3	0.65	0.47	0.47	<0.3	0.50	0.70	0.58	0.31	0.34	0.56	0.53	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.09	0.20	<0.04	0.56	0.04	0.10	0.04	0.21	0.29	0.13	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.29

Area: Talcher

Project: Nandira U/G

Project / OCP	Nandira U/G													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Pit Top, Nandira Colliery													Permissible
Date of Sampling	10-Apr-2024	7-May-2024	6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	
Colour(Hazen)	2	3.0	2	2	3	4	4	2	1	2	1	4	5	15
Turbidity(NTU)	1	1	3	1	1	2	1	1	3	2	2	1	1	5
pH	7.81	7.44	7.48	7.31	6.42	6.63	6.88	7.06	7.87	6.95	8.05	5.72	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	97.5	44.44	40.2	60.3	32.16	60	52	36.18	265.32	58.83	88.24	12.61	200	600
Total Hardness (Ca CO ₃)(mg/L)	161	83.66	214.57	91.51	95.24	107.15	95.24	107.29	194.45	168.91	60.32	51.59	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	29.63	19.71	11.83	9.85	43.36	15.77	11.82	29.56	43.36	13.51	15.22	41.26	250	1000
Total Dissolve Solid(mg/L)	254	176	278	222	174	216	168	172	448	266	304	106	500	2000
Calcium(mg/L)	56.56	20.76	66.80	31.94	25.45	30.22	19.09	27.04	66.80	46.68	16.10	12.72	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	0.03	0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	0.1	0.3
Sulphate(mg/L)	34.16	18.35	106.03	78.94	28.25	34.68	28.84	37.42	52.44	92.44	94.80	10.14	200	400
Nitrate(mg/L)	<2.0	14.59	<0.5	<0.5	19.06	20.6	18.8	18.4	<0.5	<0.5	<0.5	7.57	45	No relaxation
Fluoride(mg/L)	<0.3	0.71	0.42	0.72	<0.30	0.63	0.57	0.36	0.61	0.48	0.61	0.66	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.18	0.22	<0.04	0.17	0.06	0.44	0.04	0.10	<0.04	0.25	<0.04	0.71	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.30

Area: Talcher

Project: Deulbera U/G

Project / OCP	Deulbera U/G													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Deulbera Manager Office													Permissible
Date of Sampling	12-Apr-2024	7-May-2024	6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	
Colour(Hazen)	2	4.0	1	2	4	2	2	3	4	3	2	1	5	15
Turbidity(NTU)	1	1	2	1	1	2	2	2	2	2	3	2	1	5
pH	7.49	7.28	7.22	7.20	6.85	7.07	7.43	7.58	7.89	7.75	6.95	6.81	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	59.4	36.36	92.46	28.14	12.06	128	144	128.64	76.38	75.64	147.07	126.06	200	600
Total Hardness (Ca CO ₃)(mg/L)	125	79.68	158.94	83.55	75.40	79.37	95.24	242.39	11.12	108.58	60.32	253.98	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	17.78	19.71	9.85	45.33	9.85	41.39	43.36	37.45	15.77	15.44	38.60	33.06	250	1000
Total Dissolve Solid(mg/L)	186	174	224	166	102	216	260	346	192	202	438	428	500	2000
Calcium(mg/L)	43.64	19.16	47.71	27.15	14.31	15.90	20.68	65.21	38.17	32.19	69.21	69.98	75	200
Copper(mg/L)	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	0.05	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	24.86	20.2	41.13	20.30	39.47	46.28	52.18	81.72	43.17	42.19	85.07	105.89	200	400
Nitrate(mg/L)	<2.0	14.89	0.97	15.72	<0.5	<0.5	<0.5	<0.5	2.20	<0.5	<0.5	4.82	45	No relaxation
Fluoride(mg/L)	<0.3	0.36	0.37	0.42	0.31	0.53	0.75	0.64	0.30	0.38	0.48	0.61	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.97	0.16	<0.04	0.10	0.06	0.05	0.08	0.29	<0.04	<0.04	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.31

Area: Talcher

Project: Deulbera Colliery

Project / OCP	Deulbera Colliery													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Deulbera Colliery Mine Discharge at Pit Top													Permissible
Date of Sampling	12-Apr-2024	7-May-2024	6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	
Colour(Hazen)	4.0	1.0	3	4	3	5	5	3	3	3	3	3	5	15
Turbidity(NTU)	1	1	2	1	1	2	1	2	3	2	3	2	1	5
pH	5.42	5.59	6.85	6.62	6.38	6.55	6.69	6.85	7.57	7.34	7.25	6.94	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	4.04	4.04	40.2	16.08	40.2	44	48	136.68	152.76	142.87	142.87	142.87	200	600
Total Hardness (Ca CO ₃)(mg/L)	47.62	59.76	87.42	55.70	119.05	134.93	126.99	234.44	269.85	269.45	273.47	253.98	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	39.42	35.48	49.27	47.30	37.45	39.42	35.48	35.48	47.30	36.67	15.22	35.01	250	1000
Total Dissolve Solid(mg/L)	110	134	190	142	182	228	206	358	460	418	428	452	500	2000
Calcium(mg/L)	14.31	17.56	28.63	15.97	28.63	34.99	36.58	69.98	79.52	72.43	67.60	69.98	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.081	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	35.45	37.44	8.87	14.63	24.34	30.24	26.12	87.24	99.39	82.93	88.36	114.66	200	400
Nitrate(mg/L)	<0.5	<0.5	15.90	16.22	15.22	16.8	16.2	16.8	9.27	5.02	<0.5	4.95	45	No relaxation
Fluoride(mg/L)	0.43	0.63	0.34	0.40	0.38	0.35	0.67	0.84	0.36	0.41	0.40	0.49	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.16	0.16	<0.04	0.15	<0.04	0.07	0.05	<0.04	<0.04	0.04	0.10	0.06	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.32

Area: Talcher

Project: Deulbera Colliery

Project / OCP	Deulbera Colliery													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Rani park Submersible Pump													Permissible
Date of Sampling	12-Apr-2024	7-May-2024	6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	
Colour(Hazen)	3.0	1.0	2	3	2	3	3	2	2	2	2	3	5	15
Turbidity(NTU)	1	1	2	1	2	3	2	1	1	1	2	1	1	5
pH	5.45	5.63	7.28	7.38	6.86	7.04	7.21	7.39	7.83	7.47	7.85	5.93	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	4.04	4.04	92.46	52.26	24.12	40	56	48.24	48.24	50.42	50.42	16.81	200	600
Total Hardness (Ca CO ₃)(mg/L)	27.78	43.82	143.05	35.81	246.04	253.98	269.85	55.63	67.46	60.32	68.37	63.49	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	0.19	<0.1	<0.1	<0.1	0.12	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	37.45	33.51	9.85	5.91	53.22	35.45	39.42	7.88	7.88	9.65	32.81	40.84	250	1000
Total Dissolve Solid(mg/L)	78	88	216	110	318	346	386	106	102	110	68.37	136	500	2000
Calcium(mg/L)	7.95	11.18	47.71	<4.0	65.21	73.16	74.75	17.50	17.50	20.93	19.32	15.90	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	19.34	22.41	41.87	13.49	123.33	134.6	126.8	23.93	16.71	16.59	92.33	16.85	200	400
Nitrate(mg/L)	<0.5	<0.5	0.97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	7.18	45	No relaxation
Fluoride(mg/L)	0.76	0.46	0.53	0.32	0.37	0.49	0.65	<0.30	<0.30	<0.30	0.33	0.35	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.14	0.24	<0.04	<0.04	0.04	0.06	0.06	0.22	<0.04	<0.04	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.33

Area: Talcher

Project: Handhidhua Colliery

Project / OCP	Handhidhua Colliery													Indian Drinking Standard (IS-10500):2012
Monitoring Station	Pit Top Tap Water													
Date of Sampling	10-Apr-2024	7-May-2024	6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	Permissible
Colour(Hazen)	3	1.0	3	2	4	2	2	4	1	2	3	1	5	15
Turbidity(NTU)	1	1	1	1	2	3	2	2	2	3	2	2	1	5
pH	7.94	7.21	6.55	7.10	6.65	6.73	6.94	7.10	7.09	6.53	6.65	6.41	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	63.6	28.28	8.04	36.18	52.26	64	76	56.28	56.28	63.03	67.23	71.43	200	600
Total Hardness (Ca CO ₃)(mg/L)	125	79.68	79.47	47.75	206.36	194.45	218.26	182.79	158.74	213.14	261.40	242.07	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	21.73	21.68	45.33	11.82	29.56	39.42	43.36	27.59	27.59	30.88	30.88	33.06	250	1000
Total Dissolve Solid(mg/L)	224	178	144	102	274	308	354	288	270	354	370	418	500	2000
Calcium(mg/L)	42.02	17.56	22.27	14.37	42.94	38.17	41.35	54.08	57.26	57.95	61.17	62.03	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.056	<0.04	<0.04	<0.04	0.04	<0.04	0.06	0.27	<0.04	0.2	0.1	0.3
Sulphate(mg/L)	22.46	20.94	6.65	16.52	89.78	94.28	98.8	75.34	66.71	104.88	116.44	142.06	200	400
Nitrate(mg/L)	<2.0	15.09	17.33	<0.5	4.99	5.42	6.1	5.8	10.26	3.12	<0.5	0.95	45	No relaxation
Fluoride(mg/L)	<0.3	0.5	0.46	0.49	0.32	0.48	0.60	0.49	0.76	0.63	0.33	0.33	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.05	0.20	<0.04	0.17	0.33	0.09	0.11	0.51	<0.04	0.30	0.38	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.34

Area: Talcher

Project: Handhidhua Colliery

Project / OCP	Handhidhua Colliery													Indian Drinking Standard (IS-10500):2012
Monitoring Station	RWSS(Pit Top Tap Water)													Permissible
Date of Sampling	12-Apr-2024	7-May-2024	6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	
Colour(Hazen)	3.0	2.0	4	3	4	1	3	3	2	3	1	3	5	15
Turbidity(NTU)	1	1	2	1	1	1	1	1	3	1	1	1	1	5
pH	5.74	5.61	6.85	7.27	6.70	6.82	7.16	7.33	6.71	6.33	5.92	6.32	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	4.04	4.04	96.48	64.32	28.14	60	68	32.16	60.3	12.61	12.16	67.23	200	600
Total Hardness (Ca CO ₃)(mg/L)	31.75	39.84	154.97	51.72	43.65	59.53	71.43	95.37	206.36	60.32	48.26	71.43	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	39.42	37.45	7.88	17.74	11.82	39.42	35.48	35.48	29.56	38.6	40.53	13.61	250	1000
Total Dissolve Solid(mg/L)	50	90	238	118	86	116	156	146	340	130	214	114	500	2000
Calcium(mg/L)	6.36	9.58	47.71	15.97	12.72	12.72	14.31	27.04	54.08	14.49	14.49	7.95	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.21	<0.04	<0.04	0.122	0.1	0.3
Sulphate(mg/L)	16.27	17.61	32.76	14.63	12.11	18.26	24.48	25.64	111.19	15.49	126.03	4.79	200	400
Nitrate(mg/L)	<0.5	<0.5	1.19	<0.5	<0.5	<0.5	<0.5	<0.5	4.54	11.44	<0.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.38	0.55	0.57	0.59	0.32	0.52	0.37	0.34	<0.3	<0.3	<0.30	<0.3	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.13	0.26	<0.04	0.15	0.17	0.25	0.12	0.17	0.40	0.25	0.15	2.93	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

Table: 10.2.4.35

Area: Talcher

Project: Handhidhua Colliery

Project / OCP	Handhidhua Colliery													Indian Drinking Standard (IS-10500):2012
Monitoring Station	19X Cut Road Bore Hole Point													Permissible
Date of Sampling	12-Apr-2024	7-May-2024	6-Jun-2024	4-Jul-2024	7-Aug-2024	13-Sep-2024	9-Oct-2024	12-Nov-2024	3-Dec-2024	14-Jan-2025	07-Feb-2025	13-Mar-2025	Acceptable	
Colour(Hazen)	1.0	3.0	2	1	3	3	2	4	3	4	3	1	5	15
Turbidity(NTU)	1	1	1	2	2	3	2	2	3	3	3	2	1	5
pH	5.38	5.56	6.59	7.44	7.66	7.49	7.69	7.80	6.70	6.70	7.90	6.44	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	4.04	4.04	8.04	108.54	48.24	56	72	52.26	60.3	67.23	67.23	88.24	200	600
Total Hardness (Ca CO ₃)(mg/L)	27.78	39.84	83.45	210.88	226.20	238.10	257.95	202.65	222.23	217.17	265.43	250.01	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	37.45	33.51	45.33	88.69	13.8	37.45	41.39	29.56	31.54	32.81	30.88	31.12	250	1000
Total Dissolve Solid(mg/L)	50	92	152	368	252	286	358	284	346	362	382	438	500	2000
Calcium(mg/L)	7.95	11.18	28.63	78.24	47.71	50.90	54.29	52.49	52.49	51.51	59.56	58.85	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	0.42	0.26	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	24.52	26.35	8.87	24.34	86.00	91.6	96.42	91.41	113.90	104.02	120.55	143.02	200	400
Nitrate(mg/L)	<0.5	<0.5	16.91	23.11	9.75	10.6	11.4	10.6	4.48	3.06	<0.5	0.93	45	No relaxation
Fluoride(mg/L)	0.41	0.41	0.38	0.35	0.41	0.61	0.42	0.60	0.82	0.74	0.37	0.42	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.24	0.32	<0.04	0.23	<0.04	0.12	0.12	<0.04	0.13	0.08	<0.04	0.3	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	2.4
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	–	–
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	1.0
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation

10 SURFACE WATER QUALITY DATA

Table:10.2.5.1

Area: Jagannath

Project: Jagannath OCP

Project/OCP	Jagannath OCP			
NAME OF STATIONS	Upstream of Brahmani River where Bangaru Water meets			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	27-May-24	25-Nov-24	20-Jan-25	
pH	8.03	7.80	7.86	6.5-8.5
Dissolved Oxygen(mg/L)	6.4	6.8	6.8	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	2	3	3	300
Total dissolved solids (mg/L)	352	260	618	1500
TSS(mg/L)	36	40	39	-
Total Hardness(mg/L)	239.04	190.73	417.23	-
Copper(mg/L)	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<<0.1	<<0.1	<0.1	50
Chlorides(mg/L)	51.25	27.59	23.16	600
Sulphate(mg/L)	54.76	27.24	227.40	400
Nitrate(mg/L)	14.2	<0.5	1.34	50
Fluoride(mg/L)	0.76	0.40	1.35	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.01	0.1
Zinc(mg/L)	0.047	<0.04	0.05	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	58	150	12	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Table: 10.2.5.2
Area: Jagannath
Project: Jagannath OCP

Project/OCP	Jagannath OCP		
NAME OF STATIONS	Downstream of Banagaru Jhor Nalla		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	27-May-24	25-Nov-24	
pH	7.91	8.13	6.5-8.5
Dissolved Oxygen(mg/L)	5.8	6.2	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	3	3	300
Total dissolved solids (mg/L)	428	658	1500
TSS(mg/L)	32	78	-
Total Hardness(mg/L)	358.56	492.73	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	25.62	33.51	600
Sulphate(mg/L)	138.42	228.22	400
Nitrate(mg/L)	15.8	15.52	50
Fluoride(mg/L)	0.85	1.13	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.074	1.2	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	130	130	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.3
Area: Jagannath
Project: Jagannath OCP

Project/OCP	Jagannath OCP			
NAME OF STATIONS	Downstream of Brahmani River where Bangaru Water meets			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	27-May-24	25-Nov-24	20-Jan-25	
pH	6.12	8.19	7.45	6.5-8.5
Dissolved Oxygen(mg/L)	6.4	7.0	6.4	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	4	2	2	300
Total dissolved solids (mg/L)	818	784	754	1500
TSS(mg/L)	54	46	51	-
Total Hardness(mg/L)	402.38	528.49	528.49	-
Copper(mg/L)	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	50
Chlorides(mg/L)	63.07	27.59	27.02	600
Sulphate(mg/L)	140.56	230.68	269.87	400
Nitrate(mg/L)	16.4	15.21	8.78	50
Fluoride(mg/L)	0.54	0.63	0.67	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.009	0.1
Zinc(mg/L)	<0.04	0.38	0.12	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	84	140	14	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Table: 10.2.5.4
Area: Jagannath
Project: Jagannath OCP

Project/OCP	Jagannath OCP		
NAME OF STATIONS	East Sump		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	27-May-24	25-Nov-24	
pH	6.86	6.95	6.5-8.5
Dissolved Oxygen(mg/L)	6.8	6.4	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	4	2	300
Total dissolved solids (mg/L)	432	404	1500
TSS(mg/L)	26	38	-
Total Hardness(mg/L)	354.58	294.05	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	21.68	17.74	600
Sulphate(mg/L)	122.7	121.47	400
Nitrate(mg/L)	0.82	0.57	50
Fluoride(mg/L)	0.46	0.58	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	199	0.08	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	26	Not detected	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.5
Area: Jagannath
Project: Jagannath OCP

Project/OCP	Jagannath OCP		
NAME OF STATIONS	Central Sump		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	27-May-24	25-Nov-24	
pH	6.92	6.74	6.5-8.5
Dissolved Oxygen(mg/L)	5.6	6.4	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	1	2	300
Total dissolved solids (mg/L)	376	146	1500
TSS(mg/L)	38	64	-
Total Hardness(mg/L)	294.82	87.42	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	19.71	15.77	600
Sulphate(mg/L)	128.8	50.92	400
Nitrate(mg/L)	0.66	<0.5	50
Fluoride(mg/L)	0.34	0.68	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.050	0.080	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	—
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	31	Not detected	—
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.6

Area: Jagannath

Project: Jagannath OCP

Project/OCP	Jagannath OCP		
NAME OF STATIONS	Bangaru Jhor river near Joragarhia as downstream water point of Bharatpur OCP (Upstream for Jagannath) (Reported)		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	27-May-24	25-Nov-24	
pH	7.49	7.26	6.5-8.5
Dissolved Oxygen(mg/L)	6.3	6.8	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	3	2	300
Total dissolved solids (mg/L)	348	532	1500
TSS(mg/L)	44	32	-
Total Hardness(mg/L)	278.88	425.18	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	23.65	31.54	600
Sulphate(mg/L)	122.6	235.58	400
Nitrate(mg/L)	0.52	6.48	50
Fluoride(mg/L)	0.36	1.00	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.162	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	110	120	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.7
Area: Bharatpur
Project: Bharatpur OCP

Project/OCP	Bharatpur OCP		
NAME OF STATIONS	Bangaru Jhor river near up stream water point of Bharatpur OCP		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	27-May-24	25-Nov-24	
pH	7.57	7.33	6.5-8.5
Dissolved Oxygen(mg/L)	6.7	6.5	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	4	3	300
Total dissolved solids (mg/L)	458	408	1500
TSS(mg/L)	38	28	-
Total Hardness(mg/L)	362.54	301.99	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	27.59	25.62	600
Sulphate(mg/L)	134.4	154.60	400
Nitrate(mg/L)	4.82	3.42	50
Fluoride(mg/L)	0.68	0.50	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.164	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	94	110	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.8
Area: Bharatpur
Project: Bharatpur OCP

Project/OCP	Bharatpur OCP		
NAME OF STATIONS	Pond Water near N-W point of mine		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	27-May-24	25-Nov-24	
pH	7.71	7.59	6.5-8.5
Dissolved Oxygen(mg/L)	6.1	6.3	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	1	4	300
Total dissolved solids (mg/L)	364	308	1500
TSS(mg/L)	30	24	-
Total Hardness(mg/L)	282.86	234.44	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	23.65	19.71	600
Sulphate(mg/L)	104.8	90.18	400
Nitrate(mg/L)	0.74	<0.5	50
Fluoride(mg/L)	0.60	0.70	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	0.005	0.1
Zinc(mg/L)	0.045	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	28	94	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.9
Area: Bharatpur
Project: Bharatpur OCP

Project/OCP	Bharatpur OCP		
NAME OF STATIONS	Jambubahali Village Pond		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	27-May-24	25-Nov-24	
pH	7.76	7.35	6.5-8.5
Dissolved Oxygen(mg/L)	6.6	6.6	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	2	3	300
Total dissolved solids (mg/L)	348	294	1500
TSS(mg/L)	36	34	-
Total Hardness(mg/L)	286.85	182.79	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	25.62	49.27	600
Sulphate(mg/L)	102.6	32.76	400
Nitrate(mg/L)	0.68	<0.5	50
Fluoride(mg/L)	0.65	0.47	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.102	0.1	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	63	120	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.10
Area: Lingraj
Project: Lingraj OCP

Project/OCP	Lingraj OCP			
NAME OF STATIONS	Village pond near Deulbera siding			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	28-May-24	26-Nov-24	21-Jan-25	
pH	7.29	7.89	7.62	6.5-8.5
Dissolved Oxygen(mg/L)	6.0	6.8	6.3	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	3	3	3	300
Total dissolved solids (mg/L)	484	908	198	1500
TSS(mg/L)	46	44	57	-
Total Hardness(mg/L)	330.67	735.12	99.34	-
Copper(mg/L)	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	50
Chlorides(mg/L)	21.68	33.51	30.88	600
Sulphate(mg/L)	42.36	282.21	24.38	400
Nitrate(mg/L)	0.98	10.41	<5	50
Fluoride(mg/L)	0.59	0.60	<0.3	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	<0.04	0.04	0.10	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	70	110	4.5	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Table: 10.2.5.11

Area: Kaniha**Project:** Kaniha OCP

Project/OCP	Kaniha OCP		
NAME OF STATIONS	Singada jhor stream nearer to Village Khairnali as u/s Water for Kaniha OCP		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	29-May-24	27-Nov-24	
pH	7.59	7.67	6.5-8.5
Dissolved Oxygen(mg/L)	6.2	6.4	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	2	4	300
Total dissolved solids (mg/L)	154	306	1500
TSS(mg/L)	26	34	-
Total Hardness(mg/L)	95.62	226.50	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	13.8	23.65	600
Sulphate(mg/L)	42.48	58.90	400
Nitrate(mg/L)	<0.5	1.18	50
Fluoride(mg/L)	0.78	0.74	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.068	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	150	120	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.12

Area: Kaniha**Project:** Kaniha OCP

Project/OCP	Kaniha OCP		
NAME OF STATIONS	Before Junction Point of Singadajhor & Brahmani River at Balangi Village as d/s for Kaniha OCP		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	29-May-24	27-Nov-24	
pH	7.64	7.53	6.5-8.5
Dissolved Oxygen(mg/L)	5.6	6.2	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	1	2	300
Total dissolved solids (mg/L)	78	108	1500
TSS(mg/L)	44	38	-
Total Hardness(mg/L)	39.84	31.79	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	15.77	9.85	600
Sulphate(mg/L)	9.28	12.39	400
Nitrate(mg/L)	<0.5	<0.5	50
Fluoride(mg/L)	0.71	0.39	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	0.014	0.1
Zinc(mg/L)	<0.04	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	120	130	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.13
Area: Kaniha
Project: Kaniha OCP

Project/OCP	Kaniha OCP		
NAME OF STATIONS	Tikra Nadi Near Kaniah Village as u/s Water for Kaniah OCP		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	29-May-24	27-Nov-24	
pH	7.93	7.44	6.5-8.5
Dissolved Oxygen(mg/L)	5.8	6.7	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	2	1	300
Total dissolved solids (mg/L)	238	164	1500
TSS(mg/L)	32	32	-
Total Hardness(mg/L)	175.30	99.34	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	13.8	15.77	600
Sulphate(mg/L)	13.7	27.36	400
Nitrate(mg/L)	<0.5	<0.5	50
Fluoride(mg/L)	0.42	0.36	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.146	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	84	130	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.14

Area: Kaniha**Project:** Kaniha OCP

Project/OCP	Kaniha OCP		
NAME OF STATIONS	Tikra Nadi Near Shagarhi Pala Village as d/s Water for Kaniha OCP		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	29-May-24	27-Nov-24	
pH	8.01	7.41	6.5-8.5
Dissolved Oxygen(mg/L)	6.7	6.3	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	3	3	300
Total dissolved solids (mg/L)	328	168	1500
TSS(mg/L)	38	26	-
Total Hardness(mg/L)	239.04	99.34	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	80.81	15.77	600
Sulphate(mg/L)	54.8	29.33	400
Nitrate(mg/L)	0.74	<0.5	50
Fluoride(mg/L)	0.35	0.53	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.059	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	79.0	140.0	-
Chromium(as Cr⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.15
Area: Hingula
Project: Hingula OCP

Project/OCP	Hingula OCP			
NAME OF STATIONS	Singadhajhor Stream Near Kumunda village			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	29-May-24	27-Nov-24	22-Jan-25	
pH	8.14	8.06	8.15	6.5-8.5
Dissolved Oxygen(mg/L)	6.4	6.7	6.6	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	2	2	1	300
Total dissolved solids (mg/L)	174	226	336	1500
TSS(mg/L)	26	30	38	-
Total Hardness(mg/L)	103.58	147.02	198.68	-
Copper(mg/L)	<0.03	<0.03	0.03	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	50
Chlorides(mg/L)	15.77	21.68	27.02	600
Sulphate(mg/L)	21.38	34.85	64.39	400
Nitrate(mg/L)	<0.5	<0.5	4.38	50
Fluoride(mg/L)	0.42	0.78	0.32	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.01	0.1
Zinc(mg/L)	0.087	<0.04	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	110	110	6	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Table: 10.2.5.16

Area: Hingula**Project:** Hingula OCP

Project/OCP	Hingula OCP			
NAME OF STATIONS	Singadhajhor Stream Near Baghabaspur village			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	29-May-24	27-Nov-24	22-Jan-25	
pH	8.10	8.13	8.07	6.5-8.5
Dissolved Oxygen(mg/L)	6.7	6.9	6.8	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	3	1	2	300
Total dissolved solids (mg/L)	286	234	324	1500
TSS(mg/L)	34	28	36	-
Total Hardness(mg/L)	179.28	154.97	202.65	-
Copper(mg/L)	<0.03	<0.03	0.04	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	50
Chlorides(mg/L)	27.59	21.68	27.02	600
Sulphate(mg/L)	48.6	34.60	61.92	400
Nitrate(mg/L)	0.6	<0.5	4.24	50
Fluoride(mg/L)	0.46	0.33	0.34	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	0.012	0.007	0.1
Zinc(mg/L)	0.088	<0.04	0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	120	120	6.1	-
Chromium(as Cr⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Table: 10.2.5.17
Area: Hingula
Project: Hingula OCP

Project/OCP	Hingula OCP			
NAME OF STATIONS	Pond Water of Kankarei Village			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	29-May-24	27-Nov-24	22-Jan-25	
pH	8.18	8.03	7.93	6.5-8.5
Dissolved Oxygen(mg/L)	6.2	6.4	6.9	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	1	3	2	300
Total dissolved solids (mg/L)	98	78	342	1500
TSS(mg/L)	48	38	31	-
Total Hardness(mg/L)	43.82	43.71	162.92	-
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	50
Chlorides(mg/L)	23.65	5.91	13.51	600
Sulphate(mg/L)	8.28	10.67	36.30	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	50
Fluoride(mg/L)	0.38	0.47	0.51	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	<0.04	<0.04	0.05	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	110	79	8.1	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Table: 10.2.5.18
Area: Hingula
Project: Balaram OCP

Project/OCP	Balaram OCP			
NAME OF STATIONS	Derjenga reservoir as a part of Impact Study			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	29-May-24	27-Nov-24	22-Jan-25	
pH	7.95	8.04	8.37	6.5-8.5
Dissolved Oxygen(mg/L)	6.8	6.8	6.6	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	3	3	2	300
Total dissolved solids (mg/L)	162	224	268	1500
TSS(mg/L)	46	34	41	-
Total Hardness(mg/L)	83.66	143.05	154.97	-
Copper(mg/L)	<0.03	<0.03	0.04	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	50
Chlorides(mg/L)	17.74	15.77	15.44	600
Sulphate(mg/L)	9.16	20.37	23.29	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	50
Fluoride(mg/L)	0.47	0.57	0.68	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.008	0.1
Zinc(mg/L)	0.505	<0.04	0.05	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	130	150	12	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Table: 10.2.5.19
Area: Hingula
Project: Balaram OCP

Project/OCP	Balaram OCP			
NAME OF STATIONS	Pond water of Ambapal Village			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	29-May-24	27-Nov-24	22-Jan-25	
pH	8.05	7.97	7.88	6.5-8.5
Dissolved Oxygen(mg/L)	5.9	6.2	6.2	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	3	2	2	300
Total dissolved solids (mg/L)	262	254	298	1500
TSS(mg/L)	36	26	33	-
Total Hardness(mg/L)	199.20	111.26	107.29	-
Copper(mg/L)	<0.03	<0.03	0.04	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	50
Chlorides(mg/L)	21.68	55.19	52.11	600
Sulphate(mg/L)	28.46	43.07	129.73	400
Nitrate(mg/L)	0.72	6.72	1.16	50
Fluoride(mg/L)	0.59	0.76	<0.3	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.008	0.1
Zinc(mg/L)	0.062	0.07	0.06	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	94	94	6.1	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Table: 10.2.5.20
Area: Talcher
Project: Talcher Colliery

Project/OCP	Talcher Colliery		
NAME OF STATIONS	Pond Water of Dera Village		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	28-May-24	26-Nov-24	
pH	8.18	7.63	6.5-8.5
Dissolved Oxygen(mg/L)	6.3	6.7	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	2	4	300
Total dissolved solids (mg/L)	228	116	1500
TSS(mg/L)	42	58	-
Total Hardness(mg/L)	119.52	59.60	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	43.36	15.77	600
Sulphate(mg/L)	36.16	17.30	400
Nitrate(mg/L)	0.85	<0.5	50
Fluoride(mg/L)	0.64	0.79	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.050	0.2	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	110	84	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.21
Area: Talcher
Project: Nandira Colliery

Project/OCP	Nandira Colliery		
NAME OF STATIONS	Jambubahali Village Pond		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	28-May-24	26-Nov-24	
pH	8.19	7.98	6.5-8.5
Dissolved Oxygen(mg/L)	5.7	6.2	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	1	3	300
Total dissolved solids (mg/L)	136	152	1500
TSS(mg/L)	32	40	-
Total Hardness(mg/L)	79.68	75.50	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	25.62	29.56	600
Sulphate(mg/L)	32.78	19.88	400
Nitrate(mg/L)	<0.5	<0.5	50
Fluoride(mg/L)	0.83	0.60	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.093	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	84	120	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.22
Area: Talcher
Project: Deulbera Colliery

Project/OCP	Deulbera Colliery		
NAME OF STATIONS	Pond Water of Gopinathpur Village		IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	28-May-24	26-Nov-24	
pH	8.12	8.01	6.5-8.5
Dissolved Oxygen(mg/L)	6.4	6.5	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	2	4	300
Total dissolved solids (mg/L)	118	148	1500
TSS(mg/L)	26	32	-
Total Hardness(mg/L)	79.68	111.26	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	15.77	9.85	600
Sulphate(mg/L)	16.28	8.60	400
Nitrate(mg/L)	<0.5	<0.5	50
Fluoride(mg/L)	0.95	0.50	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	<0.04	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	70	84	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.23

Area: Talcher

Project: Handhidhua Colliery

Project/OCP	Handhidhua Colliery		
NAME OF STATIONS	Pond Near Handhidhua		IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	28-May-24	26-Nov-24	
pH	7.69	8.10	6.5-8.5
Dissolved Oxygen(mg/L)	5.6	6.9	4
BOD (3 days 27°C) (mg/L)	<2	<2	3
Color (Hazen unit)	3	3	300
Total dissolved solids (mg/L)	104	240	1500
TSS(mg/L)	34	40	-
Total Hardness(mg/L)	43.82	154.97	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Chlorides(mg/L)	11.82	29.56	600
Sulphate(mg/L)	14.12	53.62	400
Nitrate(mg/L)	<0.5	<0.5	50
Fluoride(mg/L)	0.60	0.74	1.5
Cadmium(mg/L)	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	<0.04	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	0.005
MPN (Index/100 ml)	84	110	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2

Table: 10.2.5.24

Area: Talcher**Project:** Mandapal Sand Mine

Project/OCP	Mandapal Sand Mine			
NAME OF STATIONS	Upstream - At 200 m before leasehold area			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	28-May-24	26-Nov-24	21-Jan-25	
pH	7.84	7.61	8.34	6.5-8.5
Dissolved Oxygen(mg/L)	6.6	6.6	6.8	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	3	2	4	300
Total dissolved solids (mg/L)	110	80	90	1500
TSS(mg/L)	34	28	35	-
Total Hardness(mg/L)	71.71	43.71	47.68	-
Copper(mg/L)	<0.03	<0.03	0.03	1.5
Iron(mg/L)	<0.1	0.12	<0.1	50
Chlorides(mg/L)	13.8	5.91	7.72	600
Sulphate(mg/L)	18.72	13.74	10.69	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	50
Fluoride(mg/L)	0.37	0.47	0.52	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	<0.04	<0.04	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	140	110	5.5	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Table: 10.2.5.25

Area: Talcher**Project:** Mandapal Sand Mine

Project/OCP	Mandapal Sand Mine			
NAME OF STATIONS	Downstream - At 200 m after leasehold area			IS:2296-1982 Tolerance for inland Surface water (ClassC)
Date of sampling	28-May-24	26-Nov-24	21-Jan-25	
pH	7.91	7.83	8.40	6.5-8.5
Dissolved Oxygen(mg/L)	6.0	6.2	6.5	4
BOD (3 days 27°C) (mg/L)	<2	<2	<2	3
Color (Hazen unit)	2	4	3	300
Total dissolved solids (mg/L)	138	122	94	1500
TSS(mg/L)	40	36	30	-
Total Hardness(mg/L)	91.63	75.50	71.52	-
Copper(mg/L)	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	50
Chlorides(mg/L)	17.74	9.85	9.65	600
Sulphate(mg/L)	20.14	16.81	14.35	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	50
Fluoride(mg/L)	0.65	0.33	0.60	1.5
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	<0.04	<0.04	<0.04	15
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
MPN (Index/100 ml)	170	120	5.6	-
Chromium(as Cr ⁶)(mg/L)	<0.05	<0.05	<0.05	0.05
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

GROUND WATER LEVEL AT PIEZOMETRIC LOCATIONS

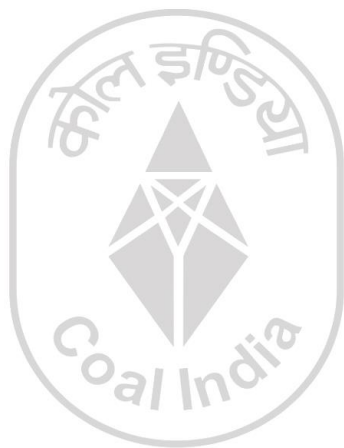


TABLE NO 10 FOR PIEZOMETER QUANTITY DATA

Table:10.2.6.1

Project	Station	Date	Ground Water level (mbgl)
Jagannath OCP	Piezometer no MTP 04; Inside central nursery (beside golf hut), Jagannath area	23-May-24	4.3
	Piezometer no MTP 04; Inside central nursery (beside golf hut), Jagannath area	07-Aug-24	3.53
	Piezometer no MTP 04; Inside central nursery (beside golf hut), Jagannath area	18-Nov-24	4.23
	Piezometer no MTP 04; Inside central nursery (beside golf hut), Jagannath area	06-Jan-25	5

Table:10.2.6.2

Project	Station	Date	Ground Water level (mbgl)
Ananta OCP	Piezometer no MTP 05; Outside Ananta OCP canteen	23-May-24	27.2
	Piezometer no MTP 05; Outside Ananta OCP canteen	06-Aug-24	30.2
	Piezometer no MTP 05; Outside Ananta OCP canteen	18-Nov-24	Collapsed
	Piezometer no MTP 05; Outside Ananta OCP canteen	06-Jan-25	Collapsed

Table:10.2.6.3

Project	Station	Date	Ground Water level (mbgl)
Bharatpur OCP	Piezometer no MTP 09; Inside the premises of Joragarhia Panchayat high school	23-May-24	5.78
	Piezometer no MTP 09; Inside the premises of Joragarhia Panchayat high school	07-Aug-24	4.68
	Piezometer no MTP 09; Inside the premises of Joragarhia Panchayat high school	18-Nov-24	6.33
	Piezometer no MTP 09; Inside the premises of Joragarhia Panchayat high school	06-Jan-25	8

Table:10.2.6.4

Project	Station	Date	Ground Water level (mbgl)
Lingraj OCP	Piezometer no MTP 01; Inside the premises of Mandapal hospital	24-May-24	11.4
	Piezometer no MTP 01; Inside the premises of Mandapal hospital	07-Aug-24	9.74
	Piezometer no MTP 01; Inside the premises of Mandapal hospital	18-Nov-24	7.6
	Piezometer no MTP 01; Inside the premises of Mandapal hospital	06-Jan-25	8.1

Table:10.2.6.5

Project	Station	Date	Ground Water level (mbgl)
Kaniha OCP	Piezometer no MTP 20; Inside the premises of Kansamunda village old site office, MCL	25-May-24	36.2
	Piezometer no MTP 20; Inside the premises of Kansamunda village old site office, MCL	08-Aug-24	15.2
	Piezometer no MTP 20; Inside the premises of Kansamunda village old site office, MCL	18-Nov-24	8
	Piezometer no MTP 20; Inside the premises of Kansamunda village old site office, MCL	06-Jan-25	10

Table:10.2.6.6

Project	Station	Date	Ground Water level (mbgl)
Kaniha OCP	Piezometer no MTP 19; Outside Golaghar sahi primary school, Bijigol (school constructed by NTPC)	25-May-24	5.32
	Piezometer no MTP 19; Outside Golaghar sahi primary school, Bijigol (school constructed by NTPC)	08-Aug-24	3.71
	Piezometer no MTP 19; Outside Golaghar sahi primary school, Bijigol (school constructed by NTPC)	18-Nov-24	5.66
	Piezometer no MTP 19; Outside Golaghar sahi primary school, Bijigol (school constructed by NTPC)	06-Jan-25	7

Table:10.2.6.7

Project	Station	Date	Ground Water level (mbgl)
Kaniha OCP	Piezometer no MTP 18; Inside the premisses of Chellia Prathamiki school	25-May-24	6.2
	Piezometer no MTP 18; Inside the premisses of Chellia Prathamiki school	09-Aug-24	5.4
	Piezometer no MTP 18; Inside the premisses of Chellia Prathamiki school	18-Nov-24	9.9
	Piezometer no MTP 18; Inside the premisses of Chellia Prathamiki school	06-Jan-25	11.8

Table:10.2.6.8

Project	Station	Date	Ground Water level (mbgl)
Balram OCP	Piezometer no MTP 10; Inside the premises of Danara high school	25-May-24	Casing jammed
	Piezometer no MTP 10; Inside the premises of Danara high school	10-Aug-24	Casing jammed
	Piezometer no MTP 10; Inside the premises of Danara high school	18-Nov-24	10
	Piezometer no MTP 10; Inside the premises of Danara high school	06-Jan-25	12

Table:10.2.6.9

Project	Station	Date	Ground Water level (mbgl)
Balram OCP	Piezometer no MTP 12; In Betianalli village, opposite to Sindhu deori's house	25-May-24	7.61
	Piezometer no MTP 12; In Betianalli village, opposite to Sindhu deori's house	10-Aug-24	6.52
	Piezometer no MTP 12; In Betianalli village, opposite to Sindhu deori's house	18-Nov-24	6
	Piezometer no MTP 12; In Betianalli village, opposite to Sindhu deori's house	06-Jan-25	7.2

Table:10.2.6.10

Project	Station	Date	Ground Water level (mbgl)
Hingula OCP	Piezometer no MTP 16; Backside of Hingula Mandir VIP guest house	25-May-24	12.16
	Piezometer no MTP 16; Backside of Hingula Mandir VIP guest house	09-Aug-24	9.6
	Piezometer no MTP 16; Backside of Hingula Mandir VIP guest house	18-Nov-24	Pump fitted depth could not be measured
	Piezometer no MTP 16; Backside of Hingula Mandir VIP guest house	06-Jan-25	Pump fitted depth could not be measured

Table:10.2.6.11

Project	Station	Date	Ground Water level (mbgl)
Hingula OCP	Piezometer no MTP 15; Beside Sujan Pradhan's house in Chottaberani village, near nalla.	25-May-24	5.82
	Piezometer no MTP 15; Beside Sujan Pradhan's house in Chottaberani village, near nalla.	09-Aug-24	4.68
	Piezometer no MTP 15; Beside Sujan Pradhan's house in Chottaberani village, near nalla.	18-Nov-24	Pump fitted depth could not be measured
	Piezometer no MTP 15; Beside Sujan Pradhan's house in Chottaberani village, near nalla.	06-Jan-25	Pump fitted depth could not be measured

Table:10.2.6.12

Project	Station	Date	Ground Water level (mbgl)
Nandira Colliery	Piezometer no MTP 11; Inside the premises of Hingula area office	24-May-24	8.21
	Piezometer no MTP 11; Inside the premises of Hingula area office	07-Aug-24	9.74
	Piezometer no MTP 11; Inside the premises of Hingula area office	18-Nov-24	7
	Piezometer no MTP 11; Inside the premises of Hingula area office	06-Jan-25	8.05