ANNUAL REPORT

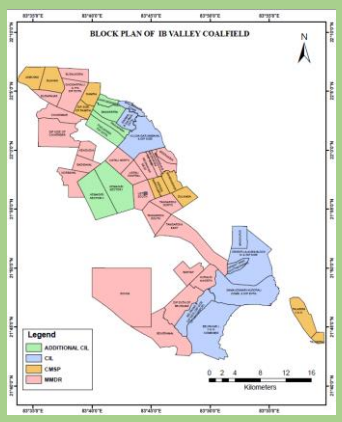
OF

ROUTINE ENVIRONMENTAL MONITORING

OF

IB VALLEY COAL FIELD

YEAR: 2024-25



CLIENT NAME	**MAHANADI COALFIELDS LIMITED, JAGRUTI VIHAR, BURLA, SAMBALPUR – 768020**
SITE LOCATION	IB Valley 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 is essential for understanding environmental conditions, detecting potential risks, and implementing timely mitigation measures. REM includes data collection, analysis, and interpretation related to air quality, water quality, and noise levels. The information generated supports decision-making processes and aids in the preparation of Environmental Impact Assessment (EIA) and Environmental Management Plans (EMP) as mandated for environmental clearances by the Ministry of Environment, Forest and Climate Change (MoEF&CC).

M/s Central Mine Planning & Design Institute Ltd (CMPDI), Regional Institute-VII, Bhubaneswar, has been entrusted with the task of conducting Routine Environmental Monitoring for the Ib Valley Coalfield of M/s Mahanadi Coalfields Ltd (MCL), as per work order no. MCL/HQ/Env & Forest/24-25/1422 dated 09-04-2024.

The monitoring has been conducted for the year 2024–25. The results of the monitoring, including data and relevant graphical presentations, are presented in this report.

We express our sincere gratitude to the General Manager (Environment & Forest), MCL, Burla, for the opportunity to undertake this work. We also thank all supporting staff for their cooperation during 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	Analyser 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 (CMPDI), Regional Institute-VII, Bhubaneswar, has been entrusted with the responsibility of conducting Routine Environmental Monitoring (REM) for the Talcher and Ib Valley Coalfields of M/s Mahanadi Coalfields Limited (MCL) for the financial year 2024–25. The monitoring encompasses various environmental components including ambient air, effluent, drinking water, and surface water, groundwater, and noise levels.

The data generated through this systematic monitoring is critical for assessing the environmental quality of the project area. It supports effective environmental management, helps identify potential risks, and facilitates evidence-based decision-making. Furthermore, the data serves as an essential input for the preparation of Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) reports for various projects under MCL.

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 PM_{10}, $PM_{2.5}$, gaseous pollutants (SO_2, NO_2, 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), PM_{10}, SOx, and NOx

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, Class 'a' – General Standards for Discharge of Environmental Pollutants** 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**.

SECTION 5: CONCEPT & METHODOLOGY

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, identify emerging trends, and evaluate the effectiveness of environmental management practices. It serves as the foundation for data-driven decision-making, regulatory compliance, and the development of effective environmental protection and conservation strategies.

Key components of Routine Environmental Monitoring include:

1. **Data Collection:**
   Regular collection of environmental data using standardized techniques such as sampling, field observations, instrumental measurements, laboratory analysis, and remote sensing. Data is gathered from fixed monitoring stations, portable units, and field surveys.
2. **Parameter Selection:**
   Selection of environmental parameters depends on the objectives of the monitoring program. These may include air pollutants (PM_{10}, $PM_{2.5}$, SO_2, NO_2, etc.), water quality indicators (pH, TDS, heavy metals, BOD, etc.), and noise levels, among others.
3. **Monitoring Network:**
   A strategically planned network of monitoring stations is established across core and buffer zones to ensure spatially representative data. This may include permanent stations, mobile units, and supplementary data from other validated sources.
4. **Data Analysis and Interpretation:**
   Collected data is processed and analyzed using statistical tools, modelling, and GIS-based methods to identify trends, assess compliance, and detect anomalies. Interpretation enables evaluation of environmental performance over time.
5. **Reporting and Communication:**
   Timely and transparent reporting of monitoring outcomes is essential. Reports, visual summaries, and data sharing with stakeholders help in raising awareness, regulatory enforcement, and collaborative environmental management.

5.2 Scope of Work

The scope of this study is to monitor the current environmental conditions in and around the Ib Valley Coalfield with respect to ambient air, water, and noise quality. The monitoring was conducted for the Year 2024–25. The data generated will be used to assess the prevailing environmental scenario and compare it with the applicable standards prescribed by CPCB, MoEF & CC, and other statutory bodies. This will also help in identifying any deviations and guide corrective measures, if required.

5.3 Methodology

In the present study, standard and approved methods were adopted for the collection, analysis, and interpretation of environmental data. These include:

- **Air Quality Monitoring:** Conducted as per IS: 5182 series and CPCB guidelines for ambient air quality assessment.
- **Water Quality Monitoring:** Sampling and analysis were done as per APHA (Standard Methods for Examination of Water and Wastewater) and BIS standards for drinking, surface, and effluent water.
- **Noise Monitoring:** Carried out in accordance with "The Protocol for Ambient Noise Monitoring" as prescribed by CPCB, capturing data during day and night time.

- **Sample Handling and Laboratory Analysis:** All samples were collected using standard protocols, preserved properly, and analyzed in NABL-accredited laboratories or laboratories meeting quality control requirements.

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,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-NH3 B,F	Spectrophotometer
72	Waste Water (Effluent/Sewage)	Ammonical Nitrogen as N	APHA 24th Ed 4500-NH3 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

The selection of sampling sites is a critical step in initiating Routine Environmental Monitoring (REM) as it directly influences the relevance and accuracy of data generated. Proper site selection provides insights into the type of environmental compliance measures and management strategies to be adopted by the project proponent.

Sampling stations were selected considering key meteorological parameters such as predominant wind direction (based on IMD data), wind speed, and the physiographic features of the area. This ensures that the monitoring network captures representative environmental conditions across the project site.

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
West of the Mine	21	47	57.60	83	52	38.60
South of the Mine	21	47	10.80	83	53	53.30
East of the Mine	21	48	13.20	83	55	11.80
South East of the Mine	21	47	37.80	83	55	22.10
Near Project Office	21	49	21.40	83	54	53.50
Near South Coal Stock	21	48	51.50	83	54	2.60
VIP Guest House, IB Valley	21	50	11.80	83	54	52.20
Khokelmal	21	49	18.20	83	52	52.00
Chuakani	21	50	24.44	83	53	53.53
West of Lakhanpur Quarry Near Solada	21	45	12.64	83	48	4.05
Kirulbal Village	21	43	50.66	83	49	49.13
BOCM Workshop	21	45	35.75	83	51	43.28
Lilari Magazine House	21	47	7.32	83	51	13.70
Bartap Village North West of Mine	21	48	41.55	83	48	31.15
Lakhanpur Police Station West of Mine	21	45	53.59	83	46	9.43
Barihapali Village South West of Mine	21	42	47.35	83	47	1.18
Gumadera Village North of Mine	21	48	44.24	83	51	33.06
Ramada Village South of Mine	21	41	34.41	83	49	42.32
Kadam Rehab Centre East of Mine	21	44	13.28	83	51	58.33
North of the Sardega Railway Siding, Kulapada	22	4	16.10	83	42	37.00
West of Coal Stock, Near Golf Course	22	3	49.60	83	44	19.70
South West of Working face Gopalpur Village, Near CMPDI Camp	22	3	15.80	83	42	17.50
Khamarpara, East Side of Sardega Railway Siding	22	4	5.64	83	43	54.5
Sarangijharia Village	22	6	17.58	83	43	37.56
Ratansara Village	22	3	22.48	83	40	19.20
External CT Road, Barpali	22	2	13.96	83	46	48.90
Laikera Railway Siding	21	59	50.8	83	49	44.61
North of CHP, Teleimal	22	2	55.34	83	46	54.50
South West of Working Face, Chakarpur	22	1	47.90	83	41	58.20
Bilaimunda Village	22	2	2.99	83	36	48.21
Karlikachar	22	0	54.00	83	44	40.40

Name of Air Monitoring Station	Latitude			Longitude		
	DD	MM	SS.SS	DD	MM	SS.SS
Garjanbahal	22	0	42.72	83	45	48.80
KAN-1 Near Coal Sampling Lab	21	52	42.60	83	43	46.60
South-East of Working Face, Kutabaga	21	59	40.10	83	44	28.30
Bihaimunda Village	22	0	19.07	83	43	58.63
Orient Mine No. 1 & 2	21	50	1.20	83	55	4.40
IB Valley GM Office	21	51	13.66	83	55	22.48
Orient Mine No. 3	21	50	40.80	83	54	29.30
Orient Mine No. 4	21	51	36.60	83	54	41.50
HBI Mine	21	46	56.70	83	54	52.80
Bundia Colony Pump House	21	47	20.60	83	54	56.50
Rampur Officers Guest House	21	48	5.40	83	55	20.90
Rampur Sub Area	21	48	7.10	83	55	30.20
Near CHP HRC	21	48	47.00	83	55	23.00
Near Rampur Colliery Check Post	21	48	42.00	83	55	22.00

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.

Area	Project	Name of the Station
IB Valley	Samaleswari	Pandren Nallah near Global Washery u/s
		Pandren Nallah Before Confluence Point with Lilari Nallah d/s
		Lajkura Pond Water
	Lajkura	U/S of Baghmara Nala at Discharge Point
		D/S of Baghmara Nala at Discharge Point
Lakhanpur	LBL OCP	Pulijhor Stream Near Tingismal Village (u/s of Lakhanpur OCP)
		Pulijhor Stream Near Darlipalil Village before Confluence to Lilari Nallah (d/s of Lakhanpur OCP)
		Lilari Nallah Near Kudaloi Village (u/s of Lakhanpur OCP)
		Lilari Nallah Near Lilari Bridge Village (d/s of Lakhanpur OCP)
		Confluence point of Lilari Nallah with IB River
		Jurabaga Pond
		Adhapada Village
Mahalaxmi	Basundhara (W)	Basundhara River u/s point near Tiklipara
		Basundhara River d/s point near Tiklipara

Area	Project	Name of the Station
Basundhara	Kulda	Basundhara River near Bankibahal bridge as u/s water
		Basundhara River near Barpali Village as d/s water
		Chattanjhor nallah near Tumulia Village as u/s water
		Chattanjhor nallah near Siarmal Village as d/s water
		Kund Pond water
	Garjanbahal	Basundhara River near Bandhpali Village as d/s water
Orient	Orient Mine No. 1 & 2	U/S of Baghmara Nala at Discharge Point
		D/S of Baghmara Nala at Discharge Point
	Orient Mine No. 3	Pond Water at Budhijam Village
	Orient Mine No. 4	IB River Near Charbhati Village as u/s Water for IB Valley Coalfield
		IB River Bridge of NH200 at Gondghora Village as u/s of Orient Area
	HBI	IB River near Kutabaga Village at Bridge Point

Table No. 4: List of Drinking water collection points

SL. NO.	Area	OCP/UG/HQ	NAME OF THE STATION
1	IB Valley	Samleswari	Well Water from Kudopali
2			Tap Water from Samleswari OCP Colony
3			Water from IWSS, IB Valley Area
4			Well Water from Lajkura
5		Lajkura	Madhuban Nagar Well Water
6			Adarsh Nagar Colony Well Water
7			Chhualiberna Village Well Water
8			VIP Guest House Tap Water
9	Lakhanpur	LBL OCP	Tap water at LKP Project Office
10			IWSS Outlet
11	Mahalaxmi	Basundhara (W)	Water Treatment Plant Clear Water reservoir
12	Basundhara	Kulda	Well at Sahaspur
13			Well at Teleimal
14		Garjhanbahal	Well at Garjanbahal Village
15			South West of Coalface
16	Orient	Orient Mine No. 1 & 2	Tap Water at Budhijam Colony
17			Mine No. 1 & 2 Filter Plant
18		Orient Mine No. 3	Mine No. 3 Filter Plant
19		HBI Mine	Tap Water at Rampur Colony
20			HBI Water Filter Plant
21	MCL(HQ)	MCL(HQ)	Tap Water at DAV School (Anand Vihar)
22			Tap Water at Cooperate Office (Jagruthi Vihar)
23			Inlet to Water Treatment Plant (Anand Vihar)
24			Outlet of Water Treatment Plant (Anand Vihar)

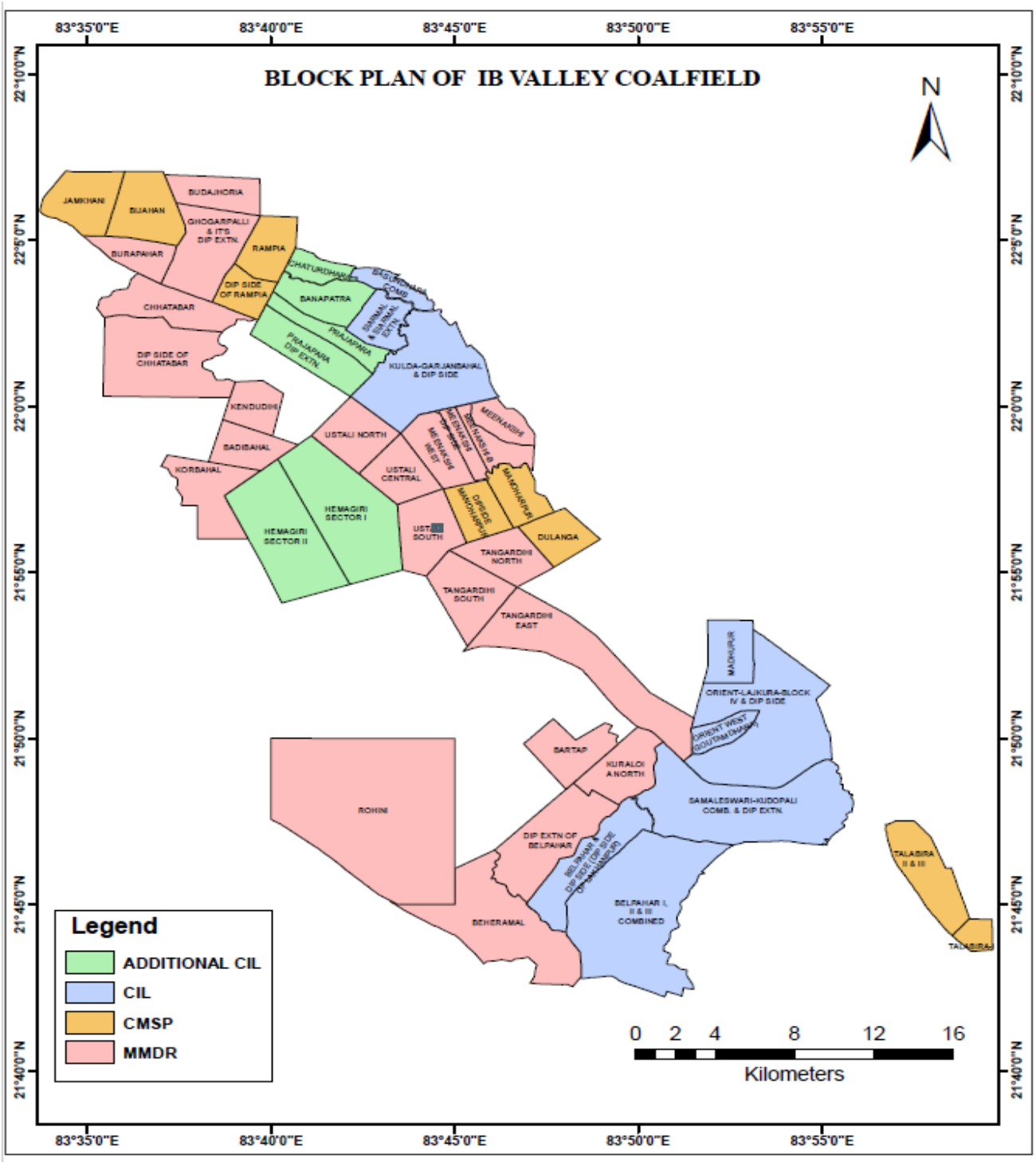
Table No 5 List of Noise monitoring stations

Sl. No.	Area	Project (OCP/UG)	Name of the station
1	Ib Valley	Samleswari	West of the Mine
2			South of the Mine
3			East of the Mine
4			South East of the Mine
5			Rampur Sub Area
6			Khokelmal (Reported)
7		Lajkura	Near Project Office
8			Near South Coal Stock
9			VIP guest house, IB Valley
10			Khokelmal
11			Chuakani
12	Lakhanpur	LBL OCP	Kirulbal Village
13			Lilari Magazine House
14			BOCM Workshop
15			West of Lakhanpur Quarry Near Solada
16			Kadam Rehab Centre East of Mine
17			Lakhanpur Police Station West of Mine
18			Gumadera Village North of Mine
19			Ramada Village South of Mine
20			Barihapali Village South West of Mine
21			Bartap Village North West of Mine
22	Mahalaxmi	Basundhara(W)	North of the Sardega Railway Siding, Kulapada
23			West of Coal Stock, Near Golf Course
24			South West of Working face Gopalpur Village, Near CMPDI Camp
25			Sarangijharia Village
26			Ratansara Village
27	Basundhara	Kulda	External CT Road
28			North of CHP
29		Garjanbahal OCP	Karlikachar Village
30			Garjanbahal Village
31	Orient	Orient Mine No. 1 & 2	Orient Mine No. 1 & 2
32			VIP guest house, IB Valley (Reported)
33		Orient Mine No. 3	Orient Mine No. 3
34		Orient Mine No. 4	Orient Mine No. 4
35		HBI Mine	HBI Mine
36			Bundia Colony Pump House
37			Rampur Officers Guest House
38			Rampur Sub Area (Reported)
39		HRC	Near CHP HRC
40			Near Rampur Colliery Check Post

Table No. : 6: Description of piezometer locations

Sl. No.	Project (OCP/UG)	Piezometer No.	Latitude			Longitude			Location of Piezometer
			DD	MM	SS.SS	DD	MM	SS.SS	
1	Samleswari	MIP 04	21	47	56.00	83	56	24.00	Inside Kutabaga Church
2	Lajkura	MIP 02	21	47	56.60	83	52	29.50	Jamkani Primary School
3	LBL OCP	MIP 06	21	46	42.30	83	51	31.00	Near Lilari PO Office
4		MIP 09	21	45	49.40	83	47	42.50	Junion Forest Office
5		MIP 10	21	46	51.20	83	48	47.70	Dahaldera Primary School
6		MIP 07	21	45	11.00	83	52	6.10	Bandhbahal DAV School
7		MIP 08	21	43	9.40	83	50	4.00	Kusraloi Village School
8	Basundhara (W)	MIP 15	22	4	9.70	83	43	19.60	School Sardega Village
9		MIP 16	22	4	12.00	83	42	36.70	Kulapada Village
10		MIP 13	22	1	7.30	83	43	10.00	Tumulia College
11		MIP 17	22	3	15.80	83	42	17.50	CMPDI Gopalpur Camp
12	Kulda	MIP 01	22	0	42.00	83	45	52.70	Garjanbahal Primary School
13		MIP 11	22	0	50.00	83	44	42.70	Karlikachhar Primary School
14		MIP 12	22	2	0.00	83	45	15.40	Kulda PO Office
15		MIP 14	22	1	55.40	83	43	46.40	Kulda Primary School
16	Garjanbahal	MIP 01	22	0	42.00	83	45	52.70	Garjanbahal Primary School
17		MIP 11	22	0	50.00	83	44	42.70	Karlikachhar Primary School
18	Orient Mine No. 1 & 2	MIP 03	21	51	15.80	83	55	37.50	IB Valley GM Office
19		MIP 05	21	49	5.60	83	52	44.20	Narshingh High School, Chhualiberna
20	HBI	MIP 05	21	49	5.60	83	52	44.20	Narshingh High School, Chhualiberna

STUDY AREA


BLOCK PLAN OF IB VALLEY COALFIELD
N
83°35'0"E
83°40'0"E
83°45'0"E
83°50'0"E
83°55'0"E
22°10'0"N
22°5'0"N
22°0'0"N
21°55'0"N
21°50'0"N
21°45'0"N
21°40'0"N
JAMKHANI
BIJAHAN
BUDAJHORIA
GHOGARPALLI & ITS DIP EXTN.
BURAPAHAR
RAMPIA
DIP SIDE OF RAMPIA
CHHATABAR
DIP SIDE OF CHHATABAR
CHATURDHARA
BAGUNDHARA COMB.
BANAPATRA
SAHAJAL & SAHAJAL EXTN.
PRAJAPARA
PRAJAPARA DIP EXTN.
KULDA-GARJANBAHAL & DIP SIDE
KENDUDIHI
BADIBAHAL
KORBAHAL
USTALI NORTH
USTALI CENTRAL
MEENAKSHI
MEENAKSHI DIP SIDE
MEENAKSHI WEST
DIP SIDE OF MEENAKSHI & MAHAMAYA
MAHAMAYA
DIP SIDE MAHAMAYA
UST SOUTH
HEMAGIRI SECTOR I
HEMAGIRI SECTOR II
DULANGA
TANGARDIH NORTH
TANGARDIH SOUTH
TANGARDIH EAST
MADHUPUR
ORIENT-LAJKURIA-BLOCK IV & DIP SIDE
ORIENT WEST (GOUTAM DHARA)
BARTAP
KURALOI A NORTH
SAMALESWARI-KUDOPALI COMB. & DIP EXTN.
ROHINI
DIP EXTN OF BELPAHAR
BELPAHAR DIP SIDE (DIP SIDE OF SAMALESWARI)
BELPAHAR I, II & III COMBINED
BEHERAMAL
TALABIRA II & III
TALABIRA I
Legend
ADDITIONAL CIL
CIL
CMSP
MMDR
0 2 4 8 12 16
Kilometers

SECTION 7: RATIONALE BEHIND SAMPLING

Ambient Air Quality Monitoring (AAQM)

Ambient Air Quality Monitoring stations were selected based on the guidelines outlined in IS: 5182 (Part 14): 2000 for the project area. The station locations were determined using the wind rose pattern, ensuring representative coverage. At least two stations were placed within the core zone (compliance stations) and two within the buffer/residential zone (reference stations). Sampling locations were chosen to represent upwind, downwind, and crosswind directions for comprehensive coverage.

Water Sampling:

Water is a critical natural resource, and assessing its quality is essential. To evaluate water quality around the project area, samples were collected to capture physical, chemical, and microbiological characteristics. This included:

- **Drinking Water Samples** from village wells
- **Surface Water Samples** from the Ib River and its tributaries (upstream and downstream), Basundhara River, and ponds
- **Effluent Water Samples** from opencast mine sump water, domestic effluents, and treatment plants
- Additionally, groundwater levels at piezometric locations and nearby wells were measured quarterly. Groundwater samples from piezometers were also analyzed quantitatively.

Noise Monitoring:

Noise levels were monitored at various locations near the AAQM stations following the CPCB protocol for ambient noise monitoring. Measurements were taken once every fortnight during both day and night to assess compliance with noise standards.

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 45 different locations in IB coalfield of MCL. Ambient Air Quality for parameters such as SPM, PM10, PM2.5, SO_2 and NO_2, were monitored at 26 locations and is governed by coal mine standard whereas ambient air quality parameter such as PM 10, PM 2.5, SO_2, NO_2, Ozone, Ammonia, Carbon monoxide, Lead, Arsenic, Nickel, Benzene, Benzo alpha pyrene were monitored at 19 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, and Mercury. For the collection of samples, Respirable dust sampler and PM2.5 sampler were installed at Ambient Air Quality station. PM10 and PM2.5 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 (PM10)	24
2	Particulate Matter (PM2.5)	24
3	Oxides of Sulphur (SO2)	24
4	Oxides of Nitrogen (NOx)	24
5	Ammonia (NH3)	24
6	Ozone (O3)	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: Ib valley Area

Project: Samleswari OCP

Monitoring Station: East of the Mine

All values are in µg/m³

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	230	142	52	12.75	12.75
16-Apr-24	240	105	49	16.77	13.81
04-May-24	234	131	66	16.2	12.9
18-May-24	228	118	56	13.7	19.36
01-Jun-24	191	105	47	23.08	17.53
21-Jun-24	248	108	55	10.75	25.05
05-Jul-24	256	128	63	12.65	31.5
20-Jul-24	241	108	55	14.04	22.27
03-Aug-24	286	113	63	17.5	22.35
19-Aug-24	220	125	63	14.5	12.39
06-Sep-24	264	128	59	16.33	30.76
18-Sep-24	251	134	67	14.04	15.01
01-Oct-24	233	128	64	16.17	33.16
18-Oct-24	275	151	72	17.96	29.28
06-Nov-24	258	135	68	15.78	28.05
20-Nov-24	273	148	66	15.93	27.13
06-Dec-24	232	133	60	12.57	15.02
18-Dec-24	243	136	62	16.06	35.99
14-Jan-25	275	166	69	18.34	29.32
18-Jan-25	253	142	63	14.24	28.46

01-Feb-25	224	93	60	15.27	26.05
17-Feb-25	236	138	57	13.27	28.24
01-Mar-25	274	168	65	16.47	23.91
21-Mar-25	235	94	52	17.1	34.52
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	286	168	72	23.08	35.99
Minimum	191	93	47	10.75	12.39
Average	245.8	128.21	60.54	15.48	23.95
Standard 24 hr	500	250	-	120	120
Standard Annual	360	180	-	80	80

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna

Table: 8.5.2

Area: Ib valley Area

Project: Samleswari OCP

Monitoring Station: West of the Mine

All values are in µg/m³

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
01-Apr-24	245	128	56	13.89	13.89
16-Apr-24	238	132	55	11.98	10.75
04-May-24	283	160	56	11.86	10.09
18-May-24	266	120	67	17.75	14.42
01-Jun-24	206	119	57	12.08	11.31
21-Jun-24	252	114	57	13.01	14.46
05-Jul-24	236	98	55	13.46	21.28
20-Jul-24	189	93	50	12.24	13.78
03-Aug-24	259	112	55	18.87	19.49
19-Aug-24	215	110	56	12.96	25.66
06-Sep-24	276	142	69	19.65	27.55
18-Sep-24	219	104	68	15.12	25.23
01-Oct-24	245	132	68	22.81	28.72
18-Oct-24	286	143	70	23.2	37.81
06-Nov-24	253	124	67	18.68	31.6
20-Nov-24	255	155	68	16.84	24.2
06-Dec-24	228	125	58	14.85	33.63
18-Dec-24	241	140	63	21.86	30.22
06-Jan-25	258	153	65	16.33	25.24
18-Jan-25	253	150	63	11.04	28.78
01-Feb-25	242	139	60	14.92	36.05
17-Feb-25	242	169	63	19.23	35.74
01-Mar-25	276	169	63	16.63	32.71
21-Mar-25	214	114	50	15.73	20.52
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	286	169	70	23.2	37.81
Minimum	189	93	50	11.04	10.09
Average	244.9	131.04	60.79	16.04	23.88
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.3

Area: Ib valley

Project: Samleswari OCP

Monitoring Station: South of the Mine

All values are in µg/m³

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
01-Apr-24	252	146	66	17.46	17.46
16-Apr-24	265	144	62	13.96	17.26
04-May-24	262	111	63	10.19	9.64
18-May-24	264	127	61	12.43	20.89
01-Jun-24	193	113	51	10.2	15.91
21-Jun-24	258	128	63	17.07	40.49
05-Jul-24	242	104	56	10.32	28.49
20-Jul-24	222	98	54	13.21	35.1
03-Aug-24	305	104	72	15.83	15.5
19-Aug-24	214	116	58	16.72	14
06-Sep-24	197	119	56	15.17	23.94
18-Sep-24	272	148	71	16.64	33.76
01-Oct-24	222	125	62	16.87	37.42
18-Oct-24	233	132	63	16.84	27.44
06-Nov-24	267	148	71	16.72	14.87
20-Nov-24	287	182	73	12.39	18.44
06-Dec-24	237	140	63	16.29	23.1
18-Dec-24	248	146	64	28.93	30.48
06-Jan-25	265	168	69	13.62	23.97
18-Jan-25	260	165	67	16.25	23.86
01-Feb-25	252	168	64	14	32
17-Feb-25	258	159	61	15.57	24.63
01-Mar-25	249	143	58	19.25	28.27
21-Mar-25	231	115	50	12.17	18.53
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	305	182	73	28.93	40.49
Minimum	193	98	50	10.19	9.64
Average	248.1	135.38	62.42	15.34	23.98
Standard 24 hr	500	250	-	120	120
Standard Annual	360	180	-	80	80

Table: 8.5.4

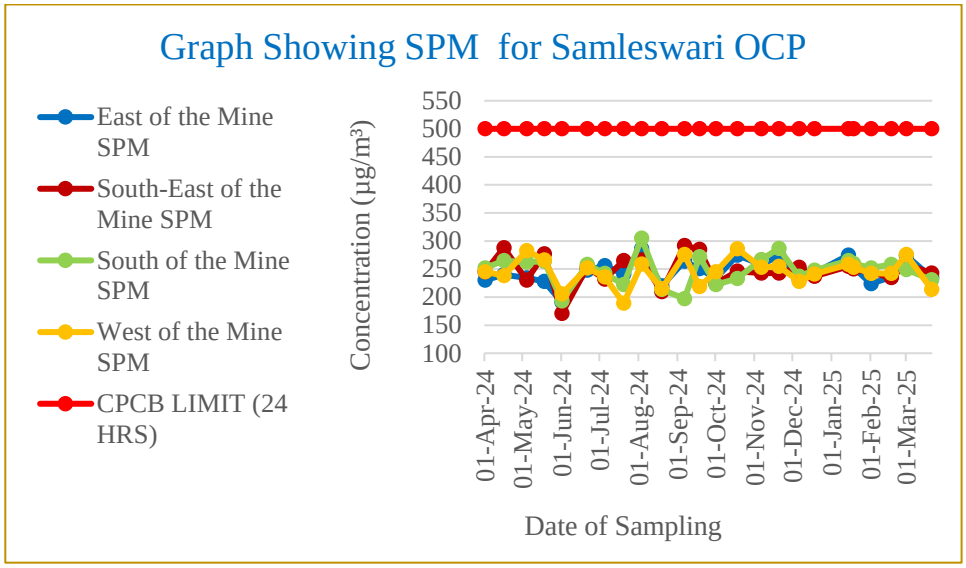
Area: Ib valley

Project: Samleswari OCP

Monitoring Station: South-East of the Mine

All values are in µg/m³

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
02-Apr-24	245	132	58	11.6	11.6
17-Apr-24	288	156	64	16.74	17.56
04-May-24	230	151	78	9.04	12.61
18-May-24	277	142	63	12.31	15.83
01-Jun-24	171	99	51	16	14.83
21-Jun-24	253	112	61	14.54	11.97
05-Jul-24	232	117	58	9.86	24.44
20-Jul-24	265	144	68	11.33	15.26
03-Aug-24	266	105	60	15.39	18.36
19-Aug-24	210	112	58	14.15	30.34
06-Sep-24	292	137	62	16.19	14.4
18-Sep-24	285	140	68	21.25	20.93
01-Oct-24	224	108	56	15	24.45
18-Oct-24	246	148	65	21.76	35.46
06-Nov-24	243	130	63	12.56	21.09
20-Nov-24	243	134	65	14.36	23.14
06-Dec-24	253	146	67	11.71	20.35
18-Dec-24	237	123	58	15.02	39.98
06-Jan-25	255	153	64	19.86	24.08
18-Jan-25	250	150	62	12.2	29.3
01-Feb-25	244	158	59	20.11	24.55
17-Feb-25	235	143	57	16.83	29
01-Mar-25	258	159	62	12.37	24.85
21-Mar-25	243	129	55	13.01	24.5
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	292	159	78	21.76	39.98
Minimum	171	99	51	9.04	11.6
Average	247.7	134.50	61.75	14.72	22.04
Standard 24 hr	500	250	-	120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for Samleswari OCP
East of the Mine SPM
South-East of the Mine SPM
South of the Mine SPM
West of the Mine SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
550
500
450
400
350
300
250
200
150
100
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
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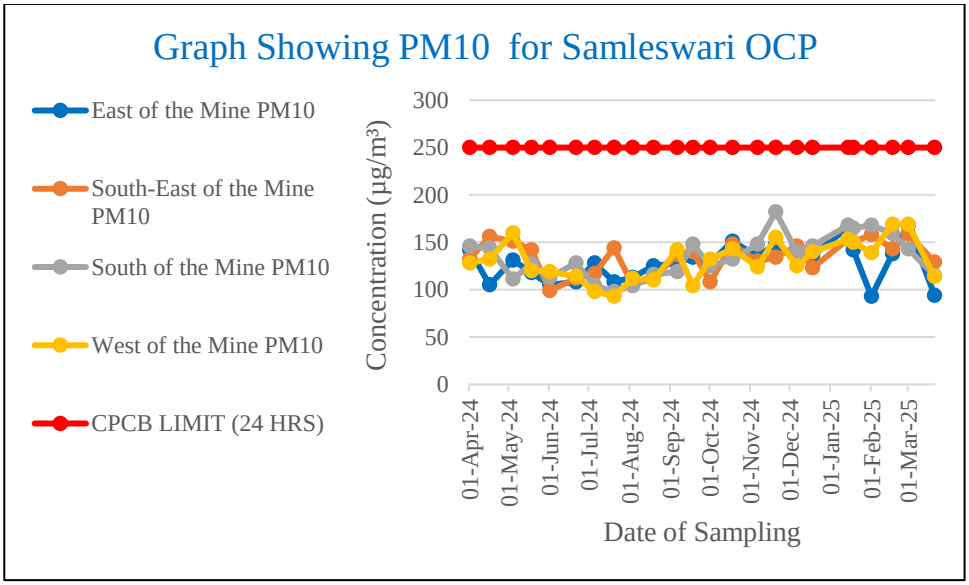
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling


Graph Showing PM10 for Samleswari OCP
East of the Mine PM10
South-East of the Mine PM10
South of the Mine PM10
West of the Mine PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
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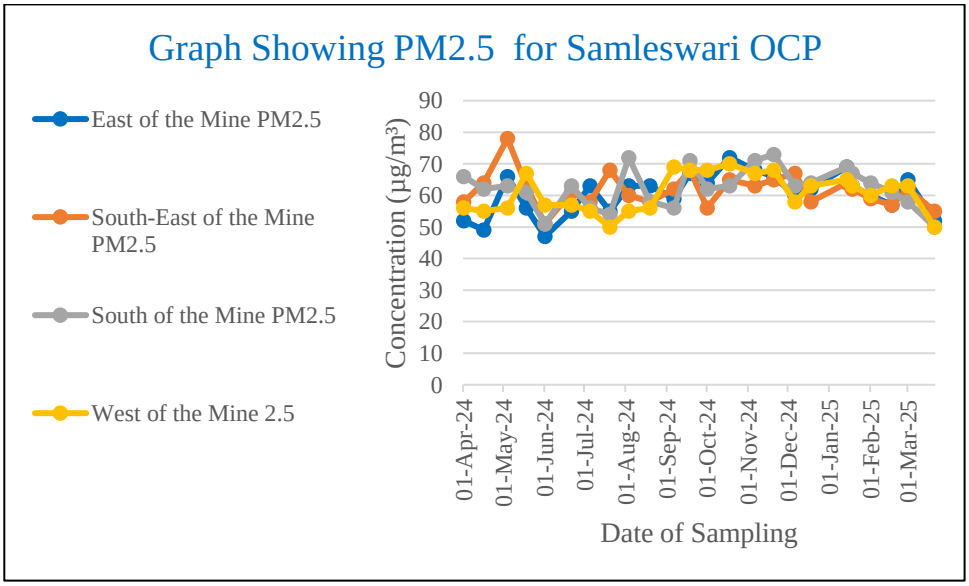
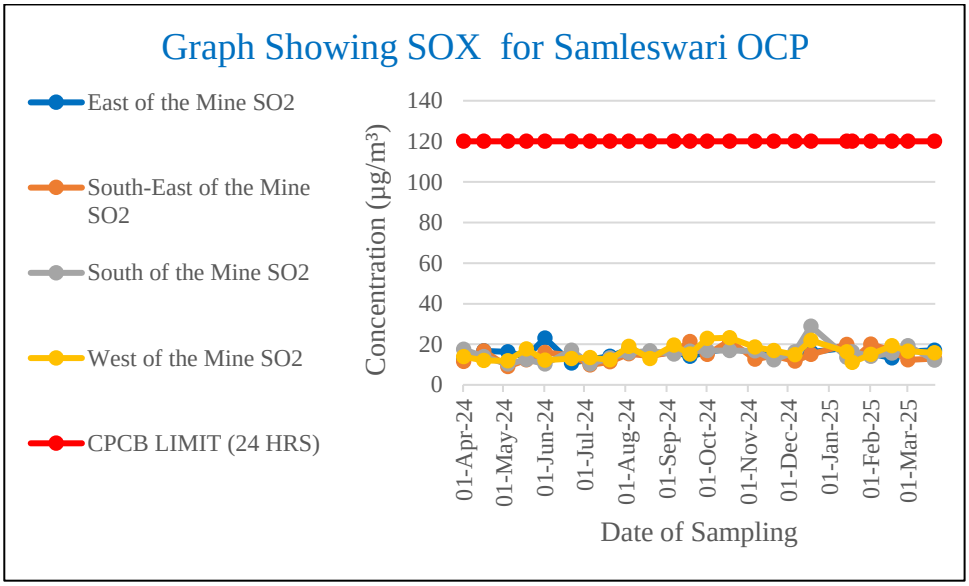
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling


Graph Showing PM2.5 for Samleswari OCP
East of the Mine PM2.5
South-East of the Mine PM2.5
South of the Mine PM2.5
West of the Mine 2.5
Concentration (µg/m³)
90
80
70
60
50
40
30
20
10
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling


Graph Showing SOX for Samleswari OCP
East of the Mine SO2
South-East of the Mine SO2
South of the Mine SO2
West of the Mine SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling

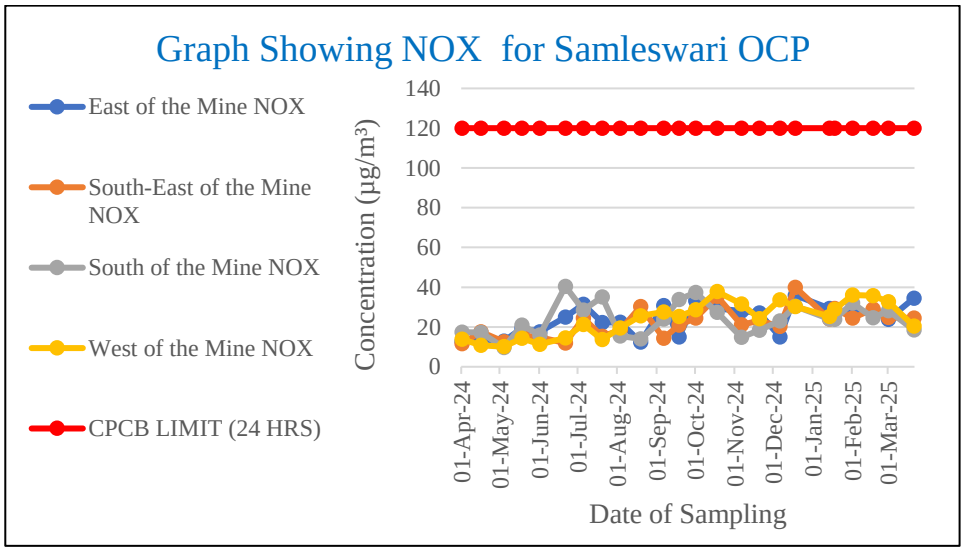

Graph Showing NOX for Samleswari OCP
East of the Mine NOX
South-East of the Mine NOX
South of the Mine NOX
West of the Mine NOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling

Table: 8.5.5

Area: Ib valley

Project: Samleswari OCP

Monitoring Station: Khokelmal (Reported only)

All values are in µg/m³

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	158	74	28	12.68	12.68
06-Apr-24	194	86	40	9.42	9.42
12-Apr-24	167	81	34	13.23	13.23
13-Apr-24	198	90	42	15.65	15.65
18-Apr-24	178	79	34	11.61	15.58
19-Apr-24	189	86	38	10.80	13.80
26-Apr-24	215	92	40	11.31	13.06
27-Apr-24	184	87	35	15.11	19.32
06-May-24	183	83	48	16.69	17.65
07-May-24	177	82	42	12.17	16.50
10-May -24	209	88	39	13.10	15.59
11-May-24	198	92	55	14.94	12.10
20-May-24	172	73	39	15.21	14.68
21-May-24	197	82	43	14.72	18.97
27-May-24	212	87	40	10.99	12.26
28-May-24	183	76	43	10.62	13.90
03-Jun-24	165	82	42	12.78	24.72
04-Jun-24	191	83	45	11.80	14.31
10-Jun-24	204	98	51	16.44	31.10
11-Jun-24	163	77	43	15.83	26.60
17-Jun-24	157	74	36	10.76	7.09
18-Jun-24	186	83	46	12.99	16.85
24-Jun-24	174	88	44	9.37	29.25
25-Jun-24	198	77	49	13.12	36.37
28-Jun-24	179	83	44	15.98	29.61
29-Jun-24	186	86	47	11.78	12.91
01-Jul-24	191	84	41	16.06	22.15
02-Jul-24	168	76	37	10.99	18.44
08-Jul-24	187	82	39	14.56	20.39
09-Jul-24	174	72	36	12.20	21.35
16-Jul-24	163	83	43	19.50	21.33
17-Jul-24	183	90	49	11.25	29.52
24-Jul-24	193	82	45	13.15	16.88
25-Jul-24	180	78	41	15.65	26.58
30-Jul-24	199	85	43	16.52	20.78
31-Jul-24	201	93	51	14.56	15.29
05-Aug-24	161	78	35	11.11	16.91
06-Aug-24	210	94	51	11.74	21.87
13-Aug-24	198	82	45	16.53	20.29
14-Aug-24	225	92	50	16.72	17.70
21-Aug-24	175	94	50	14.14	24.95
22-Aug-24	152	72	36	15.86	10.89
28-Aug-24	204	86	42	18.09	13.29

29-Aug-24	161	75	36	16.13	13.87
02-Sep-24	197	86	48	15.74	36.15
03-Sep-24	190	80	43	15.81	15.71
09-Sep-24	210	91	52	13.44	35.27
10-Sep-24	195	85	47	14.83	10.16
16-Sep-24	203	86	44	18.64	21.82
17-Sep-24	177	77	41	13.91	38.84
23-Sep-24	173	80	43	13.42	11.90
24-Sep-24	177	86	44	15.23	23.26
03-Oct-24	197	86	45	16.51	14.30
04-Oct-24	175	73	34	16.32	36.88
14-Oct-24	181	77	35	14.08	31.44
15-Oct-24	167	68	32	13.32	26.05
21-Oct-24	168	68	34	13.83	22.54
22-Oct-24	198	86	44	18.29	29.81
25-Oct-24	210	90	46	13.99	22.80
26-Oct-24	172	74	34	15.67	25.54
01-Nov-24	198	91	46	17.97	21.94
02-Nov-24	177	75	37	17.06	25.20
08-Nov-24	187	83	42	23.34	26.24
09-Nov-24	188	84	43	14.69	27.62
15-Nov-24	219	78	40	12.06	17.19
16-Nov-24	213	88	45	13.22	28.41
22-Nov-24	194	84	42	17.75	32.26
23-Nov-24	202	88	45	14.80	18.24
29-Nov-24	188	81	40	22.40	15.36
30-Nov-24	216	92	49	17.64	28.42
04-Dec-24	201	81	43	20.64	29.20
05-Dec-24	210	84	46	21.47	23.88
12-Dec-24	214	83	48	19.82	38.55
13-Dec-24	226	88	52	16.76	29.13
20-Dec-24	209	87	53	11.75	38.58
21-Dec-24	206	82	48	14.63	30.37
27-Dec-24	214	85	54	15.73	26.62
28-Dec-24	226	93	56	15.48	17.94
01-Jan-25	188	84	43	16.81	26.75
02-Jan-25	195	85	44	17.56	34.68
08-Jan-25	214	89	48	13.50	17.78
09-Jan-25	229	93	51	22.47	15.48
16-Jan-25	231	89	51	11.32	35.55
17-Jan-25	207	79	44	12.10	24.20
22-Jan-25	213	85	48	12.47	18.82
23-Jan-25	199	74	43	14.78	21.96
30-Jan-25	189	72	41	16.98	27.82
31-Jan-25	198	77	44	10.59	32.93
03-Feb-25	188	73	40	12.36	23.85
04-Feb-25	207	86	48	18.89	27.00
10-Feb-25	192	73	41	12.13	20.53
11-Feb-25	206	74	45	15.64	31.02
18-Feb-25	181	70	38	14.81	26.11
19-Feb-25	214	83	46	16.69	28.66
25-Feb-25	185	72	39	19.32	34.98
26-Feb-25	199	75	43	11.62	31.53
03-Mar-25	175	68	37	12.24	18.86

04-Mar-25	207	81	44	14.95	33.20
10-Mar-25	218	87	48	15.68	25.86
11-Mar-25	192	77	41	17.52	32.77
17-Mar-25	180	74	38	13.99	22.26
18-Mar-25	193	79	41	15.81	20.30
24-Mar-25	164	67	35	12.97	35.13
25-Mar-25	203	82	44	19.93	30.80
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	231	98	56	23.34	38.84
Minimum	152	67	28	9.37	7.09
Average	192.18	82.07	43.05	14.88	23.00
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
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Table: 8.5.6

Area: Ib valley Area

Project: Samleswari OCP

Monitoring Station: Rampur Sub Area(Reported Only)

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	188	85	37	17.16	19.55
06-Apr-24	168	74	28	13.30	14.30
12-Apr-24	180	88	33	15.60	16.21
13-Apr-24	161	81	38	17.16	19.66
22-Apr-24	172	83	37	13.08	14.67
23-Apr-24	189	94	42	10.62	13.64
26-Apr-24	166	78	29	12.61	13.64
27-Apr-24	174	87	33	12.54	12.67
02-May-24	175	87	40	9.79	14.87
03-May-24	155	85	50	21.61	13.50
08-May-24	157	94	37	13.75	10.61
09-May-24	176	91	35	13.77	9.01
16-May-24	173	88	46	18.93	13.30
17-May-24	178	82	39	10.23	12.62
24-May-24	185	92	40	16.21	19.50
25-May-24	152	72	50	11.30	18.88
05-Jun-24	161	75	58	11.10	25.44
06-Jun-24	176	81	34	13.92	19.92
12-Jun-24	182	85	41	15.08	34.27
13-Jun-24	175	80	38	15.90	27.14
19-Jun-24	183	88	43	13.54	40.13
20-Jun-24	167	86	38	10.83	27.29
26-Jun-24	221	92	44	9.63	18.74
27-Jun-24	191	89	43	10.70	7.55
28-Jun-24	208	94	47	15.41	23.70
29-Jun-24	172	75	38	16.94	25.12
03-Jul-24	183	78	36	15.15	13.26
04-Jul-24	193	86	43	12.25	22.33
10-Jul-24	188	90	45	13.85	20.77
11-Jul-24	164	75	36	11.90	20.83
18-Jul-24	166	77	41	11.78	23.31
19-Jul-24	199	91	39	14.66	31.27
26-Jul-24	207	96	30	14.61	29.83
27-Jul-24	205	85	41	13.19	13.68
01-Aug-24	211	76	35	11.11	20.44
02-Aug-24	187	82	38	11.98	20.35
09-Aug-24	149	80	35	13.30	18.16
10-Aug-24	207	74	31	15.27	19.60
16-Aug-24	186	81	43	13.18	25.29
17-Aug-24	146	84	45	10.52	11.59
23-Aug-24	186	78	37	9.40	15.01
24-Aug-24	167	74	33	12.90	13.48
30-Aug-24	154	69	31	11.68	29.67
31-Aug-24	154	72	30	14.47	16.32
04-Sep-24	208	84	45	11.66	20.40

05-Sep-24	202	82	43	17.61	13.82
11-Sep-24	212	78	39	15.79	19.33
12-Sep-24	195	85	44	14.29	11.33
19-Sep-24	170	83	39	15.26	14.77
20-Sep-24	187	90	36	18.19	25.07
27-Sep-24	164	75	33	15.34	14.82
28-Sep-24	164	84	42	15.41	11.77
07-Oct-24	172	73	36	11.21	35.81
08-Oct-24	159	68	28	14.35	36.29
16-Oct-24	174	70	32	14.07	36.70
17-Oct-24	198	86	44	11.63	30.81
23-Oct-24	168	72	34	12.65	20.62
24-Oct-24	179	80	39	15.43	25.14
29-Oct-24	175	74	37	19.10	31.13
30-Oct-24	175	69	40	16.53	26.94
04-Nov-24	175	74	35	14.56	16.51
05-Nov-24	201	92	50	13.52	16.53
11-Nov-24	186	79	38	10.77	20.52
12-Nov-24	173	70	32	10.30	28.82
18-Nov-24	182	75	38	11.32	35.07
19-Nov-24	193	78	40	15.23	29.46
25-Nov-24	196	82	43	16.10	25.25
26-Nov-24	204	84	45	15.23	16.13
02-Dec-24	181	84	39	16.81	28.34
03-Dec-24	196	80	43	15.04	23.34
09-Dec-24	212	85	48	17.61	25.49
10-Dec-24	205	83	46	13.38	27.73
16-Dec-24	191	77	46	13.79	18.49
17-Dec-24	206	82	50	22.92	17.43
23-Dec-24	211	85	52	17.20	29.90
24-Dec-24	195	83	51	12.56	35.21
30-Dec-24	212	86	53	21.37	24.22
31-Dec-24	218	90	56	11.10	26.18
03-Jan-25	188	83	42	11.19	31.18
04-Jan-25	199	83	45	9.94	35.69
10-Jan-25	208	88	47	16.20	34.41
11-Jan-25	227	92	50	14.87	25.22
20-Jan-25	206	84	45	12.88	21.96
21-Jan-25	210	90	48	15.18	19.69
28-Jan-25	206	79	44	11.34	18.67
29-Jan-25	208	87	46	14.05	27.47
05-Feb-25	198	75	43	19.50	23.52
06-Feb-25	209	84	45	16.57	21.47
12-Feb-25	220	88	48	12.91	21.12
13-Feb-25	206	81	45	14.86	24.65
20-Feb-25	213	84	46	14.73	28.08
21-Feb-25	194	80	43	14.55	39.32
27-Feb-25	193	76	41	17.05	35.52
28-Feb-25	198	75	43	16.26	29.51
05-Mar-25	186	76	39	14.28	36.51
06-Mar-25	191	86	47	21.18	34.38
12-Mar-25	206	84	44	17.39	25.41
13-Mar-25	187	80	41	14.68	27.67
19-Mar-25	180	74	38	20.42	25.16

20-Mar-25	152	64	30	10.95	18.52
26-Mar-25	172	68	35	11.83	28.32
27-Mar-25	168	74	32	12.64	24.74
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	227	96	58	22.92	40.13
Minimum	146	64	28	9.40	7.55
Average	186.28	81.48	40.69	14.26	22.83
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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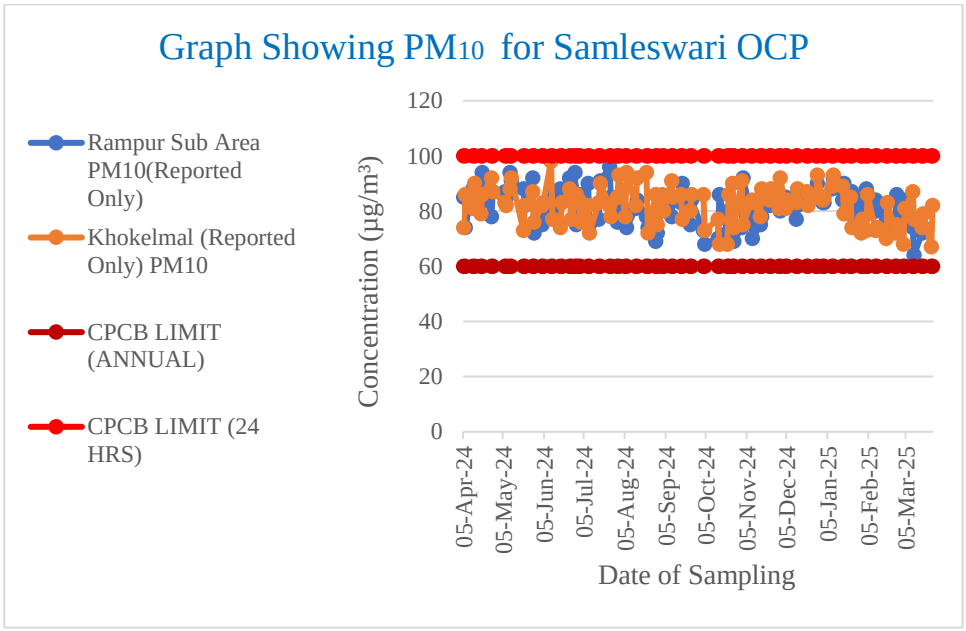
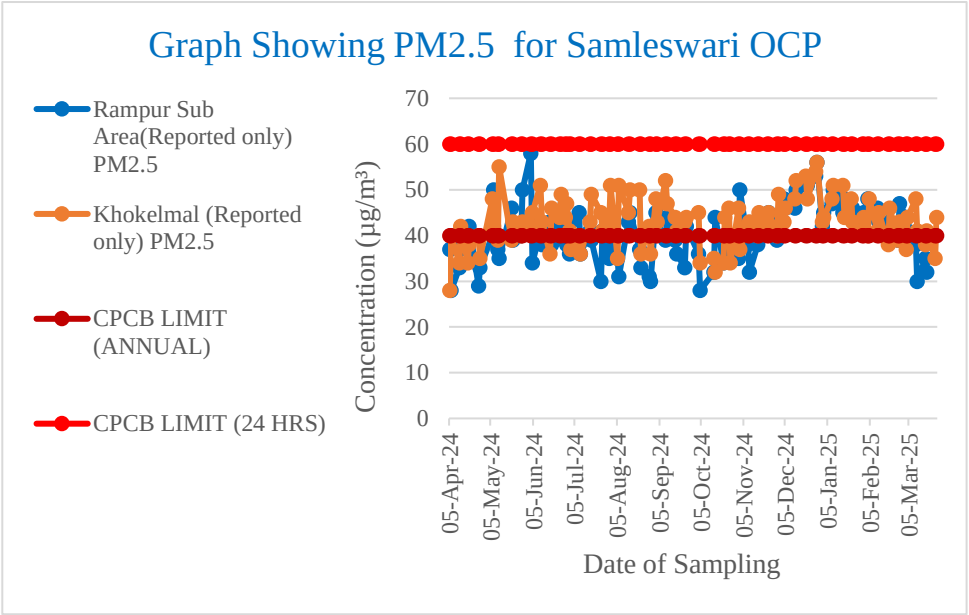
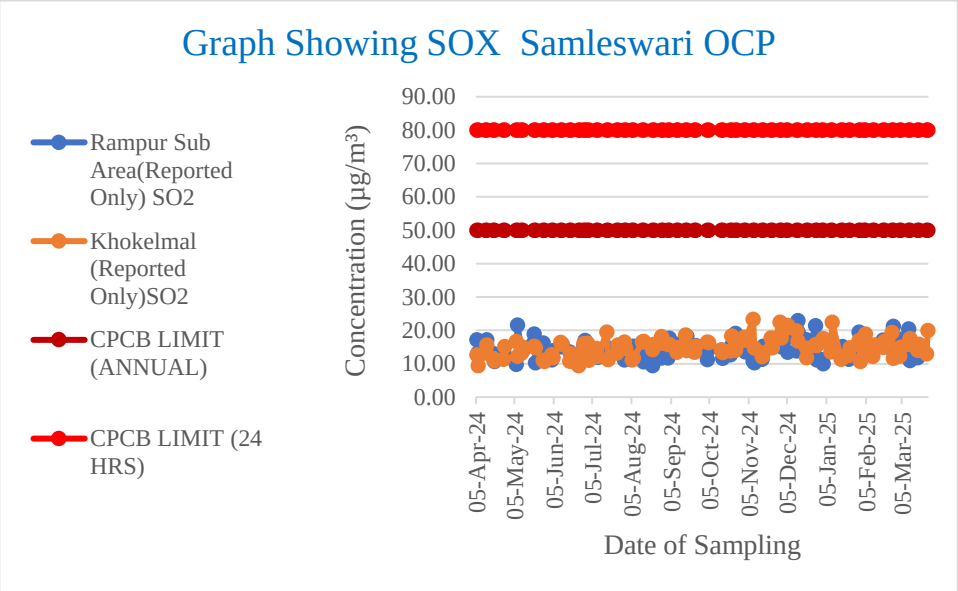

Graph Showing PM10 for Samleswari OCP
Rampur Sub Area PM10(Reported Only)
Khokelmal (Reported Only) PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for Samleswari OCP
Rampur Sub Area(Reported only) PM2.5
Khokelmal (Reported only) PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOX Samleswari OCP
Rampur Sub Area(Reported Only) SO2
Khokelmal (Reported Only)SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

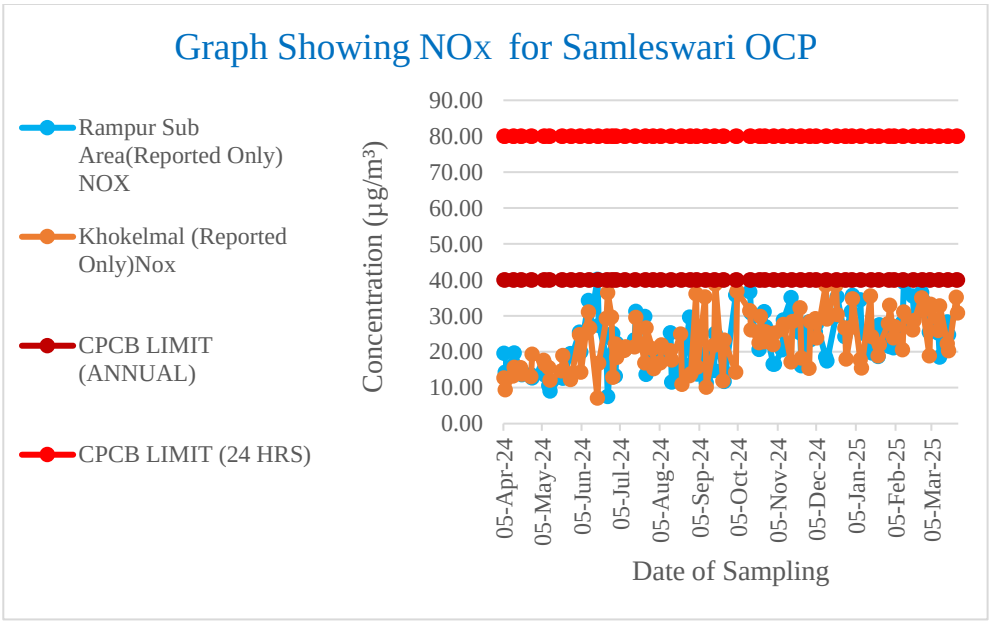

Graph Showing NOx for Samleswari OCP
Rampur Sub Area(Reported Only) NOX
Khokelmal (Reported Only)Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

Table: 8.5.7

Area: Ib valley Area

Project: Lajkura OCP

Monitoring Station: Near Project Office

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
02-Apr-24	218	96	49	11.09	11.09
17-Apr-24	244	128	52	14.64	18.05
04-May-24	208	120	61	12.27	19.79
18-May-24	233	130	66	10.57	12.05
01-Jun-24	179	107	56	12.8	17.32
21-Jun-24	237	98	50	10.19	11.12
05-Jul-24	231	112	56	13.51	27.46
20-Jul-24	244	116	58	9.74	20.46
03-Aug-24	234	107	60	17.12	14.4
19-Aug-24	217	132	65	14.86	19.16
06-Sep-24	280	132	60	16.82	14
18-Sep-24	243	124	62	15.08	21.1
01-Oct-24	228	135	63	15.56	36.22
18-Oct-24	252	126	67	14.99	24.42
06-Nov-24	214	118	54	13.08	36.9
20-Nov-24	234	127	60	16.97	20.34
06-Dec-24	225	129	59	12.88	22.39
18-Dec-24	245	137	62	16.51	24.35
06-Jan-25	265	155	67	12.97	13.96
18-Jan-25	260	152	65	13.94	37.64
01-Feb-25	267	164	67	14.78	21.96
17-Feb-25	246	158	59	12.47	18.82
01-Mar-25	237	143	56	12.47	18.82
21-Mar-25	220	118	53	14.78	21.96
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	280	164	67	17.12	37.64
Minimum	179	96	49	9.74	11.09
Average	235.9	127.67	59.46	13.75	20.99
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

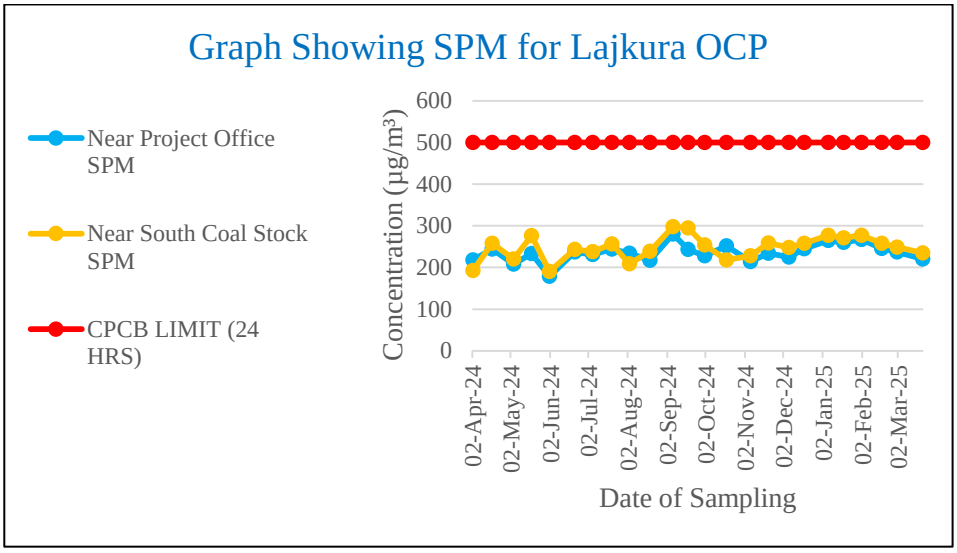
Table: 8.5.8

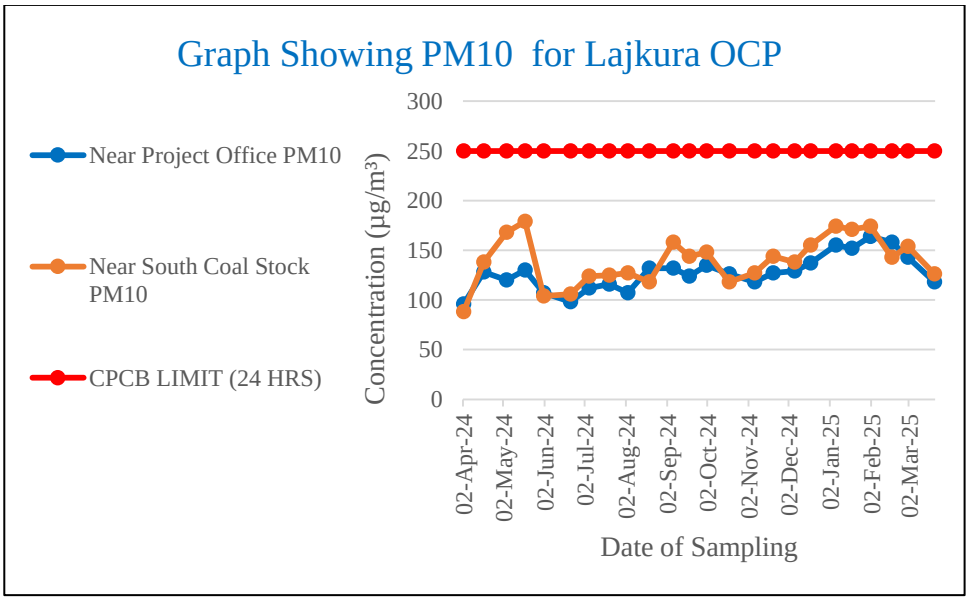
Area: Ib valley Area

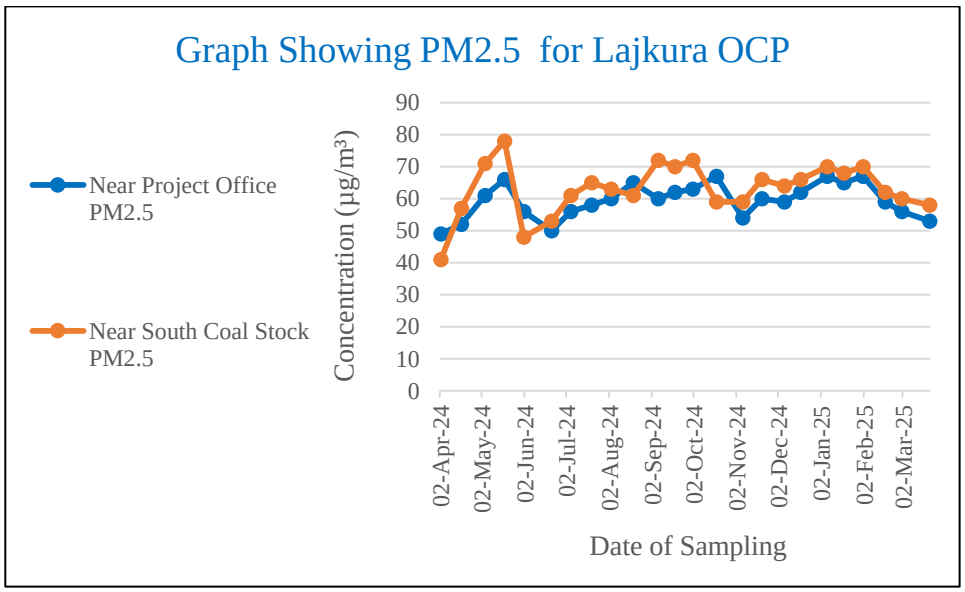
Project: Lajkura OCP

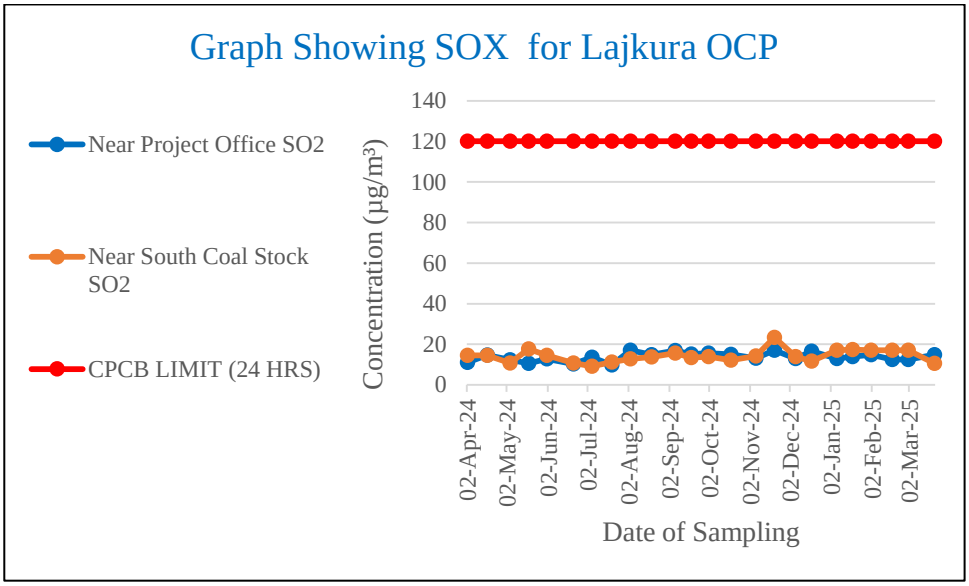
Monitoring Station: Near South Coal Stock

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	193	88	41	14.47	14.47
17-Apr-24	258	138	57	14.45	11.6
04-May-24	220	168	71	10.8	12.78
18-May-24	276	179	78	17.68	18.65
01-Jun-24	190	104	48	14.53	20.11
21-Jun-24	243	106	53	10.74	27.3
05-Jul-24	238	124	61	9.18	20.45
20-Jul-24	256	125	65	11.21	20.48
03-Aug-24	209	127	63	12.71	14.41
19-Aug-24	239	118	61	13.72	14
06-Sep-24	298	158	72	15.63	19.05
18-Sep-24	295	144	70	13.43	15.36
01-Oct-24	254	148	72	13.82	23.25
18-Oct-24	218	118	59	12.2	19.88
06-Nov-24	228	127	59	14.2	29.99
20-Nov-24	259	144	66	23.36	26.12
06-Dec-24	248	138	64	13.97	12.51
18-Dec-24	258	155	66	11.72	21.83
06-Jan-25	277	174	70	17.1	25.93
18-Jan-25	271	171	68	17.39	21.47
07-Feb-25	277	174	70	17.1	25.93
17-Feb-25	258	143	62	16.98	27.82
01-Mar-25	249	154	60	16.98	27.82
21-Mar-25	235	126	58	10.59	32.93
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	298	179	78	23.36	32.93
Minimum	190	88	41	9.18	11.60
Average	247.8	139.63	63.08	14.33	21.01
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for Lajkura OCP
Near Project Office SPM
Near South Coal Stock SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
600
500
400
300
200
100
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Date of Sampling


Graph Showing PM10 for Lajkura OCP
Near Project Office PM10
Near South Coal Stock PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Date of Sampling


Graph Showing PM2.5 for Lajkura OCP
Near Project Office PM2.5
Near South Coal Stock PM2.5
Concentration (µg/m³)
90
80
70
60
50
40
30
20
10
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Date of Sampling


Graph Showing SOX for Lajkura OCP
Near Project Office SO2
Near South Coal Stock SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Date of Sampling

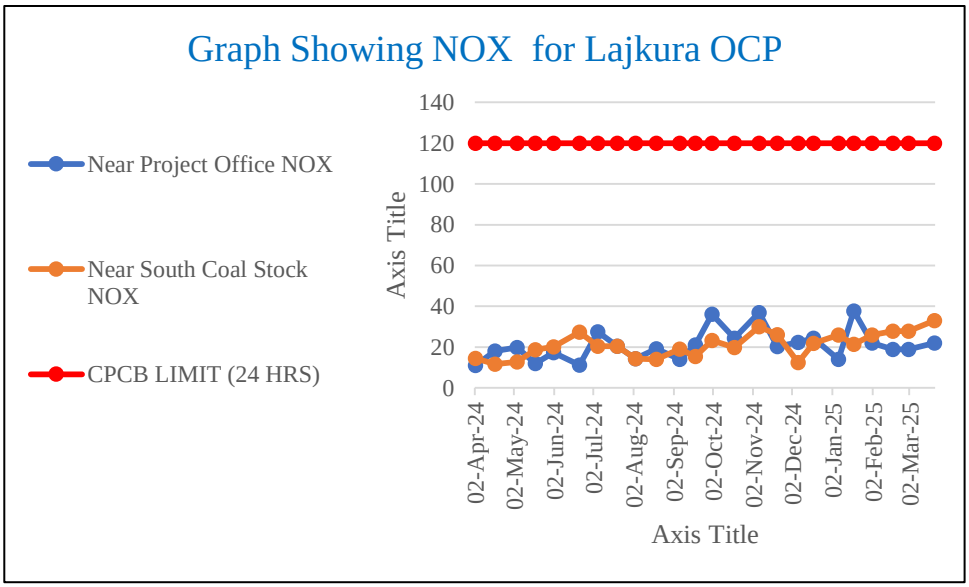

Graph Showing NOX for Lajkura OCP
Near Project Office NOX
Near South Coal Stock NOX
CPCB LIMIT (24 HRS)
Axis Title
140
120
100
80
60
40
20
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Axis Title

Table: 8.5.9

Area: Ib valley Area

Project: Lajkura OCP

Monitoring Station: Khokelmal

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	158	74	28	12.68	12.68
06-Apr-24	194	86	40	9.42	9.42
12-Apr-24	167	81	34	13.23	13.23
13-Apr-24	198	90	42	15.65	15.65
18-Apr-24	178	79	34	11.61	15.58
19-Apr-24	189	86	38	10.80	13.80
26-Apr-24	215	92	40	11.31	13.06
27-Apr-24	184	87	35	15.11	19.32
06-May-24	183	83	48	16.69	17.65
07-May-24	177	82	42	12.17	16.50
10-May-24	209	88	39	13.10	15.59
11-May-24	198	92	55	14.94	12.10
20-May-24	172	73	39	15.21	14.68
21-May-24	197	82	43	14.72	18.97
27-May-24	212	87	40	10.99	12.26
28-May-24	183	76	43	10.62	13.90
03-Jun-24	165	82	42	12.78	24.72
04-Jun-24	191	83	45	11.80	14.31
10-Jun-24	204	98	51	16.44	31.10
11-Jun-24	163	77	43	15.83	26.60
17-Jun-24	157	74	36	10.76	7.09
18-Jun-24	186	83	46	12.99	16.85
24-Jun-24	174	88	44	9.37	29.25
25-Jun-24	198	77	49	13.12	36.37
28-Jun-24	179	83	44	15.98	29.61
29-Jun-24	186	86	47	11.78	12.91
01-Jul-24	191	84	41	16.06	22.15
02-Jul-24	168	76	37	10.99	18.44
08-Jul-24	187	82	39	14.56	20.39
09-Jul-24	174	72	36	12.20	21.35
16-Jul-24	163	83	43	19.50	21.33
17-Jul-24	183	90	49	11.25	29.52
24-Jul-24	193	82	45	13.15	16.88
25-Jul-24	180	78	41	15.65	26.58
30-Jul-24	199	85	43	16.52	20.78
31-Jul-24	201	93	51	14.56	15.29
05-Aug-24	161	78	35	11.11	16.91
06-Aug-24	210	94	51	11.74	21.87
13-Aug-24	198	82	45	16.53	20.29
14-Aug-24	225	92	50	16.72	17.70
21-Aug-24	175	94	50	14.14	24.95
22-Aug-24	152	72	36	15.86	10.89
28-Aug-24	204	86	42	18.09	13.29
29-Aug-24	161	75	36	16.13	13.87
02-Sep-24	197	86	48	15.74	36.15

03-Sep-24	190	80	43	15.81	15.71
09-Sep-24	210	91	52	13.44	35.27
10-Sep-24	195	85	47	14.83	10.16
16-Sep-24	203	86	44	18.64	21.82
17-Sep-24	177	77	41	13.91	38.84
23-Sep-24	173	80	43	13.42	11.90
24-Sep-24	177	86	44	15.23	23.26
03-Oct-24	197	86	45	16.51	14.30
04-Oct-24	175	73	34	16.32	36.88
14-Oct-24	181	77	35	14.08	31.44
15-Oct-24	167	68	32	13.32	26.05
21-Oct-24	168	68	34	13.83	22.54
22-Oct-24	198	86	44	18.29	29.81
25-Oct-24	210	90	46	13.99	22.80
26-Oct-24	172	74	34	15.67	25.54
01-Nov-24	198	91	46	17.97	21.94
02-Nov-24	177	75	37	17.06	25.20
08-Nov-24	187	83	42	23.34	26.24
09-Nov-24	188	84	43	14.69	27.62
15-Nov-24	219	78	40	12.06	17.19
16-Nov-24	213	88	45	13.22	28.41
22-Nov-24	194	84	42	17.75	32.26
23-Nov-24	202	88	45	14.80	18.24
29-Nov-24	188	81	40	22.40	15.36
30-Nov-24	216	92	49	17.64	28.42
04-Dec-24	201	81	43	20.64	29.20
05-Dec-24	210	84	46	21.47	23.88
12-Dec-24	214	83	48	19.82	38.55
13-Dec-24	226	88	52	16.76	29.13
20-Dec-24	209	87	53	11.75	38.58
21-Dec-24	206	82	48	14.63	30.37
27-Dec-24	214	85	54	15.73	26.62
28-Dec-24	226	93	56	15.48	17.94
01-Jan-25	188	84	43	16.81	26.75
02-Jan-25	195	85	44	17.56	34.68
08-Jan-25	214	89	48	13.50	17.78
09-Jan-25	229	93	51	22.47	15.48
16-Jan-25	231	89	51	11.32	35.55
17-Jan-25	207	79	44	12.10	24.20
22-Jan-25	213	85	48	12.47	18.82
23-Jan-25	199	74	43	14.78	21.96
30-Jan-25	189	72	41	16.98	27.82
31-Jan-25	198	77	44	10.59	32.93
03-Feb-25	188	73	40	12.36	23.85
04-Feb-25	207	86	48	18.89	27.00
10-Feb-25	192	73	41	12.13	20.53
11-Feb-25	206	74	45	15.64	31.02
18-Feb-25	181	70	38	14.81	26.11
19-Feb-25	214	83	46	16.69	28.66
25-Feb-25	185	72	39	19.32	34.98
26-Feb-25	199	75	43	11.62	31.53
03-Mar-25	175	68	37	12.24	18.86
04-Mar-25	207	81	44	14.95	33.20
10-Mar-25	218	87	48	15.68	25.86

11-Mar-25	192	77	41	17.52	32.77
17-Mar-25	180	74	38	13.99	22.26
18-Mar-25	193	79	41	15.81	20.30
24-Mar-25	164	67	35	12.97	35.13
25-Mar-25	203	82	44	19.93	30.80
Basic Stats	SPM	PM10	PM2 5	SO2	NOx
Maximum	231	98	56	23.34	38.84
Minimum	152	67	28	9.37	7.09
Average	192.18	82.07	43.05	14.88	23.00
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.10

Area: Ib valley

Project: Lajkura OCP

Monitoring Station: Chuakani

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	195	93	40	13.56	17.69
06-Apr-24	165	78	33	14.94	14.94
12-Apr-24	176	82	38	11.63	11.63
13-Apr-24	165	76	29	16.96	16.96
22-Apr-24	173	75	35	15.76	17.35
23-Apr-24	259	172	65	11.26	16.29
26-Apr-24	178	94	38	13.63	15.63
27-Apr-24	194	88	42	12.01	16.52
06-May-24	226	93	50	20.26	17.79
07-May-24	157	65	43	17.24	16.78
10-May-24	204	84	51	14.84	14.31
11-May-24	214	81	56	12.32	17.00
20-May-24	222	92	51	10.27	15.69
21-May-24	202	76	52	11.73	13.37
27-May-24	207	84	50	14.69	15.07
28-May-24	145	89	42	17.30	18.79
03-Jun-24	208	89	42	19.61	31.71
04-Jun-24	194	74	35	18.46	11.61
10-Jun-24	176	95	45	15.80	22.48
11-Jun-24	167	90	47	13.67	26.43
17-Jun-24	163	68	37	20.55	26.43
18-Jun-24	173	84	43	14.11	22.52
24-Jun-24	180	89	47	9.30	29.02
25-Jun-24	166	73	38	18.30	17.56
28-Jun-24	228	96	52	9.55	9.00
29-Jun-24	216	89	50	13.00	13.65
01-Jul-24	193	81	42	11.05	18.53
02-Jul-24	213	85	46	15.67	14.48
08-Jul-24	184	73	40	14.55	16.98
09-Jul-24	192	78	42	10.68	17.91
16-Jul-24	188	76	38	12.76	13.40
17-Jul-24	157	68	32	16.58	21.34
24-Jul-24	162	65	30	17.99	28.08
25-Jul-24	219	92	46	23.81	28.41
30-Jul-24	174	76	37	16.27	35.59
31-Jul-24	195	89	44	12.94	25.57
05-Aug-24	162	85	48	15.06	13.40
06-Aug-24	170	82	40	13.08	13.79
13-Aug-24	204	88	51	9.88	12.88
14-Aug-24	233	86	49	16.35	17.11
21-Aug-24	191	86	48	13.30	12.06
22-Aug-24	184	72	34	15.36	15.48
28-Aug-24	194	83	45	12.49	18.77
29-Aug-24	201	79	38	11.04	39.29
02-Sep-24	176	78	42	14.16	19.27

03-Sep-24	150	85	46	15.23	16.52
09-Sep-24	201	81	42	13.48	21.16
10-Sep-24	203	92	39	16.17	16.08
16-Sep-24	213	88	51	15.37	19.59
17-Sep-24	182	78	39	13.40	26.86
23-Sep-24	190	85	43	15.05	17.62
24-Sep-24	196	82	41	13.22	32.69
03-Oct-24	185	77	39	12.79	31.27
04-Oct-24	189	73	36	15.62	25.45
14-Oct-24	204	82	45	11.50	30.68
15-Oct-24	212	86	48	13.44	18.66
21-Oct-24	216	91	50	17.14	27.93
22-Oct-24	194	83	45	16.69	27.19
25-Oct-24	161	77	38	15.15	24.68
26-Oct-24	174	71	35	16.31	26.57
01-Nov-24	188	83	41	14.87	30.58
02-Nov-24	193	88	46	14.70	37.74
08-Nov-24	174	74	32	10.08	18.56
09-Nov-24	167	70	36	14.50	18.09
15-Nov-24	196	85	42	16.32	34.19
22-Nov-24	179	76	38	13.93	14.03
23-Nov-24	196	85	44	13.20	35.20
29-Nov-24	190	83	42	15.67	20.34
30-Nov-24	206	90	48	12.74	32.26
04-Dec-24	174	74	35	14.74	19.41
05-Dec-24	188	78	41	13.95	27.10
12-Dec-24	197	81	44	18.50	26.07
13-Dec-24	200	83	46	15.26	33.99
20-Dec-24	192	81	47	17.41	33.63
21-Dec-24	210	85	52	15.32	16.94
27-Dec-24	223	89	55	17.94	22.39
28-Dec-24	195	84	51	15.05	39.67
01-Jan-25	201	83	45	13.10	13.86
02-Jan-25	208	85	47	13.06	39.57
08-Jan-25	214	88	49	16.77	23.29
09-Jan-25	230	93	52	11.34	32.68
16-Jan-25	227	94	51	15.46	22.27
17-Jan-25	209	85	47	13.04	23.06
22-Jan-25	204	83	46	18.36	30.22
23-Jan-25	198	78	44	13.18	21.69
30-Jan-25	205	84	46	13.22	29.30
31-Jan-25	188	75	42	12.18	22.82
03-Feb-25	208	83	45	17.73	24.41
04-Feb-25	212	86	47	17.30	25.11
10-Feb-25	216	89	48	16.65	31.24
11-Feb-25	196	75	43	13.77	24.27
18-Feb-25	199	78	43	15.22	25.30
19-Feb-25	202	81	45	14.52	37.14
25-Feb-25	213	84	46	14.09	33.60
26-Feb-25	187	73	41	14.83	28.39
03-Mar-25	192	78	41	17.26	30.15
04-Mar-25	195	82	43	14.99	28.08
10-Mar-25	206	86	44	19.22	38.61
11-Mar-25	181	75	39	12.19	25.05

17-Mar-25	166	68	35	12.07	23.52
18-Mar-25	201	82	43	14.49	25.73
24-Mar-25	185	75	40	18.07	31.35
25-Mar-25	178	74	37	18.12	37.69
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	259	172	65	23.81	39.67
Minimum	145	65	29	9.30	9.00
Average	193.24	82.80	43.39	14.75	23.30
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.11

Area: Ib valley

Project: Lajkura OCP

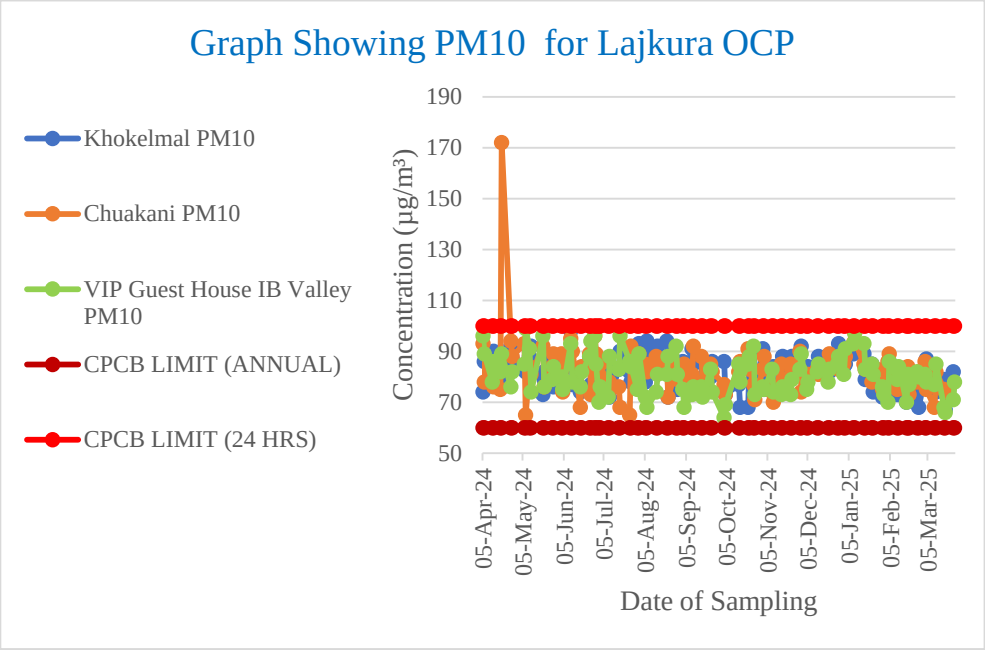
Monitoring Station: VIP Guest House IB Valley

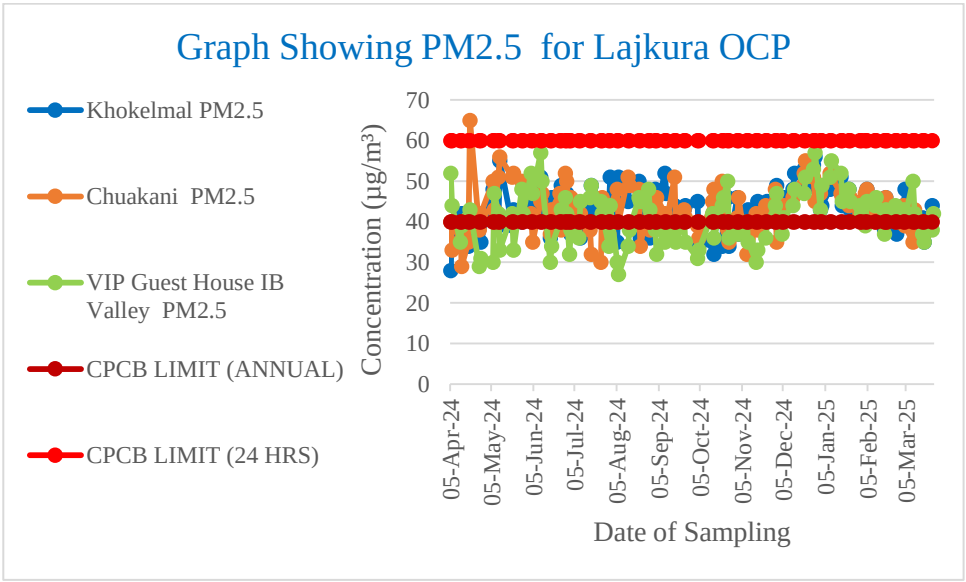
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	218	96	52	13.98	13.98
06-Apr-24	210	89	44	15.41	15.41
12-Apr-24	188	78	35	17.17	17.17
13-Apr-24	204	86	39	18.14	18.14
18-Apr-24	193	82	41	13.94	16.46
19-Apr-24	198	89	43	10.28	15.57
26-Apr-24	168	76	29	13.75	14.98
27-Apr-24	169	82	31	14.88	18.56
06-May-24	165	85	30	13.69	12.20
07-May-24	158	99	47	15.13	17.47
10-May-24	194	91	42	16.28	13.99
11-May-24	154	74	33	20.32	15.72
20-May-24	205	96	42	11.39	16.63
21-May-24	159	76	33	14.55	19.31
27-May-24	175	79	48	13.14	13.77
28-May-24	180	84	42	13.71	9.79
03-Jun-24	199	80	52	9.60	10.05
04-Jun-24	174	75	47	11.14	14.36
10-Jun-24	169	93	57	20.77	21.03
11-Jun-24	171	78	50	13.03	13.63
17-Jun-24	165	76	30	9.76	29.67
18-Jun-24	182	82	34	11.72	36.19
24-Jun-24	186	88	40	8.15	30.97
25-Jun-24	193	94	43	11.92	11.78
28-Jun-24	215	96	46	14.56	25.18
29-Jun-24	206	85	42	11.31	16.80
01-Jul-24	157	70	32	10.32	18.07
02-Jul-24	170	76	38	10.40	17.48
08-Jul-24	162	72	36	11.70	16.09
09-Jul-24	200	88	45	11.11	22.68
16-Jul-24	175	83	46	11.58	33.55
17-Jul-24	203	96	49	15.74	32.40
24-Jul-24	191	86	45	12.05	16.00
25-Jul-24	185	84	42	19.43	12.95
30-Jul-24	164	75	34	14.77	26.65
31-Jul-24	185	89	44	10.42	32.84
05-Aug-24	181	72	30	15.74	18.51
06-Aug-24	175	68	27	14.23	16.71
13-Aug-24	166	74	34	11.99	10.99
14-Aug-24	186	81	38	15.04	13.28
21-Aug-24	191	81	46	13.30	19.16
22-Aug-24	222	88	45	11.57	14.00
28-Aug-24	189	92	48	15.36	32.52
29-Aug-24	159	81	43	12.86	25.68
02-Sep-24	188	75	38	15.97	20.59

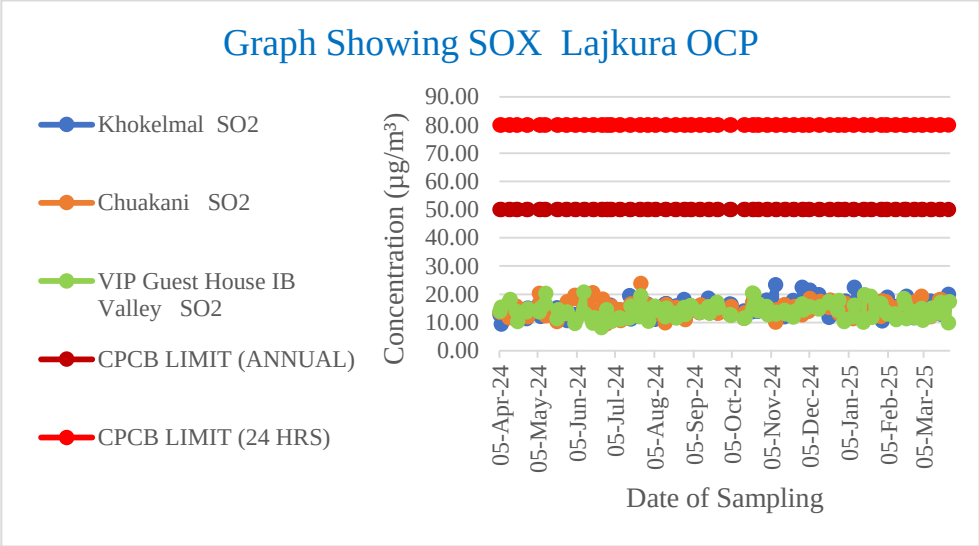
03-Sep-24	179	68	32	15.57	25.36
09-Sep-24	217	73	35	13.61	20.21
10-Sep-24	177	76	37	13.58	17.76
16-Sep-24	182	76	40	15.48	27.63
17-Sep-24	169	72	35	13.24	22.01
23-Sep-24	213	83	40	17.07	25.20
24-Sep-24	191	74	35	15.22	37.36
03-Oct-24	158	64	31	12.79	22.94
04-Oct-24	168	69	33	12.44	34.03
14-Oct-24	189	85	42	11.44	23.73
15-Oct-24	176	78	36	11.63	21.14
21-Oct-24	207	85	44	20.44	33.31
22-Oct-24	206	88	46	20.07	32.71
25-Oct-24	215	92	50	14.20	23.15
26-Oct-24	172	73	36	16.40	26.73
01-Nov-24	171	76	38	15.61	21.80
02-Nov-24	168	75	37	12.65	19.64
08-Nov-24	187	83	40	12.97	25.95
09-Nov-24	181	74	35	13.59	31.72
15-Nov-24	163	73	30	14.29	32.68
16-Nov-24	168	76	33	13.01	36.89
22-Nov-24	173	73	36	11.92	26.89
23-Nov-24	187	79	40	13.93	29.46
29-Nov-24	196	83	44	16.54	16.83
30-Nov-24	208	89	47	14.36	15.43
04-Dec-24	178	75	37	15.54	17.77
05-Dec-24	191	78	41	15.58	15.05
12-Dec-24	198	82	44	14.71	14.02
13-Dec-24	210	85	48	15.70	18.42
20-Dec-24	189	78	47	17.47	29.58
21-Dec-24	197	83	51	16.85	29.97
27-Dec-24	214	85	53	14.25	28.78
28-Dec-24	227	88	57	17.75	40.60
01-Jan-25	195	81	43	10.33	19.84
02-Jan-25	223	91	49	11.03	26.81
08-Jan-25	234	93	51	12.05	28.32
09-Jan-25	246	97	55	16.05	17.09
16-Jan-25	236	93	52	10.08	25.58
17-Jan-25	207	83	45	19.86	26.51
22-Jan-25	215	85	48	19.32	30.13
23-Jan-25	208	81	45	11.76	20.74
30-Jan-25	196	76	44	16.78	25.11
31-Jan-25	186	73	42	15.12	20.05
03-Feb-25	175	70	39	13.68	23.34
04-Feb-25	200	86	45	12.99	27.32
10-Feb-25	195	79	44	12.99	23.72
11-Feb-25	212	84	46	10.96	27.83
17-Feb-25	175	70	37	18.52	36.28
18-Feb-25	189	81	43	16.71	27.13
19-Feb-25	185	77	42	11.33	27.65
25-Feb-25	201	82	44	13.88	25.21
26-Feb-25	189	80	40	11.67	31.59
03-Mar-25	201	81	43	14.95	21.55
04-Mar-25	182	78	41	10.76	23.86

10-Mar-25	228	77	50	12.26	23.15
11-Mar-25	194	85	42	15.03	34.31
17-Mar-25	169	68	37	13.30	29.30
18-Mar-25	163	66	35	17.15	26.11
24-Mar-25	175	71	38	9.81	16.54
25-Mar-25	194	78	42	17.40	21.18
Basic Stats	SPM	PM10	PM2 5	SO2	NOx
Maximum	246	99	57	20.77	40.60
Minimum	154	64	27	8.15	9.79
Average	189.00	80.92	41.37	14.07	22.76
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna


Graph Showing PM10 for Lajkura OCP
Khokelmal PM10
Chuakani PM10
VIP Guest House IB Valley PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
190
170
150
130
110
90
70
50
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for Lajkura OCP
Khokelmal PM2.5
Chuakani PM2.5
VIP Guest House IB Valley PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOX Lajkura OCP
Khokelmal SO2
Chuakani SO2
VIP Guest House IB Valley SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

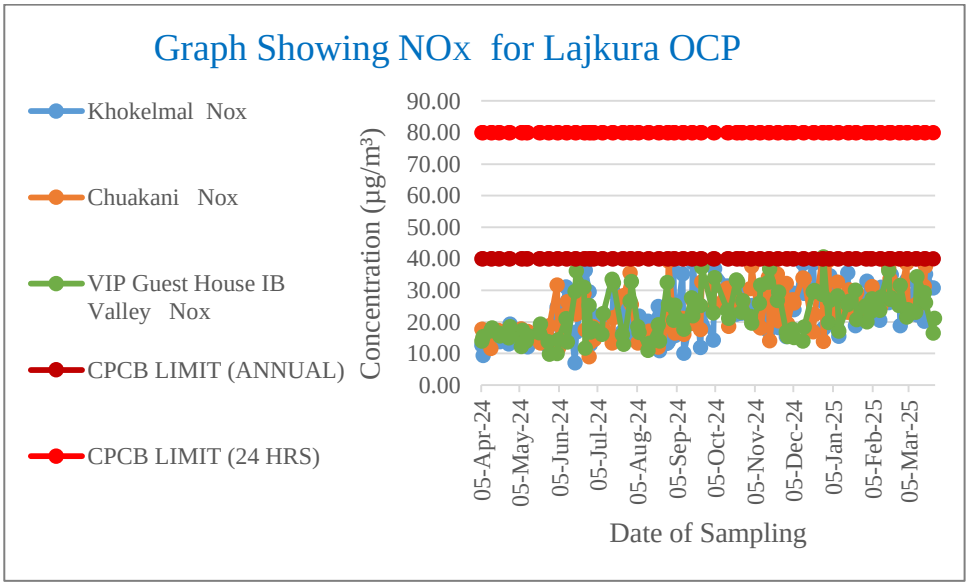

Graph Showing NOx for Lajkura OCP
Khokelmal Nox
Chuakani Nox
VIP Guest House IB Valley Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

Table: 8.5.12

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: BOCM Workshop

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
04-Apr-24	257	162	69	10.97	10.97
25-Apr-24	238	132	54	10.88	16.02
14-May-24	323	160	67	16.65	14.17
23-May-24	263	118	60	9.08	12.88
07-Jun-24	206	96	63	13.17	30.79
21-Jun-24	244	108	55	19.38	15.16
06-Jul-24	258	126	65	11.38	15.32
22-Jul-24	219	120	64	12.49	34.01
07-Aug-24	247	115	58	11.25	25.78
20-Aug-24	224	136	68	11.65	15.69
07-Sep-24	294	135	61	12.87	22.63
21-Sep-24	237	135	66	13.93	24.11
09-Oct-24	238	125	64	12.03	19.61
28-Oct-24	260	128	52	16.69	27.21
07-Nov-24	283	154	72	15.84	29.04
21-Nov-24	275	144	68	12.29	16.86
07-Dec-24	246	138	65	17.18	14.93
18-Dec-24	255	153	67	16.53	16.42
07-Jan-25	271	163	68	9.95	14.95
24-Jan-25	266	148	66	12.88	23.86
07-Feb-25	251	146	63	15.14	25.28
17-Feb-25	248	137	60	13.49	24.55
07-Mar-25	239	157	62	21.76	35.12
22-Mar-25	282	124	51	15.96	22.04
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	323	163	72	21.76	35.12
Minimum	206	96	51	9.08	10.97
Average	255.17	135.83	62.83	13.89	21.14
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.13

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Kirulbal Village

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
03-Apr-24	234	135	58	14.51	14.51
24-Apr-24	212	134	46	12.80	17.83
14-May-24	274	120	71	17.43	11.89
23-May-24	310	144	67	10.08	9.18
07-Jun-24	237	124	57	15.79	23.40
21-Jun-24	259	134	67	14.08	19.26
06-Jul-24	263	132	66	11.95	23.34
22-Jul-24	240	118	63	12.07	21.12
07-Aug-24	268	131	67	9.33	11.52
20-Aug-24	262	148	71	9.77	15.01
07-Sep-24	296	146	70	12.41	11.26
21-Sep-24	260	118	66	16.21	33.84
09-Oct-24	217	103	58	16.62	30.48
28-Oct-24	219	112	58	19.61	31.96
06-Nov-24	278	148	71	15.51	23.33
20-Nov-24	289	178	73	13.06	34.37
07-Dec-24	256	146	68	14.09	26.53
18-Dec-24	248	143	65	14.15	34.29
06-Jan-25	271	164	68	17.21	30.04
18-Jan-25	266	161	66	11.69	21.51
07-Feb-25	268	158	63	12.64	23.10
17-Feb-25	253	153	60	16.25	30.96
07-Mar-25	244	143	57	11.79	20.09
22-Mar-25	219	138	55	12.87	24.23
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	310	178	73	19.61	34.37
Minimum	212	103	46	9.33	9.18
Average	255.96	138.79	63.79	13.83	22.63
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.14

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Lilari Magazine House

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
03-Apr-24	248	153	64	10.86	10.86
24-Apr-24	236	146	52	13.25	14.29
14-May-24	317	140	58	16.21	19.15
23-May-24	336	180	68	11.41	12.62
07-Jun-24	219	107	68	15.95	16.55
21-Jun-24	227	96	52	9.35	10.40
06-Jul-24	245	118	60	9.55	17.44
22-Jul-24	250	126	66	12.55	11.71
07-Aug-24	289	138	67	14.28	18.67
20-Aug-24	247	118	57	10.92	15.04
07-Sep-24	284	123	55	17.31	33.52
21-Sep-24	263	126	61	12.20	23.72
09-Oct-24	228	116	61	13.80	17.24
28-Oct-24	220	131	67	15.48	25.23
06-Nov-24	285	162	74	12.14	12.04
20-Nov-24	217	120	58	25.03	25.35
07-Dec-24	235	135	62	17.73	14.99
18-Dec-24	209	101	61	12.62	21.22
06-Jan-25	258	148	65	14.87	18.54
18-Jan-25	253	145	63	17.47	40.78
07-Feb-25	246	135	60	12.10	24.20
17-Feb-25	248	138	62	11.32	35.55
07-Mar-25	243	145	59	11.32	35.55
22-Mar-25	211	83	48	12.10	24.20
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	336	180	74	25.03	40.78
Minimum	209	83	48	9.35	10.40
Average	250.58	130.42	61.17	13.74	20.79
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

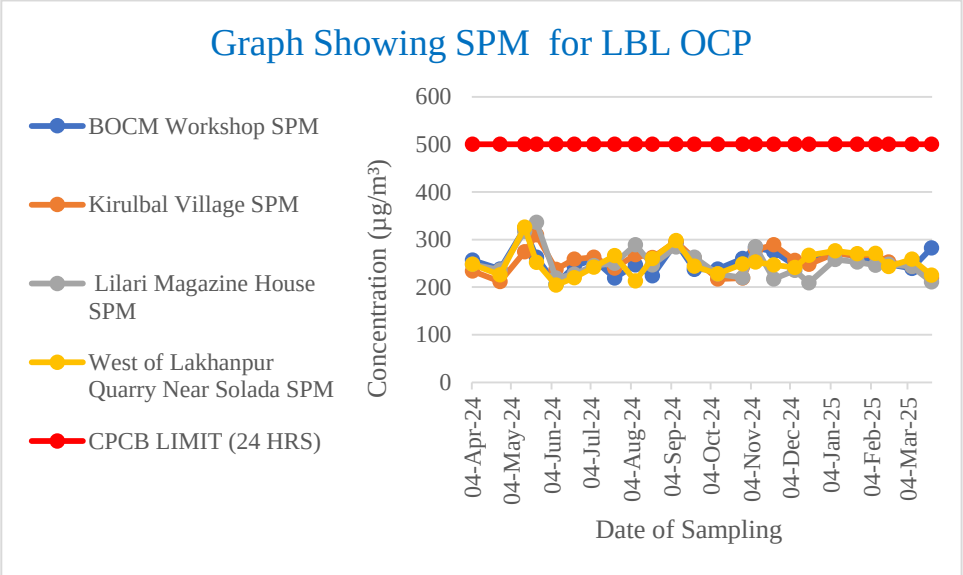
Table: 8.5.15

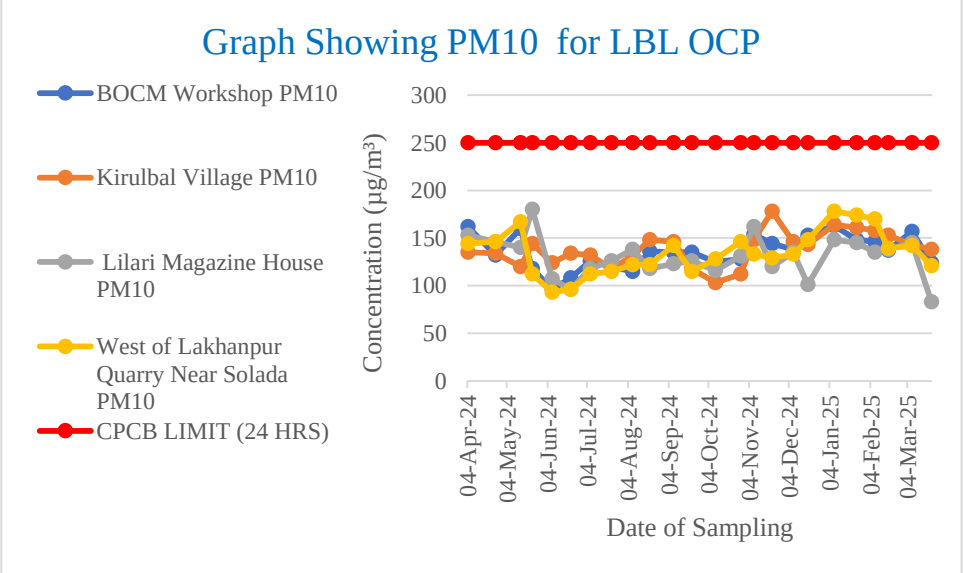
Area: Lakhanpur

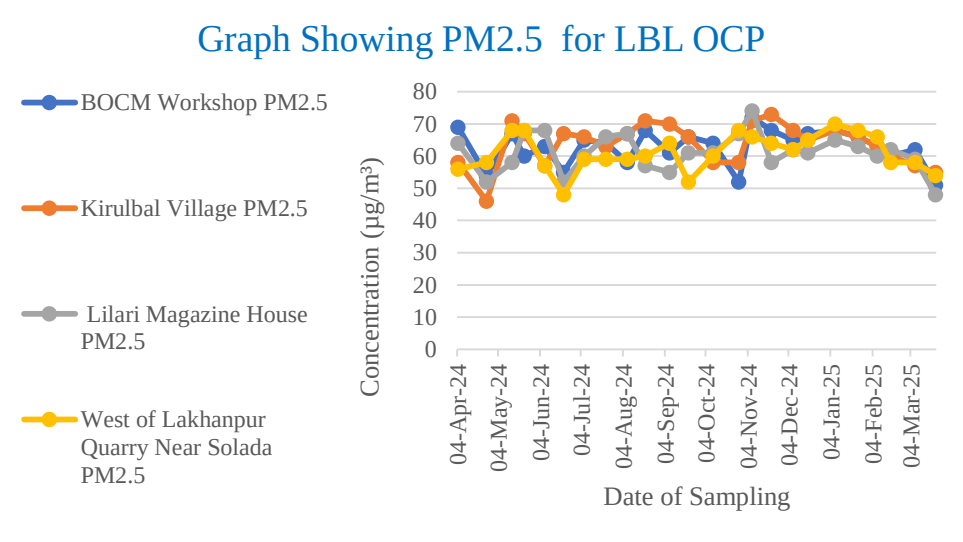
Project: LBL OCP

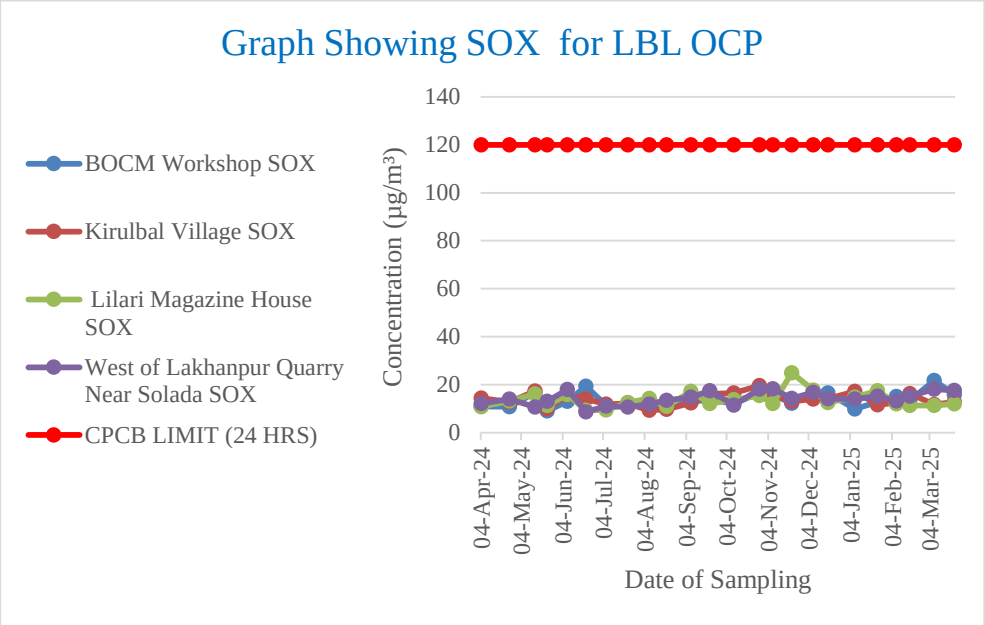
Monitoring Station: West of Lakhanpur Quarry Near Solada

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
04-Apr-24	248	144	56	12.23	12.23
25-Apr-24	226	146	58	14.04	18.19
14-May-24	326	167	68	10.71	11.02
23-May-24	252	112	68	13.09	8.31
07-Jun-24	204	93	57	18.06	23.15
21-Jun-24	220	96	48	8.67	14.36
06-Jul-24	242	112	59	11.15	21.14
22-Jul-24	266	115	59	10.65	37.26
07-Aug-24	213	122	59	11.86	16.92
20-Aug-24	260	122	60	13.53	16.37
07-Sep-24	298	142	64	14.78	23.20
21-Sep-24	244	115	52	17.52	11.29
09-Oct-24	228	128	60	11.45	24.60
28-Oct-24	249	146	68	18.24	29.74
07-Nov-24	253	133	66	18.35	23.98
20-Nov-24	247	129	64	14.36	19.26
07-Dec-24	241	133	62	16.87	12.35
18-Dec-24	267	148	65	14.17	26.75
07-Jan-25	276	178	70	14.06	35.54
24-Jan-25	270	174	68	15.18	23.48
07-Feb-25	271	170	66	13.26	28.96
17-Feb-25	243	139	58	15.19	36.51
07-Mar-25	259	142	58	18.15	33.89
22-Mar-25	225	121	54	17.62	23.11
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	326	178	70	18.35	37.26
Minimum	204	93	48	8.67	8.31
Average	251.17	134.46	61.13	14.30	22.15
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for LBL OCP
BOCM Workshop SPM
Kirulbal Village SPM
Lilari Magazine House SPM
West of Lakhanpur Quarry Near Solada SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
600
500
400
300
200
100
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling


Graph Showing PM10 for LBL OCP
BOCM Workshop PM10
Kirulbal Village PM10
Lilari Magazine House PM10
West of Lakhanpur Quarry Near Solada PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling


Graph Showing PM2.5 for LBL OCP
BOCM Workshop PM2.5
Kirulbal Village PM2.5
Lilari Magazine House PM2.5
West of Lakhanpur Quarry Near Solada PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling


Graph Showing SOX for LBL OCP
BOCM Workshop SOX
Kirulbal Village SOX
Lilari Magazine House SOX
West of Lakhanpur Quarry Near Solada SOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling

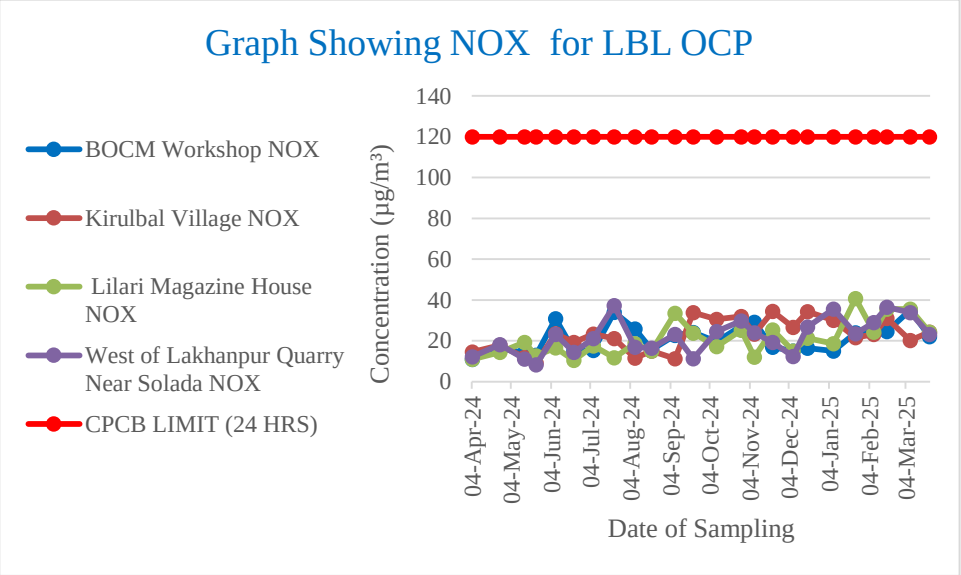

Graph Showing NOX for LBL OCP
BOCM Workshop NOX
Kirulbal Village NOX
Lilari Magazine House NOX
West of Lakhanpur Quarry Near Solada NOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling

Table: 8.5.16

Area: Lakhanpur

Project: Lakhanpur OCP

Monitoring Station: Barihapali Village South West of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	202	83	39	13.86	13.86
02-Apr-24	192	76	34	17.49	17.49
08-Apr-24	174	84	32	17.79	17.79
09-Apr-24	184	88	37	14.20	14.20
16-Apr-24	168	72	30	11.47	14.47
17-Apr-24	188	82	37	16.71	18.72
22-Apr-24	204	86	40	12.99	13.17
23-Apr-24	178	84	35	14.93	17.30
29-Apr-24	164	81	26	14.67	17.17
30-Apr-24	245	92	37	15.45	16.56
06-May-24	170	85	37	10.57	14.33
07-May-24	166	83	55	14.80	19.67
10-May-24	193	86	52	12.24	22.48
11-May-24	172	72	44	14.45	16.63
20-May-24	165	74	52	12.98	12.61
21-May-24	186	71	44	16.13	10.27
27-May-24	182	86	37	11.00	15.43
28-May-24	196	92	48	15.60	16.22
03-Jun-24	206	89	50	19.38	25.02
04-Jun-24	169	71	37	20.78	16.66
10-Jun-24	167	73	35	11.91	25.21
11-Jun-24	188	76	43	12.69	10.97
17-Jun-24	235	86	54	12.37	37.43
18-Jun-24	218	78	44	13.11	33.57
24-Jun-24	225	91	50	8.57	15.09
25-Jun-24	210	83	40	8.44	15.65
01-Jul-24	214	88	44	12.07	21.97
02-Jul-24	168	74	37	14.63	15.82
08-Jul-24	179	78	41	11.06	27.43
09-Jul-24	191	85	43	12.91	19.36
16-Jul-24	203	93	49	13.00	28.62
17-Jul-24	164	70	32	11.44	24.48
24-Jul-24	206	91	40	13.97	26.08
25-Jul-24	160	76	37	10.90	33.76
30-Jul-24	196	83	38	15.33	23.25
31-Jul-24	176	79	33	9.14	33.45
05-Aug-24	202	86	44	14.86	18.83
06-Aug-24	180	89	47	15.37	15.67
13-Aug-24	196	92	51	11.98	16.92
14-Aug-24	179	93	49	11.46	15.20
21-Aug-24	195	96	52	12.85	14.84
22-Aug-24	207	91	49	11.94	17.81
28-Aug-24	181	88	45	15.32	22.10
29-Aug-24	185	73	35	16.81	26.26
02-Sep-24	200	83	41	14.16	12.97

03-Sep-24	214	78	46	14.19	30.41
09-Sep-24	215	85	50	16.34	22.23
10-Sep-24	180	76	39	17.16	31.52
16-Sep-24	185	85	44	14.39	33.44
17-Sep-24	198	82	42	16.98	25.94
23-Sep-24	190	85	46	17.01	33.62
24-Sep-24	216	92	45	16.85	27.45
03-Oct-24	194	89	51	16.00	24.39
04-Oct-24	186	78	42	10.78	33.60
14-Oct-24	180	93	43	15.60	31.36
15-Oct-24	214	91	53	15.83	37.95
21-Oct-24	175	73	36	16.94	27.60
22-Oct-24	188	86	45	14.52	23.67
25-Oct-24	182	78	39	16.32	26.60
26-Oct-24	176	75	37	20.27	33.03
01-Nov-24	199	83	44	14.14	30.68
02-Nov-24	165	72	35	11.63	29.60
08-Nov-24	161	68	30	11.33	34.77
09-Nov-24	167	75	36	14.77	22.92
15-Nov-24	192	79	40	17.45	28.12
16-Nov-24	183	75	38	12.56	17.24
22-Nov-24	184	76	38	13.93	27.35
23-Nov-24	192	78	41	11.38	24.93
29-Nov-24	187	83	40	12.87	33.80
30-Nov-24	202	84	45	16.68	31.49
04-Dec-24	198	81	44	15.30	28.76
05-Dec-24	211	86	49	16.86	36.24
12-Dec-24	203	83	45	14.20	17.82
13-Dec-24	218	90	51	21.59	24.44
20-Dec-24	195	75	46	17.71	20.60
21-Dec-24	212	84	53	21.52	26.97
27-Dec-24	206	83	52	16.29	28.32
28-Dec-24	229	92	58	13.83	22.26
01-Jan-25	194	77	43	14.67	31.91
02-Jan-25	218	91	50	13.88	22.85
08-Jan-25	204	82	47	9.90	29.77
09-Jan-25	210	87	49	16.30	33.76
16-Jan-25	217	92	49	12.88	26.51
17-Jan-25	207	85	48	12.60	26.97
22-Jan-25	227	93	51	17.87	24.65
23-Jan-25	205	83	47	17.80	20.09
30-Jan-25	193	81	45	12.20	24.27
31-Jan-25	205	77	43	14.49	31.81
03-Feb-25	214	88	47	15.80	24.97
04-Feb-25	204	84	46	15.97	32.69
10-Feb-25	195	75	43	13.26	31.46
11-Feb-25	210	82	45	16.17	26.77
18-Feb-25	198	80	44	16.12	25.97
19-Feb-25	186	76	43	11.09	34.57
25-Feb-25	179	74	41	19.05	39.60
26-Feb-25	193	77	42	16.65	35.78
03-Mar-25	203	88	46	10.75	20.34
04-Mar-25	188	83	41	20.26	26.91
10-Mar-25	173	74	39	12.80	22.69

11-Mar-25	186	77	40	12.66	20.04
17-Mar-25	206	83	45	11.86	19.99
18-Mar-25	187	75	41	12.77	34.99
24-Mar-25	177	72	38	14.37	36.75
25-Mar-25	186	78	44	13.19	31.09
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	245	96	58	21.59	39.6
Minimum	160	68	26	8.44	10.27
Average	193.18	82.11	43.04	14.45	24.51
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna

Table: 8.5.17

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Bartap Village North West of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	170	81	34	18.11	18.11
02-Apr-24	163	73	32	14.35	14.35
08-Apr-24	172	79	37	17.46	17.46
09-Apr-24	168	74	29	13.53	13.53
16-Apr-24	192	79	39	12.53	17.92
17-Apr-24	178	90	34	12.26	14.55
22-Apr-24	172	87	33	15.96	18.30
23-Apr-24	178	82	35	13.21	14.45
29-Apr-24	186	81	36	14.36	15.69
30-Apr-24	177	88	38	14.68	17.16
06-May-24	200	93	37	11.96	17.02
07-May-24	182	93	48	12.47	13.31
10-May-24	187	85	41	15.72	11.15
11-May-24	167	88	43	18.18	18.66
20-May-24	162	74	41	12.46	17.05
21-May-24	172	88	43	10.45	14.82
27-May-24	192	69	48	11.05	10.08
28-May-24	195	87	40	15.33	13.76
03-Jun-24	201	88	51	18.64	25.95
04-Jun-24	198	72	30	19.50	28.13
10-Jun-24	220	79	49	12.30	13.90
11-Jun-24	188	94	38	12.74	14.78
17-Jun-24	156	68	31	14.81	25.34
18-Jun-24	162	73	33	13.69	27.60
24-Jun-24	221	93	44	11.92	23.57
25-Jun-24	176	84	37	12.23	20.40
01-Jul-24	216	92	47	11.05	23.36
02-Jul-24	212	90	45	10.83	29.28
08-Jul-24	196	81	42	17.51	30.65
09-Jul-24	182	77	41	13.31	17.67
16-Jul-24	173	68	30	13.13	16.18
17-Jul-24	176	75	36	14.21	27.35
24-Jul-24	188	82	39	11.31	19.06
25-Jul-24	193	88	47	11.24	10.65
30-Jul-24	194	91	42	13.15	19.95
31-Jul-24	174	72	34	12.15	38.27
05-Aug-24	188	85	41	15.21	13.66
06-Aug-24	187	82	38	17.12	17.92
13-Aug-24	180	86	41	15.26	12.00
14-Aug-24	149	78	37	11.79	15.06
21-Aug-24	174	78	37	14.47	25.55
22-Aug-24	223	85	43	14.79	30.38
28-Aug-24	186	74	36	14.08	15.61
29-Aug-24	215	93	51	18.25	18.49
02-Sep-24	202	84	42	16.62	40.88

03-Sep-24	214	74	37	14.99	29.90
09-Sep-24	191	88	46	13.30	15.21
10-Sep-24	170	70	34	12.65	15.32
16-Sep-24	196	88	50	15.07	32.44
17-Sep-24	186	81	45	13.33	18.19
23-Sep-24	189	77	35	12.21	17.45
24-Sep-24	203	70	37	18.50	24.13
03-Oct-24	171	68	32	10.23	15.63
04-Oct-24	178	75	36	14.78	19.78
14-Oct-24	192	82	40	12.49	20.12
15-Oct-24	196	85	42	11.55	17.63
21-Oct-24	187	78	40	15.60	25.42
22-Oct-24	162	65	30	18.36	29.92
25-Oct-24	174	72	35	12.03	19.61
26-Oct-24	186	78	39	12.60	20.53
01-Nov-24	174	72	35	11.90	10.84
02-Nov-24	200	93	51	12.14	31.60
08-Nov-24	200	88	45	10.28	33.15
09-Nov-24	195	84	42	15.18	34.08
15-Nov-24	186	87	45	10.28	14.99
16-Nov-24	173	75	37	13.70	18.92
22-Nov-24	194	80	41	14.36	21.04
23-Nov-24	198	85	44	17.29	26.40
29-Nov-24	208	89	48	15.73	20.74
30-Nov-24	204	83	45	12.62	11.92
04-Dec-24	172	71	36	15.23	24.13
05-Dec-24	188	78	40	13.46	19.06
11-Dec-24	193	79	42	16.40	36.42
12-Dec-24	203	82	45	12.27	26.31
20-Dec-24	193	80	45	15.46	36.59
21-Dec-24	204	84	52	14.28	33.10
27-Dec-24	234	92	58	18.13	36.77
28-Dec-24	216	88	55	15.38	15.17
01-Jan-25	234	94	53	15.15	24.08
02-Jan-25	198	81	45	15.26	25.12
08-Jan-25	228	90	51	14.54	20.63
09-Jan-25	207	85	48	11.27	11.13
16-Jan-25	223	90	49	16.64	21.21
17-Jan-25	204	84	46	15.64	23.48
22-Jan-25	196	82	44	14.49	26.75
23-Jan-25	193	80	42	15.26	25.11
30-Jan-25	202	83	44	14.49	27.39
31-Jan-25	224	78	41	19.32	24.27
03-Feb-25	219	91	49	19.21	26.92
04-Feb-25	198	78	44	14.43	20.52
10-Feb-25	187	74	42	20.50	32.23
11-Feb-25	185	77	40	16.35	26.13
18-Feb-25	209	86	46	17.73	29.47
19-Feb-25	189	73	41	14.40	29.92
25-Feb-25	185	72	40	15.59	29.60
26-Feb-25	177	70	38	15.91	24.26
03-Mar-25	202	83	44	13.11	24.67
04-Mar-25	182	73	40	20.61	22.24
10-Mar-25	179	70	38	12.26	28.37

11-Mar-25	185	78	40	14.60	30.22
17-Mar-25	182	74	39	20.45	37.34
18-Mar-25	209	83	47	22.09	29.52
24-Mar-25	189	76	42	12.26	28.19
25-Mar-25	211	86	45	12.58	30.39
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	234	94	58	22.09	40.88
Minimum	149	65	29	10.23	10.08
Average	191.06	81.11	41.27	14.53	22.41
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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Table: 8.5.18

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Gumadera Village North of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	173	87	36	12.30	12.30
02-Apr-24	186	92	32	13.38	13.38
08-Apr-24	174	96	35	17.55	17.55
09-Apr-24	164	84	28	14.54	14.54
16-Apr-24	180	81	35	13.40	14.42
17-Apr-24	196	92	39	9.98	11.16
22-Apr-24	204	79	42	12.13	17.12
23-Apr-24	175	90	32	12.68	16.02
29-Apr-24	182	83	36	13.83	17.96
30-Apr-24	206	95	44	11.39	14.58
06-May-24	190	75	48	14.41	12.98
07-May-24	177	84	28	11.22	11.32
10-May-24	162	58	37	15.97	17.62
11-May-24	195	89	41	14.30	17.16
20-May-24	180	65	37	13.14	16.91
21-May-24	207	78	41	17.08	17.53
27-May-24	170	77	56	18.84	14.05
28-May-24	174	75	52	11.01	16.21
03-Jun-24	208	88	53	13.04	24.37
04-Jun-24	203	92	43	17.51	34.33
10-Jun-24	186	83	37	13.48	12.49
11-Jun-24	172	85	43	18.59	18.89
17-Jun-24	198	92	45	9.55	12.38
18-Jun-24	178	78	37	12.40	15.99
24-Jun-24	186	94	42	12.41	32.41
25-Jun-24	185	75	36	9.60	30.84
01-Jul-24	181	92	48	16.61	22.61
02-Jul-24	165	75	39	13.36	18.99
08-Jul-24	215	84	46	10.94	16.86
09-Jul-24	181	81	43	10.54	27.26
16-Jul-24	214	96	47	9.27	20.50
17-Jul-24	179	87	40	11.77	12.20
24-Jul-24	186	84	43	11.57	37.14
25-Jul-24	201	89	48	13.59	19.18
30-Jul-24	150	76	34	10.08	30.69
31-Jul-24	186	87	45	14.62	28.14
05-Aug-24	154	72	45	16.97	14.80
06-Aug-24	152	90	48	13.51	12.96
13-Aug-24	186	92	46	15.47	13.79
14-Aug-24	198	89	47	17.90	16.91
21-Aug-24	154	74	32	14.08	23.42
22-Aug-24	182	89	45	12.85	13.42
28-Aug-24	155	82	40	16.56	16.18
29-Aug-24	149	69	28	13.29	31.12
02-Sep-24	249	82	44	12.01	30.44

03-Sep-24	210	79	42	11.60	27.32
09-Sep-24	211	84	43	17.94	37.46
10-Sep-24	162	77	39	15.94	27.45
16-Sep-24	202	93	51	13.25	33.58
17-Sep-24	231	82	41	16.33	36.43
23-Sep-24	203	85	44	18.52	34.88
24-Sep-24	184	78	42	13.95	14.50
03-Oct-24	185	86	41	10.43	39.11
04-Oct-24	175	74	33	10.25	34.93
14-Oct-24	176	78	38	13.89	37.99
15-Oct-24	196	87	45	13.57	32.79
21-Oct-24	191	84	42	12.92	21.06
22-Oct-24	185	77	40	12.64	20.60
25-Oct-24	177	74	38	18.77	30.59
26-Oct-24	206	85	47	17.02	27.73
01-Nov-24	176	78	39	14.01	34.61
02-Nov-24	179	82	40	14.18	16.69
09-Nov-24	176	75	37	13.33	21.48
15-Nov-24	196	85	48	11.41	10.40
16-Nov-24	174	70	33	13.58	19.62
22-Nov-24	178	75	37	11.75	19.64
23-Nov-24	188	80	42	11.75	20.34
29-Nov-24	196	86	44	16.10	11.92
30-Nov-24	212	92	49	17.16	33.03
04-Dec-24	208	80	44	10.68	32.99
05-Dec-24	198	79	43	14.77	28.52
12-Dec-24	214	84	47	18.25	28.39
13-Dec-24	223	89	51	15.44	15.66
20-Dec-24	203	82	49	15.00	13.04
21-Dec-24	210	86	52	16.56	20.32
27-Dec-24	185	80	48	18.23	23.76
28-Dec-24	212	84	53	12.38	23.00
01-Jan-25	205	85	46	14.47	36.95
02-Jan-25	194	82	43	10.33	19.21
08-Jan-25	227	92	51	12.05	23.29
09-Jan-25	210	86	48	14.99	11.22
16-Jan-25	221	79	49	17.48	24.23
17-Jan-25	197	85	44	12.18	26.28
22-Jan-25	190	77	43	13.96	30.04
23-Jan-25	208	84	46	12.08	19.08
30-Jan-25	193	74	41	15.64	24.99
31-Jan-25	196	76	43	13.86	20.74
03-Feb-25	195	77	40	20.51	34.20
04-Feb-25	202	83	45	13.77	32.36
10-Feb-25	185	74	42	20.35	25.76
11-Feb-25	208	85	47	15.24	30.32
18-Feb-25	180	72	38	17.13	34.78
19-Feb-25	195	78	43	17.59	32.65
25-Feb-25	188	70	40	13.18	31.69
26-Feb-25	204	82	45	16.24	36.80
03-Mar-25	194	85	43	18.22	32.48
04-Mar-25	188	78	41	15.68	23.76
10-Mar-25	181	76	38	13.90	28.89
11-Mar-25	197	87	46	12.32	23.95

17-Mar-25	182	73	40	19.17	28.34
18-Mar-25	174	68	37	11.18	24.97
24-Mar-25	167	64	36	19.10	20.06
25-Mar-25	166	62	35	13.66	20.78
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	249	96	56	20.51	39.11
Minimum	149	58	28	9.27	10.4
Average	189.49	81.56	42.09	14.22	23.19
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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Table: 8.5.19

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Kadam Rehab Centre East of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	180	84	38	15.32	15.32
02-Apr-24	212	92	45	14.11	14.11
08-Apr-24	172	78	36	16.71	16.71
09-Apr-24	195	86	44	11.38	11.38
16-Apr-24	194	84	43	17.21	17.32
17-Apr-24	204	92	48	12.24	13.37
22-Apr-24	187	78	37	11.36	15.36
23-Apr-24	178	82	41	18.20	16.53
29-Apr-24	165	77	35	12.15	13.87
30-Apr-24	198	89	47	13.64	16.63
06-May-24	216	71	50	13.36	11.32
07-May-24	152	93	40	18.93	16.14
10-May-24	201	91	58	11.16	17.04
11-May-24	205	78	55	16.72	14.17
20-May-24	210	95	58	10.59	15.68
21-May-24	190	92	55	19.11	13.42
27-May-24	179	76	48	13.20	15.93
28-May-24	199	81	37	8.36	18.15
03-Jun-24	154	78	27	12.41	21.90
04-Jun-24	198	80	46	13.69	11.07
10-Jun-24	191	90	38	16.87	12.50
11-Jun-24	182	85	33	15.90	26.71
17-Jun-24	187	75	42	12.53	17.73
18-Jun-24	225	86	53	14.54	21.56
24-Jun-24	187	72	43	12.02	14.58
25-Jun-24	178	84	38	8.75	10.76
01-Jul-24	188	92	48	10.18	28.85
02-Jul-24	162	78	39	12.85	21.68
08-Jul-24	176	88	46	17.86	21.43
09-Jul-24	169	86	42	11.19	18.78
16-Jul-24	169	72	34	9.16	24.05
17-Jul-24	168	80	39	10.19	32.44
24-Jul-24	146	76	35	12.47	26.91
25-Jul-24	195	89	40	14.47	23.52
30-Jul-24	167	78	37	15.37	26.08
31-Jul-24	186	71	35	13.66	19.64
05-Aug-24	163	89	42	17.86	11.04
06-Aug-24	193	82	35	17.47	18.79
13-Aug-24	186	86	46	11.85	18.78
14-Aug-24	168	71	37	20.58	15.85
21-Aug-24	186	88	45	12.57	26.38
22-Aug-24	192	80	39	12.00	18.68
28-Aug-24	143	65	27	12.90	17.74
29-Aug-24	183	86	40	12.71	17.63
02-Sep-24	199	80	43	14.39	23.00

03-Sep-24	189	86	48	12.56	20.93
09-Sep-24	184	83	44	13.63	30.25
10-Sep-24	171	76	39	16.39	25.73
16-Sep-24	167	78	35	12.41	23.37
17-Sep-24	180	88	46	14.01	33.67
23-Sep-24	157	79	40	14.38	24.90
24-Sep-24	167	84	43	14.45	17.89
29-Sep-24	185	86	39	14.89	26.40
03-Oct-24	187	75	43	13.42	31.59
04-Oct-24	178	71	40	12.00	24.62
14-Oct-24	198	86	49	11.31	36.87
15-Oct-24	166	65	34	14.63	32.59
21-Oct-24	178	82	43	16.79	27.36
22-Oct-24	166	78	40	11.74	19.14
25-Oct-24	159	72	36	14.73	24.00
26-Oct-24	192	86	48	17.22	28.08
01-Nov-24	193	89	47	16.85	28.90
02-Nov-24	185	85	46	11.88	35.90
08-Nov-24	167	76	32	20.40	21.07
09-Nov-24	187	90	46	9.80	24.83
15-Nov-24	165	73	36	15.14	18.50
16-Nov-24	187	83	44	14.64	23.60
22-Nov-24	201	85	44	16.02	18.55
23-Nov-24	209	88	46	18.44	31.41
29-Nov-24	195	80	43	13.93	21.04
30-Nov-24	213	91	48	12.62	11.92
04-Dec-24	185	77	38	20.63	32.18
05-Dec-24	190	80	42	20.13	19.16
12-Dec-24	206	83	45	11.94	20.04
13-Dec-24	213	86	48	14.96	20.08
20-Dec-24	196	82	49	9.98	38.71
21-Dec-24	205	84	51	16.12	36.52
27-Dec-24	225	87	55	15.83	17.64
28-Dec-24	232	92	53	16.66	19.60
01-Jan-25	201	80	43	12.76	27.40
02-Jan-25	206	84	45	14.10	17.41
08-Jan-25	218	89	49	15.33	28.49
09-Jan-25	223	92	50	12.62	20.77
16-Jan-25	213	84	46	14.98	19.08
17-Jan-25	211	82	45	17.02	24.23
22-Jan-25	195	75	42	14.01	27.83
23-Jan-25	228	90	51	11.04	20.45
30-Jan-25	190	79	43	16.10	30.92
31-Jan-25	215	85	47	11.42	22.41
03-Feb-25	186	83	41	14.85	27.99
04-Feb-25	208	86	47	14.67	31.89
10-Feb-25	203	84	46	17.19	32.27
11-Feb-25	190	75	42	18.71	28.41
18-Feb-25	179	73	39	16.69	26.24
19-Feb-25	201	81	45	15.28	30.48
25-Feb-25	196	79	44	12.77	28.84
26-Feb-25	183	71	40	11.16	25.74
03-Mar-25	176	78	37	18.96	36.36
04-Mar-25	194	81	43	18.06	26.52

10-Mar-25	189	79	42	11.62	19.70
11-Mar-25	183	77	40	14.42	33.66
17-Mar-25	157	62	29	17.15	37.40
18-Mar-25	158	66	32	17.98	26.58
24-Mar-25	167	69	35	13.25	21.08
25-Mar-25	179	72	39	19.42	19.80
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	232	95	58	20.63	38.71
Minimum	143	62	27	8.36	10.76
Average	187.67	81.41	42.53	14.40	22.66
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
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Table: 8.5.20

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Lakhanpur Police Station West of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	187	88	40	10.50	10.50
02-Apr-24	182	81	34	13.48	13.48
08-Apr-24	178	92	35	15.27	15.27
09-Apr-24	169	75	31	12.46	12.46
16-Apr-24	185	78	40	12.82	15.15
17-Apr-24	191	82	38	11.39	12.69
22-Apr-24	170	92	31	10.11	12.68
23-Apr-24	194	78	39	11.98	12.37
29-Apr-24	174	86	32	17.43	17.94
30-Apr-24	163	76	28	13.92	14.45
06-May-24	182	73	48	14.89	16.91
07-May-24	187	76	37	12.47	18.14
10-May-24	179	90	46	13.58	13.19
11-May-24	190	87	38	13.36	10.04
20-May-24	153	77	46	11.01	12.87
21-May-24	191	88	38	14.53	11.81
27-May-24	177	75	48	17.35	15.69
28-May-24	186	88	28	15.66	15.68
03-Jun-24	155	78	52	16.66	17.96
04-Jun-24	184	91	42	21.31	26.85
10-Jun-24	144	69	43	20.49	26.23
11-Jun-24	157	85	37	13.23	29.05
17-Jun-24	194	92	48	10.19	27.95
18-Jun-24	181	78	45	9.08	31.13
24-Jun-24	169	73	37	14.19	36.18
25-Jun-24	214	88	51	11.55	25.32
01-Jul-24	192	84	44	15.44	18.99
02-Jul-24	182	72	40	11.77	16.78
08-Jul-24	194	78	43	11.96	29.50
09-Jul-24	161	68	34	19.31	18.59
16-Jul-24	210	95	41	10.99	10.42
17-Jul-24	201	92	48	8.48	31.16
24-Jul-24	211	86	41	11.36	37.94
25-Jul-24	206	94	51	13.57	36.78
30-Jul-24	160	76	37	13.35	31.41
31-Jul-24	151	70	34	11.23	16.97
05-Aug-24	191	74	27	10.89	16.22
06-Aug-24	206	88	47	13.43	12.66
13-Aug-24	160	72	36	14.58	14.85
14-Aug-24	190	83	48	14.36	13.03
21-Aug-24	167	77	33	15.32	22.10
22-Aug-24	163	75	32	16.50	13.55
28-Aug-24	167	68	29	12.43	18.67
29-Aug-24	171	83	39	16.21	28.65
02-Sep-24	209	79	41	13.46	14.17

03-Sep-24	205	90	46	16.39	19.80
09-Sep-24	215	81	42	13.91	12.33
10-Sep-24	228	86	48	12.92	17.04
16-Sep-24	180	78	41	16.40	22.40
17-Sep-24	165	76	40	14.52	15.64
23-Sep-24	145	68	31	12.80	18.67
24-Sep-24	189	90	50	13.19	35.90
03-Oct-24	171	69	36	14.31	24.99
04-Oct-24	182	78	40	14.65	26.05
14-Oct-24	158	64	28	15.43	24.25
15-Oct-24	174	73	38	10.76	19.73
21-Oct-24	184	84	45	14.77	24.07
22-Oct-24	184	82	41	17.98	29.31
25-Oct-24	195	90	46	14.74	24.03
26-Oct-24	214	93	47	13.63	22.21
01-Nov-24	162	72	31	11.38	22.71
02-Nov-24	190	86	45	12.12	11.27
08-Nov-24	183	78	41	15.58	25.89
09-Nov-24	177	78	39	11.99	22.84
15-Nov-24	169	68	32	15.16	30.73
16-Nov-24	175	73	36	13.54	26.33
22-Nov-24	175	74	37	14.22	31.41
23-Nov-24	194	79	40	16.68	19.97
29-Nov-24	198	84	43	16.97	25.95
30-Nov-24	213	88	46	16.10	18.94
04-Dec-24	204	84	46	17.19	30.71
05-Dec-24	196	79	42	14.83	14.06
12-Dec-24	205	83	46	17.76	19.78
13-Dec-24	216	85	49	14.21	35.05
20-Dec-24	202	75	41	19.15	29.78
21-Dec-24	215	84	46	14.09	19.14
27-Dec-24	206	81	44	11.62	22.53
28-Dec-24	225	89	52	14.60	25.37
01-Jan-25	196	81	43	18.48	20.03
02-Jan-25	214	86	47	10.38	26.01
08-Jan-25	208	84	45	16.22	20.67
09-Jan-25	225	91	50	14.98	24.66
16-Jan-25	225	88	49	12.45	22.09
17-Jan-25	208	81	45	13.44	39.28
22-Jan-25	193	78	43	11.00	33.88
23-Jan-25	212	84	46	12.73	38.58
30-Jan-25	187	75	41	10.75	24.47
31-Jan-25	196	80	44	12.99	33.16
03-Feb-25	203	78	44	18.73	33.99
04-Feb-25	218	85	48	11.60	24.54
10-Feb-25	189	75	42	13.89	29.89
11-Feb-25	207	83	46	12.37	41.22
18-Feb-25	196	75	42	11.84	33.71
19-Feb-25	210	85	46	15.88	28.84
25-Feb-25	184	74	40	13.89	29.89
26-Feb-25	200	80	44	12.37	41.22
03-Mar-25	189	75	40	21.77	36.06
04-Mar-25	203	82	44	15.25	24.99
10-Mar-25	178	74	38	13.89	29.89

11-Mar-25	193	78	42	12.37	41.22
17-Mar-25	191	77	42	14.54	16.50
18-Mar-25	166	66	37	13.89	29.89
24-Mar-25	156	64	33	12.37	41.22
25-Mar-25	186	75	40	11.32	35.55
Basic Stats	SPM	PM10	PM2 5	SO2	NOx
Maximum	228	95	52	21.77	41.22
Minimum	144	64	27	8.48	10.04
Average	188.03	80.25	41.09	14.01	23.51
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.21

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Ramada Village South of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	175	78	30	13.44	13.44
02-Apr-24	165	84	33	11.15	11.15
08-Apr-24	194	81	38	12.73	12.73
09-Apr-24	215	89	42	12.90	12.90
16-Apr-24	175	86	37	13.54	15.53
17-Apr-24	314	91	46	17.17	20.01
22-Apr-24	196	95	42	18.30	19.45
23-Apr-24	181	83	35	15.14	15.80
29-Apr-24	176	88	33	11.78	13.45
30-Apr-24	198	96	43	10.51	12.14
06-May-24	180	97	56	10.62	14.93
07-May-24	209	95	52	12.64	11.70
10-May-24	145	78	49	14.14	14.40
11-May-24	138	84	42	16.97	20.72
20-May-24	155	74	49	9.86	11.67
21-May-24	151	83	42	8.90	12.15
27-May-24	178	88	37	11.86	17.32
28-May-24	168	84	55	13.50	12.48
03-Jun-24	204	79	41	13.15	23.02
04-Jun-24	190	82	34	14.43	19.60
10-Jun-24	197	86	40	14.40	24.50
11-Jun-24	188	91	41	13.71	32.70
17-Jun-24	208	83	52	14.35	17.02
18-Jun-24	177	88	40	9.20	28.08
24-Jun-24	169	78	37	12.86	22.24
25-Jun-24	178	83	39	13.43	29.14
01-Jul-24	188	78	40	18.38	23.70
02-Jul-24	209	85	44	16.77	17.93
08-Jul-24	168	66	34	14.17	20.15
09-Jul-24	178	72	38	13.74	16.84
16-Jul-24	189	80	37	15.65	37.05
17-Jul-24	196	93	45	12.47	39.28
24-Jul-24	177	79	41	13.61	36.57
25-Jul-24	194	85	42	10.71	20.45
30-Jul-24	155	68	34	10.71	21.30
31-Jul-24	199	91	44	15.62	11.10
05-Aug-24	180	92	49	18.64	14.33
06-Aug-24	211	84	37	19.77	22.73
13-Aug-24	209	84	43	18.31	20.89
14-Aug-24	189	80	41	15.21	16.03
21-Aug-24	169	72	30	10.51	31.09
22-Aug-24	158	75	32	15.43	28.01
28-Aug-24	164	68	29	16.29	23.34
29-Aug-24	156	83	42	13.98	11.98
02-Sep-24	175	70	35	12.66	10.22

03-Sep-24	211	81	42	13.07	16.75
09-Sep-24	193	87	45	17.07	23.38
10-Sep-24	208	92	54	14.49	33.67
16-Sep-24	227	85	46	11.87	18.06
17-Sep-24	167	72	36	14.67	10.57
23-Sep-24	164	68	33	13.51	33.67
24-Sep-24	182	78	40	16.64	18.15
03-Oct-24	174	74	35	12.14	20.68
04-Oct-24	170	70	33	14.58	21.47
14-Oct-24	184	77	38	14.00	16.90
15-Oct-24	190	83	44	11.37	37.06
21-Oct-24	216	93	48	15.85	25.83
22-Oct-24	169	71	36	12.49	20.36
25-Oct-24	168	68	33	16.69	27.21
26-Oct-24	180	77	35	14.27	23.25
01-Nov-24	187	76	38	13.54	18.06
02-Nov-24	188	83	42	19.54	22.74
08-Nov-24	195	89	46	13.20	22.85
09-Nov-24	181	78	39	10.93	17.61
15-Nov-24	204	86	45	13.54	33.10
16-Nov-24	195	82	43	11.77	28.86
22-Nov-24	179	76	39	18.11	28.42
23-Nov-24	188	80	42	19.54	19.20
29-Nov-24	196	86	45	12.19	21.04
30-Nov-24	208	91	49	16.10	30.16
04-Dec-24	177	70	37	17.46	22.99
05-Dec-24	216	78	42	11.34	19.01
12-Dec-24	212	85	48	19.78	30.85
13-Dec-24	207	83	46	20.34	33.72
20-Dec-24	194	78	41	14.38	14.58
21-Dec-24	203	83	45	15.89	39.33
27-Dec-24	210	91	49	13.59	41.53
28-Dec-24	235	95	54	13.53	24.36
01-Jan-25	195	81	42	14.58	14.57
02-Jan-25	203	85	44	15.85	26.86
08-Jan-25	217	88	49	19.39	19.84
09-Jan-25	230	94	52	10.75	20.64
16-Jan-25	222	93	49	12.42	29.54
17-Jan-25	213	85	47	12.56	19.88
22-Jan-25	204	82	45	15.76	20.93
23-Jan-25	228	90	50	13.73	27.62
30-Jan-25	188	76	42	18.82	23.44
31-Jan-25	204	83	45	13.22	30.13
03-Feb-25	225	93	50	17.47	40.78
04-Feb-25	211	82	45	12.54	25.41
10-Feb-25	219	86	48	13.94	37.64
11-Feb-25	197	78	44	11.09	18.82
18-Feb-25	218	87	48	12.99	33.16
19-Feb-25	197	79	43	17.47	40.78
25-Feb-25	208	85	45	12.54	25.41
26-Feb-25	196	83	42	13.94	37.64
03-Mar-25	210	87	46	12.99	33.16
04-Mar-25	190	79	41	17.47	40.78
10-Mar-25	201	85	43	12.54	25.41

11-Mar-25	188	83	41	13.94	37.64
17-Mar-25	201	83	42	17.47	40.78
18-Mar-25	163	65	29	12.54	25.41
24-Mar-25	168	68	32	13.94	37.64
25-Mar-25	179	74	37	11.09	18.82
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	314	97	56	20.34	41.53
Minimum	138	65	29	8.9	10.22
Average	191.740	82.202	41.837	14.248	23.552
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
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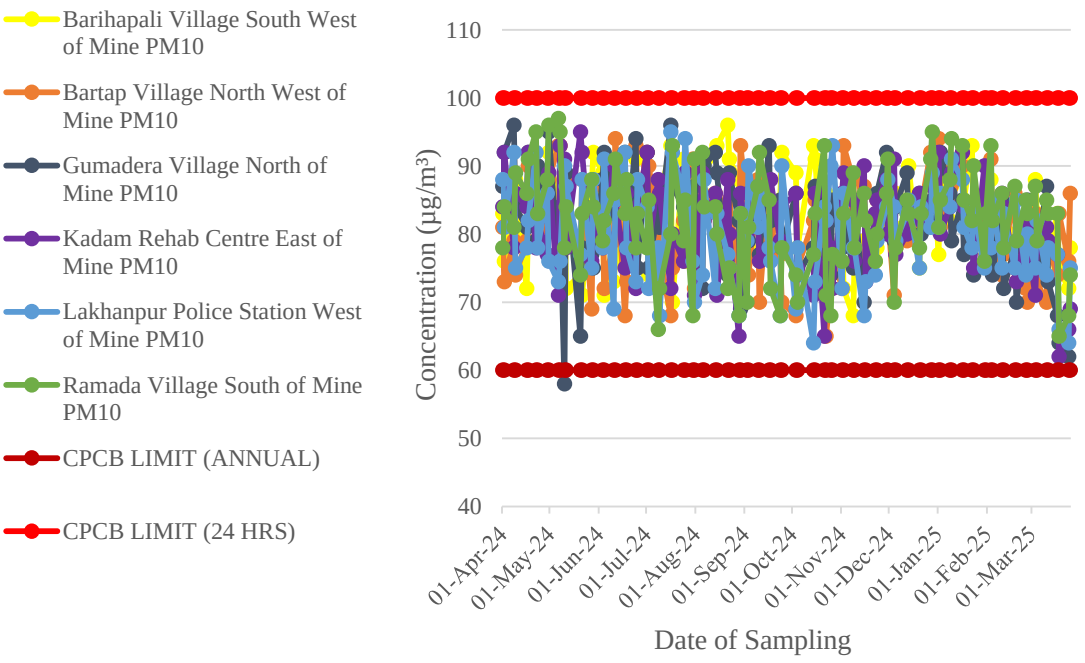
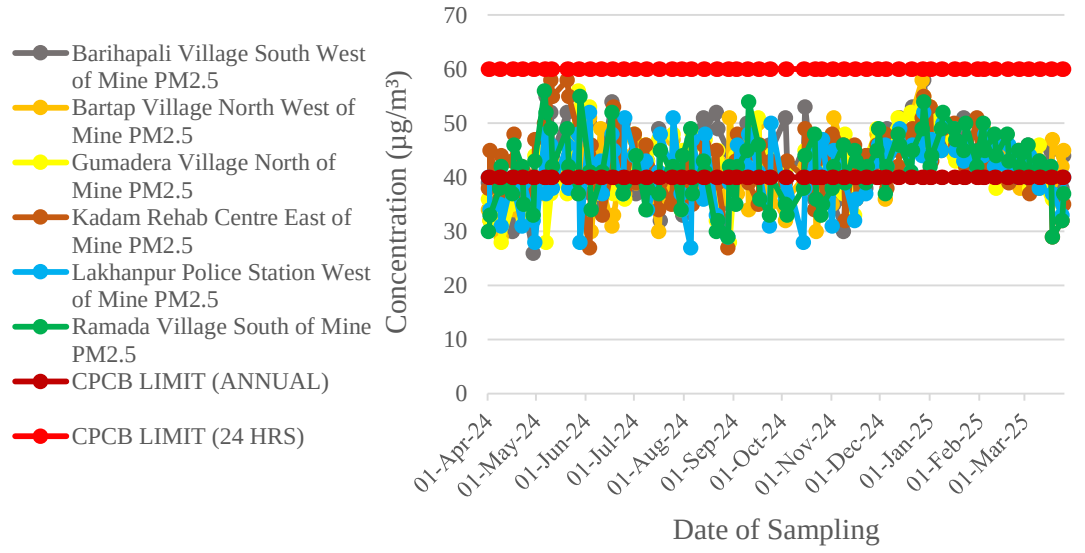
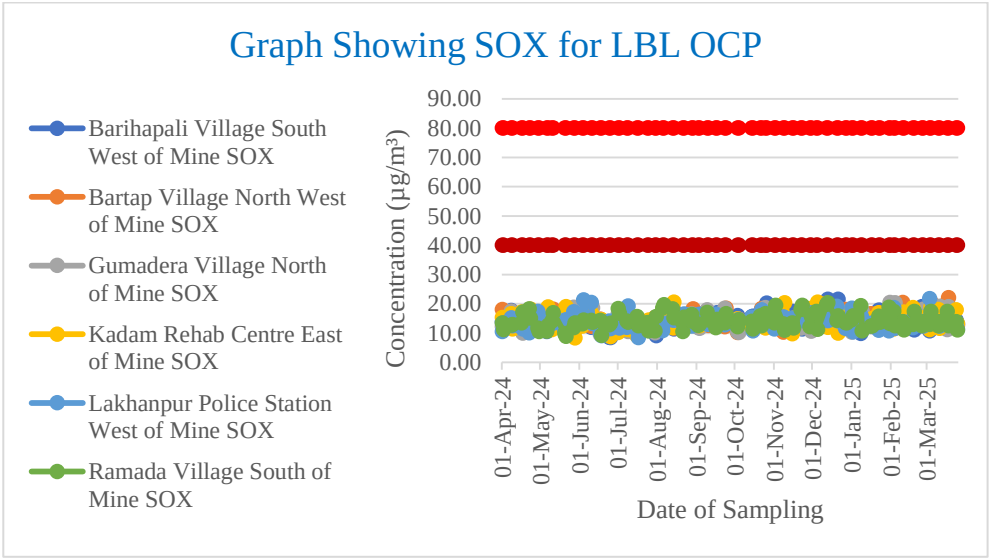
Graph Showing PM10 for LBL OCP



सीएमपीडीआई

Graph Showing PM2.5 for LBL OCP




Graph Showing SOX for LBL OCP
Barihapali Village South West of Mine SOX
Bartap Village North West of Mine SOX
Gumadera Village North of Mine SOX
Kadam Rehab Centre East of Mine SOX
Lakhanpur Police Station West of Mine SOX
Ramada Village South of Mine SOX
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling

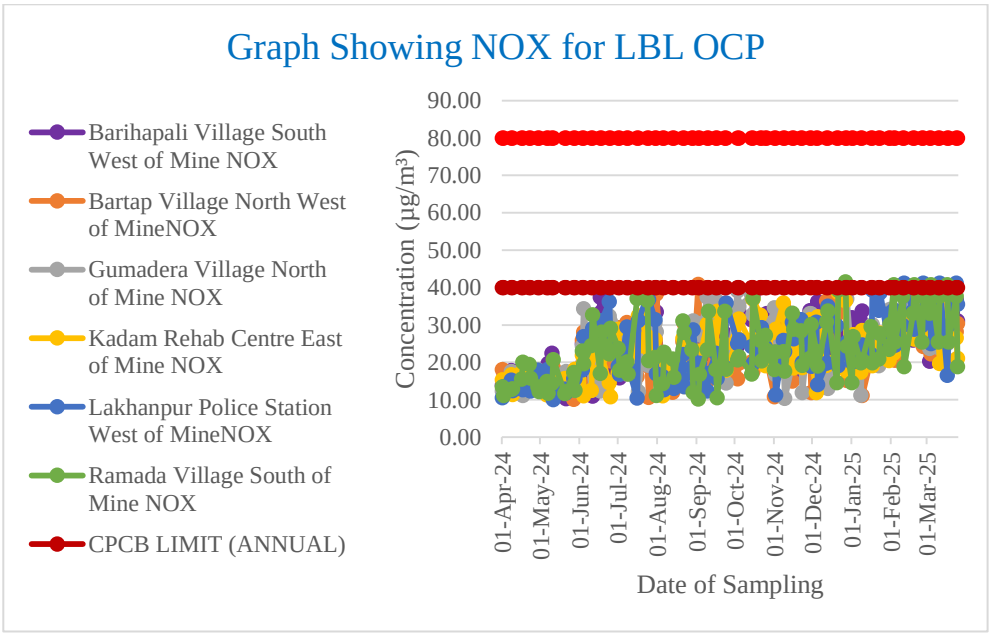

Graph Showing NOX for LBL OCP
Barihapali Village South West of Mine NOX
Bartap Village North West of MineNOX
Gumadera Village North of Mine NOX
Kadam Rehab Centre East of Mine NOX
Lakhanpur Police Station West of MineNOX
Ramada Village South of Mine NOX
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling

Table: 8.5.22

Area: Mahalaxmi

Project: Basundhara (w) OCP

Monitoring Station: Khamarpara, East Side of Sardega Railway Siding

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
06-Apr-24	253	148	64	14.61	15.48
20-Apr-24	228	138	52	13.56	17.16
13-May-24	309	145	73	12.41	15.09
22-May-24	348	169	62	15.73	18.98
08-Jun-24	236	107	69	18.47	29.15
22-Jun-24	246	110	58	8.30	29.67
12-Jul-24	266	128	67	11.43	21.83
23-Jul-24	237	127	65	12.54	16.82
08-Aug-24	271	143	63	13.98	10.57
26-Aug-24	235	126	64	13.15	21.14
13-Sep-24	275	135	61	16.40	10.90
25-Sep-24	224	125	63	13.98	13.52
05-Oct-24	237	118	64	14.69	31.13
19-Oct-24	208	85	52	15.85	21.32
13-Nov-24	223	112	57	11.75	11.84
21-Nov-24	241	138	64	15.47	38.13
14-Dec-24	286	168	72	18.72	38.11
19-Dec-24	263	159	68	14.49	30.53
13-Jan-25	279	174	70	12.22	36.36
25-Jan-25	273	171	68	12.37	41.23
08-Feb-25	269	168	65	14.78	32.14
22-Feb-25	256	155	62	16.20	31.65
08-Mar-25	247	150	59	17.17	24.39
28-Mar-25	228	136	57	19.07	23.22
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	348	174	73	19.07	41.23
Minimum	208	85	52	8.30	10.57
Average	255.75	138.96	63.29	14.47	24.18
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.23

Area: Mahalaxmi

Project: Basundhara (w) OCP

Monitoring Station: North of the Sardega Railway Siding, Kulapada

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
05-Apr-24	265	155	62	10.41	10.41
20-Apr-24	216	96	48	16.10	17.05
13-May-24	269	125	76	16.06	13.64
22-May-24	278	140	63	16.50	12.96
08-Jun-24	224	116	59	19.27	15.97
22-Jun-24	261	125	59	9.28	14.40
12-Jul-24	234	108	55	10.90	21.36
22-Jul-24	255	132	65	10.74	20.50
07-Aug-24	286	136	68	13.82	16.72
20-Aug-24	262	128	62	12.43	27.34
07-Sep-24	278	118	58	18.61	21.80
21-Sep-24	236	122	63	16.92	11.86
05-Oct-24	244	104	67	10.79	22.93
19-Oct-24	226	123	61	15.80	25.76
13-Nov-24	279	165	75	14.73	24.49
21-Nov-24	263	152	68	17.16	24.58
14-Dec-24	244	148	62	16.98	26.24
19-Dec-24	247	145	64	12.63	29.55
13-Jan-25	263	158	67	13.17	28.41
25-Jan-25	258	155	65	12.18	25.58
08-Feb-25	238	138	62	11.00	33.88
22-Feb-25	238	158	59	13.44	39.28
08-Mar-25	272	168	64	13.44	39.28
28-Mar-25	237	114	52	11.00	33.88
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	286	168	76	19.27	39.28
Minimum	216	96	48	9.28	10.41
Average	253.04	134.54	62.67	13.89	23.24
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.24

Area: Mahalaxmi

Project: Basundhara (w) OCP

Monitoring Station: South West of Working face Gopalpur Village, Near CMPDI Camp

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
05-Apr-24	244	134	56	11.05	11.05
20-Apr-24	234	144	55	17.02	18.68
13-May-24	331	167	63	14.78	16.94
22-May-24	311	160	67	17.91	16.01
08-Jun-24	177	92	51	11.29	19.64
22-Jun-24	206	92	48	11.21	29.27
12-Jul-24	256	124	63	11.91	14.43
23-Jul-24	268	136	67	12.37	20.75
08-Aug-24	293	138	65	15.71	11.88
26-Aug-24	221	115	59	10.55	15.04
13-Sep-24	274	154	70	16.53	16.39
25-Sep-24	209	110	56	14.31	12.33
05-Oct-24	214	107	56	17.78	38.94
19-Oct-24	241	130	63	16.43	26.78
13-Nov-24	243	136	66	12.07	31.42
21-Nov-24	264	158	69	18.44	21.23
14-Dec-24	227	121	59	16.53	38.83
19-Dec-24	267	135	62	15.69	17.36
13-Jan-25	261	163	66	11.05	18.19
25-Jan-25	256	160	64	14.98	31.01
08-Feb-25	237	144	61	14.34	20.38
22-Feb-25	246	154	58	15.55	25.88
08-Mar-25	241	138	56	18.71	28.60
28-Mar-25	228	125	53	15.80	31.49
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	331	167	70	18.71	38.94
Minimum	177	92	48	10.55	11.05
Average	247.9	134.88	60.54	14.67	22.19
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.25

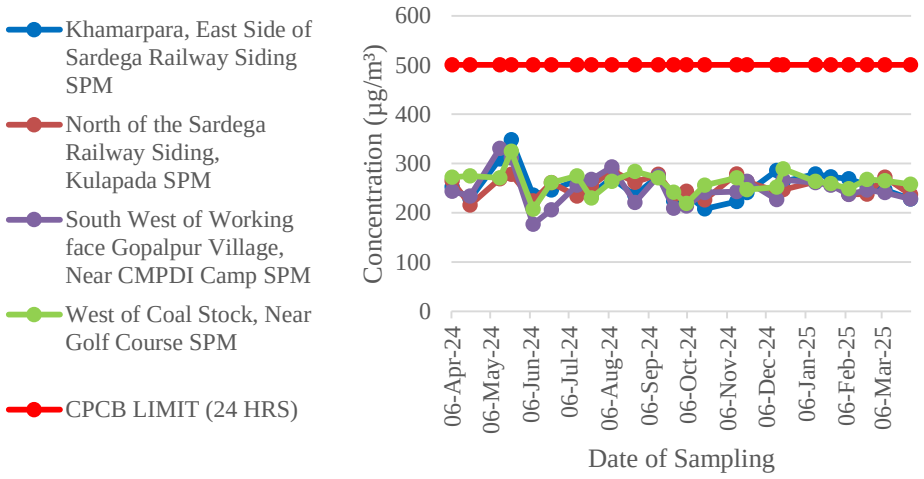
Area: Mahalaxmi

Project: Basundhara (w) OCP

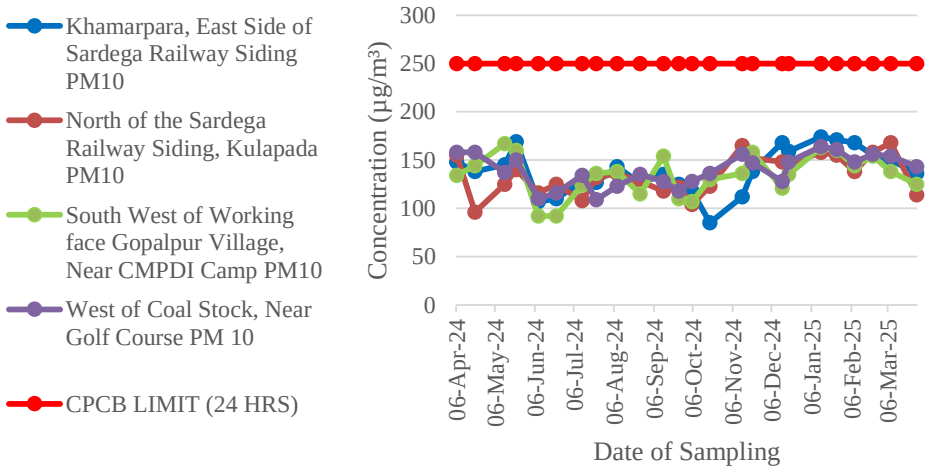
Monitoring Station: West of Coal Stock, Near Golf Course

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
05-Apr-24	272	158	65	13.40	13.40
20-Apr-24	275	158	65	17.55	19.87
13-May-24	271	137	72	11.30	11.23
22-May-24	325	150	70	12.01	17.54
08-Jun-24	207	110	56	9.26	15.79
22-Jun-24	261	116	57	12.07	8.20
12-Jul-24	275	134	68	15.43	18.91
22-Jul-24	230	109	56	13.33	26.55
07-Aug-24	264	123	67	13.39	10.88
20-Aug-24	284	135	64	10.90	30.01
07-Sep-24	271	128	62	18.98	10.22
21-Sep-24	242	118	61	16.66	13.68
05-Oct-24	219	128	58	18.74	21.21
19-Oct-24	256	136	68	20.98	34.19
13-Nov-24	271	156	71	11.94	30.62
21-Nov-24	247	147	66	13.93	31.56
14-Dec-24	252	128	63	13.30	36.34
19-Dec-24	289	148	65	15.41	43.76
07-Jan-25	264	164	67	13.82	15.69
25-Jan-25	259	161	65	11.76	26.28
08-Feb-25	249	148	63	12.45	23.51
22-Feb-25	268	156	60	12.81	34.67
08-Mar-25	265	154	62	18.00	21.66
28-Mar-25	258	143	60	13.10	21.45
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	325	164	72	20.98	43.76
Minimum	207	109	56	9.26	8.20
Average	261.4	139.38	63.79	14.19	22.38
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

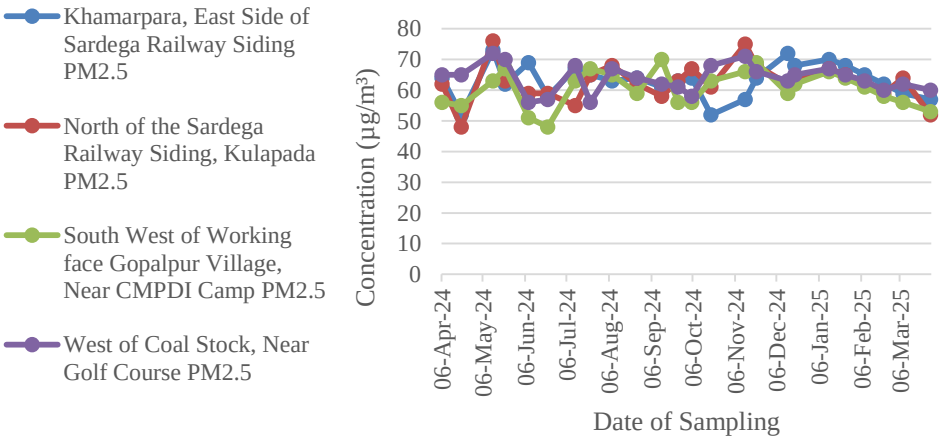
Graph Showing SPM for Bsundhara(w) OCP

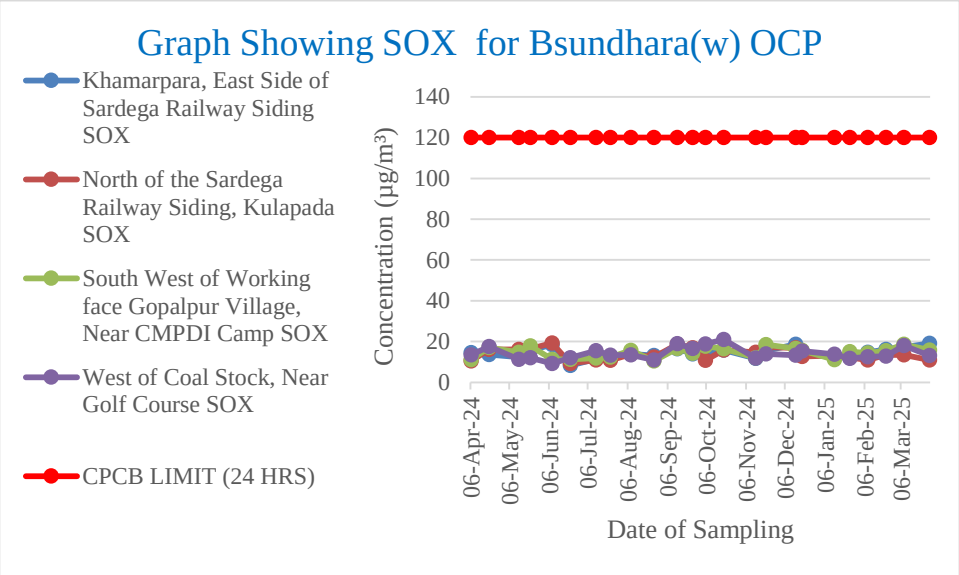


Graph Showing PM10 for Bsundhara(w) OCP



Graph Showing PM2.5 for Bsundhara(w) OCP




Graph Showing SOX for Bsundhara(w) OCP
Khamarpara, East Side of Sardega Railway Siding SOX
North of the Sardega Railway Siding, Kulapada SOX
South West of Working face Gopalpur Village, Near CMPDI Camp SOX
West of Coal Stock, Near Golf Course SOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
06-Apr-24
06-May-24
06-Jun-24
06-Jul-24
06-Aug-24
06-Sep-24
06-Oct-24
06-Nov-24
06-Dec-24
06-Jan-25
06-Feb-25
06-Mar-25
Date of Sampling

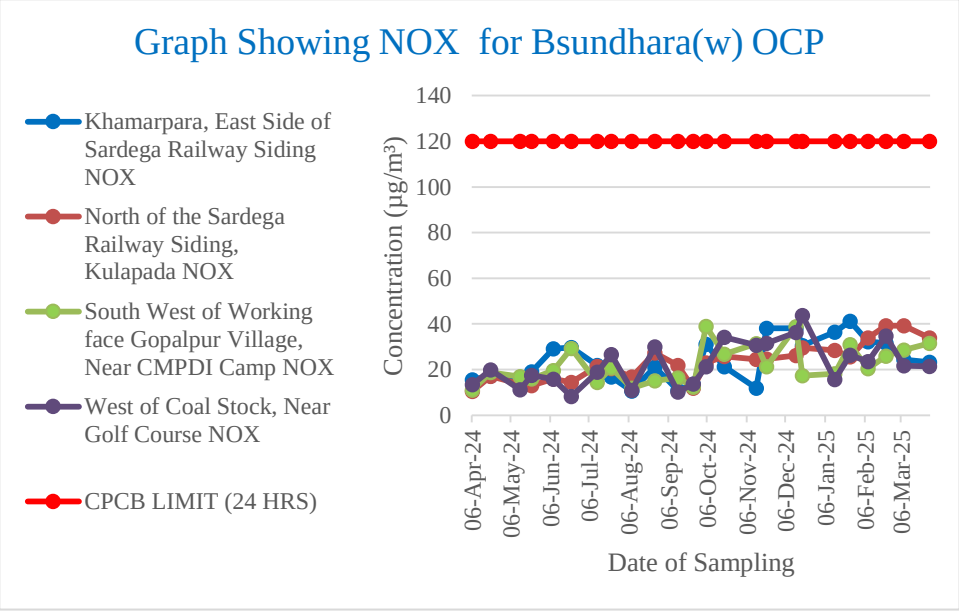

Graph Showing NOX for Bsundhara(w) OCP
Khamarpara, East Side of Sardega Railway Siding NOX
North of the Sardega Railway Siding, Kulapada NOX
South West of Working face Gopalpur Village, Near CMPDI Camp NOX
West of Coal Stock, Near Golf Course NOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
06-Apr-24
06-May-24
06-Jun-24
06-Jul-24
06-Aug-24
06-Sep-24
06-Oct-24
06-Nov-24
06-Dec-24
06-Jan-25
06-Feb-25
06-Mar-25
Date of Sampling

Table: 8.5.26

Area: Mahalaxmi

Project: Basundhara (w) OCP

Monitoring Station: Sarangijharia Village

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	193	88	41	14.47	14.47
04-Apr-24	164	75	29	17.80	17.80
10-Apr-24	176	84	37	14.71	14.71
11-Apr-24	172	79	38	15.24	15.24
18-Apr-24	205	93	46	10.18	14.11
19-Apr-24	192	89	41	13.58	16.77
24-Apr-24	192	82	38	13.73	16.68
25-Apr-24	177	87	35	12.45	15.85
02-May-24	162	87	50	15.68	15.69
03-May-24	153	93	39	11.18	12.81
08-May-24	146	77	38	15.62	18.95
09-May-24	183	87	58	7.48	9.79
16-May-24	219	92	46	12.26	13.56
17-May-24	195	81	40	15.63	16.52
24-May-24	172	76	35	10.52	14.12
25-May-24	186	84	42	13.25	18.56
05-Jun-24	186	87	52	19.24	31.98
06-Jun-24	212	96	42	13.91	9.90
12-Jun-24	120	74	38	20.40	29.38
13-Jun-24	151	93	46	14.07	29.19
19-Jun-24	186	86	42	8.72	15.96
20-Jun-24	178	83	39	12.08	23.41
26-Jun-24	204	86	47	11.78	55.65
27-Jun-24	184	89	44	10.87	8.44
03-Jul-24	217	84	42	11.19	17.95
04-Jul-24	165	78	40	12.46	17.45
10-Jul-24	195	86	43	13.76	18.92
11-Jul-24	186	92	45	10.96	18.42
18-Jul-24	178	82	40	14.38	17.54
19-Jul-24	167	78	36	10.96	32.23
26-Jul-24	158	66	32	8.72	33.45
27-Jul-24	206	92	46	14.54	32.23
01-Aug-24	166	82	37	9.71	11.29
02-Aug-24	173	81	43	11.39	16.48
09-Aug-24	164	88	47	15.24	13.98
10-Aug-24	211	92	50	12.95	20.98
16-Aug-24	156	78	36	11.39	27.09
17-Aug-24	191	87	43	14.01	21.90
23-Aug-24	141	90	45	15.68	31.30
24-Aug-24	190	80	42	14.14	37.07
30-Aug-24	155	84	30	12.81	28.02
31-Aug-24	184	76	38	10.55	15.04
04-Sep-24	232	92	47	15.68	18.05
05-Sep-24	246	95	49	15.34	27.04
11-Sep-24	243	88	46	20.59	17.45

12-Sep-24	232	85	44	20.62	23.49
19-Sep-24	195	89	52	14.60	10.31
20-Sep-24	171	86	45	15.48	15.64
27-Sep-24	187	92	47	20.32	26.10
28-Sep-24	167	81	32	21.06	21.00
07-Oct-24	168	74	32	17.63	37.19
08-Oct-24	186	83	46	13.32	19.46
16-Oct-24	172	72	36	15.67	34.90
17-Oct-24	166	68	33	15.18	15.96
23-Oct-24	194	83	41	18.26	29.76
24-Oct-24	205	86	44	14.06	22.91
29-Oct-24	213	92	48	19.30	31.45
30-Oct-24	174	70	36	18.66	30.41
04-Nov-24	192	88	45	16.83	25.37
05-Nov-24	173	76	37	11.60	14.95
11-Nov-24	183	79	38	10.31	20.99
12-Nov-24	172	73	36	10.77	18.94
18-Nov-24	186	78	40	15.67	29.46
19-Nov-24	195	81	43	19.49	23.77
25-Nov-24	210	86	48	16.68	21.51
26-Nov-24	204	84	46	20.02	23.04
02-Dec-24	180	74	38	15.02	29.28
03-Dec-24	188	77	42	12.42	26.57
09-Dec-24	197	79	43	14.06	36.66
10-Dec-24	207	82	46	14.55	27.40
16-Dec-24	184	83	53	11.13	34.98
17-Dec-24	187	82	48	11.97	34.92
23-Dec-24	197	54	50	16.51	41.11
24-Dec-24	187	79	46	14.52	31.74
30-Dec-24	208	85	51	10.91	16.26
31-Dec-24	192	87	54	10.83	21.84
03-Jan-25	206	86	45	19.91	35.36
04-Jan-25	235	93	52	15.13	31.12
10-Jan-25	211	87	48	14.43	33.82
11-Jan-25	243	96	54	13.55	18.71
20-Jan-25	201	85	46	10.54	25.30
21-Jan-25	207	87	48	13.44	23.51
28-Jan-25	194	78	43	12.30	18.80
29-Jan-25	189	73	41	14.98	24.65
05-Feb-25	216	89	48	20.87	30.02
06-Feb-25	210	85	46	15.97	28.15
12-Feb-25	197	69	38	18.60	28.23
13-Feb-25	195	91	41	13.74	29.41
20-Feb-25	217	84	48	18.67	31.17
21-Feb-25	208	80	44	16.13	40.37
27-Feb-25	186	71	37	18.25	27.10
28-Feb-25	193	73	39	10.40	26.79
05-Mar-25	209	84	46	13.56	19.10
06-Mar-25	219	92	49	12.66	33.57
12-Mar-25	188	71	40	16.03	22.59
13-Mar-25	182	73	39	19.96	21.54
19-Mar-25	165	66	28	12.67	35.53
20-Mar-25	188	77	40	11.41	24.56
26-Mar-25	206	89	45	18.19	24.08

27-Mar-25	176	73	36	16.43	30.00
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	246	96	58	21.06	55.65
Minimum	120	54	28	7.48	8.44
Average	189.45	82.59	42.61	14.47	23.84
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.27

Area: Mahalaxmi

Project: Basundhara (w) OCP

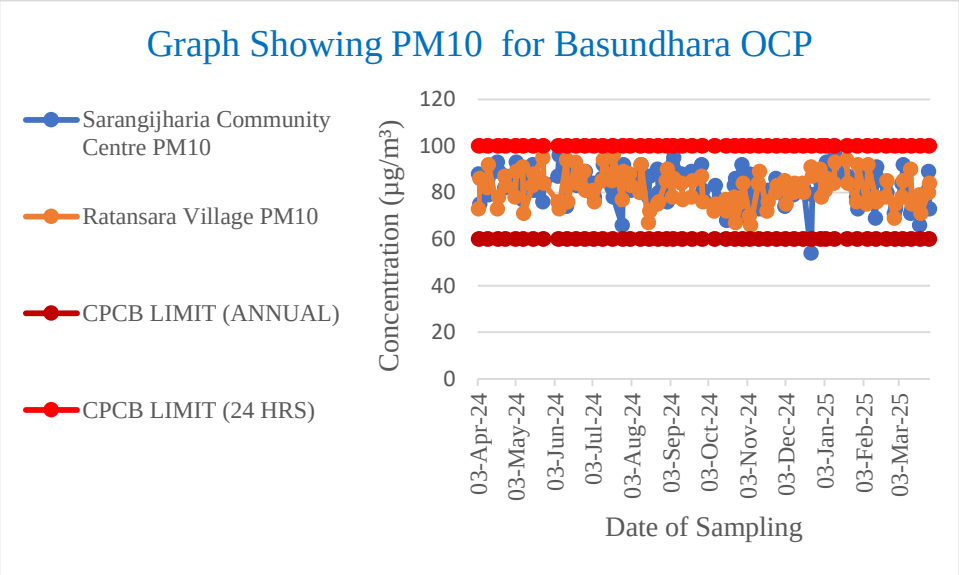
Monitoring Station: Ratansara Village

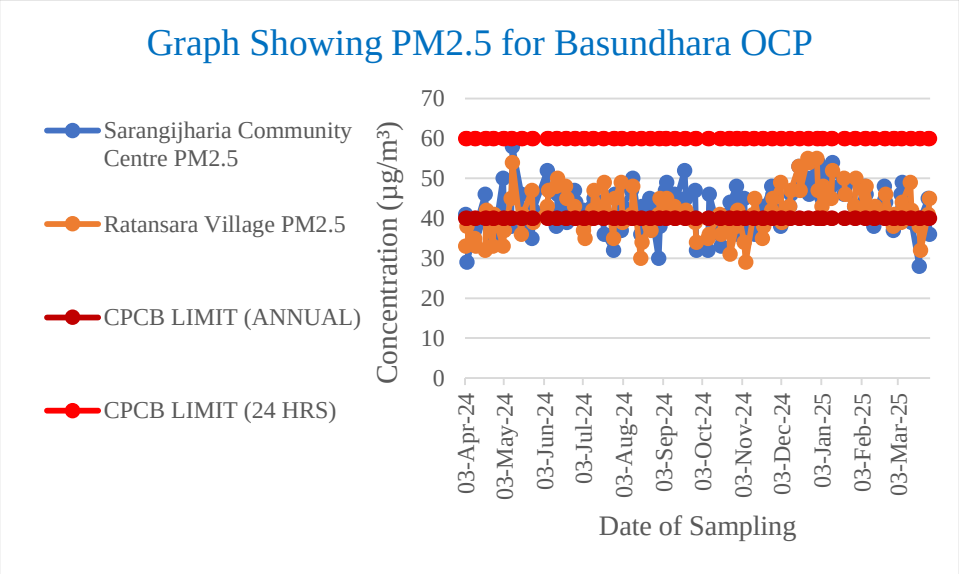
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	164	73	33	16.64	16.64
04-Apr-24	188	86	38	12.93	12.93
10-Apr-24	172	82	35	15.35	15.35
11-Apr-24	186	92	33	18.14	18.14
18-Apr-24	165	73	32	11.98	15.09
19-Apr-24	196	78	42	12.64	16.36
24-Apr-24	174	87	33	17.52	18.42
25-Apr-24	198	83	41	13.42	14.49
02-May-24	144	78	33	15.33	11.19
03-May-24	188	89	37	16.53	11.90
08-May-24	182	91	45	10.57	10.38
09-May-24	172	71	54	12.35	14.61
16-May-24	189	83	36	16.52	13.52
17-May-24	205	88	41	9.56	11.56
24-May-24	212	95	47	14.12	18.56
25-May-24	178	84	39	11.89	17.58
05-Jun-24	229	76	43	17.02	24.39
06-Jun-24	171	73	47	13.92	15.87
12-Jun-24	223	94	48	22.10	14.17
13-Jun-24	173	76	50	19.00	14.91
19-Jun-24	216	93	48	15.31	15.13
20-Jun-24	194	84	45	10.02	28.94
26-Jun-24	186	89	43	8.35	33.83
27-Jun-24	180	81	40	12.95	26.41
03-Jul-24	182	81	37	12.11	21.19
04-Jul-24	214	76	35	12.47	18.19
10-Jul-24	186	85	42	11.45	23.25
11-Jul-24	218	94	47	10.22	20.43
18-Jul-24	173	85	41	14.04	24.56
19-Jul-24	209	96	49	15.47	17.14
26-Jul-24	183	77	35	11.81	17.60
27-Jul-24	192	89	45	11.23	22.33
01-Aug-24	187	88	49	12.93	12.51
02-Aug-24	212	83	39	10.59	16.84
09-Aug-24	198	80	41	14.21	16.18
10-Aug-24	174	92	48	14.76	18.09
16-Aug-24	148	67	30	11.00	16.40
17-Aug-24	146	72	34	16.13	14.64
23-Aug-24	144	75	38	15.86	28.79
24-Aug-24	174	76	37	9.36	21.69
30-Aug-24	192	85	41	14.01	23.88
31-Aug-24	140	90	45	14.14	21.39
04-Sep-24	202	78	42	19.76	17.13
05-Sep-24	189	86	45	16.60	28.29
11-Sep-24	176	84	43	16.75	23.87

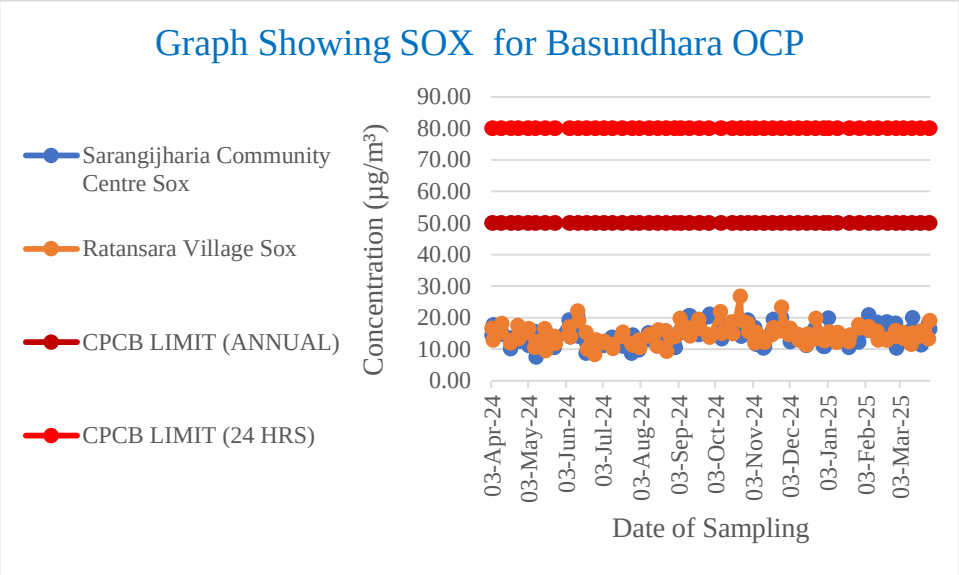
12-Sep-24	191	77	40	14.24	13.01
19-Sep-24	185	78	41	19.52	35.91
20-Sep-24	191	85	42	16.55	26.26
27-Sep-24	186	87	39	14.61	16.19
28-Sep-24	158	76	34	13.81	24.54
07-Oct-24	190	72	35	21.96	17.04
08-Oct-24	186	75	36	15.05	28.36
16-Oct-24	185	77	41	18.70	19.47
17-Oct-24	170	72	36	14.91	13.67
23-Oct-24	182	78	39	26.76	33.82
24-Oct-24	160	67	31	19.17	31.24
29-Oct-24	184	76	38	18.26	29.77
30-Oct-24	193	84	42	15.51	25.28
04-Nov-24	168	70	34	12.02	28.30
05-Nov-24	160	66	29	15.44	15.56
11-Nov-24	196	84	41	13.76	14.78
12-Nov-24	208	89	45	12.18	30.96
18-Nov-24	176	72	35	14.56	19.80
19-Nov-24	184	76	38	16.89	29.24
25-Nov-24	203	80	42	15.85	24.87
26-Nov-24	210	83	45	23.36	38.54
02-Dec-24	190	85	49	14.60	20.90
03-Dec-24	181	75	39	16.62	25.19
09-Dec-24	214	80	43	14.67	18.75
10-Dec-24	208	84	47	12.88	11.19
16-Dec-24	205	84	53	11.33	31.64
17-Dec-24	186	80	47	14.79	30.00
23-Dec-24	218	91	55	13.28	21.05
24-Dec-24	187	87	54	19.75	32.57
30-Dec-24	214	90	55	14.02	20.07
31-Dec-24	189	78	47	12.67	13.22
03-Jan-25	196	81	43	15.30	17.07
04-Jan-25	215	86	48	15.51	22.80
10-Jan-25	204	84	45	12.21	23.59
11-Jan-25	237	93	52	15.30	25.93
20-Jan-25	229	94	50	12.42	22.72
21-Jan-25	214	84	46	14.49	28.27
28-Jan-25	205	76	43	17.80	20.93
29-Jan-25	226	92	50	16.78	20.93
05-Feb-25	196	75	43	17.17	25.95
06-Feb-25	219	92	48	15.90	22.26
12-Feb-25	187	78	40	15.75	27.76
13-Feb-25	198	76	43	12.89	29.77
20-Feb-25	186	78	41	12.91	25.60
21-Feb-25	207	85	46	13.28	32.63
27-Feb-25	182	69	38	15.95	35.34
28-Feb-25	198	75	41	14.14	28.25
05-Mar-25	179	78	39	15.31	35.58
06-Mar-25	200	85	44	13.44	30.01
12-Mar-25	223	90	49	11.55	33.47
13-Mar-25	191	75	42	15.16	20.08
19-Mar-25	181	79	38	14.21	27.68
20-Mar-25	166	71	32	15.83	25.94
26-Mar-25	195	80	41	13.26	32.01

27-Mar-25	207	84	45	19.07	26.53
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	237	96	55	26.76	38.54
Minimum	140	66	29	8.35	10.38
Average	190.23	81.56	41.85	14.82	22.17
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna


Graph Showing PM10 for Basundhara OCP
Sarangijharia Community Centre PM10
Ratansara Village PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing PM2.5 for Basundhara OCP
Sarangijharia Community Centre PM2.5
Ratansara Village PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing SOX for Basundhara OCP
Sarangijharia Community Centre Sox
Ratansara Village Sox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

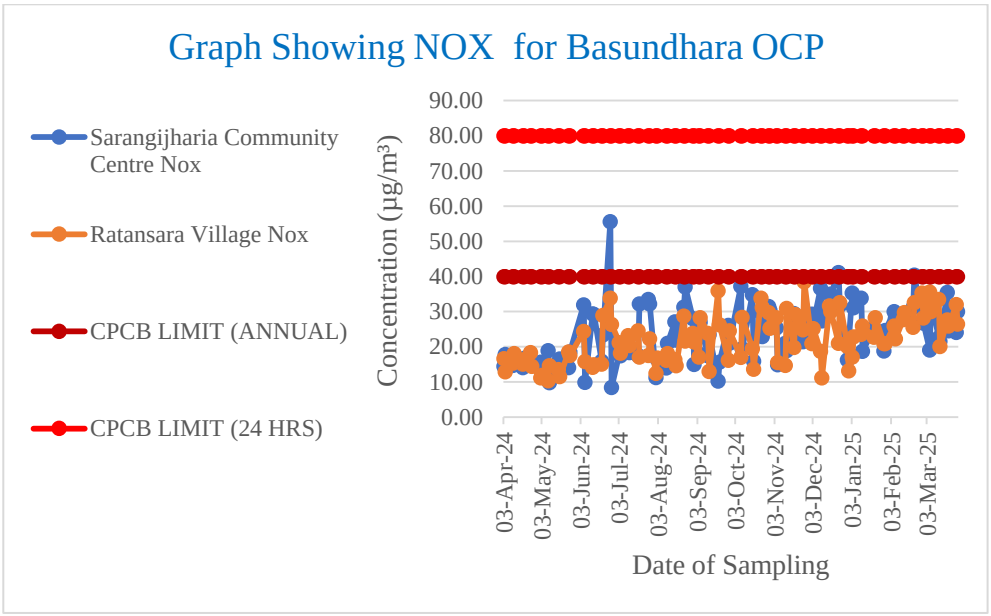

Graph Showing NOX for Basundhara OCP
Sarangijharia Community Centre Nox
Ratansara Village Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

Table: 8.5.28

Area: Basundhara

Project: Kulda OCP

Monitoring Station: External CT Road, Barpali

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
06-Apr-24	285	166	74	18.49	18.49
20-Apr-24	265	168	61	10.26	12.77
13-May-24	298	153	67	10.99	14.08
22-May-24	307	158	73	13.89	11.65
14-Jun-24	206	92	56	13.40	28.15
22-Jun-24	254	136	63	8.66	15.25
13-Jul-24	218	98	53	11.06	22.59
23-Jul-24	223	117	55	17.85	21.96
08-Aug-24	273	118	56	12.77	12.07
26-Aug-24	240	129	56	11.27	14.32
13-Sep-24	282	142	63	16.57	13.01
25-Sep-24	231	106	58	11.91	17.21
05-Oct-24	215	118	58	12.63	15.25
19-Oct-24	249	134	65	17.30	28.20
14-Nov-24	246	123	62	11.74	34.80
28-Nov-24	234	138	60	15.23	40.68
11-Dec-24	241	136	63	15.44	27.88
19-Dec-24	253	145	66	16.98	27.82
14-Jan-25	275	166	69	18.34	29.32
27-Jan-25	270	155	67	15.76	20.09
14-Feb-25	249	148	64	13.92	32.73
22-Feb-25	258	160	65	13.77	37.75
14-Mar-25	249	153	62	14.38	29.03
29-Mar-25	237	133	58	10.59	25.30
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	307	168	74	18.49	40.68
Minimum	206	92	53	8.66	11.65
Average	252.42	137.17	62.25	13.88	22.93
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.29

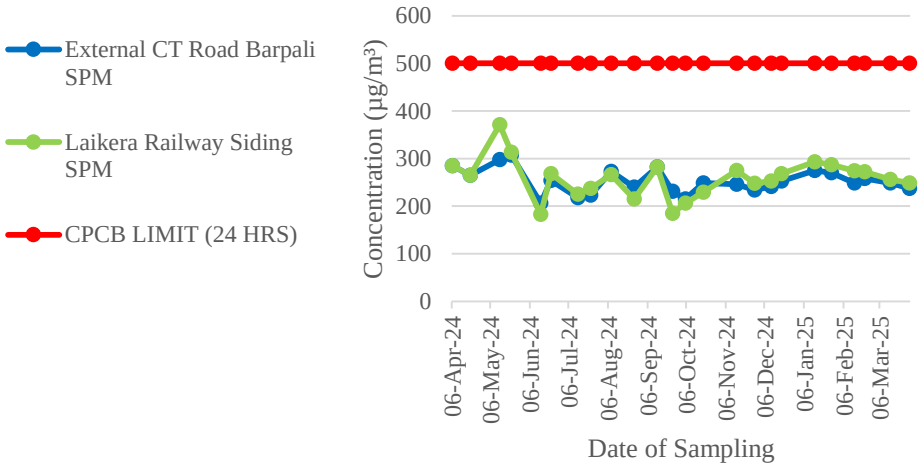
Area: Basundhara

Project: Kulda OCP

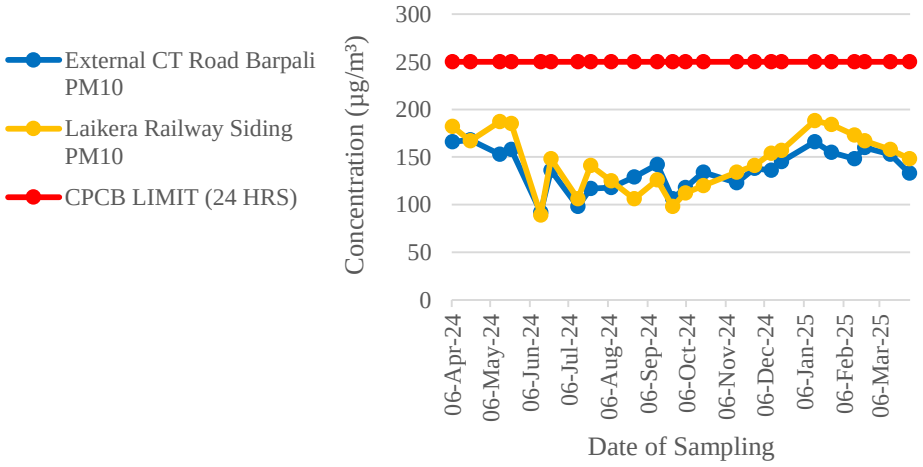
Monitoring Station: Laikera Railway Siding

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
06-Apr-24	285	182	78	19.35	20.32
20-Apr-24	265	167	69	10.29	13.25
13-May-24	371	187	62	11.39	12.05
22-May-24	313	185	66	17.41	12.88
14-Jun-24	183	89	66	13.48	26.65
22-Jun-24	268	148	72	12.45	22.47
13-Jul-24	225	106	55	11.68	18.97
23-Jul-24	237	141	68	12.21	22.91
08-Aug-24	266	125	62	13.69	12.91
26-Aug-24	215	106	60	13.56	14.35
13-Sep-24	282	126	60	14.27	17.61
25-Sep-24	185	98	51	10.99	38.34
05-Oct-24	206	112	53	17.22	22.96
19-Oct-24	229	120	61	15.61	25.45
14-Nov-24	275	134	69	11.67	29.34
28-Nov-24	248	141	65	21.45	22.28
11-Dec-24	253	154	68	18.45	24.54
19-Dec-24	268	157	70	10.59	32.93
14-Jan-25	293	188	75	13.08	38.91
27-Jan-25	287	184	73	12.99	38.69
14-Feb-25	274	173	68	20.09	33.60
22-Feb-25	272	167	65	19.07	32.75
14-Mar-25	256	158	62	16.43	23.68
29-Mar-25	249	148	60	16.66	24.34
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	371	188	78	21.45	38.91
Minimum	183	89	51	10.29	12.05
Average	258.54	145.67	64.92	14.75	24.26
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

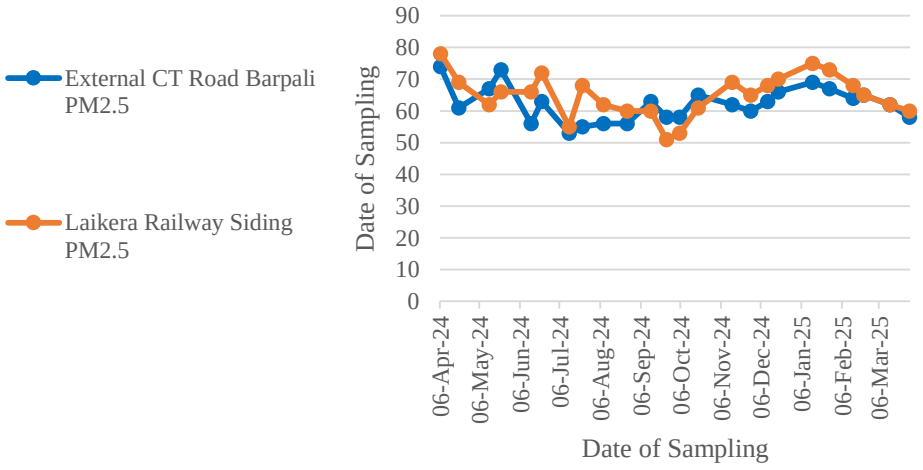
Graph Showing SPM for Kulda OCP

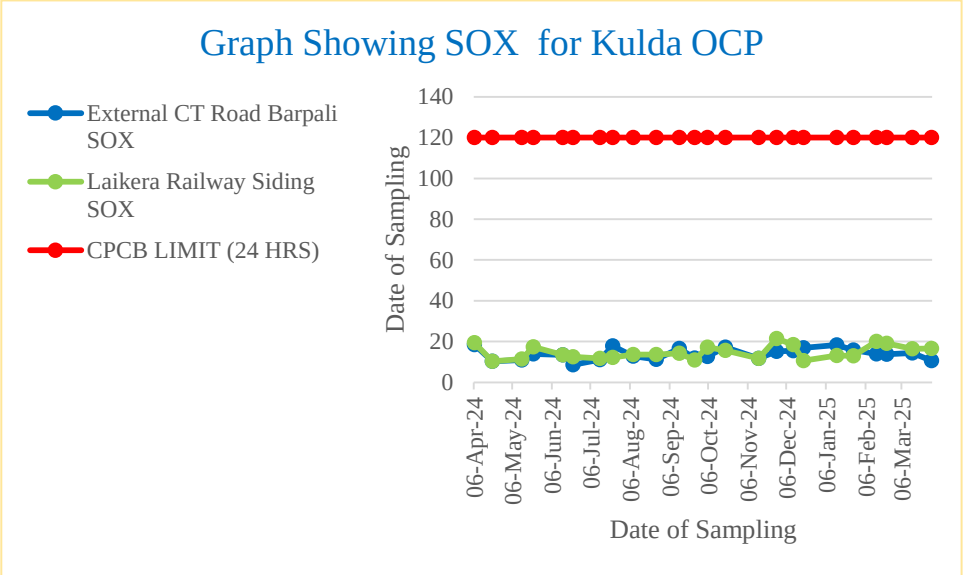


Graph Showing PM10 for Kulda OCP



Graph Showing PM2.5 for Kulda OCP




Graph Showing SOX for Kulda OCP
External CT Road Barpali SOX
Laikera Railway Siding SOX
CPCB LIMIT (24 HRS)
Date of Sampling
140
120
100
80
60
40
20
0
06-Apr-24
06-May-24
06-Jun-24
06-Jul-24
06-Aug-24
06-Sep-24
06-Oct-24
06-Nov-24
06-Dec-24
06-Jan-25
06-Feb-25
06-Mar-25
Date of Sampling

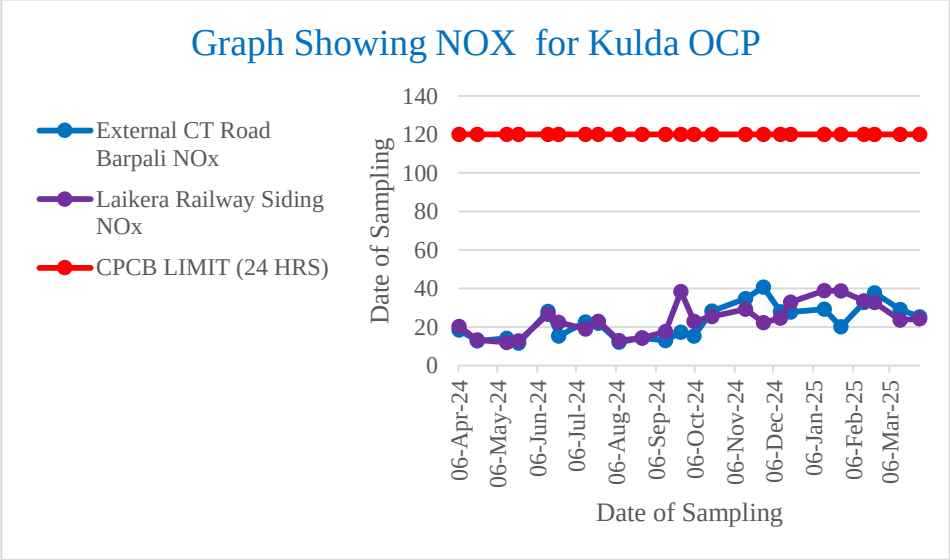

Graph Showing NOX for Kulda OCP
External CT Road Barpali NOx
Laikera Railway Siding NOx
CPCB LIMIT (24 HRS)
Date of Sampling
140
120
100
80
60
40
20
0
06-Apr-24
06-May-24
06-Jun-24
06-Jul-24
06-Aug-24
06-Sep-24
06-Oct-24
06-Nov-24
06-Dec-24
06-Jan-25
06-Feb-25
06-Mar-25
Date of Sampling

Table: 8.5.30

Area: Basundhara

Project: Kulda OCP

Monitoring Station: North of CHP, Teleimal

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	206	96	44	11.09	11.09
04-Apr-24	186	87	40	14.96	14.96
10-Apr-24	182	81	38	13.46	13.46
11-Apr-24	195	87	41	9.4	9.4
18-Apr-24	194	77	40	10.25	11.53
19-Apr-24	165	73	28	10.75	13.86
24-Apr-24	214	84	47	12.45	17.97
25-Apr-24	184	95	36	15.65	19.01
02-May-24	153	90	45	15.25	12.55
03-May-24	190	78	56	17.17	16.71
08-May-24	240	94	50	8.27	12.12
09-May-24	210	88	39	11.9	11.54
16-May-24	194	76	40	13.54	10.05
17-May-24	182	70	36	10.23	16.5
24-May-24	174	68	32	12.36	15.12
25-May-24	208	89	44	15.69	14.98
30-May-24	199	74	38	12.19	12.96
31-May-24	164	64	45	10.4	13.91
05-Jun-24	248	84	46	10.67	16.62
06-Jun-24	244	80	43	12.29	15.84
12-Jun-24	193	76	52	15.73	18.8
13-Jun-24	240	92	53	14.3	32.69
19-Jun-24	227	92	51	14.83	22.83
20-Jun-24	176	86	47	11.74	10.16
26-Jun-24	226	96	53	12.13	14.14
27-Jun-24	193	78	45	12.31	14.04
03-Jul-24	198	81	40	10.12	19.33
04-Jul-24	186	74	38	10.39	16
10-Jul-24	210	89	45	12.2	22.11
11-Jul-24	218	93	49	11.23	17.86
18-Jul-24	185	78	39	14.92	26.11
19-Jul-24	191	82	43	17.26	31.84
26-Jul-24	160	72	31	15.04	32.27
27-Jul-24	164	75	34	14.06	34.59
01-Aug-24	197	85	40	16.6	25.11
02-Aug-24	134	81	37	14.75	20.64
09-Aug-24	174	96	53	13.56	17.36
10-Aug-24	155	90	47	12.83	16.72
16-Aug-24	164	86	44	13.58	33.9
17-Aug-24	182	90	41	15.28	18.49
23-Aug-24	196	95	48	12	34.23
24-Aug-24	209	93	46	14.15	13.23
30-Aug-24	148	85	35	15.36	24
31-Aug-24	160	78	40	14.01	18.49
04-Sep-24	181	71	37	15.7	25.23

05-Sep-24	211	78	41	15.35	16.42
11-Sep-24	225	93	47	15.28	28.79
12-Sep-24	197	82	45	12.57	16.07
19-Sep-24	170	86	47	18.27	22.65
20-Sep-24	188	89	50	15.14	31.11
27-Sep-24	194	81	42	12.83	19.17
28-Sep-24	174	78	41	13.85	16.11
07-Oct-24	177	74	33	11.17	35.68
08-Oct-24	174	70	31	21.05	24.87
16-Oct-24	205	87	46	14.58	19.52
17-Oct-24	192	79	41	13.98	19.74
23-Oct-24	198	86	44	16.35	26.65
24-Oct-24	180	76	37	18.68	30.44
29-Oct-24	196	91	47	14.44	23.54
30-Oct-24	210	94	50	13.34	21.75
04-Nov-24	184	76	34	14.49	24.1
05-Nov-24	186	66	28	15.09	15.93
11-Nov-24	194	92	45	14.17	20.2
12-Nov-24	167	74	31	10.28	19.73
18-Nov-24	180	72	38	21.6	25.47
19-Nov-24	192	78	41	18.97	33.11
25-Nov-24	197	82	44	14.56	19.8
26-Nov-24	206	85	48	19.43	37.96
02-Dec-24	187	78	42	13.61	31.23
03-Dec-24	196	83	45	16.73	21.77
09-Dec-24	204	85	48	15.34	38.02
10-Dec-24	213	90	51	16.73	38.1
16-Dec-24	188	80	46	11.69	21.51
17-Dec-24	196	83	48	12.99	38.68
23-Dec-24	185	77	45	12.45	22.09
24-Dec-24	221	92	55	13.44	39.28
30-Dec-24	214	86	53	11	33.88
31-Dec-24	225	95	57	12.73	38.58
03-Jan-25	198	86	44	22.23	26.02
04-Jan-25	210	89	48	20.5	32.83
10-Jan-25	240	95	53	13.78	26.22
11-Jan-25	226	92	50	14.15	20.79
20-Jan-25	232	92	50	16.56	21.96
21-Jan-25	216	84	47	16.56	25.75
28-Jan-25	211	87	45	12.6	17.98
29-Jan-25	207	80	43	15.46	19.88
05-Feb-25	186	78	43	11.69	21.51
06-Feb-25	204	83	47	12.99	38.68
12-Feb-25	193	80	44	12.45	22.09
13-Feb-25	205	72	39	13.44	39.28
20-Feb-25	195	76	41	10.59	32.93
21-Feb-25	208	84	45	11.69	21.5
27-Feb-25	197	80	42	12.99	38.68
28-Feb-25	186	68	37	12.45	22.09
05-Mar-25	183	76	39	10.59	32.93
06-Mar-25	201	84	43	11.69	21.51
12-Mar-25	190	78	40	12.99	38.68
13-Mar-25	210	89	46	12.45	22.09
19-Mar-25	175	71	38	11.69	21.51

20-Mar-25	162	62	33	12.99	38.68
26-Mar-25	190	77	41	12.45	22.09
27-Mar-25	172	64	35	13.44	39.28
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	248	96	57	22.23	39.28
Minimum	134	62	28	8.27	9.4
Average	194.3	82.3	43.0	13.8	23.3
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
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Mini Ratna

Table: 8.5.31

Area: Basundhara

Project: Kulda OCP

Monitoring Station: South West of Working Face, Chakarpur

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	184	85	36	0.19	0.19
04-Apr-24	158	68	26	18.35	18.35
10-Apr-24	166	72	28	13.88	13.88
11-Apr-24	175	84	32	10.58	10.58
18-Apr-24	168	86	30	11.62	14.12
19-Apr-24	210	88	45	12.13	15.25
24-Apr-24	173	92	31	12.42	13.54
25-Apr-24	184	76	38	14.14	16.01
02-May-24	195	92	34	14.84	17.31
03-May-24	196	97	46	15.34	15.45
08-May-24	222	88	35	15.7	19.95
09-May-24	143	74	42	12.44	18.63
16-May-24	174	94	38	12.41	16
17-May-24	207	98	45	12.8	16.75
24-May-24	185	86	37	10.52	18.65
25-May-24	189	90	40	13.41	21.19
30-May-24	187	86	45	10.46	17.11
31-May-24	176	83	52	12.05	18.64
05-Jun-24	229	88	40	18.4	23.14
06-Jun-24	216	79	45	19.61	24.35
12-Jun-24	210	95	48	12.74	25.85
13-Jun-24	175	78	50	15.65	25.99
19-Jun-24	167	73	37	13.86	21.31
20-Jun-24	192	83	40	15.12	24.58
26-Jun-24	165	66	34	11.53	22.56
27-Jun-24	216	78	48	13.93	31.76
03-Jul-24	196	85	41	11.33	18.31
04-Jul-24	175	76	38	13.1	17.83
10-Jul-24	188	81	40	13.07	18.31
11-Jul-24	164	70	33	14.58	18.71
18-Jul-24	176	78	36	12.47	17.46
19-Jul-24	185	79	42	17.29	21.27
26-Jul-24	190	85	34	11.74	21.27
27-Jul-24	210	87	43	10.25	17.08
01-Aug-24	233	92	55	19.01	14.06
02-Aug-24	198	86	44	17.3	20.94
09-Aug-24	192	82	40	14.6	18.24
10-Aug-24	194	83	39	15.07	16.9
16-Aug-24	168	69	30	12.74	17.72
17-Aug-24	165	86	42	15.36	18.58
23-Aug-24	149	90	35	13.29	33.46
24-Aug-24	186	75	33	14.93	35.61
30-Aug-24	197	67	28	15.71	27.09
31-Aug-24	176	74	32	14.86	15.41
04-Sep-24	245	92	46	15.35	26.28

05-Sep-24	181	83	45	17.07	21.44
11-Sep-24	229	78	39	21.28	13.36
12-Sep-24	219	88	51	14.03	17.32
19-Sep-24	191	76	40	20.35	28.76
20-Sep-24	177	74	38	19.82	15.63
27-Sep-24	135	65	29	11.88	17.16
28-Sep-24	164	74	34	14.77	25.68
07-Oct-24	184	82	38	12.86	35.26
08-Oct-24	172	75	31	14.84	20.96
16-Oct-24	174	71	36	11.95	25.4
17-Oct-24	167	65	29	11.37	29.8
23-Oct-24	204	89	47	16.62	27.09
24-Oct-24	172	73	35	18.04	29.4
29-Oct-24	189	85	43	21.19	34.54
30-Oct-24	166	68	33	12.34	20.11
04-Nov-24	161	70	29	10.58	35.64
05-Nov-24	213	86	48	11.28	20.77
11-Nov-24	170	73	36	12.58	23.89
12-Nov-24	183	83	46	10.8	17.4
18-Nov-24	168	70	35	13.82	29.96
19-Nov-24	178	77	39	15.23	28.76
25-Nov-24	188	79	42	15.67	14.03
26-Nov-24	203	81	44	21.6	19.53
02-Dec-24	184	78	39	13.15	29.19
03-Dec-24	191	84	43	13.27	23.78
09-Dec-24	198	88	46	14.97	29.19
10-Dec-24	208	92	50	12.47	36.74
16-Dec-24	192	82	47	10.75	24.47
17-Dec-24	198	84	51	12.99	33.16
23-Dec-24	206	90	53	17.47	40.78
24-Dec-24	228	94	57	12.54	25.41
30-Dec-24	210	86	52	13.94	37.64
31-Dec-24	217	92	54	11.09	18.82
03-Jan-25	196	83	44	14.63	35.74
04-Jan-25	219	90	49	11.23	27.37
10-Jan-25	198	84	45	17.32	35.87
11-Jan-25	215	86	47	16.04	14.86
20-Jan-25	235	95	51	14.49	20.24
21-Jan-25	213	89	48	10.08	22.82
28-Jan-25	212	80	44	13.34	25.75
29-Jan-25	215	76	42	14.72	22.72
05-Feb-25	198	80	44	15.67	30.38
06-Feb-25	219	89	48	17.17	23.36
12-Feb-25	203	78	44	17.46	30.78
13-Feb-25	189	72	41	17.91	22.67
20-Feb-25	187	78	42	13.95	31.62
21-Feb-25	208	83	46	15.7	27.68
27-Feb-25	195	79	42	19.61	30.02
28-Feb-25	182	72	39	17.38	30.65
05-Mar-25	187	78	40	16.25	32.51
06-Mar-25	219	83	49	12.34	17.76
12-Mar-25	196	79	44	17.29	22.19
13-Mar-25	176	72	38	18.81	39.52
19-Mar-25	190	77	41	14.16	22.42

20-Mar-25	148	63	29	15.34	29.58
26-Mar-25	163	66	35	17.45	28.16
27-Mar-25	175	71	38	18.17	25.9
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	245	98	57	21.6	40.78
Minimum	135	63	26	0.19	0.19
Average	190.3	80.9	40.8	14.5	23.3
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.32

Area: Basundhara

Project: Kulda OCP

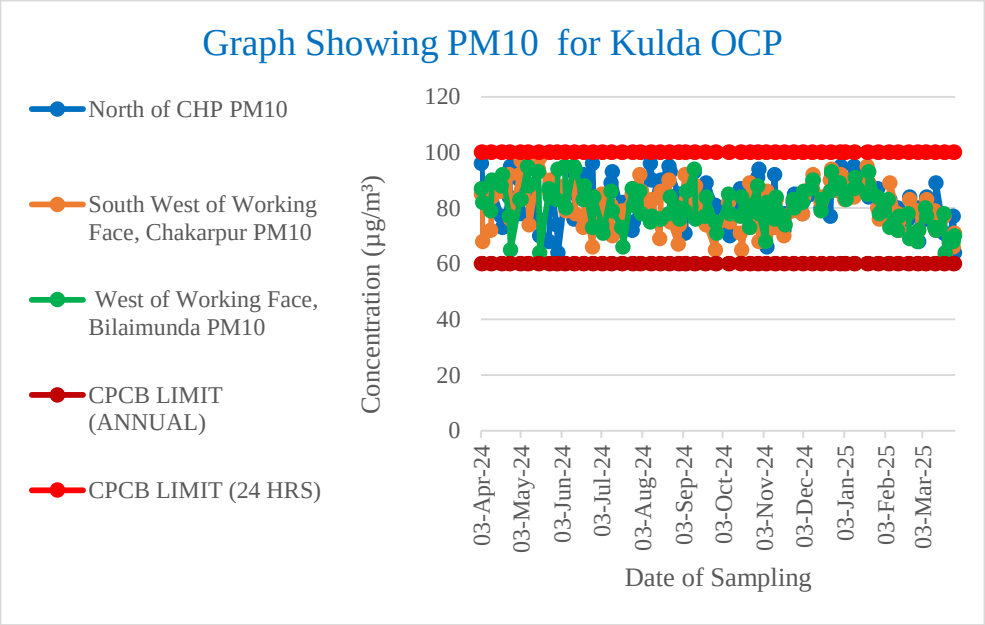
Monitoring Station: Bilaimunda Village

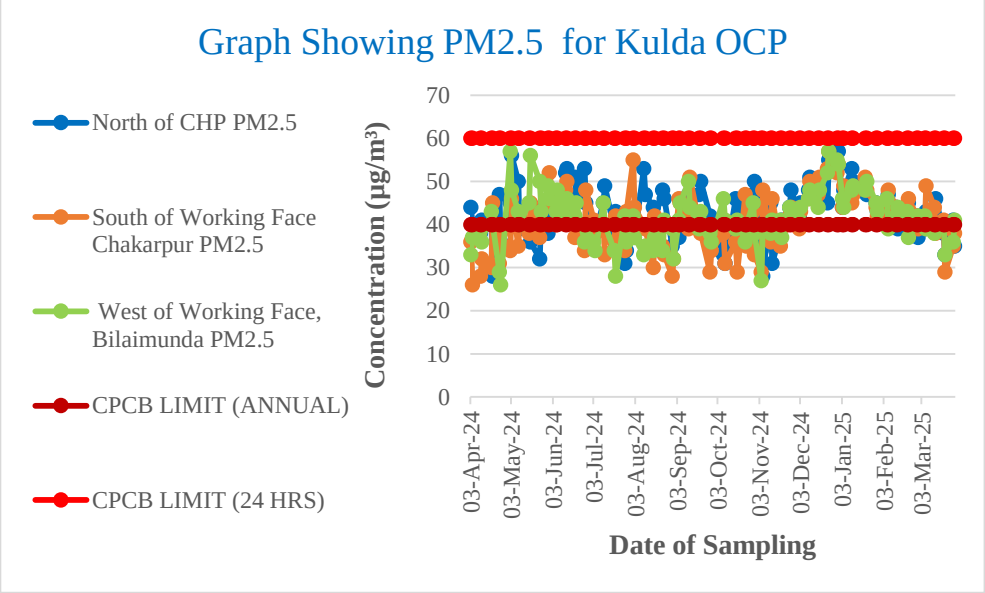
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	176	87	33	11.73	11.73
04-Apr-24	184	82	37	10.97	10.97
10-Apr-24	196	79	39	16.08	16.08
11-Apr-24	178	90	36	12.56	12.56
18-Apr-24	198	88	43	15.85	18.57
19-Apr-24	195	92	40	18.94	19.55
24-Apr-24	178	77	29	13.92	15.24
25-Apr-24	165	65	26	12.13	14.17
02-May-24	181	83	57	9.17	13.43
03-May-24	172	83	48	14.19	17.61
08-May-24	242	95	43	15.75	12.58
09-May-24	161	88	40	8.73	14.41
16-May-24	207	93	45	13.33	19.55
17-May-24	156	64	56	15.58	13.39
24-May-24	222	87	50	11.83	19.79
25-May-24	199	84	43	10.33	20.02
30-May-24	181	83	49	15.28	17.94
31-May-24	213	94	46	13.3	16.17
05-Jun-24	250	95	43	16.05	21.15
06-Jun-24	175	80	48	9.53	16.63
12-Jun-24	187	95	41	13.06	14.75
13-Jun-24	213	94	46	13.3	16.17
19-Jun-24	184	83	42	11.71	13.74
20-Jun-24	196	88	45	15.83	22.71
26-Jun-24	172	73	36	11.9	19.24
27-Jun-24	183	84	40	8.56	12.7
03-Jul-24	184	74	36	13.34	20.65
04-Jul-24	173	71	34	11.18	22.82
10-Jul-24	208	86	45	10.22	20.43
11-Jul-24	182	79	40	11.77	15.26
18-Jul-24	182	73	34	13.9	35.68
19-Jul-24	172	66	28	11.12	28.38
26-Jul-24	182	87	42	13.15	28.39
27-Jul-24	190	81	36	14.46	13.06
01-Aug-24	201	86	42	11.07	17.19
02-Aug-24	208	78	37	14.99	15.2
09-Aug-24	222	75	33	12.77	22.89
10-Aug-24	182	77	35	14.37	14.02
16-Aug-24	183	76	34	20.58	10.89
17-Aug-24	174	76	37	16.29	24.12
23-Aug-24	175	78	34	12.18	30.66
24-Aug-24	149	84	41	19.62	17.81
30-Aug-24	184	80	39	11.94	24
31-Aug-24	165	76	32	15.43	15.56
04-Sep-24	236	79	41	17.5	27.76

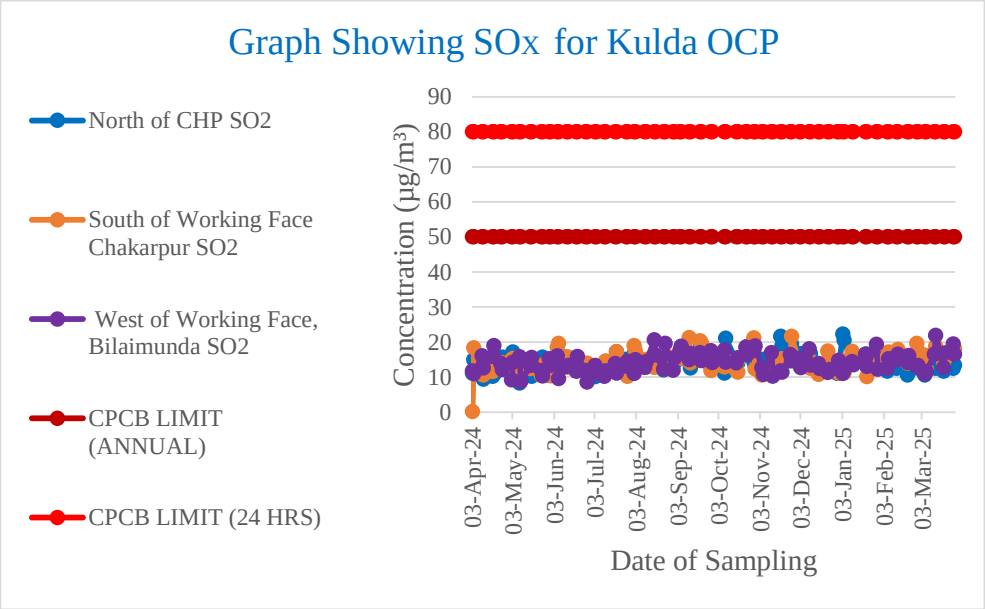
05-Sep-24	213	86	45	18.8	27.55
11-Sep-24	197	94	50	15	20.55
12-Sep-24	224	76	44	16.72	12.93
19-Sep-24	193	77	39	16.99	27.68
20-Sep-24	163	84	43	14.7	10.59
27-Sep-24	180	75	38	17.52	16.5
28-Sep-24	176	71	36	14.11	32.39
07-Oct-24	208	85	46	17.73	31.44
08-Oct-24	193	78	41	14.26	19.61
16-Oct-24	186	77	39	14.04	18.64
17-Oct-24	190	84	41	15.54	18.42
23-Oct-24	170	73	36	18.48	30.11
24-Oct-24	187	81	40	16.38	26.69
29-Oct-24	199	88	45	17.64	28.74
30-Oct-24	179	78	38	18.92	30.83
04-Nov-24	156	68	27	12.72	12.61
05-Nov-24	193	82	40	10.72	33.06
11-Nov-24	181	76	38	17	22.84
12-Nov-24	188	84	41	10.31	30.19
19-Nov-24	190	77	41	11.75	32.26
19-Nov-24	180	74	37	11.38	33.73
25-Nov-24	199	83	44	16.38	38.13
26-Nov-24	196	80	42	14.8	30.16
02-Dec-24	190	82	41	15.32	23.08
03-Dec-24	197	86	44	12.68	27.22
09-Dec-24	205	87	46	18.08	18.33
10-Dec-24	214	90	48	13.43	21.09
16-Dec-24	186	79	44	13.89	29.89
17-Dec-24	192	83	48	12.37	41.22
23-Dec-24	196	86	52	11.32	35.55
24-Dec-24	224	93	57	12.1	24.2
30-Dec-24	215	89	55	12.47	18.82
31-Dec-24	211	87	54	14.78	21.96
03-Jan-25	205	85	46	11	37.95
04-Jan-25	198	83	44	12.05	37.95
10-Jan-25	211	87	48	14.42	37.09
11-Jan-25	216	91	49	13.52	30.41
20-Jan-25	213	85	48	16.56	23.48
21-Jan-25	225	93	50	13.02	25.58
28-Jan-25	206	84	45	19.32	30.92
29-Jan-25	196	78	43	12.18	21.44
05-Feb-25	213	83	46	12.53	25.35
06-Feb-25	180	73	39	15.26	22.29
12-Feb-25	194	72	42	14.94	30.87
13-Feb-25	202	77	44	16.53	31.72
20-Feb-25	203	78	43	14.11	35.3
21-Feb-25	172	69	37	16.18	34.04
27-Feb-25	185	68	40	13.02	36.19
28-Feb-25	193	72	42	13.31	27.73
05-Mar-25	192	80	42	10.89	17.84
06-Mar-25	166	77	39	11.6	20.48
12-Mar-25	179	73	38	16.49	29.23
13-Mar-25	186	72	40	21.94	22.65
19-Mar-25	190	78	40	12.66	28.9

20-Mar-25	156	64	33	16.84	21.01
26-Mar-25	167	68	36	19.4	24.2
27-Mar-25	179	70	41	16.5	24.99
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	250	95	57	21.94	41.22
Minimum	149	64	26	8.56	10.59
Average	191.3	80.8	41.5	14.2	23.0
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna


Graph Showing PM10 for Kulda OCP
North of CHP PM10
South West of Working Face, Chakarpur PM10
West of Working Face, Bilaimunda PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing PM2.5 for Kulda OCP
North of CHP PM2.5
South of Working Face Chakarpur PM2.5
West of Working Face, Bilaimunda PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing SOx for Kulda OCP
North of CHP SO2
South of Working Face Chakarpur SO2
West of Working Face, Bilaimunda SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90
80
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

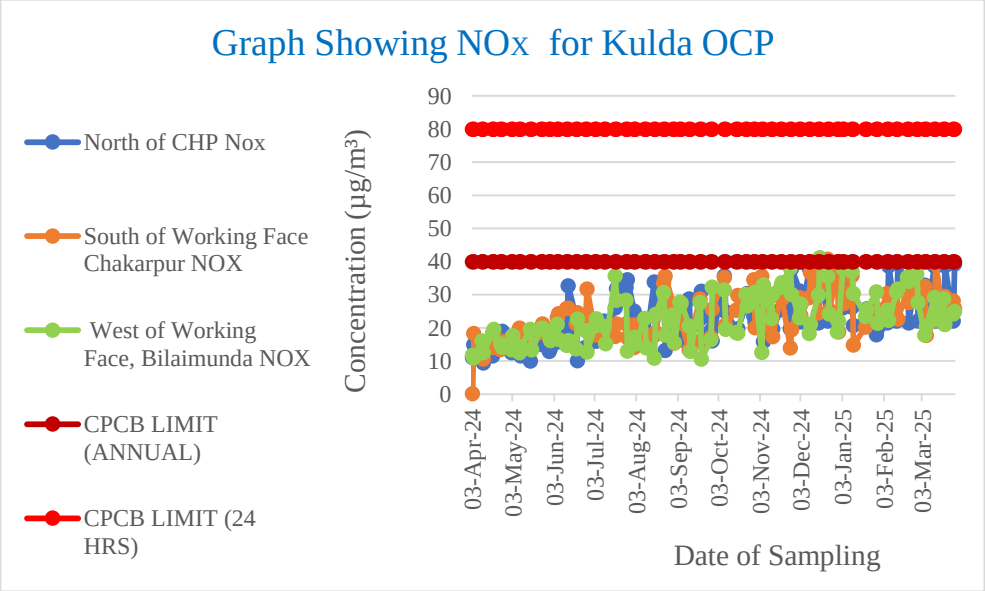

Graph Showing NOx for Kulda OCP
North of CHP Nox
South of Working Face Chakarpur NOX
West of Working Face, Bilaimunda NOX
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90
80
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

Table: 8.5.33

Area: Basundhara

Project: Garjanbahal OCP

Monitoring Station: Garjanbahal Village

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
08-Apr-24	278	175	70	17.00	17.00
20-Apr-24	232	128	55	14.73	15.29
13-May-24	298	158	73	26.66	28.19
22-May-24	352	178	71	8.42	17.12
14-Jun-24	238	110	49	9.06	20.55
22-Jun-24	248	128	66	12.69	14.11
13-Jul-24	252	134	65	10.72	21.43
23-Jul-24	221	126	60	12.30	30.13
08-Aug-24	295	132	61	9.02	19.10
26-Aug-24	221	116	63	12.83	19.18
13-Sep-24	284	148	67	14.98	26.50
25-Sep-24	237	112	55	19.00	15.21
05-Oct-24	241	120	62	10.96	23.81
19-Oct-24	217	104	57	12.24	19.95
14-Nov-24	234	119	62	14.20	20.52
28-Nov-24	263	142	65	14.36	32.96
11-Dec-24	226	114	59	13.86	21.62
19-Dec-24	232	102	57	17.85	25.16
14-Jan-25	249	149	63	13.35	39.69
27-Jan-25	244	138	61	13.22	23.44
14-Feb-25	258	163	65	19.68	29.21
22-Feb-25	248	153	62	16.15	26.94
14-Mar-25	239	144	59	13.05	28.03
29-Mar-25	254	142	60	12.52	24.44
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	352	178	73	26.66	39.69
Minimum	217	102	49	8.42	14.11
Average	252.54	134.79	61.96	14.12	23.32
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.34

Area: Basundhara

Project: Garjanbahal OCP

Monitoring Station: KAN-1 Near Coal Sampling Lab

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
08-Apr-24	294	184	76	11.47	11.47
20-Apr-24	264	145	65	17.81	13.23
13-May-24	370	176	65	16.66	13.51
22-May-24	292	173	58	21.06	14.08
14-Jun-24	209	116	52	9.35	27.02
22-Jun-24	242	125	61	17.50	20.08
13-Jul-24	214	108	52	10.93	21.25
23-Jul-24	242	123	58	14.06	23.52
08-Aug-24	259	116	60	11.77	15.85
26-Aug-24	259	142	65	16.49	10.24
13-Sep-24	271	116	57	18.61	11.68
25-Sep-24	252	124	59	15.88	12.82
05-Oct-24	267	141	70	14.04	32.03
19-Oct-24	210	96	55	15.82	25.78
14-Nov-24	286	148	74	17.05	20.39
28-Nov-24	285	162	70	15.93	22.00
11-Dec-24	232	134	72	16.42	21.64
19-Dec-24	246	141	68	11.45	30.88
14-Jan-25	286	186	73	12.40	12.25
27-Jan-25	280	182	71	14.28	22.13
14-Feb-25	261	172	67	14.68	27.44
22-Feb-25	275	162	64	16.45	34.49
14-Mar-25	265	156	61	14.29	29.62
29-Mar-25	235	139	59	16.81	18.56
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	370	186	76	21.06	34.49
Minimum	209	96	52	9.35	10.24
Average	262.33	144.46	63.83	15.05	20.50
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.35

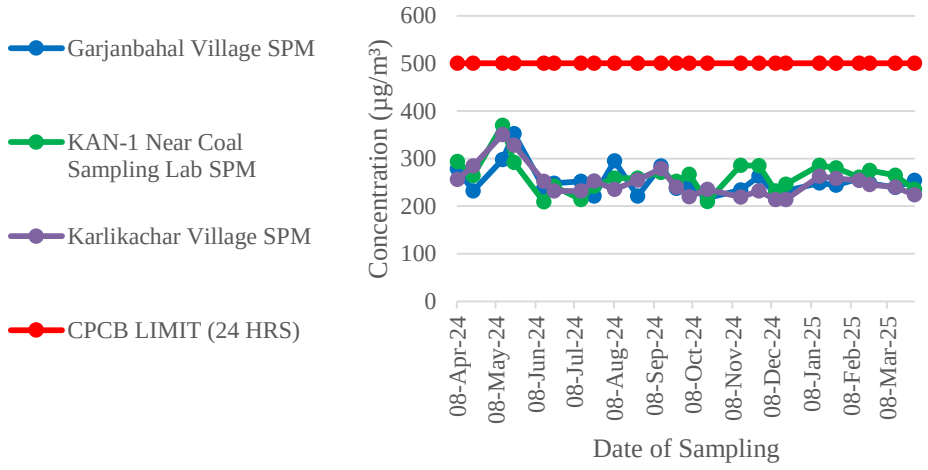
Area: Basundhara

Project: Garjanbahal OCP

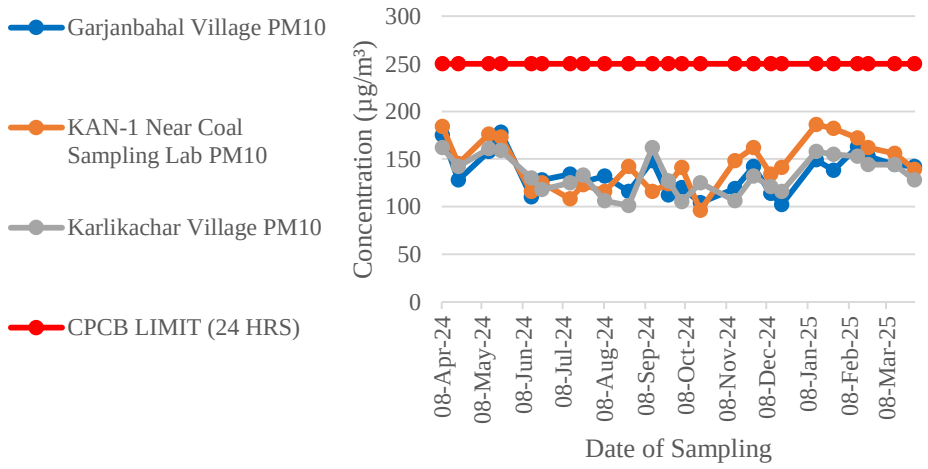
Monitoring Station: Karlikachar Village

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
08-Apr-24	256	162	66	17.30	17.41
20-Apr-24	284	142	64	13.04	11.31
13-May-24	350	161	86	12.98	12.62
22-May-24	328	159	59	12.01	16.94
14-Jun-24	252	130	53	14.08	14.78
22-Jun-24	232	118	55	9.52	15.68
13-Jul-24	232	125	61	16.04	18.71
24-Jul-24	253	133	59	15.59	12.79
08-Aug-24	235	106	50	12.53	16.01
26-Aug-24	255	101	57	20.74	21.01
13-Sep-24	279	162	75	10.65	35.51
25-Sep-24	240	127	62	15.70	30.44
05-Oct-24	220	105	56	11.72	35.13
19-Oct-24	235	125	64	12.51	20.39
14-Nov-24	219	106	55	15.14	15.15
28-Nov-24	232	132	60	13.65	35.93
11-Dec-24	214	121	58	12.86	32.48
19-Dec-24	214	116	54	14.34	26.31
14-Jan-25	263	158	66	13.89	20.65
27-Jan-25	258	155	64	13.89	29.89
14-Feb-25	254	153	61	12.18	32.64
22-Feb-25	245	144	60	11.49	34.49
14-Mar-25	240	144	57	13.35	23.51
29-Mar-25	224	128	53	17.89	32.68
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	350	162	86	20.74	35.93
Minimum	214	101	50	9.52	11.31
Average	250.58	133.88	60.6	13.88	23.44
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

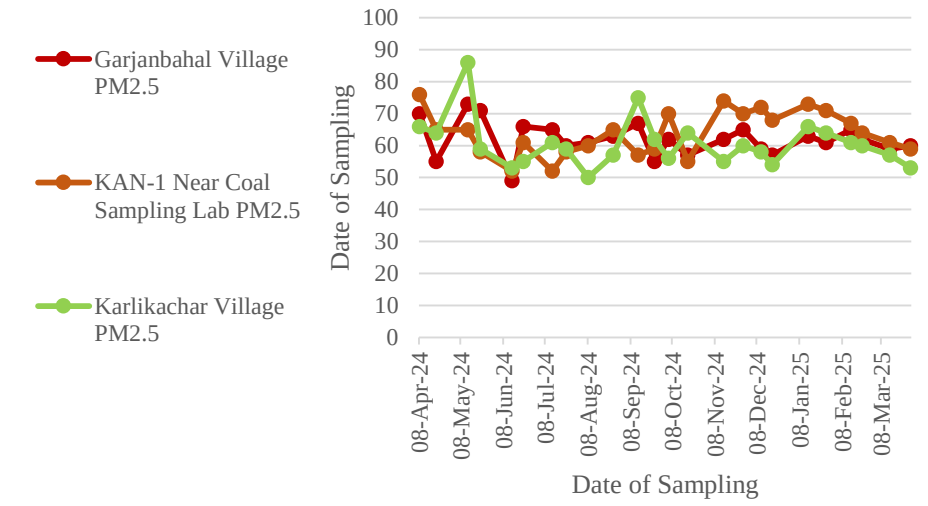
Graph Showing SPM for Garjanbahal OCP

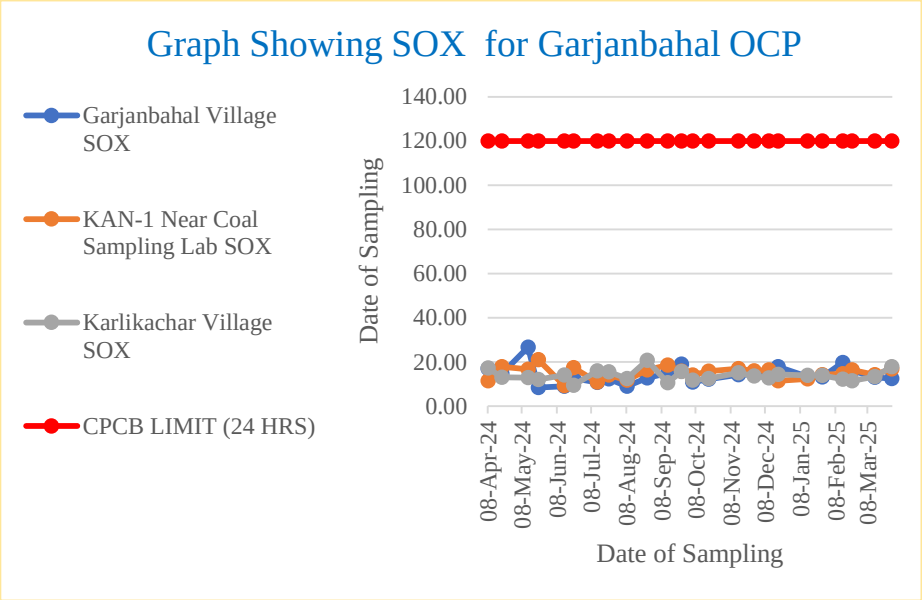


Graph Showing PM10 for Garjanbahal OCP



Graph Showing PM2.5 for Garjanbahal OCP




Graph Showing SOX for Garjanbahal OCP
Garjanbahal Village SOX
KAN-1 Near Coal Sampling Lab SOX
Karlikachar Village SOX
CPCB LIMIT (24 HRS)
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Date of Sampling
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

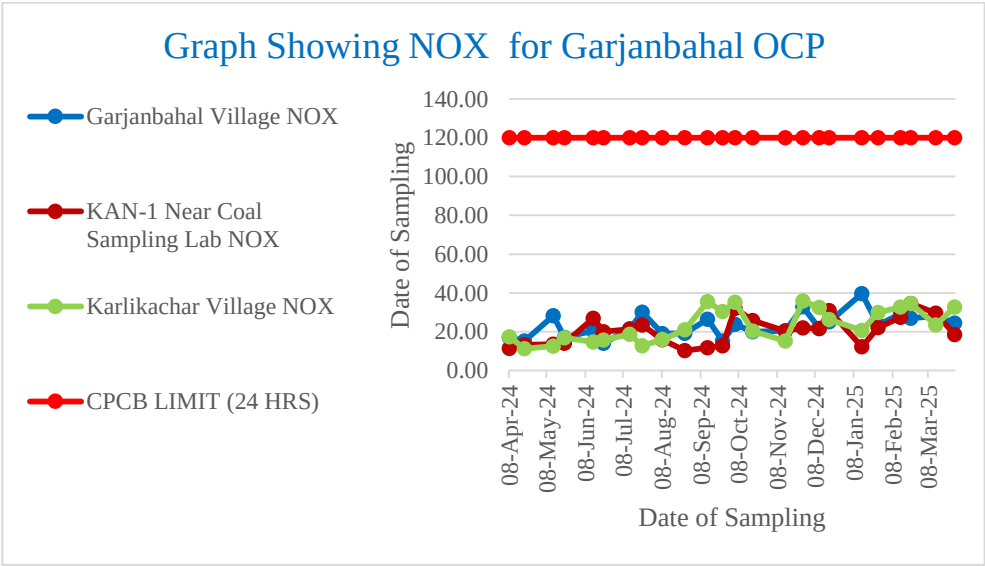

Graph Showing NOX for Garjanbahal OCP
Garjanbahal Village NOX
KAN-1 Near Coal Sampling Lab NOX
Karlikachar Village NOX
CPCB LIMIT (24 HRS)
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Date of Sampling
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

Table: 8.5.36

Area: Basundhara

Project: Garjanbahal OCP

Monitoring Station: South-East of Wokring Face, Kutabaga Village

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	184	78	32	11.44	11.44
04-Apr-24	174	73	30	13.77	13.77
10-Apr-24	192	84	38	16.86	16.86
11-Apr-24	216	91	45	13.07	13.07
18-Apr-24	184	83	38	11.82	14.75
19-Apr-24	180	85	36	13.68	17.49
24-Apr-24	175	96	33	10.93	12.93
25-Apr-24	208	89	42	10.93	12.09
02-May-24	186	72	51	12.75	13.53
03-May-24	216	85	42	13.83	17.30
08-May-24	107	89	57	15.60	12.14
09-May-24	189	94	42	10.24	15.65
16-May-24	220	87	35	10.02	13.95
17-May-24	194	70	42	17.43	16.43
24-May-24	181	83	57	10.64	12.38
25-May-24	164	79	48	11.46	16.74
30-May-24	233	92	43	17.16	14.27
31-May-24	168	79	40	11.80	17.77
05-Jun-24	203	77	44	12.19	14.15
06-Jun-24	203	71	38	9.05	20.88
12-Jun-24	196	90	44	15.83	23.46
13-Jun-24	189	75	34	16.73	19.55
19-Jun-24	214	93	50	12.93	31.14
20-Jun-24	178	74	36	9.24	35.00
26-Jun-24	186	86	42	12.99	25.67
27-Jun-24	218	91	54	12.86	8.39
03-Jul-24	189	84	42	12.12	17.95
04-Jul-24	201	88	46	12.19	19.81
10-Jul-24	192	83	44	12.47	28.20
11-Jul-24	187	78	42	12.15	15.54
18-Jul-24	184	77	39	16.65	15.38
19-Jul-24	149	82	40	13.36	10.23
26-Jul-24	188	72	30	12.83	15.23
27-Jul-24	165	68	28	14.56	18.69
01-Aug-24	237	83	41	16.02	18.25
02-Aug-24	245	92	48	15.33	17.06
09-Aug-24	230	85	39	12.26	11.65
10-Aug-24	159	95	44	14.22	14.42
16-Aug-24	169	86	42	15.64	22.00
17-Aug-24	168	68	29	14.83	14.87
23-Aug-24	194	72	31	14.14	11.41
24-Aug-24	141	79	35	11.65	18.42
30-Aug-24	169	82	30	15.03	15.69
31-Aug-24	210	85	37	16.81	22.00
04-Sep-24	211	76	39	14.83	31.54

05-Sep-24	222	88	46	12.92	35.15
11-Sep-24	215	94	48	15.77	25.59
12-Sep-24	224	90	45	17.45	21.63
19-Sep-24	187	88	53	10.65	30.81
20-Sep-24	166	83	41	14.60	26.01
27-Sep-24	176	72	37	18.02	25.24
28-Sep-24	181	92	40	15.26	12.44
07-Oct-24	215	92	48	15.54	18.57
08-Oct-24	188	84	43	11.56	14.31
16-Oct-24	181	81	39	15.29	19.58
17-Oct-24	160	68	29	13.40	36.40
23-Oct-24	174	70	33	15.56	25.36
24-Oct-24	186	79	43	14.35	23.38
29-Oct-24	195	85	46	15.57	25.38
30-Oct-24	175	74	39	19.10	31.12
04-Nov-24	205	85	46	14.34	18.33
05-Nov-24	213	90	49	16.20	18.86
11-Nov-24	178	73	35	12.76	22.85
12-Nov-24	172	70	33	13.83	10.78
18-Nov-24	175	76	38	16.10	12.62
19-Nov-24	186	81	42	15.02	16.86
25-Nov-24	198	84	46	15.93	19.06
26-Nov-24	212	88	49	12.74	22.00
02-Dec-24	205	92	47	12.23	23.54
03-Dec-24	200	88	46	15.62	22.16
09-Dec-24	189	84	43	14.86	24.78
10-Dec-24	181	87	45	19.63	21.36
16-Dec-24	178	79	43	15.86	35.16
17-Dec-24	196	76	41	14.32	40.79
23-Dec-24	192	78	45	14.03	34.43
24-Dec-24	184	74	47	14.24	25.64
30-Dec-24	178	78	51	11.46	21.33
31-Dec-24	174	76	53	17.82	14.67
03-Jan-25	194	82	43	18.39	17.18
04-Jan-25	208	85	46	14.79	11.80
10-Jan-25	216	90	48	15.19	18.11
11-Jan-25	236	94	53	14.85	18.92
20-Jan-25	207	84	46	10.50	21.44
21-Jan-25	193	75	41	15.76	30.97
28-Jan-25	189	72	40	13.73	22.60
29-Jan-25	206	75	43	15.12	25.58
05-Feb-25	210	88	47	20.87	28.08
06-Feb-25	199	83	44	14.46	34.60
12-Feb-25	208	84	46	11.45	26.98
13-Feb-25	186	73	41	12.94	27.38
20-Feb-25	214	85	47	14.16	24.23
21-Feb-25	203	75	42	13.51	38.47
27-Feb-25	203	79	44	19.54	34.45
28-Feb-25	183	73	39	15.18	23.78
05-Mar-25	207	85	45	19.18	42.41
06-Mar-25	196	75	41	12.75	35.77
12-Mar-25	196	79	42	16.42	19.50
13-Mar-25	176	73	37	17.36	25.07
19-Mar-25	168	65	33	13.79	20.84

20-Mar-25	153	67	28	11.88	28.43
26-Mar-25	179	77	34	14.38	31.19
27-Mar-25	197	94	28	19.00	35.57
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	245	96	57	20.87	42.41
Minimum	107	65	28	9.05	8.39
Average	191.51	81.49	41.63	14.3	21.6
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna

Table: 8.5.37

Area: Basundhara

Project: Garjanbahal OCP

Monitoring Station: West of working face, Bihaimunda

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	188	78	39	16.48	16.48
04-Apr-24	165	86	37	16.42	16.42
10-Apr-24	212	125	53	14.74	14.74
11-Apr-24	196	81	35	12.54	12.54
18-Apr-24	185	78	36	18.22	15.67
19-Apr-24	275	87	44	17.81	18.93
24-Apr-24	166	91	29	11.76	14.50
25-Apr-24	190	84	38	14.00	15.99
02-May-24	154	92	53	12.66	12.17
03-May-24	183	85	41	10.23	10.56
08-May-24	187	93	44	15.34	14.11
09-May-24	215	94	48	11.40	10.55
16-May-24	175	68	51	12.01	12.70
17-May-24	239	94	42	11.57	18.31
24-May-24	194	85	57	10.04	20.01
25-May-24	199	94	42	13.21	17.61
30-May-24	173	96	53	12.23	18.59
31-May-24	171	79	48	10.61	15.44
05-Jun-24	225	81	49	19.72	15.95
06-Jun-24	260	91	34	18.61	16.72
12-Jun-24	241	89	42	14.86	14.10
13-Jun-24	212	95	46	17.91	18.96
19-Jun-24	224	96	53	14.59	10.09
20-Jun-24	196	84	43	13.93	15.15
26-Jun-24	205	88	46	11.29	13.76
27-Jun-24	210	92	51	13.37	14.04
03-Jul-24	218	92	47	11.66	21.26
04-Jul-24	193	81	43	11.33	15.25
10-Jul-24	187	77	41	13.04	19.56
11-Jul-24	210	88	46	11.77	18.31
18-Jul-24	183	78	34	11.25	22.26
19-Jul-24	163	75	33	7.99	37.06
26-Jul-24	191	86	36	10.79	26.57
27-Jul-24	174	82	44	13.78	14.62
01-Aug-24	187	80	46	12.81	20.30
02-Aug-24	217	84	36	13.83	20.03
09-Aug-24	212	92	41	18.70	21.14
10-Aug-24	204	84	33	15.26	14.83
16-Aug-24	182	82	41	19.64	19.96
17-Aug-24	176	89	34	15.82	29.39
23-Aug-24	197	85	39	13.93	22.56
24-Aug-24	176	74	36	12.96	14.97
30-Aug-24	153	70	33	14.58	26.45
31-Aug-24	190	84	43	13.90	17.73
04-Sep-24	224	87	43	15.61	17.16

05-Sep-24	187	74	35	14.22	12.98
11-Sep-24	172	77	38	12.59	15.25
12-Sep-24	211	84	41	16.72	21.00
19-Sep-24	196	81	39	17.30	19.17
20-Sep-24	170	77	41	11.30	16.15
27-Sep-24	223	85	48	19.51	27.57
28-Sep-24	181	98	42	20.02	30.86
07-Oct-24	192	78	40	15.89	22.08
08-Oct-24	176	72	35	18.39	29.97
16-Oct-24	176	72	34	16.90	28.40
17-Oct-24	183	76	38	12.05	18.13
23-Oct-24	194	84	45	17.14	27.93
24-Oct-24	186	80	41	15.05	24.54
29-Oct-24	193	88	46	12.47	20.32
30-Oct-24	173	75	37	16.95	27.63
04-Nov-24	193	78	40	18.60	29.09
05-Nov-24	168	74	32	17.18	20.20
11-Nov-24	175	76	34	13.93	24.05
12-Nov-24	197	86	48	15.01	32.56
18-Nov-24	181	77	39	19.39	24.20
19-Nov-24	196	82	43	10.43	18.82
25-Nov-24	206	85	47	15.57	25.09
26-Nov-24	218	93	51	13.06	20.34
02-Dec-24	192	86	52	18.85	19.26
03-Dec-24	191	78	49	13.57	21.32
09-Dec-24	191	84	48	13.88	21.46
10-Dec-24	178	83	47	11.18	24.56
16-Dec-24	196	74	46	17.51	36.20
17-Dec-24	192	78	47	14.54	29.11
23-Dec-24	176	77	52	13.97	24.96
24-Dec-24	180	74	51	14.58	40.39
30-Dec-24	191	89	56	15.71	23.51
31-Dec-24	202	86	55	11.08	35.09
03-Jan-25	213	89	48	14.15	18.98
04-Jan-25	203	84	45	9.41	19.17
10-Jan-25	234	93	51	13.22	23.57
11-Jan-25	245	96	54	13.06	22.32
05-Feb-25	210	94	46	18.75	26.96
06-Feb-25	201	81	44	15.41	23.05
12-Feb-25	183	72	39	18.76	23.49
13-Feb-25	198	75	43	15.40	23.86
20-Feb-25	203	79	42	17.14	39.38
21-Feb-25	178	68	37	16.74	31.78
27-Feb-25	188	76	41	16.80	31.25
28-Feb-25	209	84	45	18.53	30.89
05-Mar-25	266	86	47	16.04	30.10
06-Mar-25	187	79	40	11.81	20.88
12-Mar-25	195	81	43	16.21	27.38
13-Mar-25	181	76	39	14.32	34.62
19-Mar-25	182	74	39	18.50	20.80
20-Mar-25	174	68	35	18.13	25.23
26-Mar-25	184	74	40	18.22	19.81
27-Mar-25	195	78	43	13.62	25.71
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**

Maximum	275	125	57	20.02	40.39
Minimum	153	68	29	7.99	10.09
Average	195.33	83.10	42.87	14.72	21.68
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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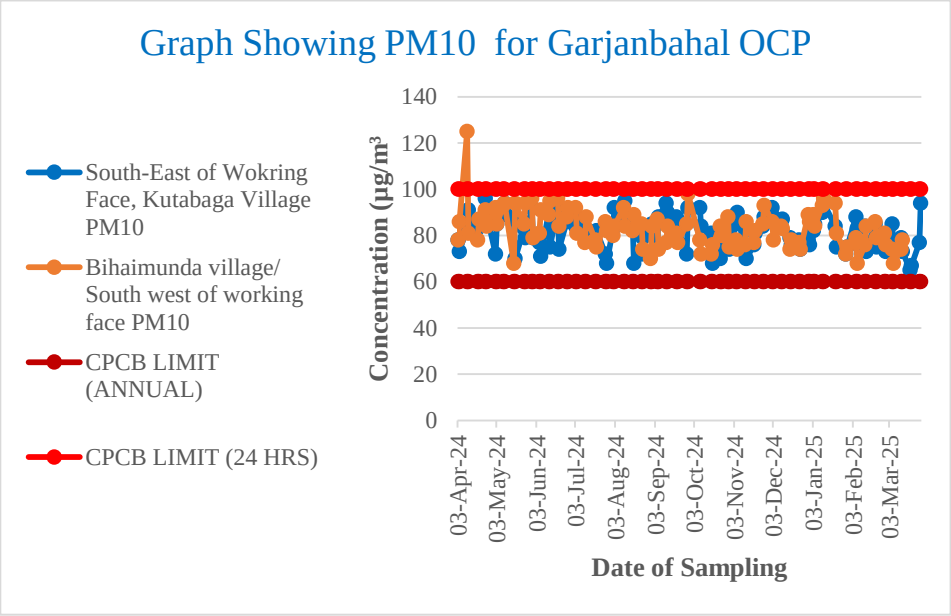
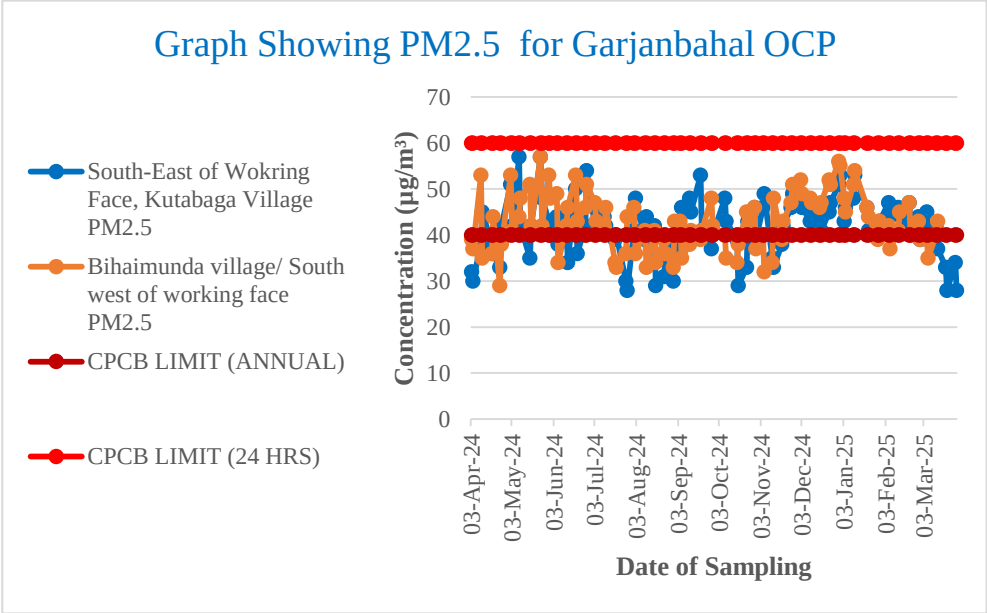
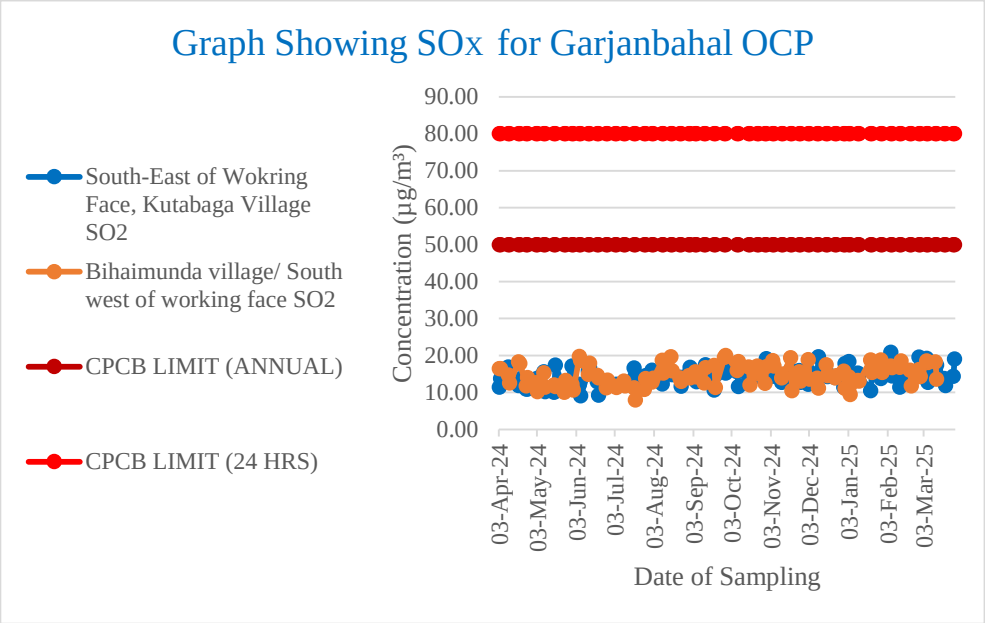

Graph Showing PM10 for Garjanbahal OCP
South-East of Wokring Face, Kutabaga Village PM10
Bihaimunda village/ South west of working face PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing PM2.5 for Garjanbahal OCP
South-East of Wokring Face, Kutabaga Village PM2.5
Bihaimunda village/ South west of working face PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing SOx for Garjanbahal OCP
South-East of Wokring Face, Kutabaga Village SO2
Bihaimunda village/ South west of working face SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

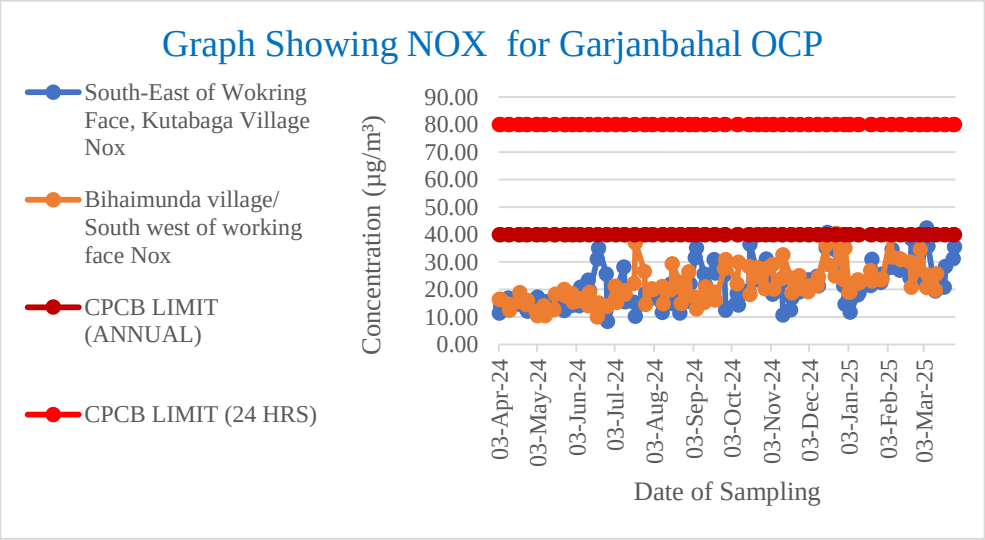

Graph Showing NOX for Garjanbahal OCP
South-East of Wokring Face, Kutabaga Village Nox
Bihaimunda village/ South west of working face Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

Table: 8.5.39

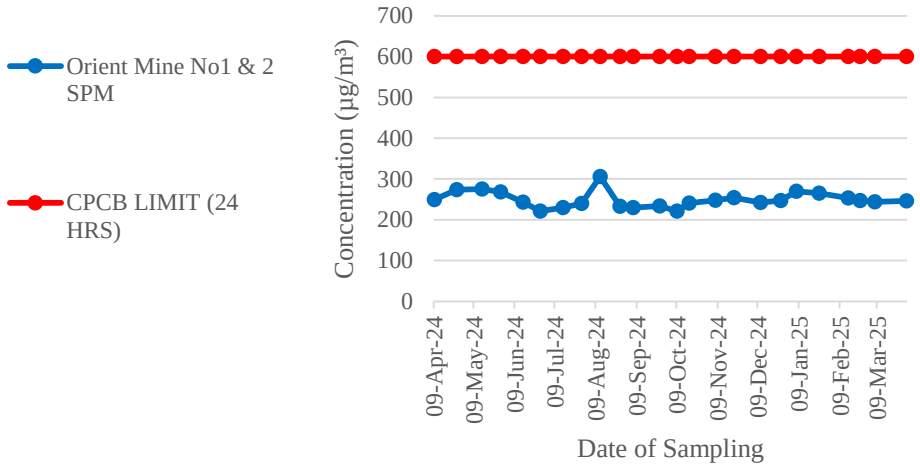
Area: Orient

Project: Orient Mine No.1 & 2

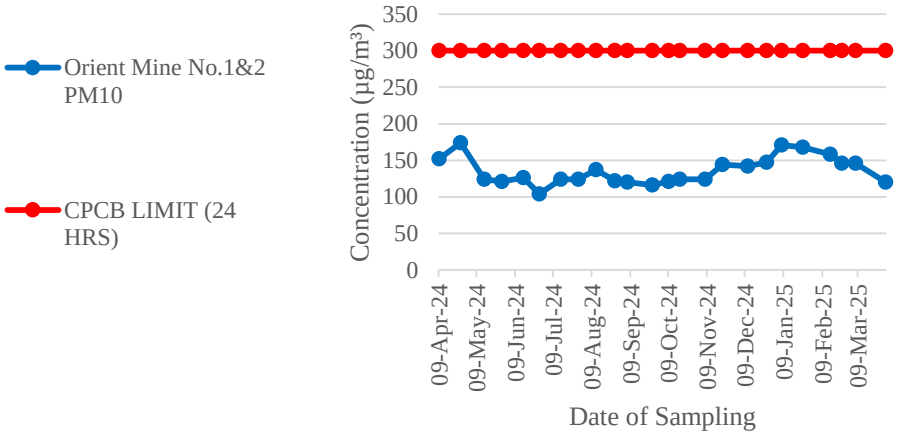
Monitoring Station: Orient Mine No1 & 2

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
09-Apr-24	249	152	66	11.00	11.00
26-Apr-24	274	174	66	11.08	15.01
15-May-24	275	124	60	22.55	10.51
29-May-24	268	121	72	10.17	9.27
15-Jun-24	243	126	66	10.60	25.65
28-Jun-24	221	104	56	11.87	20.00
15-Jul-24	230	124	62	9.14	16.73
29-Jul-24	240	124	66	11.19	18.19
12-Aug-24	306	137	78	14.40	12.01
27-Aug-24	233	122	64	14.21	28.65
06-Sep-24	230	120	62	14.12	23.26
26-Sep-24	234	116	54	14.71	30.98
09-Oct-24	221	121	58	14.07	25.72
18-Oct-24	241	124	66	14.95	24.37
07-Nov-24	248	124	64	18.59	32.46
21-Nov-24	254	144	66	13.49	30.16
11-Dec-24	242	142	64	15.84	33.38
26-Dec-24	247	147	66	12.82	20.81
07-Jan-25	270	171	69	15.13	23.34
24-Jan-25	265	168	67	16.10	23.86
15-Feb-25	253	158	64	12.73	38.58
24-Feb-25	247	146	61	11.00	33.88
07-Mar-25	244	146	58	11.00	33.88
31-Mar-25	246	120	55	12.73	38.58
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	306	174	78	22.55	38.58
Minimum	221	104	54	9.14	9.27
Average	249.21	135.63	63.75	13.48	24.18
Standard 24 hr	600	300	-	120	120
Standard Annual	430	215	-	80	80

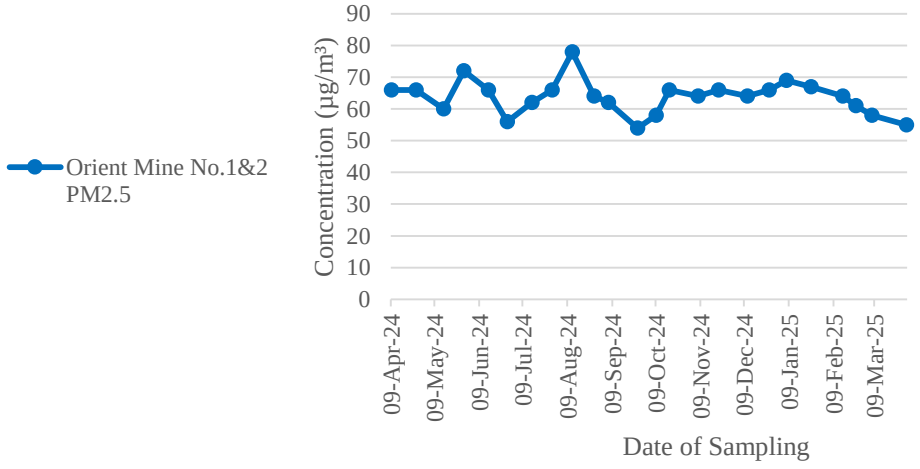
Graph Showing SPM for Orient Mine No.1&2

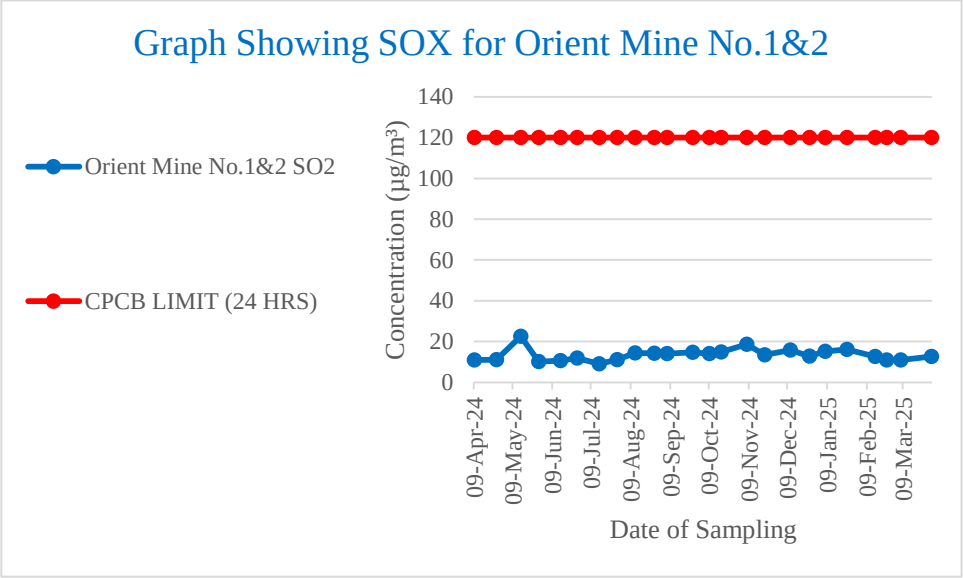


Graph Showing PM10 for Orient Mine No.1&2



Graph Showing PM2.5 for Orient Mine No.1&2




Graph Showing SOX for Orient Mine No.1&2
Orient Mine No.1&2 SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

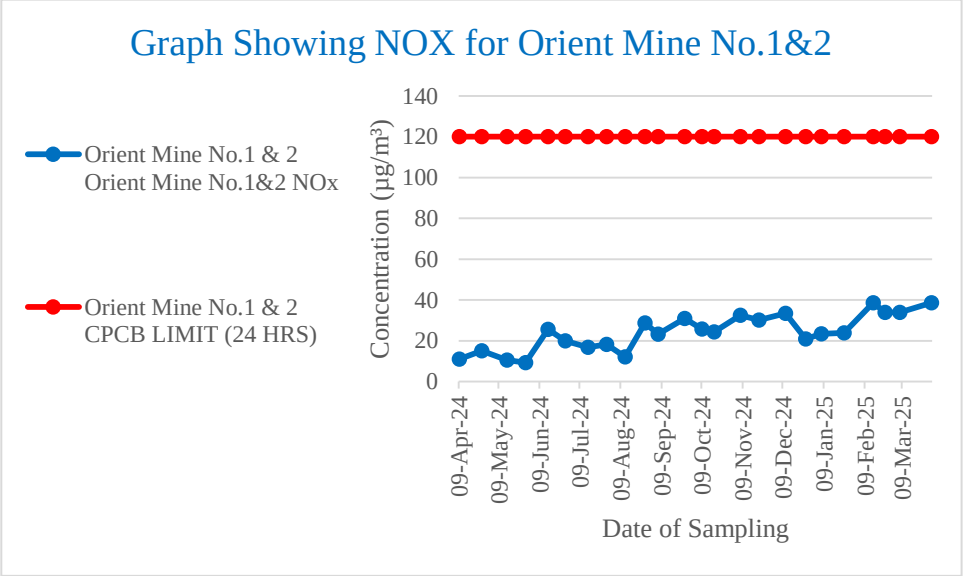

Graph Showing NOX for Orient Mine No.1&2
Orient Mine No.1 & 2
Orient Mine No.1&2 NOx
Orient Mine No.1 & 2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

Table: 8.5.40

Area: Orient

Project: Orient Mine No.1 & 2

Monitoring Station: IB Valley GM Office

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	190	95	42	10.42	10.42
06-Apr-24	178	88	38	12.20	12.20
12-Apr-24	171	84	36	14.14	14.14
13-Apr-24	238	80	33	15.15	15.15
22-Apr-24	168	87	33	16.92	17.55
23-Apr-24	164	74	29	13.17	19.47
26-Apr-24	205	88	42	12.02	13.30
27-Apr-24	186	94	38	12.42	15.41
02-May-24	196	87	36	9.70	16.93
03-May-24	198	91	58	11.41	12.10
08-May-24	144	84	39	17.53	16.06
09-May-24	184	77	50	14.42	11.99
16-May-24	195	86	44	13.19	16.98
17-May-24	221	96	48	10.57	18.37
24-May-24	210	93	36	13.49	17.39
25-May-24	182	84	45	9.86	9.44
03-Jun-24	182	83	43	19.91	15.89
04-Jun-24	158	73	49	13.19	13.03
10-Jun-24	175	87	45	18.70	18.73
11-Jun-24	138	72	54	22.71	25.79
19-Jun-24	206	82	48	13.67	20.27
20-Jun-24	238	93	56	14.08	14.45
27-Jun-24	223	88	51	12.99	13.82
28-Jun-24	196	88	46	10.05	29.79
29-Jun-24	230	96	55	14.81	15.68
03-Jul-24	222	95	48	12.95	21.05
04-Jul-24	183	86	41	10.02	15.26
10-Jul-24	195	89	43	14.39	21.58
11-Jul-24	178	83	39	10.75	20.44
18-Jul-24	184	82	41	12.48	18.61
19-Jul-24	190	86	44	12.20	27.45
26-Jul-24	178	83	45	14.98	23.69
27-Jul-24	194	86	48	13.11	29.73
01-Aug-24	155	85	41	14.55	18.75
02-Aug-24	208	95	57	11.86	18.24
09-Aug-24	206	82	43	12.11	20.00
10-Aug-24	235	90	46	15.12	18.30
16-Aug-24	146	75	33	12.79	23.21
17-Aug-24	153	88	39	9.79	19.14
23-Aug-24	144	78	34	10.52	25.92
24-Aug-24	148	84	38	13.56	23.92
24-Aug-24	195	87	42	13.56	23.44
30-Aug-24	184	87	44	12.78	16.37
04-Sep-24	194	78	37	11.88	27.43
05-Sep-24	207	89	51	16.19	35.72

11-Sep-24	199	83	42	16.34	25.40
12-Sep-24	220	77	37	13.69	11.05
19-Sep-24	186	88	46	15.76	37.12
20-Sep-24	182	84	39	17.72	30.12
27-Sep-24	170	75	36	16.63	16.54
28-Sep-24	170	73	35	20.57	10.28
07-Oct-24	174	72	35	12.85	25.83
08-Oct-24	196	82	44	12.58	22.78
16-Oct-24	196	83	44	13.39	20.37
17-Oct-24	166	74	35	15.53	20.52
23-Oct-24	165	69	34	14.00	22.81
24-Oct-24	198	88	46	17.74	28.91
29-Oct-24	171	75	34	18.25	29.74
30-Oct-24	166	67	32	15.11	24.62
04-Nov-24	219	94	50	13.63	37.66
05-Nov-24	182	83	41	16.89	32.99
11-Nov-24	194	89	46	13.07	16.55
12-Nov-24	175	74	32	18.35	11.54
18-Nov-24	186	80	41	15.23	25.25
19-Nov-24	197	82	44	14.11	36.66
25-Nov-24	206	86	47	15.23	21.04
26-Nov-24	214	93	51	11.75	35.07
02-Dec-24	183	77	39	14.46	15.52
03-Dec-24	191	80	42	14.14	16.39
09-Dec-24	206	84	45	11.97	20.09
10-Dec-24	214	83	49	11.00	25.74
16-Dec-24	194	77	46	12.09	19.61
17-Dec-24	207	82	50	16.23	21.94
23-Dec-24	190	87	53	20.85	26.13
24-Dec-24	210	90	54	16.13	28.86
30-Dec-24	219	88	56	16.51	15.11
31-Dec-24	221	92	58	16.62	37.72
03-Jan-25	202	82	44	11.90	24.48
04-Jan-25	237	92	53	14.57	26.30
10-Jan-25	204	84	45	13.61	39.82
11-Jan-25	212	87	48	14.10	20.97
20-Jan-25	216	85	48	19.32	26.79
21-Jan-25	210	77	44	17.80	27.62
28-Jan-25	195	74	41	14.28	25.58
29-Jan-25	223	91	49	13.42	29.16
05-Feb-25	205	85	46	16.97	25.65
06-Feb-25	193	76	41	18.05	26.11
12-Feb-25	198	80	44	12.88	20.35
13-Feb-25	178	76	39	16.77	20.87
20-Feb-25	198	80	44	15.69	28.40
21-Feb-25	183	72	39	13.54	27.05
27-Feb-25	191	75	42	16.99	34.94
28-Feb-25	172	71	37	10.80	23.98
05-Mar-25	191	80	42	17.57	25.82
06-Mar-25	177	72	37	17.77	28.13
12-Mar-25	184	78	40	19.93	22.53
13-Mar-25	211	84	45	15.56	20.95
19-Mar-25	192	77	42	12.85	30.58
20-Mar-25	175	69	36	17.89	31.90

26-Mar-25	169	65	33	10.90	25.60
27-Mar-25	182	74	39	18.37	24.97
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	238	96	58	22.71	39.82
Minimum	138	65	29	9.70	9.44
Average	191.49	82.72	43.06	14.48	22.39
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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Table: 8.5.41

Area: Orient

Project: Orient Mine No.1 & 2

Monitoring Station: VIP Guest House IB Valley (Reported Only)

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	218	96	52	13.98	13.98
06-Apr-24	210	89	44	15.41	15.41
12-Apr-24	188	78	35	17.17	17.17
13-Apr-24	204	86	39	18.14	18.14
18-Apr-24	193	82	41	13.94	16.46
19-Apr-24	198	89	43	10.28	15.57
26-Apr-24	168	76	29	13.75	14.98
27-Apr-24	169	82	31	14.88	18.56
06-May-24	165	85	30	13.69	12.20
07-May-24	158	99	47	15.13	17.47
10-May-24	194	91	42	16.28	13.99
11-May-24	154	74	33	20.32	15.72
20-May-24	205	96	42	11.39	16.63
21-May-24	159	76	33	14.55	19.31
27-May-24	175	79	48	13.14	13.77
28-May-24	180	84	42	13.71	9.79
03-Jun-24	199	80	52	9.60	10.05
04-Jun-24	174	75	47	11.14	14.36
10-Jun-24	169	93	57	20.77	21.03
11-Jun-24	171	78	50	13.03	13.63
17-Jun-24	165	76	30	9.76	29.67
18-Jun-24	182	82	34	11.72	36.19
24-Jun-24	186	88	40	8.15	30.97
25-Jun-24	193	94	43	11.92	11.78
28-Jun-24	215	96	46	14.56	25.18
29-Jun-24	206	85	42	11.31	16.80
01-Jul-24	157	70	32	10.32	18.07
02-Jul-24	170	76	38	10.40	17.48
08-Jul-24	162	72	36	11.70	16.09
09-Jul-24	200	88	45	11.11	22.68
16-Jul-24	175	83	46	11.58	33.55
17-Jul-24	203	96	49	15.74	32.40
24-Jul-24	191	86	45	12.05	16.00
25-Jul-24	185	84	42	19.43	12.95
30-Jul-24	164	75	34	14.77	26.65
31-Jul-24	185	89	44	10.42	32.84
05-Aug-24	181	72	30	15.74	18.51
06-Aug-24	175	68	27	14.23	16.71
13-Aug-24	166	74	34	11.99	10.99
14-Aug-24	186	81	38	15.04	13.28
21-Aug-24	191	81	46	13.30	19.16
22-Aug-24	222	88	45	11.57	14.00
28-Aug-24	189	92	48	15.36	32.52
29-Aug-24	159	81	43	12.86	25.68
02-Sep-24	188	75	38	15.97	20.59

03-Sep-24	179	68	32	15.57	25.36
09-Sep-24	217	73	35	13.61	20.21
10-Sep-24	177	76	37	13.58	17.76
16-Sep-24	182	76	40	15.48	27.63
17-Sep-24	169	72	35	13.24	22.01
23-Sep-24	213	83	40	17.07	25.20
24-Sep-24	191	74	35	15.22	37.36
03-Oct-24	158	64	31	12.79	22.94
04-Oct-24	168	69	33	12.44	34.03
14-Oct-24	189	85	42	11.44	23.73
15-Oct-24	176	78	36	11.63	21.14
21-Oct-24	207	85	44	20.44	33.31
22-Oct-24	206	88	46	20.07	32.71
25-Oct-24	215	92	50	14.20	23.15
26-Oct-24	172	73	36	16.40	26.73
01-Nov-24	171	76	38	15.61	21.80
02-Nov-24	168	75	37	12.65	19.64
08-Nov-24	187	83	40	12.97	25.95
09-Nov-24	181	74	35	13.59	31.72
15-Nov-24	163	73	30	14.29	32.68
16-Nov-24	168	76	33	13.01	36.89
22-Nov-24	173	73	36	11.92	26.89
23-Nov-24	187	79	40	13.93	29.46
29-Nov-24	196	83	44	16.54	16.83
30-Nov-24	208	89	47	14.36	15.43
04-Dec-24	178	75	37	15.54	17.77
05-Dec-24	191	78	41	15.58	15.05
12-Dec-24	198	82	44	14.71	14.02
13-Dec-24	210	85	48	15.70	18.42
20-Dec-24	189	78	47	17.47	29.58
21-Dec-24	197	83	51	16.85	29.97
27-Dec-24	214	85	53	14.25	28.78
28-Dec-24	227	88	57	17.75	40.60
01-Jan-25	195	81	43	10.33	19.84
02-Jan-25	223	91	49	11.03	26.81
08-Jan-25	234	93	51	12.05	28.32
09-Jan-25	246	97	55	16.05	17.09
16-Jan-25	236	93	52	10.08	25.58
17-Jan-25	207	83	45	19.86	26.51
22-Jan-25	215	85	48	19.32	30.13
23-Jan-25	208	81	45	11.76	20.74
30-Jan-25	196	76	44	16.78	25.11
31-Jan-25	186	73	42	15.12	20.05
03-Feb-25	175	70	39	13.68	23.34
04-Feb-25	200	86	45	12.99	27.32
10-Feb-25	195	79	44	12.99	23.72
11-Feb-25	212	84	46	10.96	27.83
17-Feb-25	175	70	37	18.52	36.28
18-Feb-25	189	81	43	16.71	27.13
19-Feb-25	185	77	42	11.33	27.65
25-Feb-25	201	82	44	13.88	25.21
26-Feb-25	189	80	40	11.67	31.59
03-Mar-25	201	81	43	14.95	21.55
04-Mar-25	182	78	41	10.76	23.86

10-Mar-25	228	77	50	12.26	23.15
11-Mar-25	194	85	42	15.03	34.31
17-Mar-25	169	68	37	13.30	29.30
18-Mar-25	163	66	35	17.15	26.11
24-Mar-25	175	71	38	9.81	16.54
25-Mar-25	194	78	42	17.40	21.18
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	246	99	57	20.77	40.6
Minimum	154	64	27	8.15	9.79
Average	189.0	80.9	41.4	14.1	22.8
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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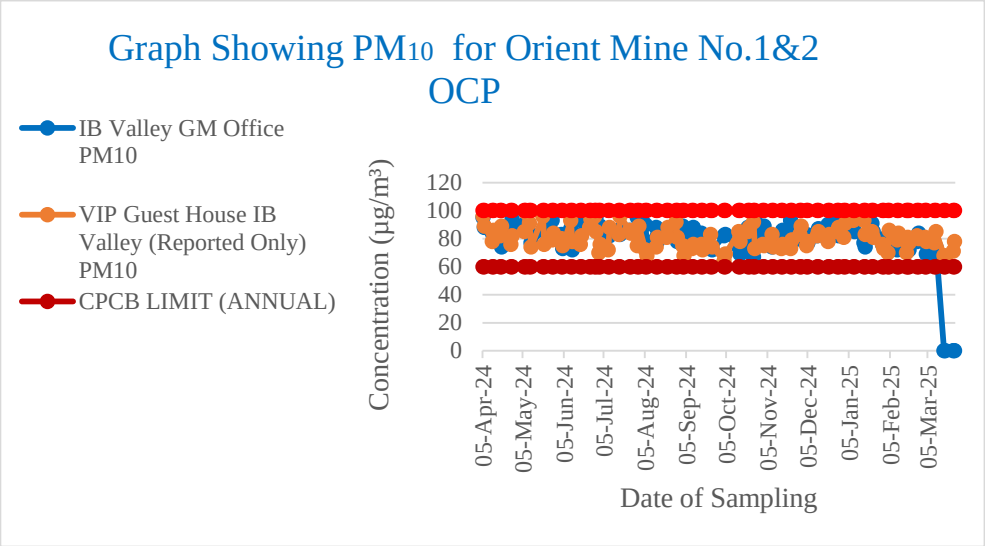
Graph Showing PM10 for Orient Mine No.1&2 OCP
IB Valley GM Office PM10
VIP Guest House IB Valley (Reported Only) PM10
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
120
100
80
60
40
20
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
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05-Oct-24
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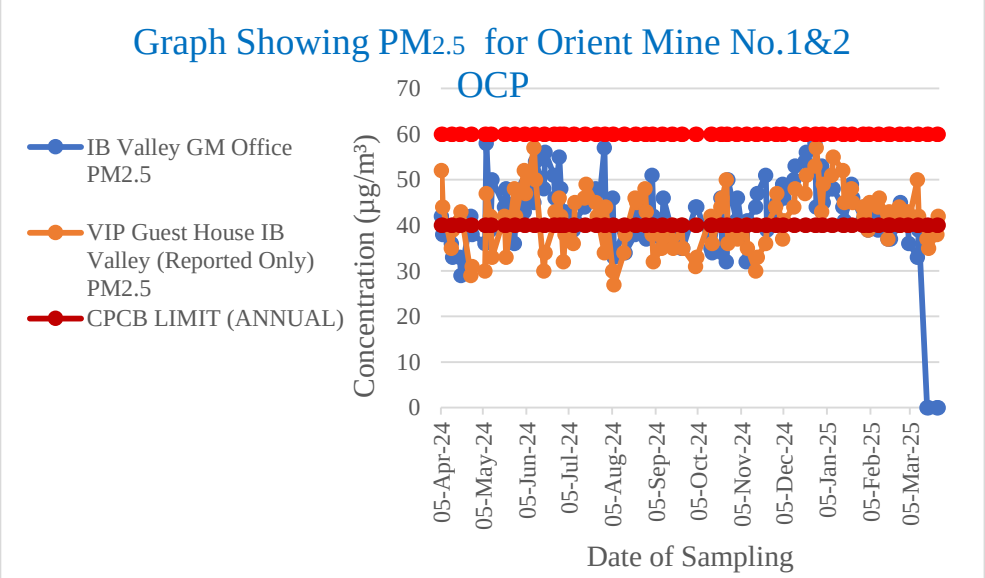
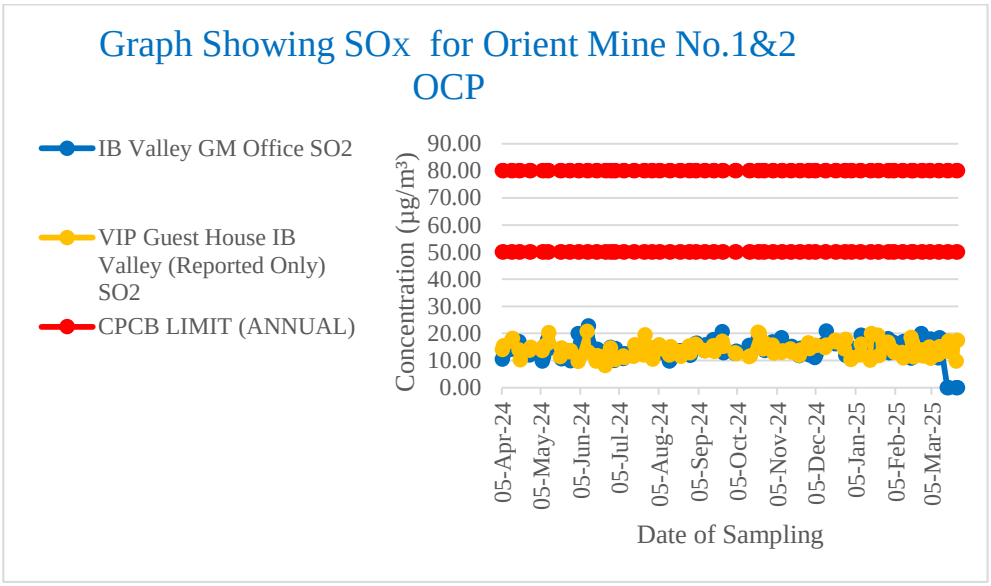
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for Orient Mine No.1&2 OCP
IB Valley GM Office PM2.5
VIP Guest House IB Valley (Reported Only) PM2.5
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOx for Orient Mine No.1&2 OCP
IB Valley GM Office SO2
VIP Guest House IB Valley (Reported Only) SO2
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

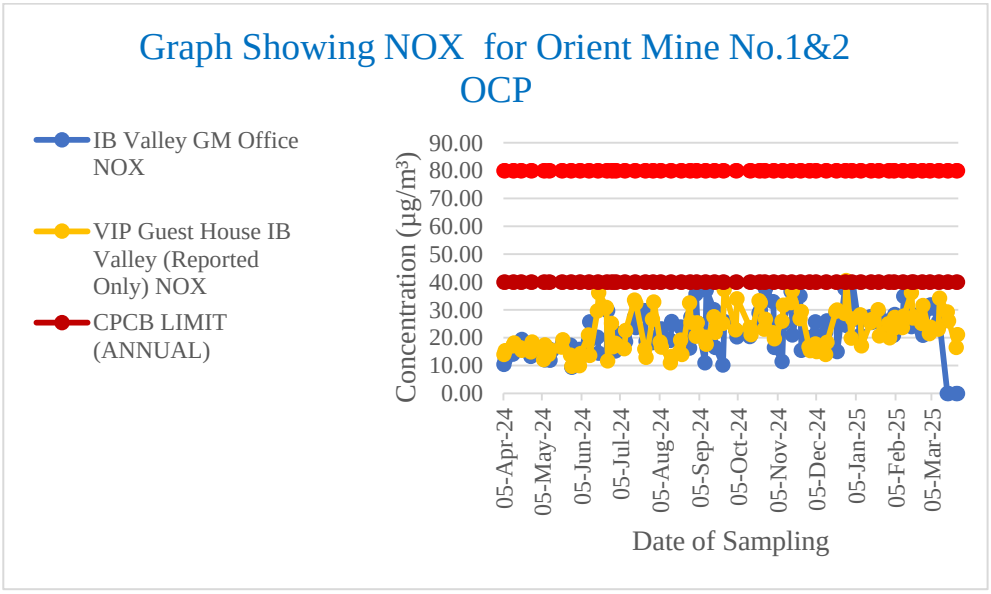

Graph Showing NOX for Orient Mine No.1&2 OCP
IB Valley GM Office NOX
VIP Guest House IB Valley (Reported Only) NOX
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

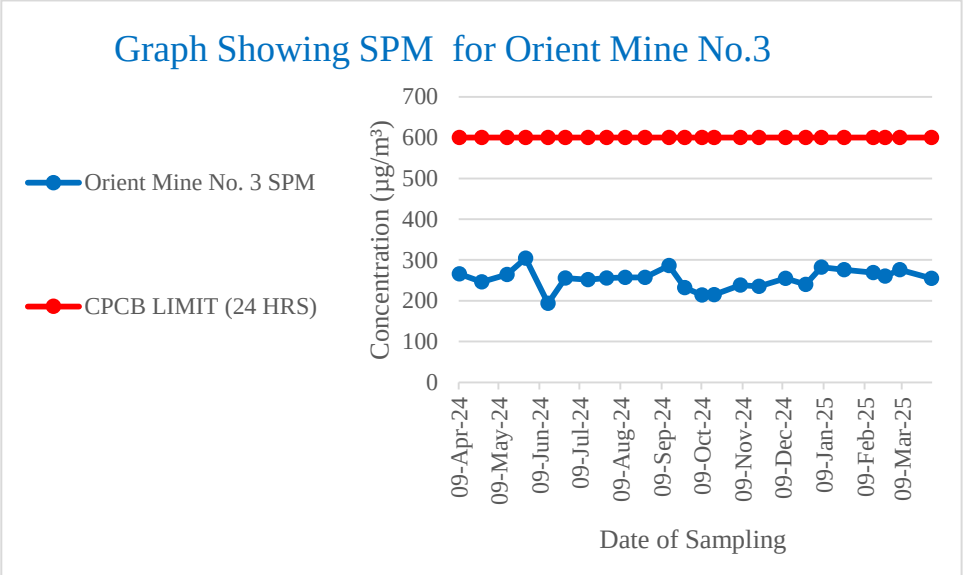
Table: 8.5.42

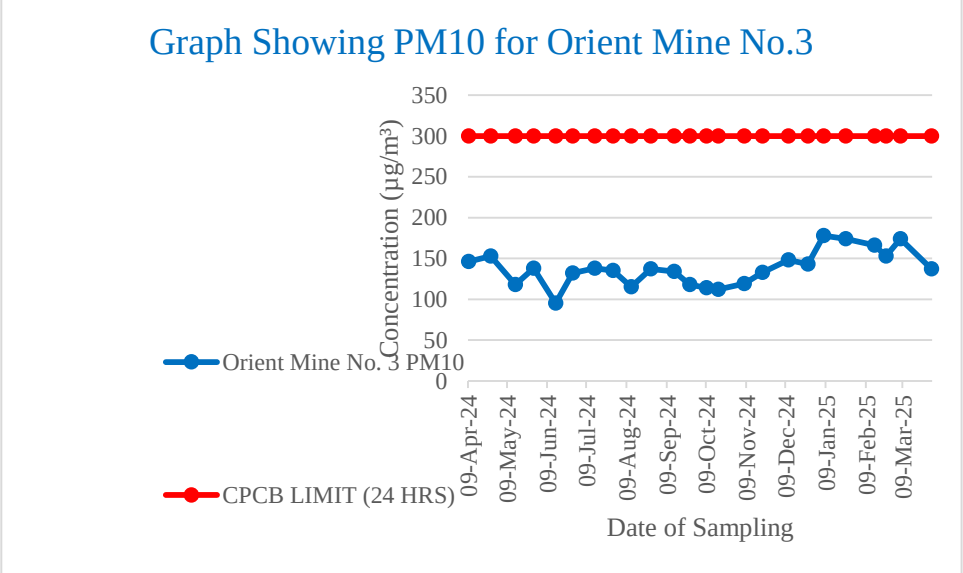
Area: Orient

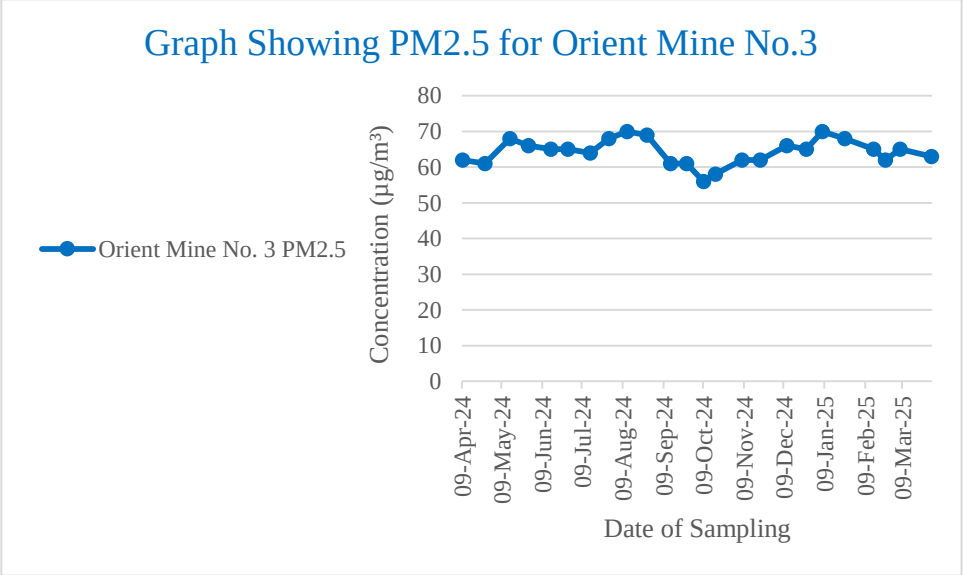
Project: Orient Mine No. 3

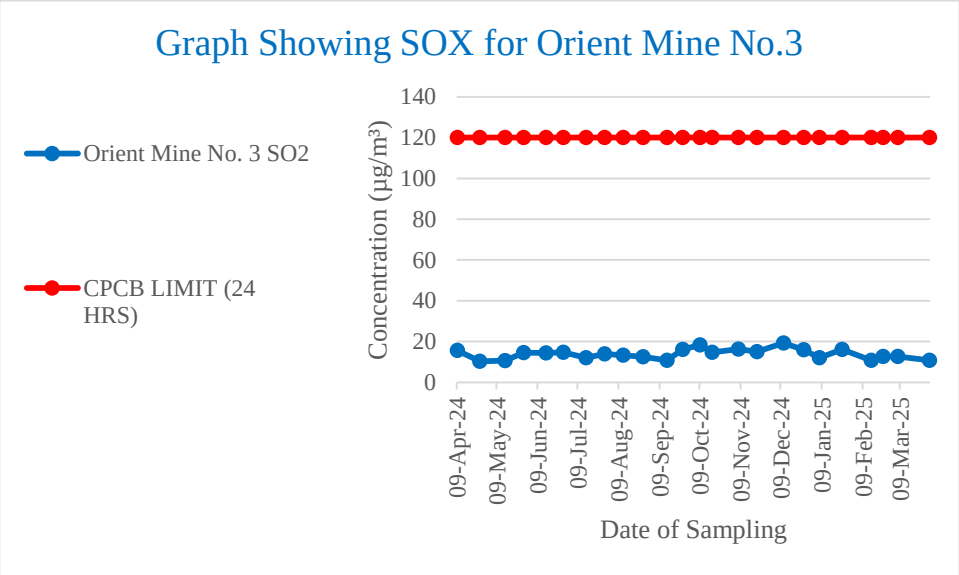
Monitoring Station: Orient Mine No. 3

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
09-Apr-24	266	146	62	15.73	15.73
26-Apr-24	246	153	61	10.40	11.87
15-May-24	264	118	68	10.67	15.94
29-May-24	304	138	66	14.62	14.49
15-Jun-24	194	95	65	14.40	27.66
28-Jun-24	256	132	65	14.76	8.76
15-Jul-24	252	138	64	12.03	16.20
29-Jul-24	256	135	68	13.89	29.16
12-Aug-24	257	115	70	13.27	12.29
27-Aug-24	257	137	69	12.53	16.44
14-Sep-24	286	134	61	10.79	13.30
26-Sep-24	232	118	61	16.08	20.20
09-Oct-24	214	114	56	18.29	34.64
18-Oct-24	215	112	58	14.75	24.04
07-Nov-24	238	119	62	16.32	33.31
21-Nov-24	235	133	62	15.02	26.89
11-Dec-24	255	148	66	19.26	18.88
26-Dec-24	240	143	65	15.91	25.21
07-Jan-25	282	178	70	12.09	30.23
24-Jan-25	276	174	68	16.10	21.96
15-Feb-25	269	166	65	10.75	24.47
24-Feb-25	260	153	62	12.73	38.58
07-Mar-25	276	174	65	12.73	38.58
31-Mar-25	255	137	63	10.75	24.47
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	304	178	70	19.26	38.58
Minimum	194	95	56	10.40	8.76
Average	253.54	137.92	64.25	13.91	22.64
Standard 24 hr	600	300		120	120
Standard Annual	430	215	-	80	80


Graph Showing SPM for Orient Mine No.3
Orient Mine No. 3 SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
700
600
500
400
300
200
100
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing PM10 for Orient Mine No.3
Orient Mine No. 3 PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
350
300
250
200
150
100
50
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing PM2.5 for Orient Mine No.3
Orient Mine No. 3 PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing SOX for Orient Mine No.3
Orient Mine No. 3 SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

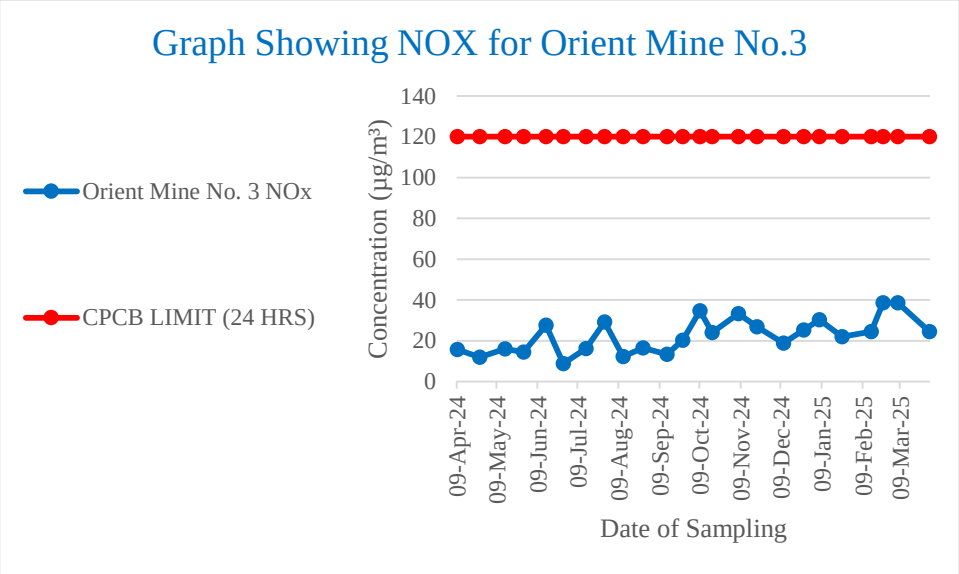

Graph Showing NOX for Orient Mine No.3
Orient Mine No. 3 NOx
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

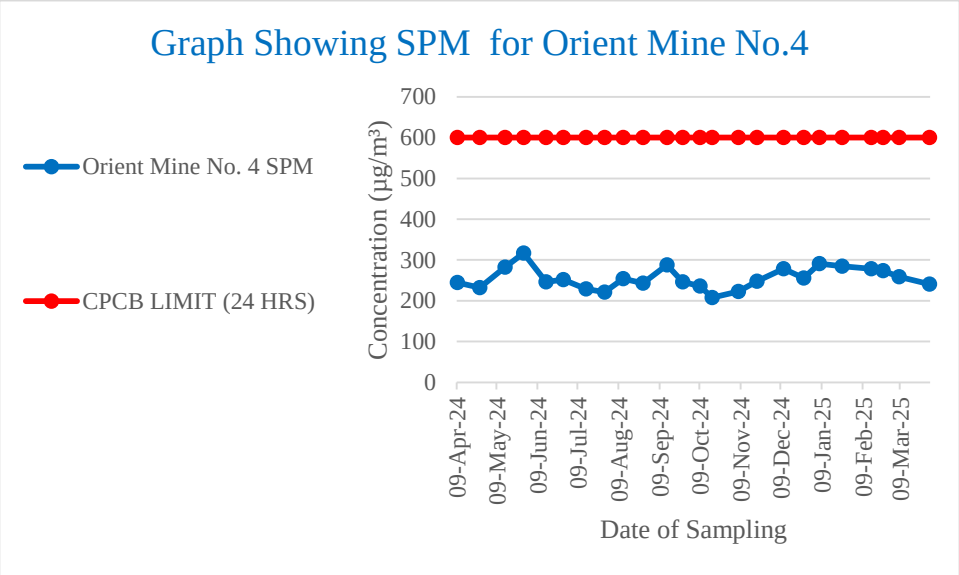
Table: 8.5.43

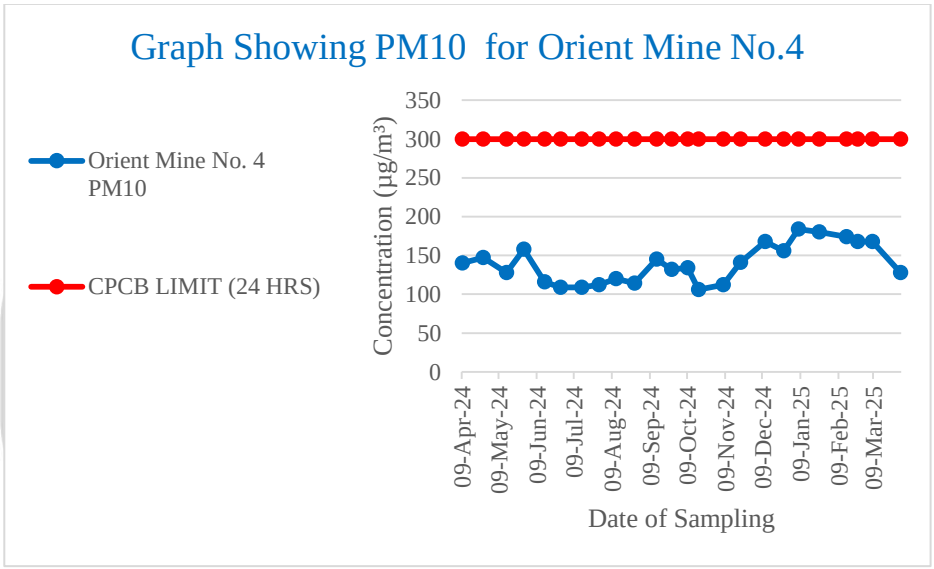
Area: Orient

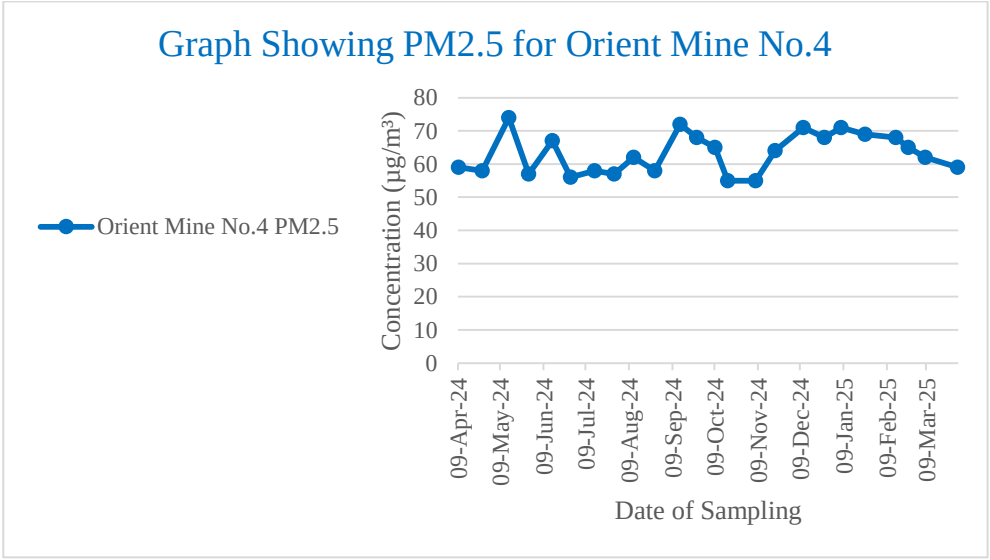
Project: Orient Mine No. 4

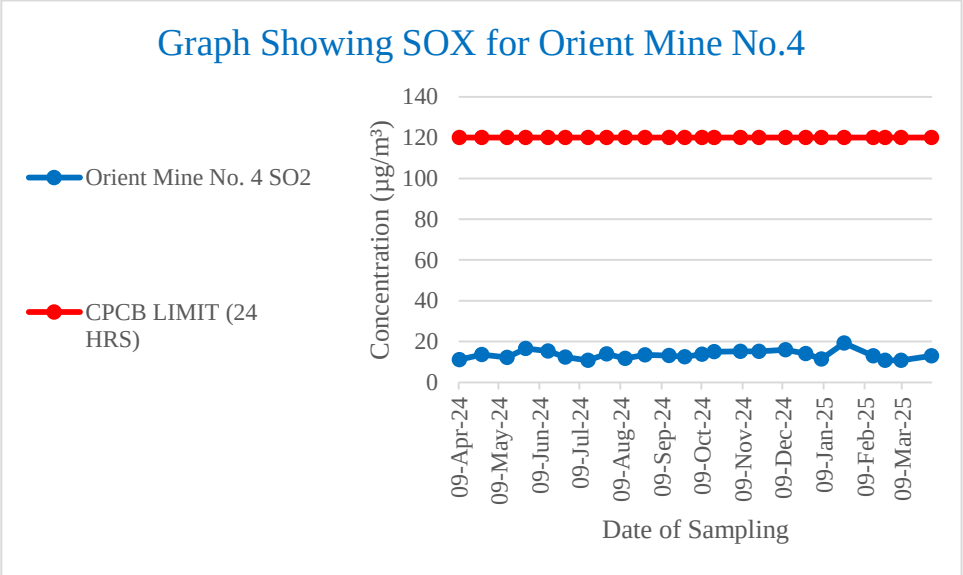
Monitoring Station: Orient Mine No. 4

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
09-Apr-24	245	140	59	11.16	11.16
26-Apr-24	232	147	58	13.58	14.97
15-May-24	282	128	74	12.26	13.47
29-May-24	317	158	57	16.65	13.35
15-Jun-24	246	116	67	15.29	30.22
28-Jun-24	252	109	56	12.30	28.10
15-Jul-24	229	109	58	10.87	19.02
29-Jul-24	221	112	57	13.94	33.55
12-Aug-24	254	120	62	11.79	16.56
27-Aug-24	243	114	58	13.42	17.19
14-Sep-24	288	145	72	13.16	14.53
26-Sep-24	246	132	68	12.47	12.10
09-Oct-24	236	134	65	13.83	30.54
18-Oct-24	208	106	55	14.99	24.44
07-Nov-24	223	112	55	15.24	35.65
21-Nov-24	248	141	64	15.25	14.59
11-Dec-24	278	168	71	16.04	16.40
26-Dec-24	256	156	68	14.17	28.05
07-Jan-25	291	184	71	11.47	22.98
24-Jan-25	285	180	69	19.32	30.13
15-Feb-25	278	174	68	12.99	33.16
24-Feb-25	274	168	65	10.75	24.47
08-Mar-25	259	168	62	10.75	24.47
31-Mar-25	241	128	59	12.99	33.16
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	317	184	74	19.32	35.65
Minimum	208	106	55	10.75	11.16
Average	255.50	139.54	63.25	13.53	22.59
Standard 24 hr	600	300		120	120
Standard Annual	430	215	-	80	80


Graph Showing SPM for Orient Mine No.4
Orient Mine No. 4 SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
700
600
500
400
300
200
100
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing PM10 for Orient Mine No.4
Orient Mine No. 4 PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
350
300
250
200
150
100
50
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing PM2.5 for Orient Mine No.4
Orient Mine No.4 PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing SOX for Orient Mine No.4
Orient Mine No. 4 SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

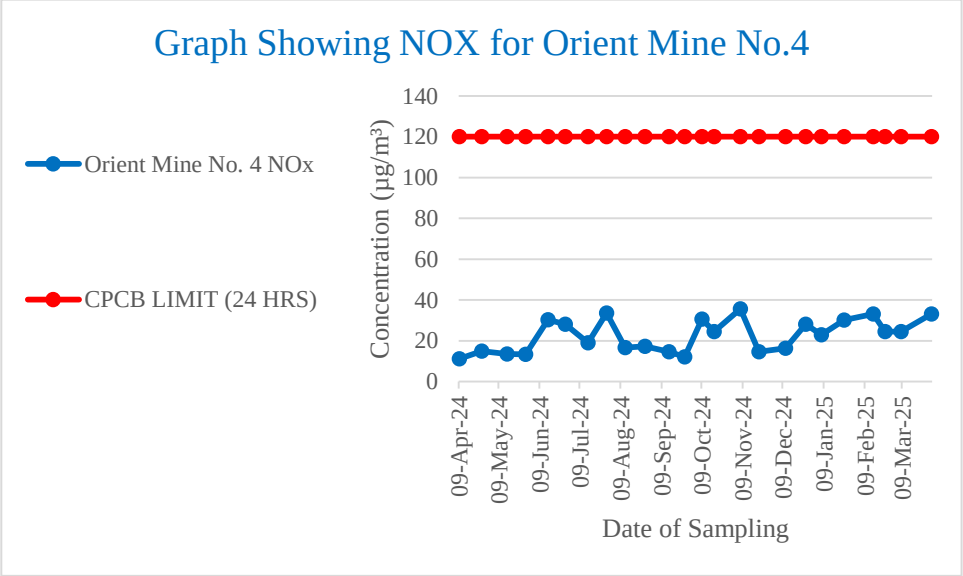

Graph Showing NOX for Orient Mine No.4
Orient Mine No. 4 NOx
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

Table: 8.5.44

Area: Orient

Project: HBI Mine

Monitoring Station: Bundia Colony Pump House

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
10-Apr-24	274	172	69	14.67	14.67
27-Apr-24	285	178	67	12.13	15.52
15-May-24	365	152	57	11.71	11.79
29-May-24	284	134	64	9.95	14.78
15-Jun-24	213	103	61	12.32	16.67
29-Jun-24	226	112	50	11.91	16.85
15-Jul-24	243	123	65	14.93	19.59
29-Jul-24	237	131	67	24.11	24.61
12-Aug-24	269	124	66	13.30	13.68
27-Aug-24	284	148	72	14.34	28.77
14-Sep-24	230	122	58	13.53	26.26
26-Sep-24	212	112	58	12.37	16.31
01-Oct-24	231	106	59	14.40	38.82
28-Oct-24	238	128	64	13.83	22.54
07-Nov-24	293	158	72	17.93	26.27
21-Nov-24	305	158	74	10.45	19.64
14-Dec-24	244	140	66	12.03	26.03
26-Dec-24	253	148	68	13.59	17.18
07-Jan-25	277	178	71	9.98	21.35
24-Jan-25	271	166	69	15.94	19.08
15-Feb-25	260	164	65	14.00	24.67
24-Feb-25	259	158	63	13.74	36.77
14-Mar-25	255	146	60	21.13	38.60
31-Mar-25	245	136	57	17.52	32.00
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	365	178	74	24.11	38.82
Minimum	212	103	50	9.95	11.79
Average	260.54	141.54	64.25	14.16	22.60
Standard 24 hr	500	250	-	120	120
Standard Annual	360	180	-	80	80

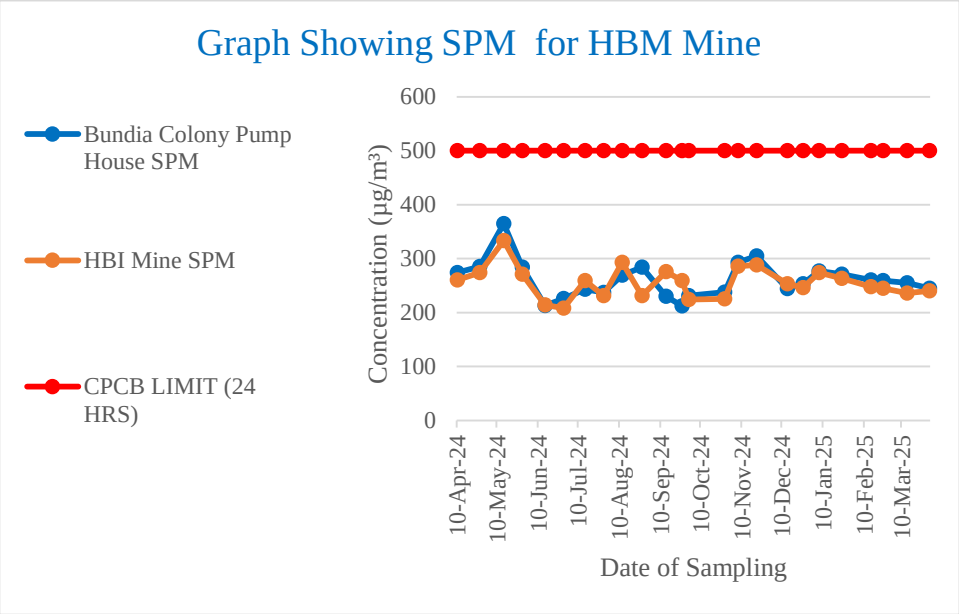
Table: 8.5.45

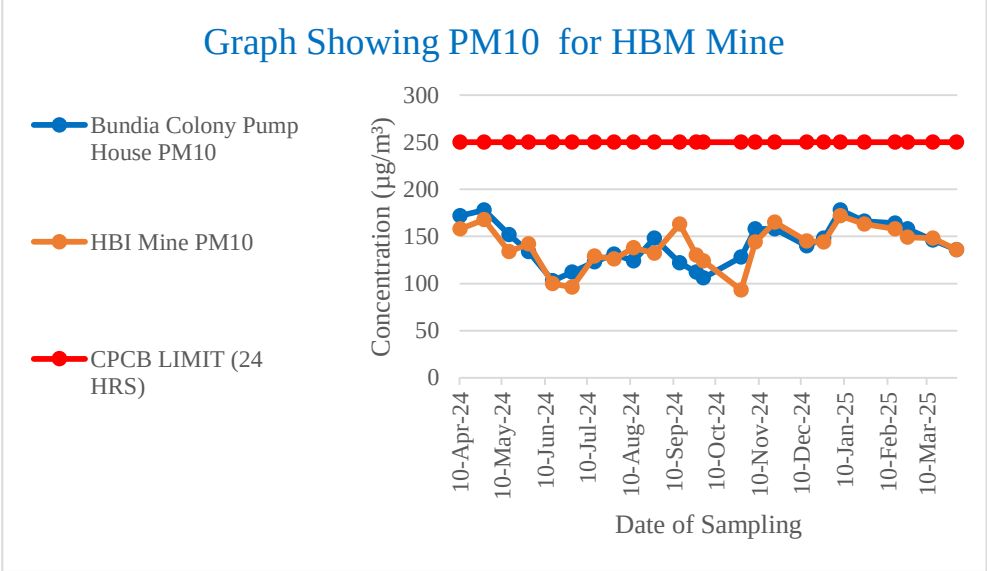
Area: Orient

Project: HBI Mine

Monitoring Station: HBI Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
10-Apr-24	260	158	64	11.11	11.11
27-Apr-24	274	168	63	11.43	13.43
15-May-24	333	134	66	9.11	10.89
29-May-24	271	142	71	14.91	15.77
15-Jun-24	214	100	47	18.48	17.81
28-Jun-24	208	96	46	10.97	16.11
15-Jul-24	259	129	67	13.07	16.01
29-Jul-24	231	126	64	10.84	32.11
12-Aug-24	293	138	70	15.14	15.27
27-Aug-24	231	132	60	14.21	24.35
14-Sep-24	276	163	69	12.62	13.28
26-Sep-24	259	130	64	11.70	17.14
09-Oct-24	224	124	57	14.28	35.63
18-Oct-24	225	93	58	10.12	18.32
07-Nov-24	286	144	70	11.16	33.72
21-Nov-24	288	165	72	13.93	25.95
11-Dec-24	253	145	68	15.52	14.98
26-Dec-24	246	144	65	13.92	25.55
07-Jan-25	274	172	69	14.40	30.37
24-Jan-25	263	163	67	14.01	27.83
15-Feb-25	248	158	64	10.40	22.57
24-Feb-25	245	149	61	13.81	30.83
08-Mar-25	236	148	62	17.84	28.17
31-Mar-25	240	136	55	19.20	27.55
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	333	172	72	19.20	35.63
Minimum	208	93	46	9.11	10.89
Average	255.71	139.88	63.29	13.42	21.86
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for HBM Mine
Bundia Colony Pump House SPM
HBI Mine SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
600
500
400
300
200
100
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing PM10 for HBM Mine
Bundia Colony Pump House PM10
HBI Mine PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
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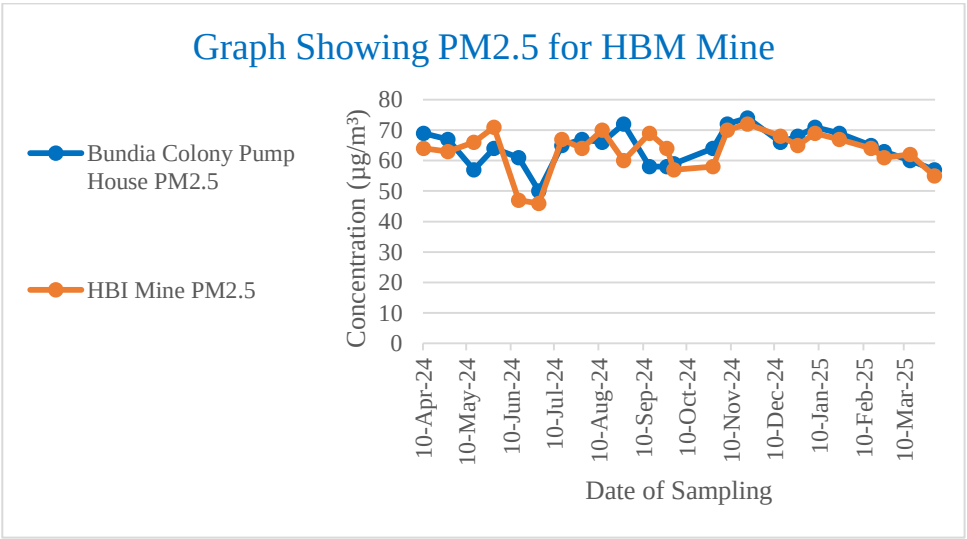
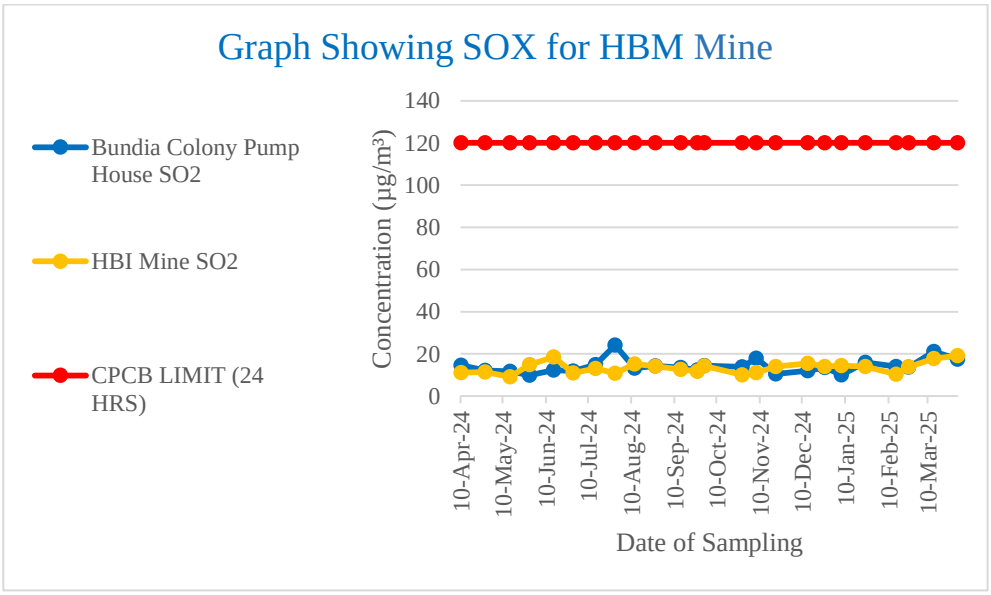
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing PM2.5 for HBM Mine
Bundia Colony Pump House PM2.5
HBI Mine PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing SOX for HBM Mine
Bundia Colony Pump House SO2
HBI Mine SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

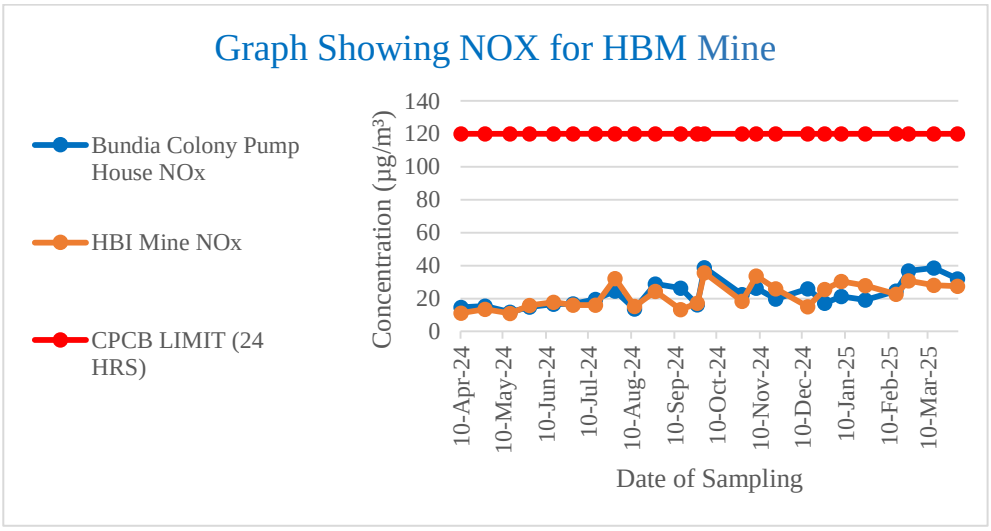

Graph Showing NOX for HBM Mine
Bundia Colony Pump House NOx
HBI Mine NOx
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 8.5.46

Area: Orient

Project: Hirakand Bundia Mine (HBM)

Monitoring Station: Rampur Sub Area

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	188	85	37	17.16	19.55
06-Apr-24	168	74	28	13.30	14.30
12-Apr-24	180	88	33	15.60	16.21
13-Apr-24	161	81	38	17.16	19.66
22-Apr-24	172	83	37	13.08	14.67
23-Apr-24	189	94	42	10.62	13.64
26-Apr-24	166	78	29	12.61	13.64
27-Apr-24	174	87	33	12.54	12.67
02-May-24	175	87	40	9.79	14.87
03-May-24	155	85	50	21.61	13.50
08-May-24	157	94	37	13.75	10.61
09-May-24	176	91	35	13.77	9.01
16-May-24	173	88	46	18.93	13.30
17-May-24	178	82	39	10.23	12.62
24-May-24	185	92	40	16.21	19.50
25-May-24	152	72	50	11.30	18.88
05-Jun-24	161	75	58	11.10	25.44
06-Jun-24	176	81	34	13.92	19.92
12-Jun-24	182	85	41	15.08	34.27
13-Jun-24	175	80	38	15.90	27.14
19-Jun-24	183	88	43	13.54	40.13
20-Jun-24	167	86	38	10.83	27.29
26-Jun-24	221	92	44	9.63	18.74
27-Jun-24	191	89	43	10.70	7.55
28-Jun-24	208	94	47	15.41	23.70
29-Jun-24	172	75	38	16.94	25.12
03-Jul-24	183	78	36	15.15	13.26
04-Jul-24	193	86	43	12.25	22.33
10-Jul-24	188	90	45	13.85	20.77
11-Jul-24	164	75	36	11.90	20.83
18-Jul-24	166	77	41	11.78	23.31
19-Jul-24	199	91	39	14.66	31.27
26-Jul-24	207	96	30	14.61	29.83
27-Jul-24	205	85	41	13.19	13.68
01-Aug-24	211	76	35	11.11	20.44
02-Aug-24	187	82	38	11.98	20.35
09-Aug-24	149	80	35	13.30	18.16
10-Aug-24	207	74	31	15.27	19.60
16-Aug-24	186	81	43	13.18	25.29
17-Aug-24	146	84	45	10.52	11.59
23-Aug-24	186	78	37	9.40	15.01
24-Aug-24	167	74	33	12.90	13.48
30-Aug-24	154	69	31	11.68	29.67
31-Aug-24	154	72	30	14.47	16.32
04-Sep-24	208	84	45	11.66	20.40

05-Sep-24	202	82	43	17.61	13.82
11-Sep-24	212	78	39	15.79	19.33
12-Sep-24	195	85	44	14.29	11.33
19-Sep-24	170	83	39	15.26	14.77
20-Sep-24	187	90	36	18.19	25.07
27-Sep-24	164	75	33	15.34	14.82
28-Sep-24	164	84	42	15.41	11.77
07-Oct-24	172	73	36	11.21	35.81
08-Oct-24	159	68	28	14.35	36.29
16-Oct-24	174	70	32	14.07	36.70
17-Oct-24	198	86	44	11.63	30.81
23-Oct-24	168	72	34	12.65	20.62
24-Oct-24	179	80	39	15.43	25.14
29-Oct-24	175	74	37	19.10	31.13
30-Oct-24	175	69	40	16.53	26.94
04-Nov-24	175	74	35	14.56	16.51
05-Nov-24	201	92	50	13.52	16.53
11-Nov-24	186	79	38	10.77	20.52
12-Nov-24	173	70	32	10.30	28.82
18-Nov-24	182	75	38	11.32	35.07
19-Nov-24	193	78	40	15.23	29.46
25-Nov-24	196	82	43	16.10	25.25
26-Nov-24	204	84	45	15.23	16.13
02-Dec-24	181	84	39	16.81	28.34
03-Dec-24	196	80	43	15.04	23.34
09-Dec-24	212	85	48	17.61	25.49
10-Dec-24	205	83	46	13.38	27.73
16-Dec-24	191	77	46	13.79	18.49
17-Dec-24	206	82	50	22.92	17.43
23-Dec-24	211	85	52	17.20	29.90
24-Dec-24	195	83	51	12.56	35.21
30-Dec-24	212	86	53	21.37	24.22
31-Dec-24	218	90	56	11.10	26.18
03-Jan-25	188	83	42	11.19	31.18
04-Jan-25	199	83	45	9.94	35.69
10-Jan-25	208	88	47	16.20	34.41
11-Jan-25	227	92	50	14.87	25.22
20-Jan-25	206	84	45	12.88	21.96
21-Jan-25	210	90	48	15.18	19.69
28-Jan-25	206	79	44	11.34	18.67
29-Jan-25	208	87	46	14.05	27.47
05-Feb-25	198	75	43	19.50	23.52
06-Feb-25	209	84	45	16.57	21.47
12-Feb-25	220	88	48	12.91	21.12
13-Feb-25	206	81	45	14.86	24.65
20-Feb-25	213	84	46	14.73	28.08
21-Feb-25	194	80	43	14.55	39.32
27-Feb-25	193	76	41	17.05	35.52
28-Feb-25	198	75	43	16.26	29.51
05-Mar-25	186	76	39	14.28	36.51
06-Mar-25	191	86	47	21.18	34.38
12-Mar-25	206	84	44	17.39	25.41
13-Mar-25	187	80	41	14.68	27.67
19-Mar-25	180	74	38	20.42	25.16

20-Mar-25	152	64	30	10.95	18.52
26-Mar-25	172	68	35	11.83	28.32
27-Mar-25	168	74	32	12.64	24.74
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	227	96	58	22.92	40.13
Minimum	146	64	28	9.4	7.55
Average	186.3	81.5	40.7	14.3	22.8
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.47

Area: Orient

Project: Hirakand Bundia Mine (HBM)

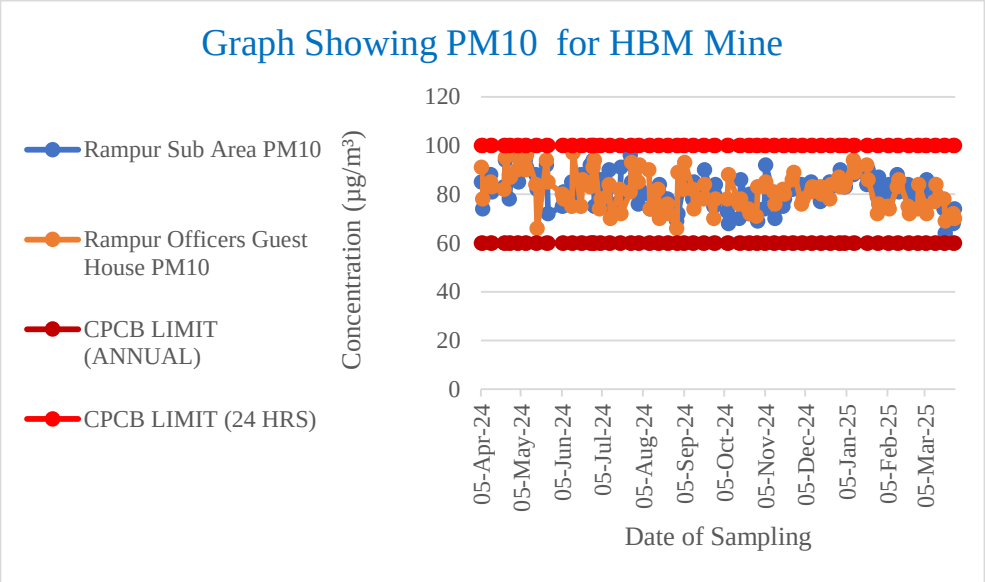
Monitoring Station: Rampur Officers Guest House

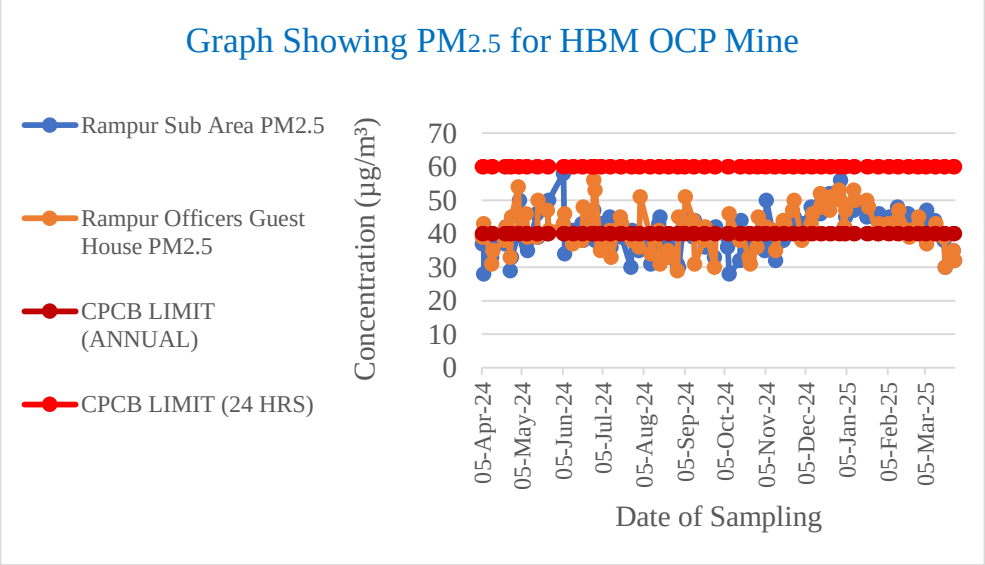
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	172	91	39	17.55	19.46
06-Apr-24	158	78	43	14.83	15.88
12-Apr-24	172	85	31	12.13	13.42
13-Apr-24	195	83	35	15.68	16.74
22-Apr-24	192	82	38	10.54	14.48
23-Apr-24	208	95	42	16.30	17.41
26-Apr-24	176	88	33	12.43	13.65
27-Apr-24	218	87	45	13.02	16.78
02-May-24	207	90	54	13.30	15.62
03-May-24	197	95	41	9.12	11.94
08-May-24	150	90	46	14.66	16.80
09-May-24	207	96	39	13.19	15.83
16-May-24	169	84	39	15.43	14.63
17-May-24	157	66	50	15.74	15.20
24-May-24	202	94	47	10.78	19.21
25-May-24	177	85	41	13.76	20.90
05-Jun-24	170	80	43	11.92	31.13
06-Jun-24	227	78	46	10.15	22.96
12-Jun-24	136	75	37	12.87	14.10
13-Jun-24	228	97	39	12.37	24.72
19-Jun-24	160	75	38	17.50	39.33
20-Jun-24	196	86	48	20.51	20.00
26-Jun-24	187	83	46	17.03	33.67
27-Jun-24	178	85	43	12.81	22.78
28-Jun-24	218	91	56	10.87	13.81
29-Jun-24	208	94	53	10.30	35.40
03-Jul-24	170	74	35	16.59	22.59
04-Jul-24	176	78	37	10.84	20.43
10-Jul-24	197	84	41	12.70	17.20
11-Jul-24	177	70	33	15.68	16.77
18-Jul-24	174	82	45	9.14	18.91
19-Jul-24	183	72	43	12.49	12.14
26-Jul-24	179	81	39	13.77	24.11
27-Jul-24	199	93	38	16.63	16.98
01-Aug-24	210	85	36	13.46	14.50
02-Aug-24	214	92	51	16.39	16.88
09-Aug-24	152	90	40	13.36	13.64
10-Aug-24	165	74	34	11.26	10.70
16-Aug-24	143	82	41	14.69	20.51
17-Aug-24	156	70	31	12.78	14.32
23-Aug-24	168	76	35	11.27	12.28
24-Aug-24	161	72	33	9.79	27.34
30-Aug-24	159	66	29	10.55	27.34
31-Aug-24	203	89	45	13.90	31.37
04-Sep-24	198	82	42	19.22	20.37

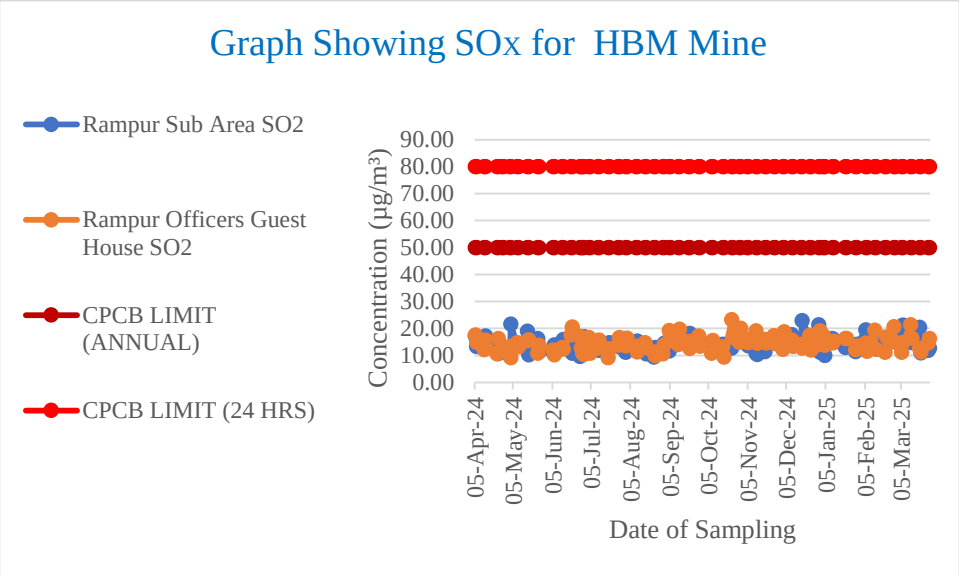
05-Sep-24	262	93	51	17.45	22.49
11-Sep-24	204	82	44	14.01	32.35
12-Sep-24	196	74	31	19.71	14.53
19-Sep-24	179	78	38	15.12	21.91
20-Sep-24	172	84	42	12.59	31.13
27-Sep-24	151	70	30	17.17	15.67
28-Sep-24	195	78	40	13.38	26.07
07-Oct-24	188	78	40	10.76	22.66
08-Oct-24	198	88	46	15.48	25.23
16-Oct-24	178	76	38	13.12	25.20
17-Oct-24	188	78	40	9.36	17.44
23-Oct-24	170	74	33	23.25	37.90
24-Oct-24	162	72	31	16.56	26.99
29-Oct-24	177	71	36	14.83	24.17
30-Oct-24	196	83	45	20.08	32.72
04-Nov-24	185	83	41	16.00	32.90
05-Nov-24	191	85	42	14.67	12.61
11-Nov-24	186	81	41	19.07	16.68
12-Nov-24	170	76	35	14.47	10.53
18-Nov-24	193	82	44	15.93	28.60
19-Nov-24	190	80	43	14.56	14.66
25-Nov-24	205	86	47	17.29	19.80
26-Nov-24	216	89	50	14.30	35.33
02-Dec-24	184	76	38	12.26	20.55
03-Dec-24	192	78	40	18.74	12.86
09-Dec-24	197	81	43	15.67	30.19
10-Dec-24	200	83	46	13.36	24.63
16-Dec-24	214	83	52	14.06	22.96
17-Dec-24	205	80	48	12.72	13.27
23-Dec-24	199	78	47	17.44	26.10
24-Dec-24	188	84	51	12.02	33.70
30-Dec-24	206	87	53	13.98	36.80
31-Dec-24	199	83	50	19.11	37.37
03-Jan-25	196	83	42	17.37	35.52
04-Jan-25	208	85	47	13.80	27.12
10-Jan-25	241	94	53	14.58	15.42
11-Jan-25	227	89	50	15.30	15.82
20-Jan-25	228	92	50	16.25	18.80
21-Jan-25	214	86	48	16.27	29.30
28-Jan-25	185	72	40	12.08	23.86
29-Jan-25	191	76	43	13.53	23.06
05-Feb-25	195	75	43	14.56	20.54
06-Feb-25	188	74	41	11.46	29.10
12-Feb-25	201	83	44	19.36	33.22
13-Feb-25	208	86	47	12.21	29.28
20-Feb-25	190	75	41	11.09	18.82
21-Feb-25	188	72	39	16.87	36.18
27-Feb-25	185	74	42	20.60	32.59
28-Feb-25	204	84	45	14.85	37.40
05-Mar-25	183	75	39	11.09	18.82
06-Mar-25	179	72	37	14.76	29.41
12-Mar-25	183	77	40	21.31	37.07
13-Mar-25	197	84	43	16.32	33.62
19-Mar-25	188	78	39	12.60	24.49

20-Mar-25	169	69	30	11.28	19.89
26-Mar-25	172	72	35	14.60	26.67
27-Mar-25	164	70	32	16.26	25.57
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	262	97	56	23.25	39.33
Minimum	136	66	29	9.12	10.53
Average	188.91	81.33	41.63	14.47	22.76
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna


Graph Showing PM10 for HBM Mine
Rampur Sub Area PM10
Rampur Officers Guest House PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for HBM OCP Mine
Rampur Sub Area PM2.5
Rampur Officers Guest House PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOx for HBM Mine
Rampur Sub Area SO2
Rampur Officers Guest House SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

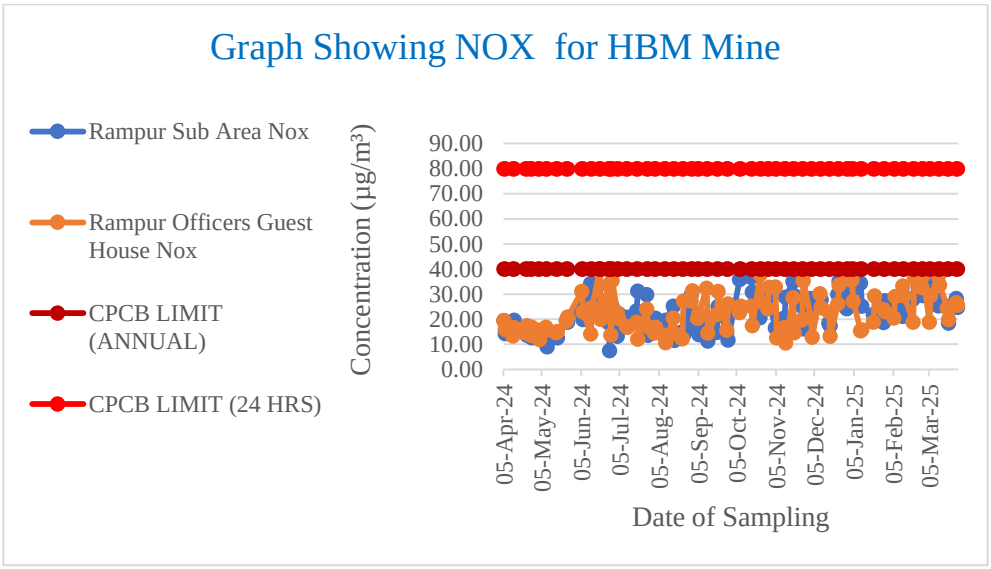

Graph Showing NOX for HBM Mine
Rampur Sub Area Nox
Rampur Officers Guest House Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

Table: 8.5.48

Area: Orient

Project: HRC

Monitoring Station: Near CHP HRC

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
11-Apr-24	256	148	64	16.92	17.48
29-Apr-24	249	138	55	10.72	11.68
15-May-24	241	132	54	10.66	11.42
29-May-24	209	94	58	15.39	15.54
15-Jun-24	258	129	54	10.06	23.19
29-Jun-24	198	94	45	12.35	23.65
15-Jul-24	216	106	55	14.12	18.9
29-Jul-24	260	76	54	14.61	20.19
03-Aug-24	216	106	55	14.12	18.9
27-Aug-24	256	127	63	10.12	16.89
14-Sep-24	299	135	68	17.06	18.61
26-Sep-24	240	132	66	11.88	15.39
01-Oct-24	238	118	65	10.31	22.91
28-Oct-24	221	110	54	12.35	20.13
07-Nov-24	243	127	62	16.71	19.35
21-Nov-24	252	138	65	13.06	13.33
11-Dec-24	244	137	63	13.28	29.56
26-Dec-24	254	148	66	14.36	27.63
07-Jan-25	23	160	68	13.97	14.84
24-Jan-25	268	157	66	12.54	25.41
15-Feb-25	256	143	62	12.47	18.82
24-Feb-25	237	133	57	12.1	24.2
14-Mar-25	275	172	66	12.1	24.2
31-Mar-25	227	144	59	12.47	18.82
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	299	172	68	17.06	29.56
Minimum	23	76	45	10.06	11.42
Average	234.8	129.33	60.17	13.07	19.63
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

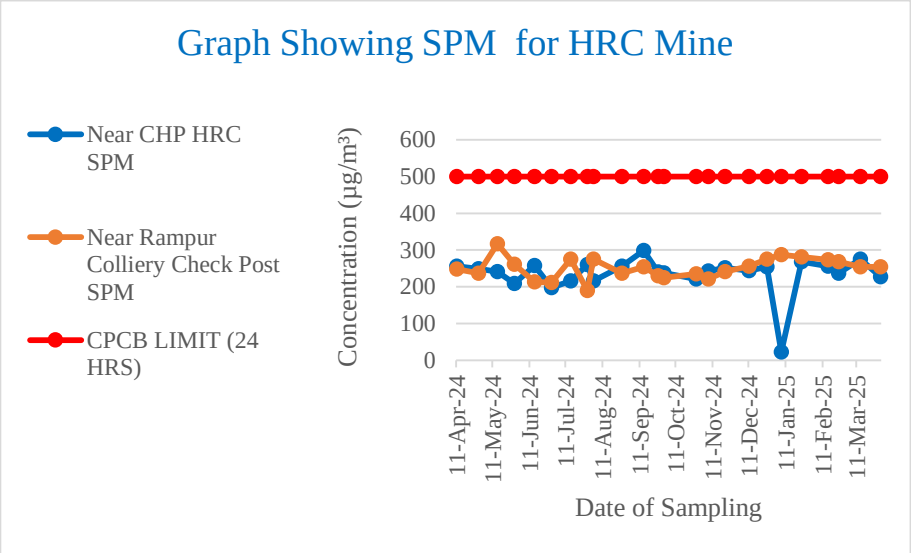
Table: 8.5.49

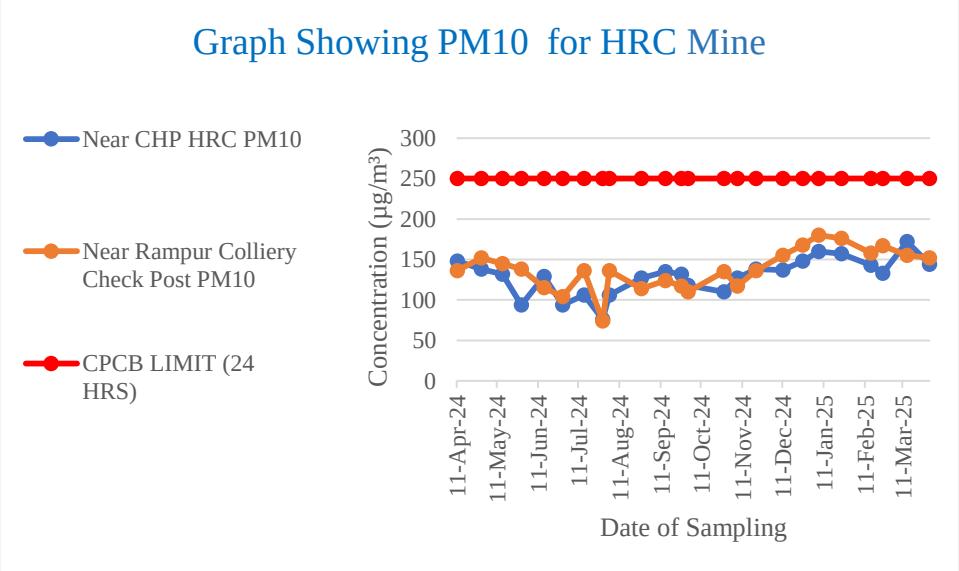
Area: Orient

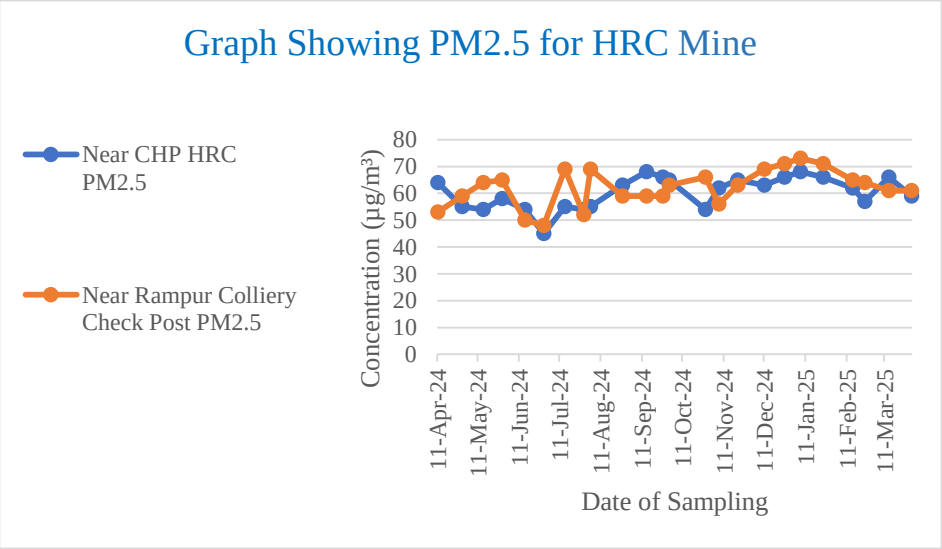
Project: HRC

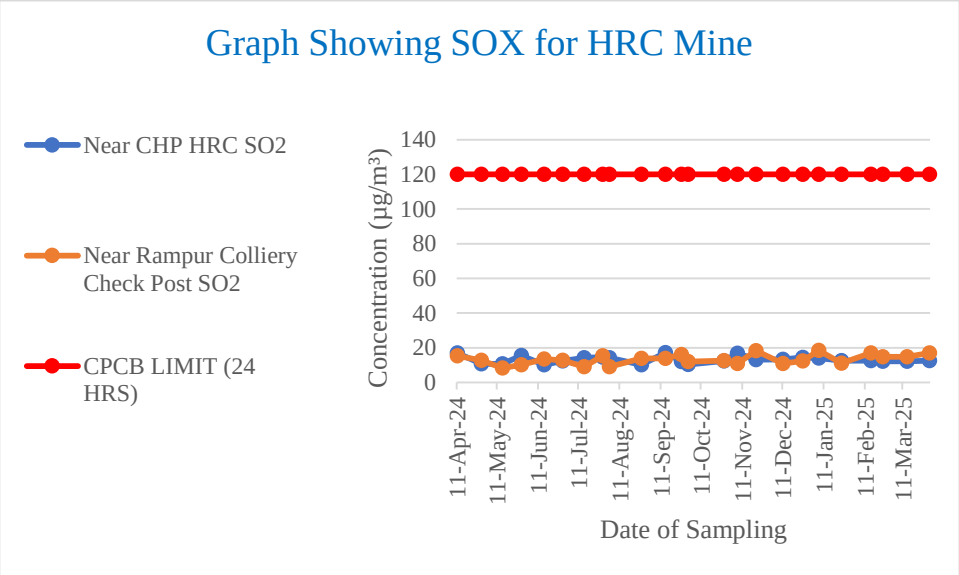
Monitoring Station: Near Rampur Colliery Check Post

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
11-Apr-24	248	136	53	15.28	17.74
29-Apr-24	237	152	59	12.69	13.87
15-May-24	317	145	64	8.32	11.39
29-May-24	261	138	65	10.07	17.77
15-Jun-24	213	115	50	13.53	23.91
29-Jun-24	212	104	48	12.64	28.11
15-Jul-24	275	136	69	9.08	23.43
29-Jul-24	190	74	52	15.31	27.45
03-Aug-24	275	136	69	9.08	23.43
27-Aug-24	237	114	59	13.88	20.47
14-Sep-24	254	124	59	13.79	10.55
26-Sep-24	230	117	59	16.05	10.62
01-Oct-24	225	110	63	12	13.76
28-Oct-24	235	135	66	12.46	20.31
07-Nov-24	221	117	56	10.9	24.6
21-Nov-24	241	136	63	18.28	25.95
14-Dec-24	256	155	69	10.78	25.33
26-Dec-24	275	168	71	12.35	29.32
07-Jan-25	287	180	73	18.38	23.34
24-Jan-25	281	176	71	11.09	18.82
15-Feb-25	273	158	65	16.98	27.82
24-Feb-25	268	167	64	14.78	21.96
14-Mar-25	254	155	61	14.78	21.96
31-Mar-25	254	152	61	16.98	27.82
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	317	180	73	18.38	29.32
Minimum	190	74	48	8.32	10.55
Average	250.8	137.50	62.04	13.31	21.24
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for HRC Mine
Near CHP HRC SPM
Near Rampur Colliery Check Post SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
600
500
400
300
200
100
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling


Graph Showing PM10 for HRC Mine
Near CHP HRC PM10
Near Rampur Colliery Check Post PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling


Graph Showing PM2.5 for HRC Mine
Near CHP HRC PM2.5
Near Rampur Colliery Check Post PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling


Graph Showing SOX for HRC Mine
Near CHP HRC SO2
Near Rampur Colliery Check Post SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling

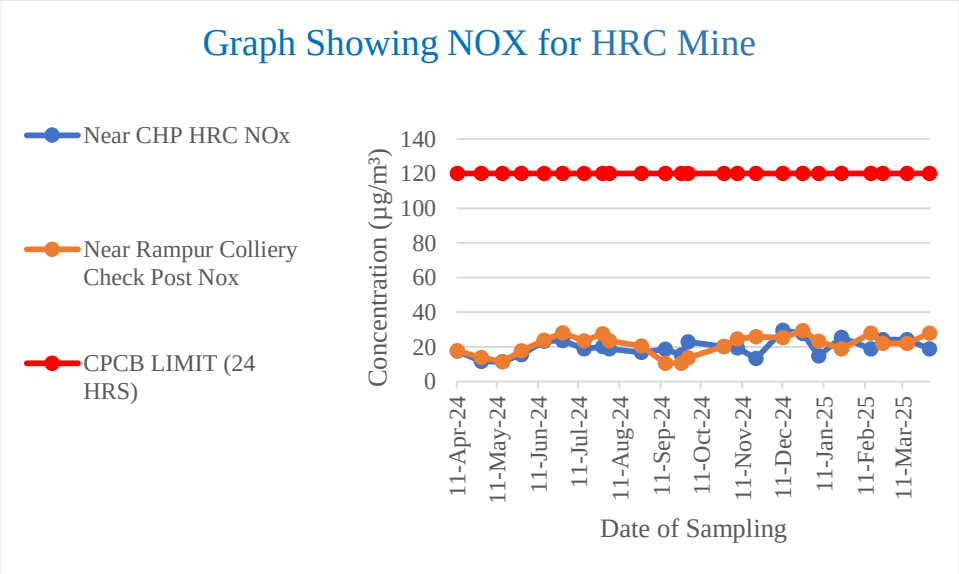

Graph Showing NOX for HRC Mine
Near CHP HRC NOx
Near Rampur Colliery Check Post Nox
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling

Table: 8.5.50

Area: Orient

Project: HRC

Monitoring Station: Rampur Sub Area (Reported only)

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	188	85	37	17.16	19.55
06-Apr-24	168	74	28	13.30	14.30
12-Apr-24	180	88	33	15.60	16.21
13-Apr-24	161	81	38	17.16	19.66
22-Apr-24	172	83	37	13.08	14.67
23-Apr-24	189	94	42	10.62	13.64
26-Apr-24	166	78	29	12.61	13.64
27-Apr-24	174	87	33	12.54	12.67
02-May-24	175	87	40	9.79	14.87
03-May-24	155	85	50	21.61	13.50
08-May-24	157	94	37	13.75	10.61
09-May-24	176	91	35	13.77	9.01
16-May-24	173	88	46	18.93	13.30
17-May-24	178	82	39	10.23	12.62
24-May-24	185	92	40	16.21	19.50
25-May-24	152	72	50	11.30	18.88
05-Jun-24	161	75	58	11.10	25.44
06-Jun-24	176	81	34	13.92	19.92
12-Jun-24	182	85	41	15.08	34.27
13-Jun-24	175	80	38	15.90	27.14
19-Jun-24	183	88	43	13.54	40.13
20-Jun-24	167	86	38	10.83	27.29
26-Jun-24	221	92	44	9.63	18.74
27-Jun-24	191	89	43	10.70	7.55
28-Jun-24	208	94	47	15.41	23.70
29-Jun-24	172	75	38	16.94	25.12
03-Jul-24	183	78	36	15.15	13.26
04-Jul-24	193	86	43	12.25	22.33
10-Jul-24	188	90	45	13.85	20.77
11-Jul-24	164	75	36	11.90	20.83
18-Jul-24	166	77	41	11.78	23.31
19-Jul-24	199	91	39	14.66	31.27
26-Jul-24	207	96	30	14.61	29.83
27-Jul-24	205	85	41	13.19	13.68
01-Aug-24	211	76	35	11.11	20.44
02-Aug-24	187	82	38	11.98	20.35
09-Aug-24	149	80	35	13.30	18.16
10-Aug-24	207	74	31	15.27	19.60
16-Aug-24	186	81	43	13.18	25.29
17-Aug-24	146	84	45	10.52	11.59
23-Aug-24	186	78	37	9.40	15.01
24-Aug-24	167	74	33	12.90	13.48
30-Aug-24	154	69	31	11.68	29.67
31-Aug-24	154	72	30	14.47	16.32
04-Sep-24	208	84	45	11.66	20.40

05-Sep-24	202	82	43	17.61	13.82
11-Sep-24	212	78	39	15.79	19.33
12-Sep-24	195	85	44	14.29	11.33
19-Sep-24	170	83	39	15.26	14.77
20-Sep-24	187	90	36	18.19	25.07
27-Sep-24	164	75	33	15.34	14.82
28-Sep-24	164	84	42	15.41	11.77
07-Oct-24	172	73	36	11.21	35.81
08-Oct-24	159	68	28	14.35	36.29
16-Oct-24	174	70	32	14.07	36.70
17-Oct-24	198	86	44	11.63	30.81
23-Oct-24	168	72	34	12.65	20.62
24-Oct-24	179	80	39	15.43	25.14
29-Oct-24	175	74	37	19.10	31.13
30-Oct-24	175	69	40	16.53	26.94
04-Nov-24	175	74	35	14.56	16.51
05-Nov-24	201	92	50	13.52	16.53
11-Nov-24	186	79	38	10.77	20.52
12-Nov-24	173	70	32	10.30	28.82
18-Nov-24	182	75	38	11.32	35.07
19-Nov-24	193	78	40	15.23	29.46
25-Nov-24	196	82	43	16.10	25.25
26-Nov-24	204	84	45	15.23	16.13
02-Dec-24	181	84	39	16.81	28.34
03-Dec-24	196	80	43	15.04	23.34
09-Dec-24	212	85	48	17.61	25.49
10-Dec-24	205	83	46	13.38	27.73
16-Dec-24	191	77	46	13.79	18.49
17-Dec-24	206	82	50	22.92	17.43
23-Dec-24	211	85	52	17.20	29.90
24-Dec-24	195	83	51	12.56	35.21
30-Dec-24	212	86	53	21.37	24.22
31-Dec-24	218	90	56	11.10	26.18
03-Jan-25	188	83	42	11.19	31.18
04-Jan-25	199	83	45	9.94	35.69
10-Jan-25	208	88	47	16.20	34.41
11-Jan-25	227	92	50	14.87	25.22
20-Jan-25	206	84	45	12.88	21.96
21-Jan-25	210	90	48	15.18	19.69
28-Jan-25	206	79	44	11.34	18.67
29-Jan-25	208	87	46	14.05	27.47
05-Feb-25	198	75	43	19.50	23.52
06-Feb-25	209	84	45	16.57	21.47
12-Feb-25	220	88	48	12.91	21.12
13-Feb-25	206	81	45	14.86	24.65
20-Feb-25	213	84	46	14.73	28.08
21-Feb-25	194	80	43	14.55	39.32
27-Feb-25	193	76	41	17.05	35.52
28-Feb-25	198	75	43	16.26	29.51
05-Mar-25	186	76	39	14.28	36.51
06-Mar-25	191	86	47	21.18	34.38
12-Mar-25	206	84	44	17.39	25.41
13-Mar-25	187	80	41	14.68	27.67
19-Mar-25	180	74	38	20.42	25.16

20-Mar-25	152	64	30	10.95	18.52
26-Mar-25	172	68	35	11.83	28.32
27-Mar-25	168	74	32	12.64	24.74
Basic Stats	SPM	PM10	PM2 5	SO2	NOx
Maximum	227	96	58	22.92	40.13
Minimum	146	64	28	9.40	7.55
Average	186.28	81.48	40.69	14.26	22.83
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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Table: 8.5.51

Area: Orient

Project: HRC

Monitoring Station: Rampur Officers Guest House (Reported only)

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	172	91	39	17.55	19.46
06-Apr-24	158	78	43	14.83	15.88
12-Apr-24	172	85	31	12.13	13.42
13-Apr-24	195	83	35	15.68	16.74
22-Apr-24	168	87	33	16.92	17.55
23-Apr-24	164	74	29	13.17	19.47
26-Apr-24	205	88	42	12.02	13.30
27-Apr-24	186	94	38	12.42	15.41
02-May-24	207	90	54	13.30	15.62
03-May-24	197	95	41	9.12	11.94
08-May-24	150	90	46	14.66	16.80
09-May-24	207	96	39	13.19	15.83
16-May-24	169	84	39	15.43	14.63
17-May-24	157	66	50	15.74	15.20
24-May-24	202	94	47	10.78	19.21
25-May-24	177	85	41	13.76	20.90
05-Jun-24	170	80	43	11.92	31.13
06-Jun-24	227	78	46	10.15	22.96
12-Jun-24	136	75	37	12.87	14.10
13-Jun-24	228	97	39	12.37	24.72
19-Jun-24	160	75	38	17.50	39.33
20-Jun-24	196	86	48	20.51	20.00
26-Jun-24	187	83	46	17.03	33.67
27-Jun-24	178	85	43	12.81	22.78
28-Jun-24	218	91	56	10.87	13.81
29-Jun-24	208	94	53	10.30	35.40
03-Jul-24	170	74	35	16.59	22.59
04-Jul-24	176	78	37	10.84	20.43
10-Jul-24	197	84	41	12.70	17.20
11-Jul-24	177	70	33	15.68	16.77
18-Jul-24	174	82	45	9.14	18.91
19-Jul-24	183	72	43	12.49	12.14
26-Jul-24	179	81	39	13.77	24.11
27-Jul-24	199	93	38	16.63	16.98
01-Aug-24	210	85	36	13.46	14.50
02-Aug-24	214	92	51	16.39	16.88
09-Aug-24	152	90	40	13.36	13.64
10-Aug-24	165	74	34	11.26	10.70
16-Aug-24	143	82	41	14.69	20.51
17-Aug-24	156	70	31	12.78	14.32
23-Aug-24	168	76	35	11.27	12.28
24-Aug-24	161	72	33	9.79	27.34
30-Aug-24	159	66	29	10.55	27.34
31-Aug-24	203	89	45	13.90	31.37
04-Sep-24	198	82	42	19.22	20.37

05-Sep-24	262	93	51	17.45	22.49
11-Sep-24	204	82	44	14.01	32.35
12-Sep-24	196	74	31	19.71	14.53
19-Sep-24	179	78	38	15.12	21.91
20-Sep-24	172	84	42	12.59	31.13
27-Sep-24	151	70	30	17.17	15.67
28-Sep-24	195	78	40	13.38	26.07
07-Oct-24	188	78	40	10.76	22.66
08-Oct-24	198	88	46	15.48	25.23
16-Oct-24	178	76	38	13.12	25.20
17-Oct-24	188	78	40	9.36	17.44
23-Oct-24	170	74	33	23.25	37.90
24-Oct-24	162	72	31	16.56	26.99
29-Oct-24	177	71	36	14.83	24.17
30-Oct-24	196	83	45	20.08	32.72
04-Nov-24	185	83	41	16.00	32.90
05-Nov-24	191	85	42	14.67	12.61
11-Nov-24	186	81	41	19.07	16.68
12-Nov-24	170	76	35	14.47	10.53
18-Nov-24	193	82	44	15.93	28.60
19-Nov-24	190	80	43	14.56	14.66
25-Nov-24	205	86	47	17.29	19.80
26-Nov-24	216	89	50	14.30	35.33
02-Dec-24	184	76	38	12.26	20.55
03-Dec-24	192	78	40	18.74	12.86
09-Dec-24	197	81	43	15.67	30.19
10-Dec-24	200	83	46	13.36	24.63
16-Dec-24	214	83	52	14.06	22.96
17-Dec-24	205	80	48	12.72	13.27
23-Dec-24	199	78	47	17.44	26.10
24-Dec-24	188	84	51	12.02	33.70
30-Dec-24	206	87	53	13.98	36.80
31-Dec-24	199	83	50	19.11	37.37
03-Jan-25	196	83	42	17.37	35.52
04-Jan-25	208	85	47	13.80	27.12
10-Jan-25	241	94	53	14.58	15.42
11-Jan-25	227	89	50	15.30	15.82
20-Jan-25	228	92	50	16.25	18.80
21-Jan-25	214	86	48	16.27	29.30
28-Jan-25	185	72	40	12.08	23.86
29-Jan-25	191	76	43	13.53	23.06
05-Feb-25	195	75	43	14.56	20.54
06-Feb-25	188	74	41	11.46	29.10
12-Feb-25	201	83	44	19.36	33.22
13-Feb-25	208	86	47	12.21	29.28
20-Feb-25	190	75	41	11.09	18.82
21-Feb-25	188	72	39	16.87	36.18
27-Feb-25	185	74	42	20.60	32.59
28-Feb-25	204	84	45	14.85	37.40
05-Mar-25	183	75	39	11.09	18.82
06-Mar-25	179	72	37	14.76	29.41
12-Mar-25	176	77	40	21.31	37.07
13-Mar-25	197	84	43	16.32	33.62
19-Mar-25	188	78	39	12.60	24.49

20-Mar-25	169	69	30	11.28	19.89
26-Mar-25	168	72	36	14.60	26.67
27-Mar-25	164	70	32	16.26	25.57
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	262	97	56	23.25	39.33
Minimum	136	66	29	9.12	10.53
Average	188.11	81.25	41.48	14.49	22.80
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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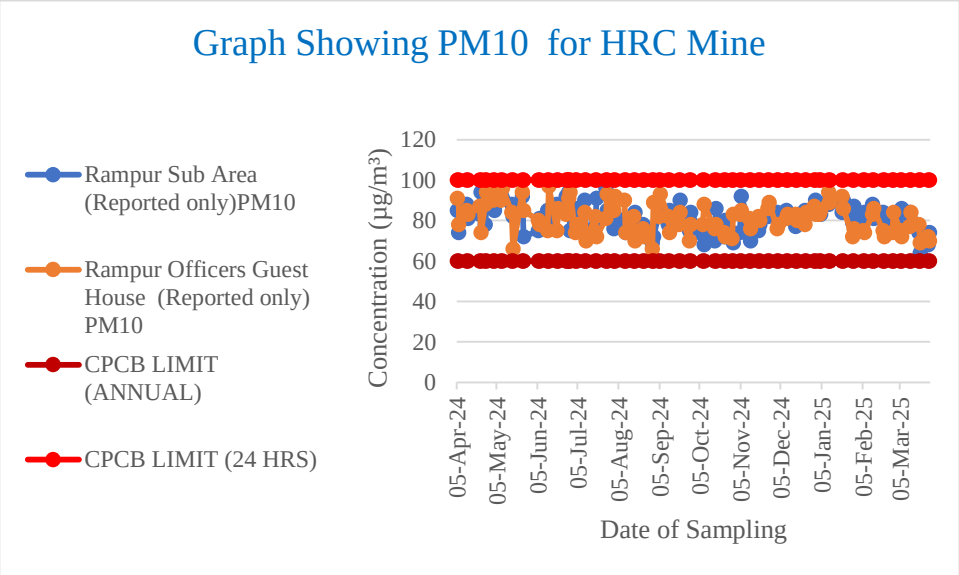
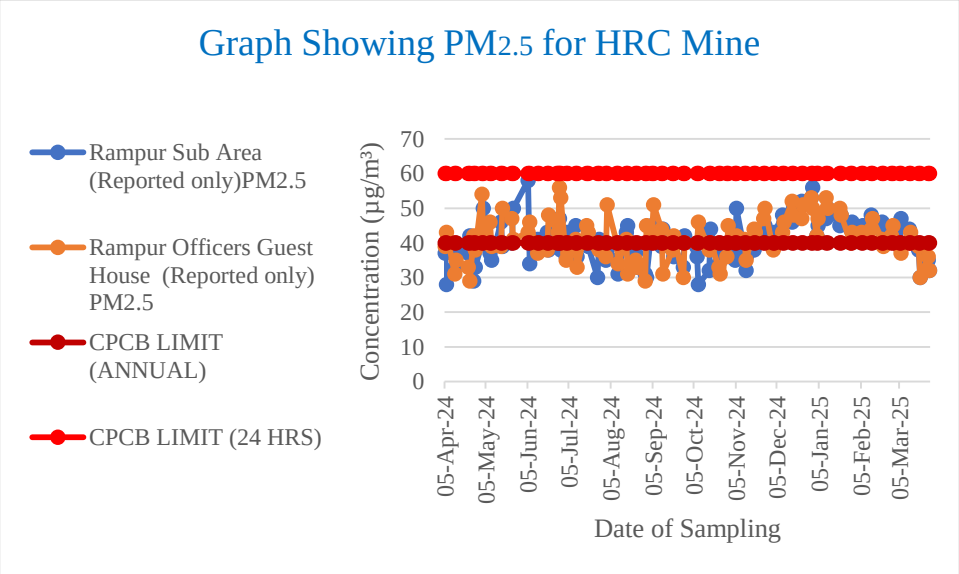
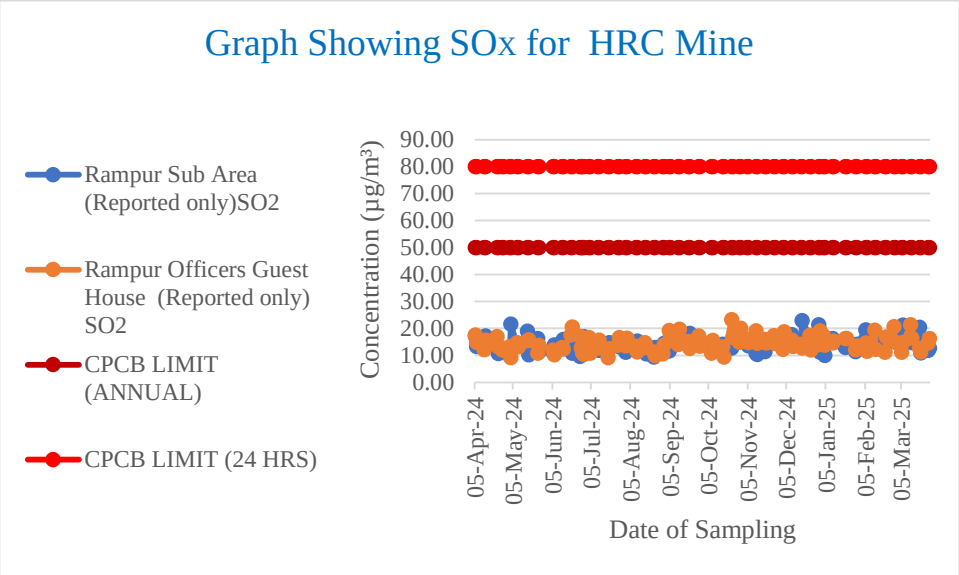
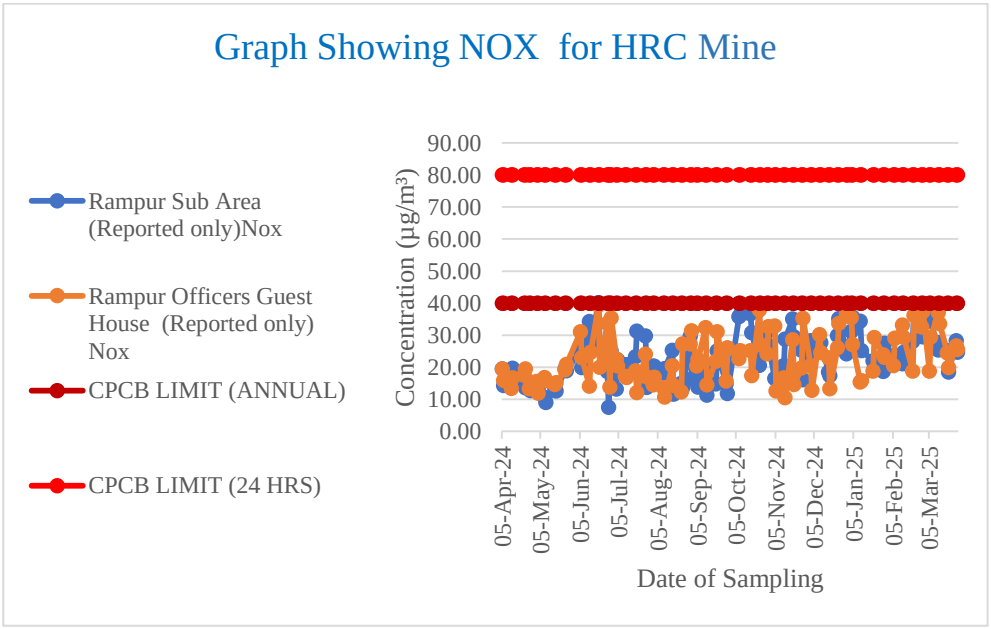

Graph Showing PM10 for HRC Mine
Rampur Sub Area (Reported only)PM10
Rampur Officers Guest House (Reported only) PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for HRC Mine
Rampur Sub Area (Reported only)PM2.5
Rampur Officers Guest House (Reported only) PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOx for HRC Mine
Rampur Sub Area (Reported only)SO2
Rampur Officers Guest House (Reported only) SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing NOX for HRC Mine
Rampur Sub Area (Reported only)Nox
Rampur Officers Guest House (Reported only) Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

8.6 EXECUTIVE SUMMARY OF AAQM

Observation for PM10

PM10 at Compliance stations ranges from 74.0 µg/m^3 (HRC Project in Orient area) to 187.0 µg/m^3 (Kulda OCP. Basundhara Area). As per Coal Mine Standard, (GSR 742(E) the annual average limit is -250 µg/$m^{3.}$ The values are well within the permissible limits. For reference stations, PM10 varies from minimum 58.0 µg/m3 LBL OCP, Lakhanpur) to maximum 172.0 µg/m3 (Lajkura OCP, Ib valley).

Observation for PM2.5

PM2.5 at Compliance stations varies from 41.0 µg/m3 (Lajkura OCP, Ib valley Area) to 86.0 µg/m3 (Garjanbahal OCP, Basundhara Area). At reference stations, PM2.5 varies from 26.0 µg/m3 (Kulda OCP, Basundhara Area & LBL OCP , Lakhanpur Area) to 65.0 µg/m3 (Lajkura OCP, Ib valley Area).

Observation for SO_2 and NO_x

Values of both SO_2 and NOx was observed very low compared to the limits of Coal mine Standard (80 µg/m3) and NAAQS-2009 (50 µg/m3 & 40 µg/m3). The minimum value in core zone for SO_2 was 8.3 µg/m^3 (Basundhara (w) OCP, Mahalaxmi Area) and maximum was 26.66 µg/m^3 (Garjanbahal OCP, Basundhara Area). Likewise, for NO_X minimium was 8.2 µg/m^3 (Basundhara (w) OCP, Mahalaxmi Area) and maximum was 40.49 µg/m^3 (Samleswari OCP, Ib valley Area). For reference stations, SO2 ranges from 7.48 µg/m3 at (Basundhara (w) OCP, Mahalaxmi Area) to 23.81 µg/m^3 at (Lajkura OCP, Ib valley Area). Similarly NOx, varies from minimum 7.09 µg/m3 (Lajkura OCP, Samleswari OCP, Ib valley Area) to maximum 55.65 µg/m3 ((Basundhara (w) OCP, Mahalaxmi Area)).

AMBIENT AIR QUALITY DATA (HEAVY METALS_REFERENCE STATIONS)

TABLE FOR HEAVY METALS IN AMBIENT AIR DATA

Table: 8.7.1
Area: IB Valley

Project	**Lajkura OCP**							
Monitoring Station	**Khokelmal**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	29.12	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	18.45	<0.1	<1.0	<1.0	0.84	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: IB Valley

Project	**Lajkura OCP**							
Monitoring Station	**Chukani**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.42	<0.1	<1.0	<1.0	1.4	BQL (0.7)	BQL
Average	<20.0	17.92	<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)**

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Table: 8.7.3
Area: IB Valley

Project	**Lajkura OCP**							
Monitoring Station	**VIP Guest House, IB Valley**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.11	<0.1	<1.0	<1.0	0.2	BQL (0.7)	BQL
Maximum	<20.0	25.67	<0.1	<1.0	<1.0	1.1	BQL (0.7)	BQL
Average	<20.0	17.57	<0.1	<1.0	<1.0	0.62	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)**

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Table: 8.7.4
Area: IB Valley

Project	**Samaleswari OCP**							
Monitoring Station	**Khokelmal (Reported Only)**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	29.12	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	18.45	<0.1	<1.0	<1.0	0.84	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)**

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Table: 8.7.5
Area: IB Valley

Project	**Samaleswari OCP**							
Monitoring Station	**Rampur Sub Area (Reported)**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	29.12	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	18.45	<0.1	<1.0	<1.0	0.84	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)**

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Table: 8.7.6
Area: Lakhanpur

Project	**Integrated LBL OCP**							
Monitoring Station	**Kadam Rehab Centre East of Mine**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.16	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.83	<0.1	<1.0	<1.0	1.8	BQL (0.7)	BQL
Average	<20.0	18.93	<0.1	<1.0	<1.0	0.91	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)**

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Table: 8.7.7
Area: Lakhanpur

Project	**Integrated LBL OCP**							
Monitoring Station	**Lakhanpur Police Station West of Mine**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.80	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	18.57	<0.1	<1.0	<1.0	0.92	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)**

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Table: 8.7.8
Area: Lakhanpur

Project	**Integrated LBL OCP**							
Monitoring Station	**Gumadera Village North of Mine**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	27.83	<0.1	<1.0	<1.0	1.1	BQL (0.7)	BQL
Average	<20.0	17.67	<0.1	<1.0	<1.0	0.61	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)**

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Table: 8.7.9
Area: Lakhanpur

Project	**Integrated LBL OCP**							
Monitoring Station	**Ramada Village South of Mine**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	27.87	<0.1	<1.0	<1.0	1.8	BQL (0.7)	BQL
Average	<20.0	19.17	<0.1	<1.0	<1.0	0.73	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)**

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Table: 8.7.10
Area: Lakhanpur

Project	**Integrated LBL OCP**							
Monitoring Station	**Barihapali Village South West of Mine**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.33	<0.1	<1.0	<1.0	1.4	BQL (0.7)	BQL
Average	<20.0	17.31	<0.1	<1.0	<1.0	0.82	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)**

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Table: 8.7.11
Area: Lakhanpur

Project	**Integrated LBL OCP**							
Monitoring Station	**Bartap Village North West of Mine**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	16.85	<0.1	<1.0	<1.0	0.4	BQL (0.7)	BQL
Average	<20.0	13.63	<0.1	<1.0	<1.0	0.25	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)**

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Table: 8.7.12
Area: Mahalaxmi

Project	**Basundhara (W) OCP**							
Monitoring Station	**Sarangijharia Village**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.33	<0.1	<1.0	<1.0	0.4	BQL (0.7)	BQL
Maximum	<20.0	28.80	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	19.77	<0.1	<1.0	<1.0	1.03	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)**

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Table: 8.7.13
Area: Mahalaxmi

Project	**Basundhara (W) OCP**							
Monitoring Station	**Ratansara Village**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.00	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	19.77	<0.1	<1.0	<1.0	0.86	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)**

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Table: 8.7.14
Area: Mahalaxmi

Project	**Basundhara (W) OCP**							
Monitoring Station	**Ratansara Village**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.17	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.00	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	19.77	<0.1	<1.0	<1.0	0.86	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)**

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Table: 8.7.15
Area: Basundhara

Project	**Kulda OCP**							
Monitoring Station	**North of CHP, Teleimal**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	14.00	<0.1	<1.0	<1.0	0.5	BQL (0.7)	BQL
Maximum	<20.0	28.42	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	22.30	<0.1	<1.0	<1.0	1.06	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)**

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Table: 8.7.16
Area: Basundhara

Project	**Kulda OCP**							
Monitoring Station	**South West of Working Face, Chakrapur**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.72	<0.1	<1.0	<1.0	0.6	BQL (0.7)	BQL
Maximum	<20.0	27.87	<0.1	<1.0	<1.0	1.8	BQL (0.7)	BQL
Average	<20.0	19.75	<0.1	<1.0	<1.0	1.05	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)**

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Table: 8.7.17
Area: Basundhara

Project	**Kulda OCP**							
Monitoring Station	**Bilaimunda Village**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	13.13	<0.1	<1.0	<1.0	0.5	BQL (0.7)	BQL
Maximum	<20.0	27.50	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	20.52	<0.1	<1.0	<1.0	0.87	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)**

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Table: 8.7.18
Area: Basundhara

Project	**Garjanbahal OCP**							
Monitoring Station	**South-East of Working Face, Kutabaga**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.56	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	28.82	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	18.88	<0.1	<1.0	<1.0	0.78	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)**

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Table: 8.7.19
Area: Basundhara

Project	**Garjanbahal OCP**							
Monitoring Station	**West of working face, Bihaimunda**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	<10.00	<0.1	<1.0	<1.0	0.1	BQL (0.7)	BQL
Maximum	<20.0	27.67	<0.1	<1.0	<1.0	1.6	BQL (0.7)	BQL
Average	<20.0	17.96	<0.1	<1.0	<1.0	0.93	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)**

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Table: 8.7.20
Area: **Orient**

Project	**Orient Mine No. 1 & 2**							
Monitoring Station	**VIP Guest House, IB Valley (Reported)**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.11	<0.1	<1.0	<1.0	0.2	BQL (0.7)	BQL
Maximum	<20.0	25.67	<0.1	<1.0	<1.0	1.1	BQL (0.7)	BQL
Average	<20.0	17.57	<0.1	<1.0	<1.0	0.62	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)**

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Table: 8.7.21
Area: **Orient**

Project	**HBI Mine**							
Monitoring Station	**Rampur Sub Area**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.15	<0.1	<1.0	<1.0	0.4	BQL (0.7)	BQL
Maximum	<20.0	26.68	<0.1	<1.0	<1.0	1.5	BQL (0.7)	BQL
Average	<20.0	18.26	<0.1	<1.0	<1.0	1.09	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)**

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Table: 8.7.22
Area: **Orient**

Project	**HBI Mine**							
Monitoring Station	**Rampur Officers Guest House**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.72	<0.1	<1.0	<1.0	0.56	BQL (0.7)	BQL
Maximum	<20.0	24.25	<0.1	<1.0	<1.0	1.24	BQL (0.7)	BQL
Average	<20.0	17.73	<0.1	<1.0	<1.0	0.91	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)**

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Table: 8.7.23
Area: **Orient**

Project	**HRC Mine**							
Monitoring Station	**Rampur Sub Area (Reported)**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.15	<0.1	<1.0	<1.0	0.4	BQL (0.7)	BQL
Maximum	<20.0	26.68	<0.1	<1.0	<1.0	1.5	BQL (0.7)	BQL
Average	<20.0	18.26	<0.1	<1.0	<1.0	1.09	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)**

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Table: 8.7.24
Area: **Orient**

Project	**HRC Mine**							
Monitoring Station	**Rampur Officers Guest House (Reported)**							
Annual for the year 2024-25	Ammonia (NH_3)	Ozone (O_3)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m3)	*(µg/m3)*	*(µg/m3)*	*(ng/m3)*	*(ng/m3)*	(mg/m^3)	(ng/m^3)	(µg/m3)
Minimum	<20.0	10.72	<0.1	<1.0	<1.0	0.56	BQL (0.7)	BQL
Maximum	<20.0	24.25	<0.1	<1.0	<1.0	1.24	BQL (0.7)	BQL
Average	<20.0	17.73	<0.1	<1.0	<1.0	0.91	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)**

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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 45 different locations in IB coalfield of MCL. Ambient Air Quality for parameters such as SPM, PM10, PM2.5, SO_2 and NO_2, were monitored at 26 locations and is governed by coal mine standard whereas ambient air quality parameter such as PM 10, PM 2.5, SO_2, NO_2, Ozone, Ammonia, Carbon monoxide, Lead, Arsenic, Nickel, Benzene, Benzo alpha pyrene were monitored at 19 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, and Mercury. For the collection of samples, Respirable dust sampler and PM2.5 sampler were installed at Ambient Air Quality station. PM10 and PM2.5 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 (PM10)	24
2	Particulate Matter (PM2.5)	24
3	Oxides of Sulphur (SO2)	24
4	Oxides of Nitrogen (NOx)	24
5	Ammonia (NH3)	24
6	Ozone (O3)	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: Ib valley Area

Project: Samleswari OCP

Monitoring Station: East of the Mine

All values are in µg/m³

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	230	142	52	12.75	12.75
16-Apr-24	240	105	49	16.77	13.81
04-May-24	234	131	66	16.2	12.9
18-May-24	228	118	56	13.7	19.36
01-Jun-24	191	105	47	23.08	17.53
21-Jun-24	248	108	55	10.75	25.05
05-Jul-24	256	128	63	12.65	31.5
20-Jul-24	241	108	55	14.04	22.27
03-Aug-24	286	113	63	17.5	22.35
19-Aug-24	220	125	63	14.5	12.39
06-Sep-24	264	128	59	16.33	30.76
18-Sep-24	251	134	67	14.04	15.01
01-Oct-24	233	128	64	16.17	33.16
18-Oct-24	275	151	72	17.96	29.28
06-Nov-24	258	135	68	15.78	28.05
20-Nov-24	273	148	66	15.93	27.13
06-Dec-24	232	133	60	12.57	15.02
18-Dec-24	243	136	62	16.06	35.99
14-Jan-25	275	166	69	18.34	29.32
18-Jan-25	253	142	63	14.24	28.46

01-Feb-25	224	93	60	15.27	26.05
17-Feb-25	236	138	57	13.27	28.24
01-Mar-25	274	168	65	16.47	23.91
21-Mar-25	235	94	52	17.1	34.52
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	286	168	72	23.08	35.99
Minimum	191	93	47	10.75	12.39
Average	245.8	128.21	60.54	15.48	23.95
Standard 24 hr	500	250	-	120	120
Standard Annual	360	180	-	80	80

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Table: 8.5.2

Area: Ib valley Area

Project: Samleswari OCP

Monitoring Station: West of the Mine

All values are in µg/m³

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
01-Apr-24	245	128	56	13.89	13.89
16-Apr-24	238	132	55	11.98	10.75
04-May-24	283	160	56	11.86	10.09
18-May-24	266	120	67	17.75	14.42
01-Jun-24	206	119	57	12.08	11.31
21-Jun-24	252	114	57	13.01	14.46
05-Jul-24	236	98	55	13.46	21.28
20-Jul-24	189	93	50	12.24	13.78
03-Aug-24	259	112	55	18.87	19.49
19-Aug-24	215	110	56	12.96	25.66
06-Sep-24	276	142	69	19.65	27.55
18-Sep-24	219	104	68	15.12	25.23
01-Oct-24	245	132	68	22.81	28.72
18-Oct-24	286	143	70	23.2	37.81
06-Nov-24	253	124	67	18.68	31.6
20-Nov-24	255	155	68	16.84	24.2
06-Dec-24	228	125	58	14.85	33.63
18-Dec-24	241	140	63	21.86	30.22
06-Jan-25	258	153	65	16.33	25.24
18-Jan-25	253	150	63	11.04	28.78
01-Feb-25	242	139	60	14.92	36.05
17-Feb-25	242	169	63	19.23	35.74
01-Mar-25	276	169	63	16.63	32.71
21-Mar-25	214	114	50	15.73	20.52
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	286	169	70	23.2	37.81
Minimum	189	93	50	11.04	10.09
Average	244.9	131.04	60.79	16.04	23.88
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.3

Area: Ib valley

Project: Samleswari OCP

Monitoring Station: South of the Mine

All values are in µg/m³

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
01-Apr-24	252	146	66	17.46	17.46
16-Apr-24	265	144	62	13.96	17.26
04-May-24	262	111	63	10.19	9.64
18-May-24	264	127	61	12.43	20.89
01-Jun-24	193	113	51	10.2	15.91
21-Jun-24	258	128	63	17.07	40.49
05-Jul-24	242	104	56	10.32	28.49
20-Jul-24	222	98	54	13.21	35.1
03-Aug-24	305	104	72	15.83	15.5
19-Aug-24	214	116	58	16.72	14
06-Sep-24	197	119	56	15.17	23.94
18-Sep-24	272	148	71	16.64	33.76
01-Oct-24	222	125	62	16.87	37.42
18-Oct-24	233	132	63	16.84	27.44
06-Nov-24	267	148	71	16.72	14.87
20-Nov-24	287	182	73	12.39	18.44
06-Dec-24	237	140	63	16.29	23.1
18-Dec-24	248	146	64	28.93	30.48
06-Jan-25	265	168	69	13.62	23.97
18-Jan-25	260	165	67	16.25	23.86
01-Feb-25	252	168	64	14	32
17-Feb-25	258	159	61	15.57	24.63
01-Mar-25	249	143	58	19.25	28.27
21-Mar-25	231	115	50	12.17	18.53
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	305	182	73	28.93	40.49
Minimum	193	98	50	10.19	9.64
Average	248.1	135.38	62.42	15.34	23.98
Standard 24 hr	500	250	-	120	120
Standard Annual	360	180	-	80	80

Table: 8.5.4

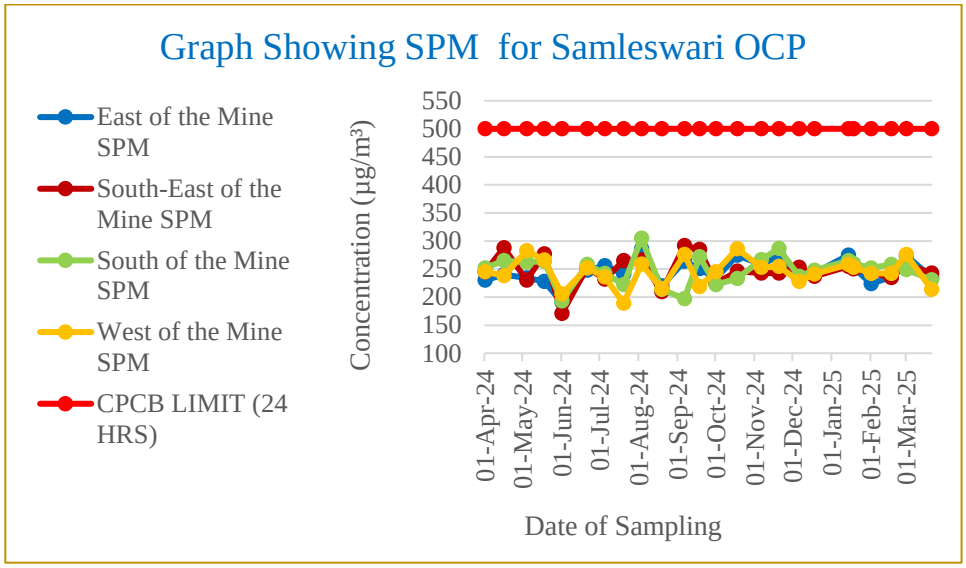
Area: Ib valley

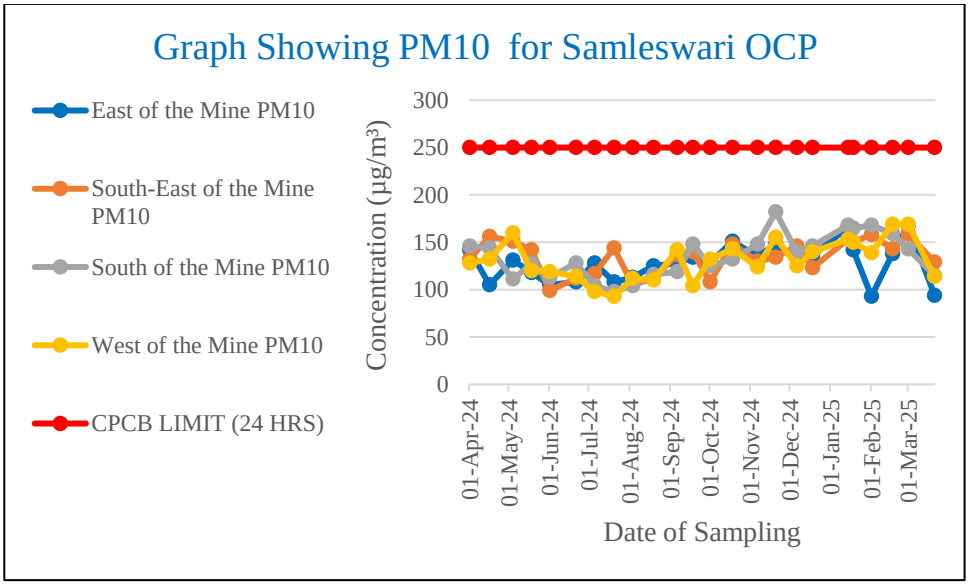
Project: Samleswari OCP

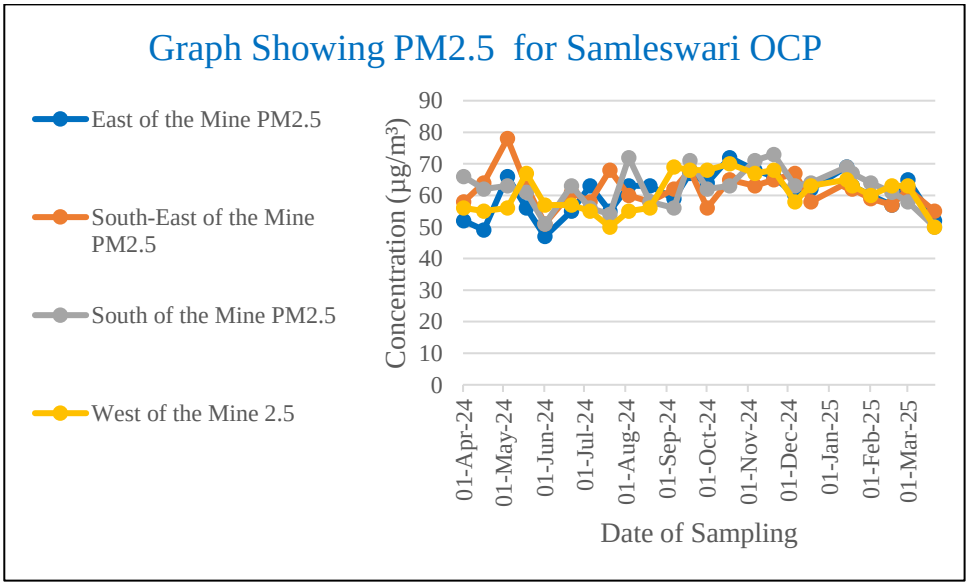
Monitoring Station: South-East of the Mine

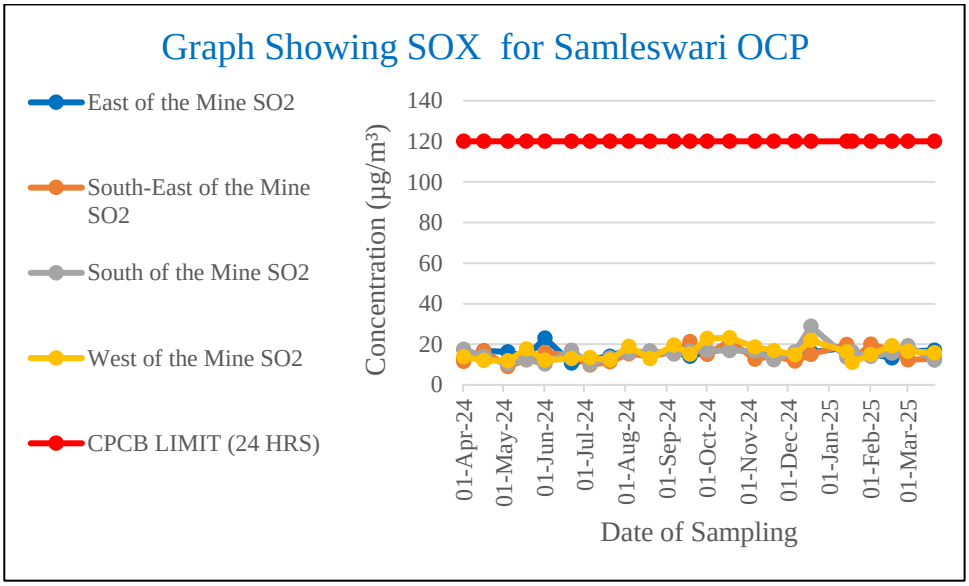
All values are in µg/m³

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
02-Apr-24	245	132	58	11.6	11.6
17-Apr-24	288	156	64	16.74	17.56
04-May-24	230	151	78	9.04	12.61
18-May-24	277	142	63	12.31	15.83
01-Jun-24	171	99	51	16	14.83
21-Jun-24	253	112	61	14.54	11.97
05-Jul-24	232	117	58	9.86	24.44
20-Jul-24	265	144	68	11.33	15.26
03-Aug-24	266	105	60	15.39	18.36
19-Aug-24	210	112	58	14.15	30.34
06-Sep-24	292	137	62	16.19	14.4
18-Sep-24	285	140	68	21.25	20.93
01-Oct-24	224	108	56	15	24.45
18-Oct-24	246	148	65	21.76	35.46
06-Nov-24	243	130	63	12.56	21.09
20-Nov-24	243	134	65	14.36	23.14
06-Dec-24	253	146	67	11.71	20.35
18-Dec-24	237	123	58	15.02	39.98
06-Jan-25	255	153	64	19.86	24.08
18-Jan-25	250	150	62	12.2	29.3
01-Feb-25	244	158	59	20.11	24.55
17-Feb-25	235	143	57	16.83	29
01-Mar-25	258	159	62	12.37	24.85
21-Mar-25	243	129	55	13.01	24.5
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	292	159	78	21.76	39.98
Minimum	171	99	51	9.04	11.6
Average	247.7	134.50	61.75	14.72	22.04
Standard 24 hr	500	250	-	120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for Samleswari OCP
East of the Mine SPM
South-East of the Mine SPM
South of the Mine SPM
West of the Mine SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
550
500
450
400
350
300
250
200
150
100
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling


Graph Showing PM10 for Samleswari OCP
East of the Mine PM10
South-East of the Mine PM10
South of the Mine PM10
West of the Mine PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling


Graph Showing PM2.5 for Samleswari OCP
East of the Mine PM2.5
South-East of the Mine PM2.5
South of the Mine PM2.5
West of the Mine 2.5
Concentration (µg/m³)
90
80
70
60
50
40
30
20
10
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling


Graph Showing SOX for Samleswari OCP
East of the Mine SO2
South-East of the Mine SO2
South of the Mine SO2
West of the Mine SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling

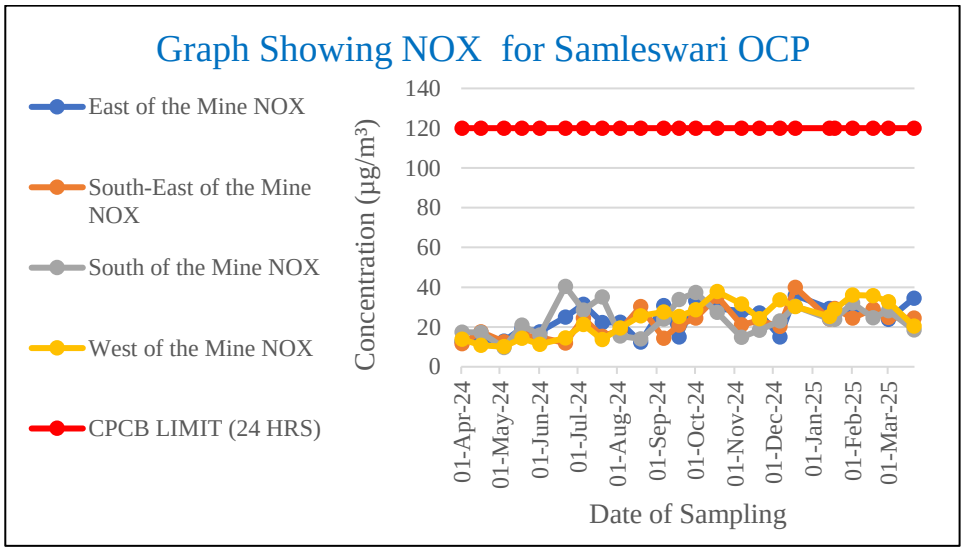

Graph Showing NOX for Samleswari OCP
East of the Mine NOX
South-East of the Mine NOX
South of the Mine NOX
West of the Mine NOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling

Table: 8.5.5

Area: Ib valley

Project: Samleswari OCP

Monitoring Station: Khokelmal (Reported only)

All values are in µg/m³

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	158	74	28	12.68	12.68
06-Apr-24	194	86	40	9.42	9.42
12-Apr-24	167	81	34	13.23	13.23
13-Apr-24	198	90	42	15.65	15.65
18-Apr-24	178	79	34	11.61	15.58
19-Apr-24	189	86	38	10.80	13.80
26-Apr-24	215	92	40	11.31	13.06
27-Apr-24	184	87	35	15.11	19.32
06-May-24	183	83	48	16.69	17.65
07-May-24	177	82	42	12.17	16.50
10-May -24	209	88	39	13.10	15.59
11-May-24	198	92	55	14.94	12.10
20-May-24	172	73	39	15.21	14.68
21-May-24	197	82	43	14.72	18.97
27-May-24	212	87	40	10.99	12.26
28-May-24	183	76	43	10.62	13.90
03-Jun-24	165	82	42	12.78	24.72
04-Jun-24	191	83	45	11.80	14.31
10-Jun-24	204	98	51	16.44	31.10
11-Jun-24	163	77	43	15.83	26.60
17-Jun-24	157	74	36	10.76	7.09
18-Jun-24	186	83	46	12.99	16.85
24-Jun-24	174	88	44	9.37	29.25
25-Jun-24	198	77	49	13.12	36.37
28-Jun-24	179	83	44	15.98	29.61
29-Jun-24	186	86	47	11.78	12.91
01-Jul-24	191	84	41	16.06	22.15
02-Jul-24	168	76	37	10.99	18.44
08-Jul-24	187	82	39	14.56	20.39
09-Jul-24	174	72	36	12.20	21.35
16-Jul-24	163	83	43	19.50	21.33
17-Jul-24	183	90	49	11.25	29.52
24-Jul-24	193	82	45	13.15	16.88
25-Jul-24	180	78	41	15.65	26.58
30-Jul-24	199	85	43	16.52	20.78
31-Jul-24	201	93	51	14.56	15.29
05-Aug-24	161	78	35	11.11	16.91
06-Aug-24	210	94	51	11.74	21.87
13-Aug-24	198	82	45	16.53	20.29
14-Aug-24	225	92	50	16.72	17.70
21-Aug-24	175	94	50	14.14	24.95
22-Aug-24	152	72	36	15.86	10.89
28-Aug-24	204	86	42	18.09	13.29

29-Aug-24	161	75	36	16.13	13.87
02-Sep-24	197	86	48	15.74	36.15
03-Sep-24	190	80	43	15.81	15.71
09-Sep-24	210	91	52	13.44	35.27
10-Sep-24	195	85	47	14.83	10.16
16-Sep-24	203	86	44	18.64	21.82
17-Sep-24	177	77	41	13.91	38.84
23-Sep-24	173	80	43	13.42	11.90
24-Sep-24	177	86	44	15.23	23.26
03-Oct-24	197	86	45	16.51	14.30
04-Oct-24	175	73	34	16.32	36.88
14-Oct-24	181	77	35	14.08	31.44
15-Oct-24	167	68	32	13.32	26.05
21-Oct-24	168	68	34	13.83	22.54
22-Oct-24	198	86	44	18.29	29.81
25-Oct-24	210	90	46	13.99	22.80
26-Oct-24	172	74	34	15.67	25.54
01-Nov-24	198	91	46	17.97	21.94
02-Nov-24	177	75	37	17.06	25.20
08-Nov-24	187	83	42	23.34	26.24
09-Nov-24	188	84	43	14.69	27.62
15-Nov-24	219	78	40	12.06	17.19
16-Nov-24	213	88	45	13.22	28.41
22-Nov-24	194	84	42	17.75	32.26
23-Nov-24	202	88	45	14.80	18.24
29-Nov-24	188	81	40	22.40	15.36
30-Nov-24	216	92	49	17.64	28.42
04-Dec-24	201	81	43	20.64	29.20
05-Dec-24	210	84	46	21.47	23.88
12-Dec-24	214	83	48	19.82	38.55
13-Dec-24	226	88	52	16.76	29.13
20-Dec-24	209	87	53	11.75	38.58
21-Dec-24	206	82	48	14.63	30.37
27-Dec-24	214	85	54	15.73	26.62
28-Dec-24	226	93	56	15.48	17.94
01-Jan-25	188	84	43	16.81	26.75
02-Jan-25	195	85	44	17.56	34.68
08-Jan-25	214	89	48	13.50	17.78
09-Jan-25	229	93	51	22.47	15.48
16-Jan-25	231	89	51	11.32	35.55
17-Jan-25	207	79	44	12.10	24.20
22-Jan-25	213	85	48	12.47	18.82
23-Jan-25	199	74	43	14.78	21.96
30-Jan-25	189	72	41	16.98	27.82
31-Jan-25	198	77	44	10.59	32.93
03-Feb-25	188	73	40	12.36	23.85
04-Feb-25	207	86	48	18.89	27.00
10-Feb-25	192	73	41	12.13	20.53
11-Feb-25	206	74	45	15.64	31.02
18-Feb-25	181	70	38	14.81	26.11
19-Feb-25	214	83	46	16.69	28.66
25-Feb-25	185	72	39	19.32	34.98
26-Feb-25	199	75	43	11.62	31.53
03-Mar-25	175	68	37	12.24	18.86

04-Mar-25	207	81	44	14.95	33.20
10-Mar-25	218	87	48	15.68	25.86
11-Mar-25	192	77	41	17.52	32.77
17-Mar-25	180	74	38	13.99	22.26
18-Mar-25	193	79	41	15.81	20.30
24-Mar-25	164	67	35	12.97	35.13
25-Mar-25	203	82	44	19.93	30.80
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	231	98	56	23.34	38.84
Minimum	152	67	28	9.37	7.09
Average	192.18	82.07	43.05	14.88	23.00
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
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Table: 8.5.6

Area: Ib valley Area

Project: Samleswari OCP

Monitoring Station: Rampur Sub Area(Reported Only)

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	188	85	37	17.16	19.55
06-Apr-24	168	74	28	13.30	14.30
12-Apr-24	180	88	33	15.60	16.21
13-Apr-24	161	81	38	17.16	19.66
22-Apr-24	172	83	37	13.08	14.67
23-Apr-24	189	94	42	10.62	13.64
26-Apr-24	166	78	29	12.61	13.64
27-Apr-24	174	87	33	12.54	12.67
02-May-24	175	87	40	9.79	14.87
03-May-24	155	85	50	21.61	13.50
08-May-24	157	94	37	13.75	10.61
09-May-24	176	91	35	13.77	9.01
16-May-24	173	88	46	18.93	13.30
17-May-24	178	82	39	10.23	12.62
24-May-24	185	92	40	16.21	19.50
25-May-24	152	72	50	11.30	18.88
05-Jun-24	161	75	58	11.10	25.44
06-Jun-24	176	81	34	13.92	19.92
12-Jun-24	182	85	41	15.08	34.27
13-Jun-24	175	80	38	15.90	27.14
19-Jun-24	183	88	43	13.54	40.13
20-Jun-24	167	86	38	10.83	27.29
26-Jun-24	221	92	44	9.63	18.74
27-Jun-24	191	89	43	10.70	7.55
28-Jun-24	208	94	47	15.41	23.70
29-Jun-24	172	75	38	16.94	25.12
03-Jul-24	183	78	36	15.15	13.26
04-Jul-24	193	86	43	12.25	22.33
10-Jul-24	188	90	45	13.85	20.77
11-Jul-24	164	75	36	11.90	20.83
18-Jul-24	166	77	41	11.78	23.31
19-Jul-24	199	91	39	14.66	31.27
26-Jul-24	207	96	30	14.61	29.83
27-Jul-24	205	85	41	13.19	13.68
01-Aug-24	211	76	35	11.11	20.44
02-Aug-24	187	82	38	11.98	20.35
09-Aug-24	149	80	35	13.30	18.16
10-Aug-24	207	74	31	15.27	19.60
16-Aug-24	186	81	43	13.18	25.29
17-Aug-24	146	84	45	10.52	11.59
23-Aug-24	186	78	37	9.40	15.01
24-Aug-24	167	74	33	12.90	13.48
30-Aug-24	154	69	31	11.68	29.67
31-Aug-24	154	72	30	14.47	16.32
04-Sep-24	208	84	45	11.66	20.40

05-Sep-24	202	82	43	17.61	13.82
11-Sep-24	212	78	39	15.79	19.33
12-Sep-24	195	85	44	14.29	11.33
19-Sep-24	170	83	39	15.26	14.77
20-Sep-24	187	90	36	18.19	25.07
27-Sep-24	164	75	33	15.34	14.82
28-Sep-24	164	84	42	15.41	11.77
07-Oct-24	172	73	36	11.21	35.81
08-Oct-24	159	68	28	14.35	36.29
16-Oct-24	174	70	32	14.07	36.70
17-Oct-24	198	86	44	11.63	30.81
23-Oct-24	168	72	34	12.65	20.62
24-Oct-24	179	80	39	15.43	25.14
29-Oct-24	175	74	37	19.10	31.13
30-Oct-24	175	69	40	16.53	26.94
04-Nov-24	175	74	35	14.56	16.51
05-Nov-24	201	92	50	13.52	16.53
11-Nov-24	186	79	38	10.77	20.52
12-Nov-24	173	70	32	10.30	28.82
18-Nov-24	182	75	38	11.32	35.07
19-Nov-24	193	78	40	15.23	29.46
25-Nov-24	196	82	43	16.10	25.25
26-Nov-24	204	84	45	15.23	16.13
02-Dec-24	181	84	39	16.81	28.34
03-Dec-24	196	80	43	15.04	23.34
09-Dec-24	212	85	48	17.61	25.49
10-Dec-24	205	83	46	13.38	27.73
16-Dec-24	191	77	46	13.79	18.49
17-Dec-24	206	82	50	22.92	17.43
23-Dec-24	211	85	52	17.20	29.90
24-Dec-24	195	83	51	12.56	35.21
30-Dec-24	212	86	53	21.37	24.22
31-Dec-24	218	90	56	11.10	26.18
03-Jan-25	188	83	42	11.19	31.18
04-Jan-25	199	83	45	9.94	35.69
10-Jan-25	208	88	47	16.20	34.41
11-Jan-25	227	92	50	14.87	25.22
20-Jan-25	206	84	45	12.88	21.96
21-Jan-25	210	90	48	15.18	19.69
28-Jan-25	206	79	44	11.34	18.67
29-Jan-25	208	87	46	14.05	27.47
05-Feb-25	198	75	43	19.50	23.52
06-Feb-25	209	84	45	16.57	21.47
12-Feb-25	220	88	48	12.91	21.12
13-Feb-25	206	81	45	14.86	24.65
20-Feb-25	213	84	46	14.73	28.08
21-Feb-25	194	80	43	14.55	39.32
27-Feb-25	193	76	41	17.05	35.52
28-Feb-25	198	75	43	16.26	29.51
05-Mar-25	186	76	39	14.28	36.51
06-Mar-25	191	86	47	21.18	34.38
12-Mar-25	206	84	44	17.39	25.41
13-Mar-25	187	80	41	14.68	27.67
19-Mar-25	180	74	38	20.42	25.16

20-Mar-25	152	64	30	10.95	18.52
26-Mar-25	172	68	35	11.83	28.32
27-Mar-25	168	74	32	12.64	24.74
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	227	96	58	22.92	40.13
Minimum	146	64	28	9.40	7.55
Average	186.28	81.48	40.69	14.26	22.83
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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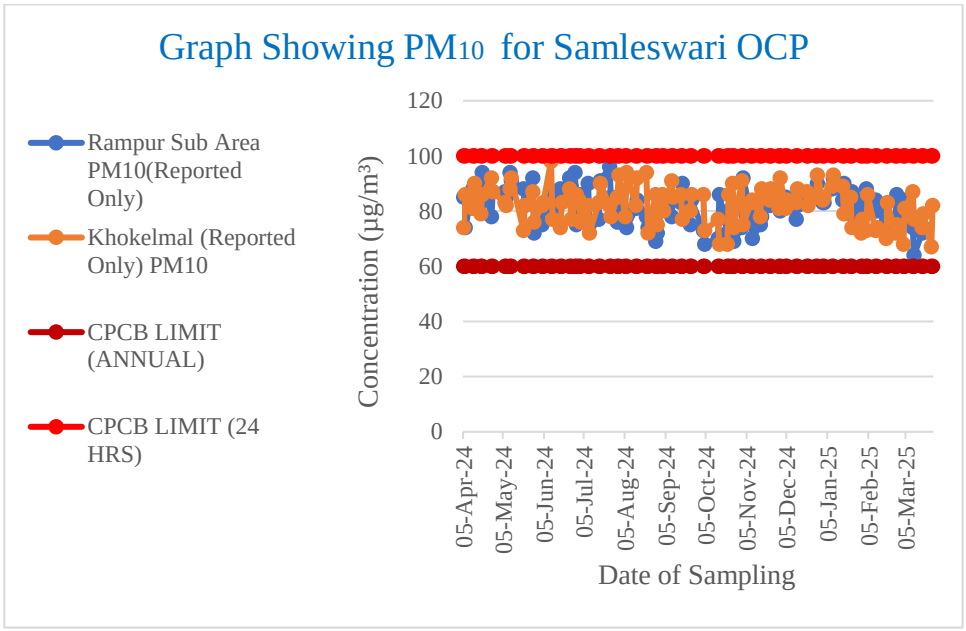
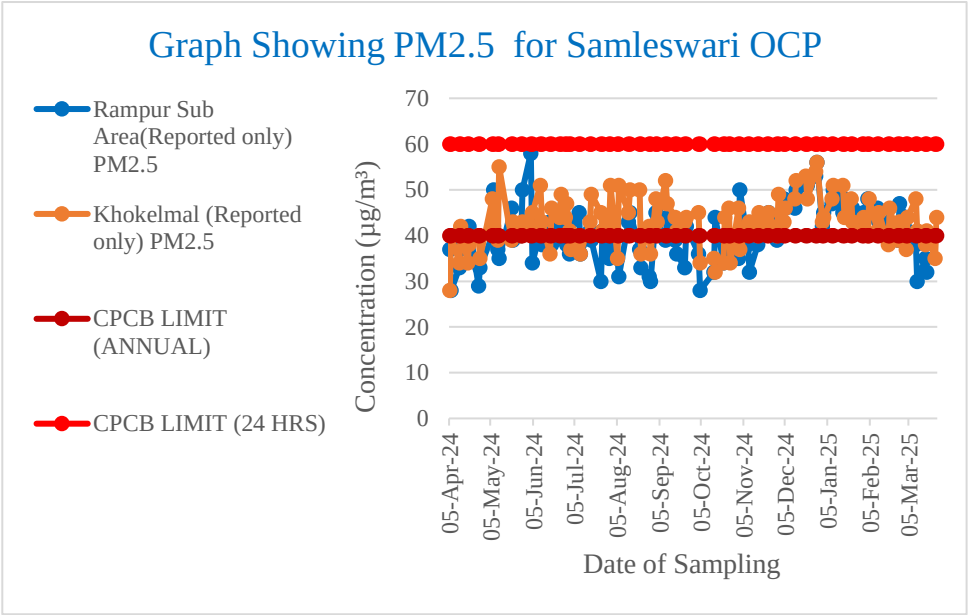
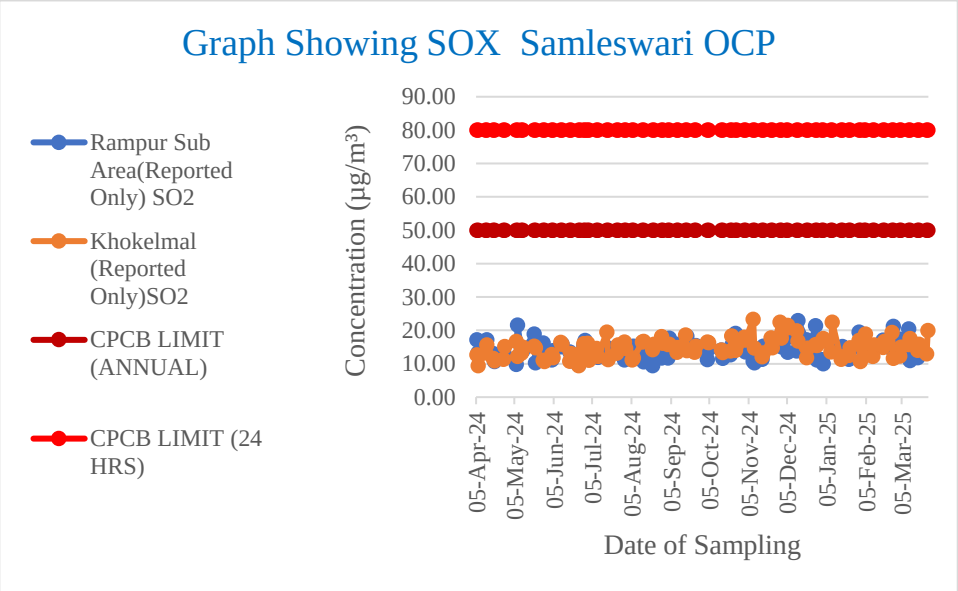

Graph Showing PM10 for Samleswari OCP
Rampur Sub Area PM10(Reported Only)
Khokelmal (Reported Only) PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for Samleswari OCP
Rampur Sub Area(Reported only) PM2.5
Khokelmal (Reported only) PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOX Samleswari OCP
Rampur Sub Area(Reported Only) SO2
Khokelmal (Reported Only)SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

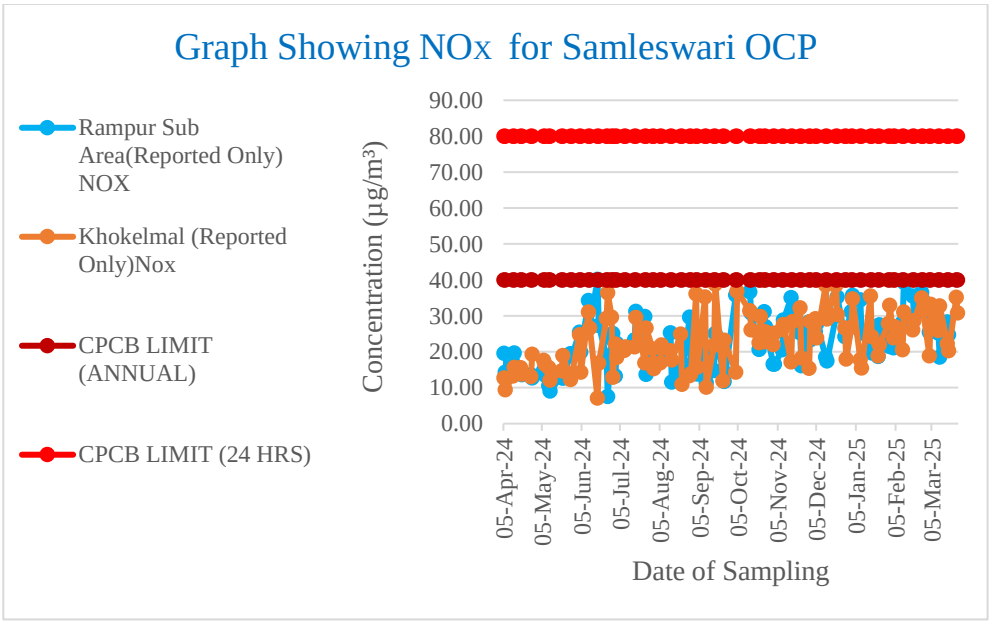

Graph Showing NOx for Samleswari OCP
Rampur Sub Area(Reported Only) NOX
Khokelmal (Reported Only)Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

Table: 8.5.7

Area: Ib valley Area

Project: Lajkura OCP

Monitoring Station: Near Project Office

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
02-Apr-24	218	96	49	11.09	11.09
17-Apr-24	244	128	52	14.64	18.05
04-May-24	208	120	61	12.27	19.79
18-May-24	233	130	66	10.57	12.05
01-Jun-24	179	107	56	12.8	17.32
21-Jun-24	237	98	50	10.19	11.12
05-Jul-24	231	112	56	13.51	27.46
20-Jul-24	244	116	58	9.74	20.46
03-Aug-24	234	107	60	17.12	14.4
19-Aug-24	217	132	65	14.86	19.16
06-Sep-24	280	132	60	16.82	14
18-Sep-24	243	124	62	15.08	21.1
01-Oct-24	228	135	63	15.56	36.22
18-Oct-24	252	126	67	14.99	24.42
06-Nov-24	214	118	54	13.08	36.9
20-Nov-24	234	127	60	16.97	20.34
06-Dec-24	225	129	59	12.88	22.39
18-Dec-24	245	137	62	16.51	24.35
06-Jan-25	265	155	67	12.97	13.96
18-Jan-25	260	152	65	13.94	37.64
01-Feb-25	267	164	67	14.78	21.96
17-Feb-25	246	158	59	12.47	18.82
01-Mar-25	237	143	56	12.47	18.82
21-Mar-25	220	118	53	14.78	21.96
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	280	164	67	17.12	37.64
Minimum	179	96	49	9.74	11.09
Average	235.9	127.67	59.46	13.75	20.99
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

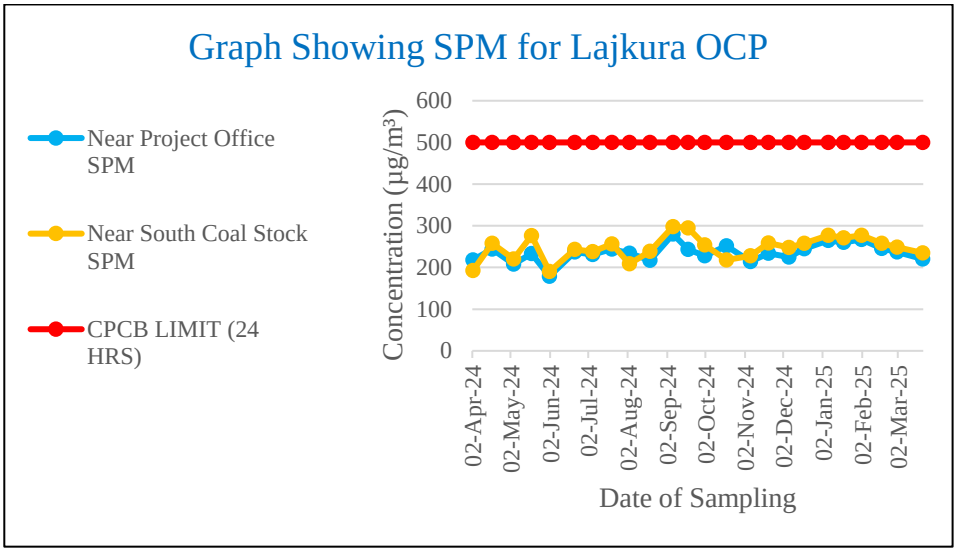
Table: 8.5.8

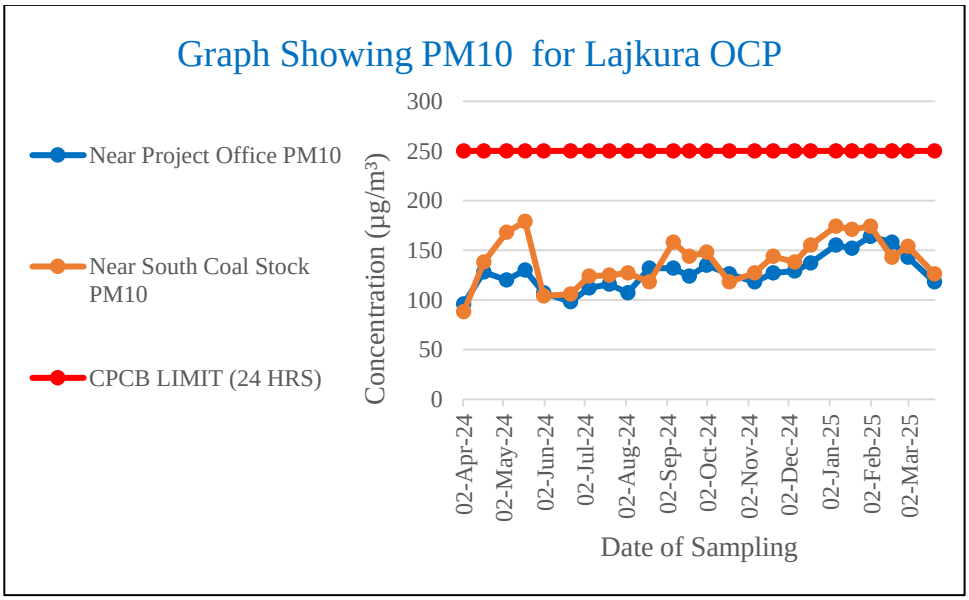
Area: Ib valley Area

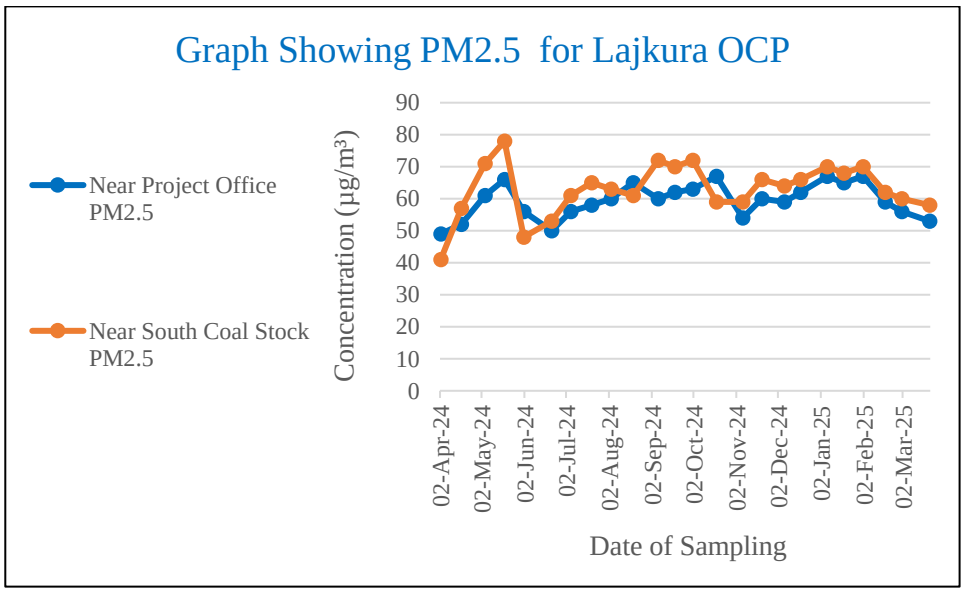
Project: Lajkura OCP

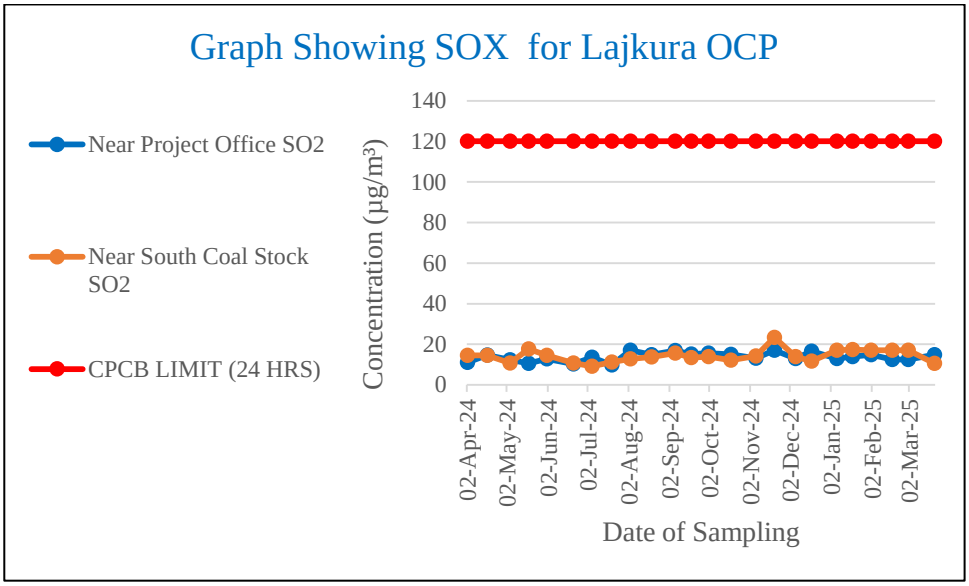
Monitoring Station: Near South Coal Stock

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	193	88	41	14.47	14.47
17-Apr-24	258	138	57	14.45	11.6
04-May-24	220	168	71	10.8	12.78
18-May-24	276	179	78	17.68	18.65
01-Jun-24	190	104	48	14.53	20.11
21-Jun-24	243	106	53	10.74	27.3
05-Jul-24	238	124	61	9.18	20.45
20-Jul-24	256	125	65	11.21	20.48
03-Aug-24	209	127	63	12.71	14.41
19-Aug-24	239	118	61	13.72	14
06-Sep-24	298	158	72	15.63	19.05
18-Sep-24	295	144	70	13.43	15.36
01-Oct-24	254	148	72	13.82	23.25
18-Oct-24	218	118	59	12.2	19.88
06-Nov-24	228	127	59	14.2	29.99
20-Nov-24	259	144	66	23.36	26.12
06-Dec-24	248	138	64	13.97	12.51
18-Dec-24	258	155	66	11.72	21.83
06-Jan-25	277	174	70	17.1	25.93
18-Jan-25	271	171	68	17.39	21.47
07-Feb-25	277	174	70	17.1	25.93
17-Feb-25	258	143	62	16.98	27.82
01-Mar-25	249	154	60	16.98	27.82
21-Mar-25	235	126	58	10.59	32.93
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	298	179	78	23.36	32.93
Minimum	190	88	41	9.18	11.60
Average	247.8	139.63	63.08	14.33	21.01
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for Lajkura OCP
Near Project Office SPM
Near South Coal Stock SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
600
500
400
300
200
100
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Date of Sampling


Graph Showing PM10 for Lajkura OCP
Near Project Office PM10
Near South Coal Stock PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Date of Sampling


Graph Showing PM2.5 for Lajkura OCP
Near Project Office PM2.5
Near South Coal Stock PM2.5
Concentration (µg/m³)
90
80
70
60
50
40
30
20
10
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Date of Sampling


Graph Showing SOX for Lajkura OCP
Near Project Office SO2
Near South Coal Stock SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Date of Sampling

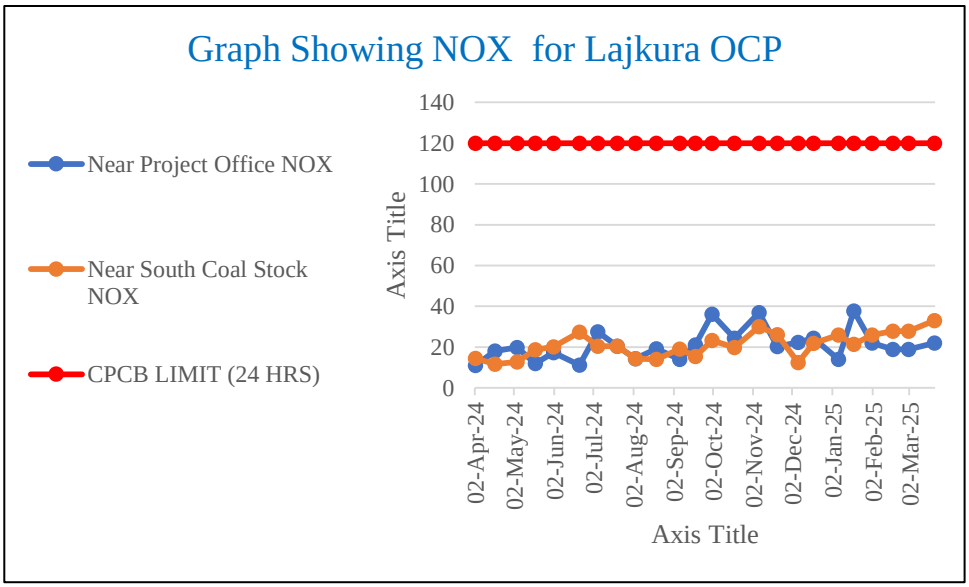

Graph Showing NOX for Lajkura OCP
Near Project Office NOX
Near South Coal Stock NOX
CPCB LIMIT (24 HRS)
Axis Title
140
120
100
80
60
40
20
0
02-Apr-24
02-May-24
02-Jun-24
02-Jul-24
02-Aug-24
02-Sep-24
02-Oct-24
02-Nov-24
02-Dec-24
02-Jan-25
02-Feb-25
02-Mar-25
Axis Title

Table: 8.5.9

Area: Ib valley Area

Project: Lajkura OCP

Monitoring Station: Khokelmal

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	158	74	28	12.68	12.68
06-Apr-24	194	86	40	9.42	9.42
12-Apr-24	167	81	34	13.23	13.23
13-Apr-24	198	90	42	15.65	15.65
18-Apr-24	178	79	34	11.61	15.58
19-Apr-24	189	86	38	10.80	13.80
26-Apr-24	215	92	40	11.31	13.06
27-Apr-24	184	87	35	15.11	19.32
06-May-24	183	83	48	16.69	17.65
07-May-24	177	82	42	12.17	16.50
10-May-24	209	88	39	13.10	15.59
11-May-24	198	92	55	14.94	12.10
20-May-24	172	73	39	15.21	14.68
21-May-24	197	82	43	14.72	18.97
27-May-24	212	87	40	10.99	12.26
28-May-24	183	76	43	10.62	13.90
03-Jun-24	165	82	42	12.78	24.72
04-Jun-24	191	83	45	11.80	14.31
10-Jun-24	204	98	51	16.44	31.10
11-Jun-24	163	77	43	15.83	26.60
17-Jun-24	157	74	36	10.76	7.09
18-Jun-24	186	83	46	12.99	16.85
24-Jun-24	174	88	44	9.37	29.25
25-Jun-24	198	77	49	13.12	36.37
28-Jun-24	179	83	44	15.98	29.61
29-Jun-24	186	86	47	11.78	12.91
01-Jul-24	191	84	41	16.06	22.15
02-Jul-24	168	76	37	10.99	18.44
08-Jul-24	187	82	39	14.56	20.39
09-Jul-24	174	72	36	12.20	21.35
16-Jul-24	163	83	43	19.50	21.33
17-Jul-24	183	90	49	11.25	29.52
24-Jul-24	193	82	45	13.15	16.88
25-Jul-24	180	78	41	15.65	26.58
30-Jul-24	199	85	43	16.52	20.78
31-Jul-24	201	93	51	14.56	15.29
05-Aug-24	161	78	35	11.11	16.91
06-Aug-24	210	94	51	11.74	21.87
13-Aug-24	198	82	45	16.53	20.29
14-Aug-24	225	92	50	16.72	17.70
21-Aug-24	175	94	50	14.14	24.95
22-Aug-24	152	72	36	15.86	10.89
28-Aug-24	204	86	42	18.09	13.29
29-Aug-24	161	75	36	16.13	13.87
02-Sep-24	197	86	48	15.74	36.15

03-Sep-24	190	80	43	15.81	15.71
09-Sep-24	210	91	52	13.44	35.27
10-Sep-24	195	85	47	14.83	10.16
16-Sep-24	203	86	44	18.64	21.82
17-Sep-24	177	77	41	13.91	38.84
23-Sep-24	173	80	43	13.42	11.90
24-Sep-24	177	86	44	15.23	23.26
03-Oct-24	197	86	45	16.51	14.30
04-Oct-24	175	73	34	16.32	36.88
14-Oct-24	181	77	35	14.08	31.44
15-Oct-24	167	68	32	13.32	26.05
21-Oct-24	168	68	34	13.83	22.54
22-Oct-24	198	86	44	18.29	29.81
25-Oct-24	210	90	46	13.99	22.80
26-Oct-24	172	74	34	15.67	25.54
01-Nov-24	198	91	46	17.97	21.94
02-Nov-24	177	75	37	17.06	25.20
08-Nov-24	187	83	42	23.34	26.24
09-Nov-24	188	84	43	14.69	27.62
15-Nov-24	219	78	40	12.06	17.19
16-Nov-24	213	88	45	13.22	28.41
22-Nov-24	194	84	42	17.75	32.26
23-Nov-24	202	88	45	14.80	18.24
29-Nov-24	188	81	40	22.40	15.36
30-Nov-24	216	92	49	17.64	28.42
04-Dec-24	201	81	43	20.64	29.20
05-Dec-24	210	84	46	21.47	23.88
12-Dec-24	214	83	48	19.82	38.55
13-Dec-24	226	88	52	16.76	29.13
20-Dec-24	209	87	53	11.75	38.58
21-Dec-24	206	82	48	14.63	30.37
27-Dec-24	214	85	54	15.73	26.62
28-Dec-24	226	93	56	15.48	17.94
01-Jan-25	188	84	43	16.81	26.75
02-Jan-25	195	85	44	17.56	34.68
08-Jan-25	214	89	48	13.50	17.78
09-Jan-25	229	93	51	22.47	15.48
16-Jan-25	231	89	51	11.32	35.55
17-Jan-25	207	79	44	12.10	24.20
22-Jan-25	213	85	48	12.47	18.82
23-Jan-25	199	74	43	14.78	21.96
30-Jan-25	189	72	41	16.98	27.82
31-Jan-25	198	77	44	10.59	32.93
03-Feb-25	188	73	40	12.36	23.85
04-Feb-25	207	86	48	18.89	27.00
10-Feb-25	192	73	41	12.13	20.53
11-Feb-25	206	74	45	15.64	31.02
18-Feb-25	181	70	38	14.81	26.11
19-Feb-25	214	83	46	16.69	28.66
25-Feb-25	185	72	39	19.32	34.98
26-Feb-25	199	75	43	11.62	31.53
03-Mar-25	175	68	37	12.24	18.86
04-Mar-25	207	81	44	14.95	33.20
10-Mar-25	218	87	48	15.68	25.86

11-Mar-25	192	77	41	17.52	32.77
17-Mar-25	180	74	38	13.99	22.26
18-Mar-25	193	79	41	15.81	20.30
24-Mar-25	164	67	35	12.97	35.13
25-Mar-25	203	82	44	19.93	30.80
Basic Stats	SPM	PM10	PM2 5	SO2	NOx
Maximum	231	98	56	23.34	38.84
Minimum	152	67	28	9.37	7.09
Average	192.18	82.07	43.05	14.88	23.00
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.10

Area: Ib valley

Project: Lajkura OCP

Monitoring Station: Chuakani

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	195	93	40	13.56	17.69
06-Apr-24	165	78	33	14.94	14.94
12-Apr-24	176	82	38	11.63	11.63
13-Apr-24	165	76	29	16.96	16.96
22-Apr-24	173	75	35	15.76	17.35
23-Apr-24	259	172	65	11.26	16.29
26-Apr-24	178	94	38	13.63	15.63
27-Apr-24	194	88	42	12.01	16.52
06-May-24	226	93	50	20.26	17.79
07-May-24	157	65	43	17.24	16.78
10-May-24	204	84	51	14.84	14.31
11-May-24	214	81	56	12.32	17.00
20-May-24	222	92	51	10.27	15.69
21-May-24	202	76	52	11.73	13.37
27-May-24	207	84	50	14.69	15.07
28-May-24	145	89	42	17.30	18.79
03-Jun-24	208	89	42	19.61	31.71
04-Jun-24	194	74	35	18.46	11.61
10-Jun-24	176	95	45	15.80	22.48
11-Jun-24	167	90	47	13.67	26.43
17-Jun-24	163	68	37	20.55	26.43
18-Jun-24	173	84	43	14.11	22.52
24-Jun-24	180	89	47	9.30	29.02
25-Jun-24	166	73	38	18.30	17.56
28-Jun-24	228	96	52	9.55	9.00
29-Jun-24	216	89	50	13.00	13.65
01-Jul-24	193	81	42	11.05	18.53
02-Jul-24	213	85	46	15.67	14.48
08-Jul-24	184	73	40	14.55	16.98
09-Jul-24	192	78	42	10.68	17.91
16-Jul-24	188	76	38	12.76	13.40
17-Jul-24	157	68	32	16.58	21.34
24-Jul-24	162	65	30	17.99	28.08
25-Jul-24	219	92	46	23.81	28.41
30-Jul-24	174	76	37	16.27	35.59
31-Jul-24	195	89	44	12.94	25.57
05-Aug-24	162	85	48	15.06	13.40
06-Aug-24	170	82	40	13.08	13.79
13-Aug-24	204	88	51	9.88	12.88
14-Aug-24	233	86	49	16.35	17.11
21-Aug-24	191	86	48	13.30	12.06
22-Aug-24	184	72	34	15.36	15.48
28-Aug-24	194	83	45	12.49	18.77
29-Aug-24	201	79	38	11.04	39.29
02-Sep-24	176	78	42	14.16	19.27

03-Sep-24	150	85	46	15.23	16.52
09-Sep-24	201	81	42	13.48	21.16
10-Sep-24	203	92	39	16.17	16.08
16-Sep-24	213	88	51	15.37	19.59
17-Sep-24	182	78	39	13.40	26.86
23-Sep-24	190	85	43	15.05	17.62
24-Sep-24	196	82	41	13.22	32.69
03-Oct-24	185	77	39	12.79	31.27
04-Oct-24	189	73	36	15.62	25.45
14-Oct-24	204	82	45	11.50	30.68
15-Oct-24	212	86	48	13.44	18.66
21-Oct-24	216	91	50	17.14	27.93
22-Oct-24	194	83	45	16.69	27.19
25-Oct-24	161	77	38	15.15	24.68
26-Oct-24	174	71	35	16.31	26.57
01-Nov-24	188	83	41	14.87	30.58
02-Nov-24	193	88	46	14.70	37.74
08-Nov-24	174	74	32	10.08	18.56
09-Nov-24	167	70	36	14.50	18.09
15-Nov-24	196	85	42	16.32	34.19
22-Nov-24	179	76	38	13.93	14.03
23-Nov-24	196	85	44	13.20	35.20
29-Nov-24	190	83	42	15.67	20.34
30-Nov-24	206	90	48	12.74	32.26
04-Dec-24	174	74	35	14.74	19.41
05-Dec-24	188	78	41	13.95	27.10
12-Dec-24	197	81	44	18.50	26.07
13-Dec-24	200	83	46	15.26	33.99
20-Dec-24	192	81	47	17.41	33.63
21-Dec-24	210	85	52	15.32	16.94
27-Dec-24	223	89	55	17.94	22.39
28-Dec-24	195	84	51	15.05	39.67
01-Jan-25	201	83	45	13.10	13.86
02-Jan-25	208	85	47	13.06	39.57
08-Jan-25	214	88	49	16.77	23.29
09-Jan-25	230	93	52	11.34	32.68
16-Jan-25	227	94	51	15.46	22.27
17-Jan-25	209	85	47	13.04	23.06
22-Jan-25	204	83	46	18.36	30.22
23-Jan-25	198	78	44	13.18	21.69
30-Jan-25	205	84	46	13.22	29.30
31-Jan-25	188	75	42	12.18	22.82
03-Feb-25	208	83	45	17.73	24.41
04-Feb-25	212	86	47	17.30	25.11
10-Feb-25	216	89	48	16.65	31.24
11-Feb-25	196	75	43	13.77	24.27
18-Feb-25	199	78	43	15.22	25.30
19-Feb-25	202	81	45	14.52	37.14
25-Feb-25	213	84	46	14.09	33.60
26-Feb-25	187	73	41	14.83	28.39
03-Mar-25	192	78	41	17.26	30.15
04-Mar-25	195	82	43	14.99	28.08
10-Mar-25	206	86	44	19.22	38.61
11-Mar-25	181	75	39	12.19	25.05

17-Mar-25	166	68	35	12.07	23.52
18-Mar-25	201	82	43	14.49	25.73
24-Mar-25	185	75	40	18.07	31.35
25-Mar-25	178	74	37	18.12	37.69
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	259	172	65	23.81	39.67
Minimum	145	65	29	9.30	9.00
Average	193.24	82.80	43.39	14.75	23.30
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.11

Area: Ib valley

Project: Lajkura OCP

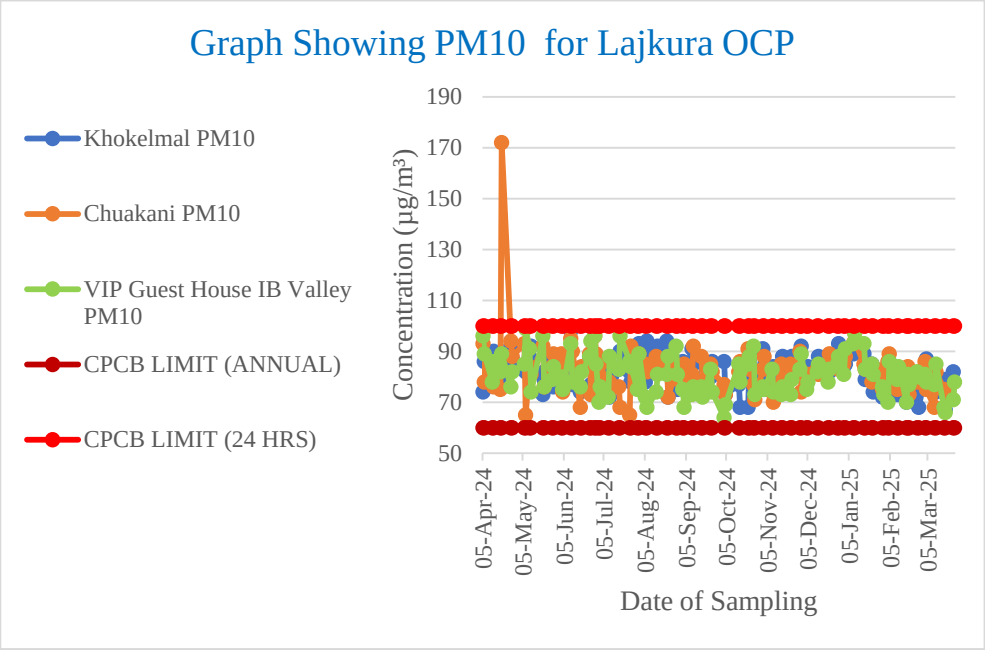
Monitoring Station: VIP Guest House IB Valley

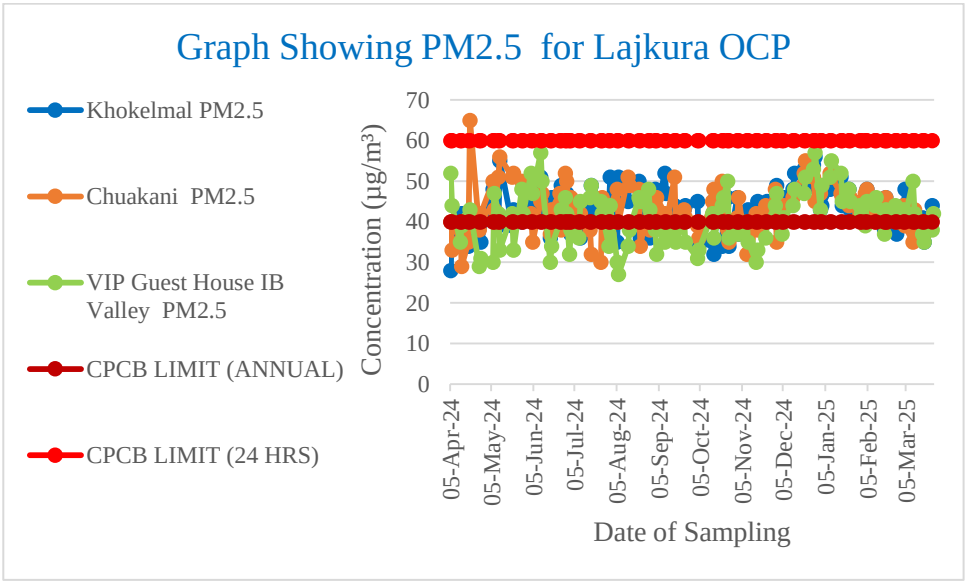
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	218	96	52	13.98	13.98
06-Apr-24	210	89	44	15.41	15.41
12-Apr-24	188	78	35	17.17	17.17
13-Apr-24	204	86	39	18.14	18.14
18-Apr-24	193	82	41	13.94	16.46
19-Apr-24	198	89	43	10.28	15.57
26-Apr-24	168	76	29	13.75	14.98
27-Apr-24	169	82	31	14.88	18.56
06-May-24	165	85	30	13.69	12.20
07-May-24	158	99	47	15.13	17.47
10-May-24	194	91	42	16.28	13.99
11-May-24	154	74	33	20.32	15.72
20-May-24	205	96	42	11.39	16.63
21-May-24	159	76	33	14.55	19.31
27-May-24	175	79	48	13.14	13.77
28-May-24	180	84	42	13.71	9.79
03-Jun-24	199	80	52	9.60	10.05
04-Jun-24	174	75	47	11.14	14.36
10-Jun-24	169	93	57	20.77	21.03
11-Jun-24	171	78	50	13.03	13.63
17-Jun-24	165	76	30	9.76	29.67
18-Jun-24	182	82	34	11.72	36.19
24-Jun-24	186	88	40	8.15	30.97
25-Jun-24	193	94	43	11.92	11.78
28-Jun-24	215	96	46	14.56	25.18
29-Jun-24	206	85	42	11.31	16.80
01-Jul-24	157	70	32	10.32	18.07
02-Jul-24	170	76	38	10.40	17.48
08-Jul-24	162	72	36	11.70	16.09
09-Jul-24	200	88	45	11.11	22.68
16-Jul-24	175	83	46	11.58	33.55
17-Jul-24	203	96	49	15.74	32.40
24-Jul-24	191	86	45	12.05	16.00
25-Jul-24	185	84	42	19.43	12.95
30-Jul-24	164	75	34	14.77	26.65
31-Jul-24	185	89	44	10.42	32.84
05-Aug-24	181	72	30	15.74	18.51
06-Aug-24	175	68	27	14.23	16.71
13-Aug-24	166	74	34	11.99	10.99
14-Aug-24	186	81	38	15.04	13.28
21-Aug-24	191	81	46	13.30	19.16
22-Aug-24	222	88	45	11.57	14.00
28-Aug-24	189	92	48	15.36	32.52
29-Aug-24	159	81	43	12.86	25.68
02-Sep-24	188	75	38	15.97	20.59

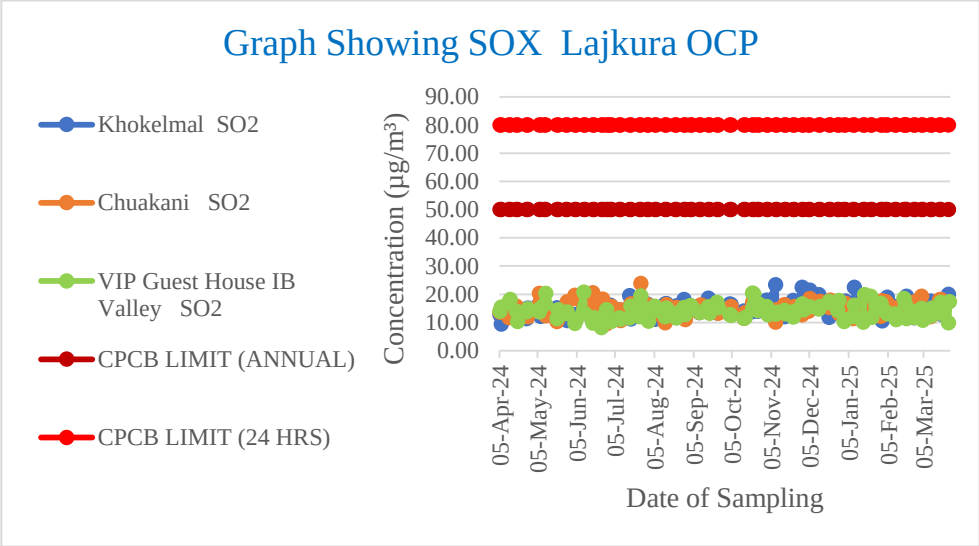
03-Sep-24	179	68	32	15.57	25.36
09-Sep-24	217	73	35	13.61	20.21
10-Sep-24	177	76	37	13.58	17.76
16-Sep-24	182	76	40	15.48	27.63
17-Sep-24	169	72	35	13.24	22.01
23-Sep-24	213	83	40	17.07	25.20
24-Sep-24	191	74	35	15.22	37.36
03-Oct-24	158	64	31	12.79	22.94
04-Oct-24	168	69	33	12.44	34.03
14-Oct-24	189	85	42	11.44	23.73
15-Oct-24	176	78	36	11.63	21.14
21-Oct-24	207	85	44	20.44	33.31
22-Oct-24	206	88	46	20.07	32.71
25-Oct-24	215	92	50	14.20	23.15
26-Oct-24	172	73	36	16.40	26.73
01-Nov-24	171	76	38	15.61	21.80
02-Nov-24	168	75	37	12.65	19.64
08-Nov-24	187	83	40	12.97	25.95
09-Nov-24	181	74	35	13.59	31.72
15-Nov-24	163	73	30	14.29	32.68
16-Nov-24	168	76	33	13.01	36.89
22-Nov-24	173	73	36	11.92	26.89
23-Nov-24	187	79	40	13.93	29.46
29-Nov-24	196	83	44	16.54	16.83
30-Nov-24	208	89	47	14.36	15.43
04-Dec-24	178	75	37	15.54	17.77
05-Dec-24	191	78	41	15.58	15.05
12-Dec-24	198	82	44	14.71	14.02
13-Dec-24	210	85	48	15.70	18.42
20-Dec-24	189	78	47	17.47	29.58
21-Dec-24	197	83	51	16.85	29.97
27-Dec-24	214	85	53	14.25	28.78
28-Dec-24	227	88	57	17.75	40.60
01-Jan-25	195	81	43	10.33	19.84
02-Jan-25	223	91	49	11.03	26.81
08-Jan-25	234	93	51	12.05	28.32
09-Jan-25	246	97	55	16.05	17.09
16-Jan-25	236	93	52	10.08	25.58
17-Jan-25	207	83	45	19.86	26.51
22-Jan-25	215	85	48	19.32	30.13
23-Jan-25	208	81	45	11.76	20.74
30-Jan-25	196	76	44	16.78	25.11
31-Jan-25	186	73	42	15.12	20.05
03-Feb-25	175	70	39	13.68	23.34
04-Feb-25	200	86	45	12.99	27.32
10-Feb-25	195	79	44	12.99	23.72
11-Feb-25	212	84	46	10.96	27.83
17-Feb-25	175	70	37	18.52	36.28
18-Feb-25	189	81	43	16.71	27.13
19-Feb-25	185	77	42	11.33	27.65
25-Feb-25	201	82	44	13.88	25.21
26-Feb-25	189	80	40	11.67	31.59
03-Mar-25	201	81	43	14.95	21.55
04-Mar-25	182	78	41	10.76	23.86

10-Mar-25	228	77	50	12.26	23.15
11-Mar-25	194	85	42	15.03	34.31
17-Mar-25	169	68	37	13.30	29.30
18-Mar-25	163	66	35	17.15	26.11
24-Mar-25	175	71	38	9.81	16.54
25-Mar-25	194	78	42	17.40	21.18
Basic Stats	SPM	PM10	PM2 5	SO2	NOx
Maximum	246	99	57	20.77	40.60
Minimum	154	64	27	8.15	9.79
Average	189.00	80.92	41.37	14.07	22.76
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna


Graph Showing PM10 for Lajkura OCP
Khokelmal PM10
Chuakani PM10
VIP Guest House IB Valley PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
190
170
150
130
110
90
70
50
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for Lajkura OCP
Khokelmal PM2.5
Chuakani PM2.5
VIP Guest House IB Valley PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOX Lajkura OCP
Khokelmal SO2
Chuakani SO2
VIP Guest House IB Valley SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

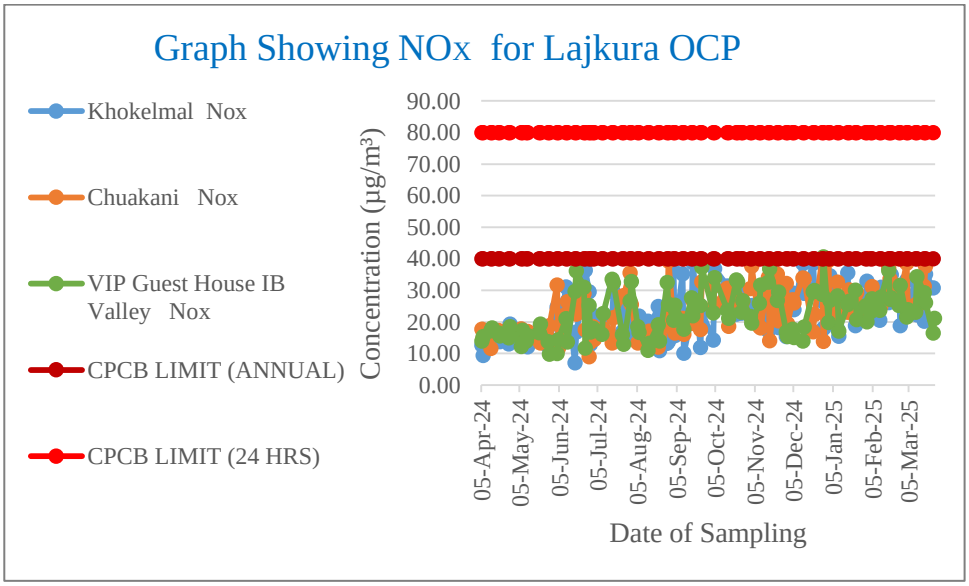

Graph Showing NOx for Lajkura OCP
Khokelmal Nox
Chuakani Nox
VIP Guest House IB Valley Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

Table: 8.5.12

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: BOCM Workshop

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
04-Apr-24	257	162	69	10.97	10.97
25-Apr-24	238	132	54	10.88	16.02
14-May-24	323	160	67	16.65	14.17
23-May-24	263	118	60	9.08	12.88
07-Jun-24	206	96	63	13.17	30.79
21-Jun-24	244	108	55	19.38	15.16
06-Jul-24	258	126	65	11.38	15.32
22-Jul-24	219	120	64	12.49	34.01
07-Aug-24	247	115	58	11.25	25.78
20-Aug-24	224	136	68	11.65	15.69
07-Sep-24	294	135	61	12.87	22.63
21-Sep-24	237	135	66	13.93	24.11
09-Oct-24	238	125	64	12.03	19.61
28-Oct-24	260	128	52	16.69	27.21
07-Nov-24	283	154	72	15.84	29.04
21-Nov-24	275	144	68	12.29	16.86
07-Dec-24	246	138	65	17.18	14.93
18-Dec-24	255	153	67	16.53	16.42
07-Jan-25	271	163	68	9.95	14.95
24-Jan-25	266	148	66	12.88	23.86
07-Feb-25	251	146	63	15.14	25.28
17-Feb-25	248	137	60	13.49	24.55
07-Mar-25	239	157	62	21.76	35.12
22-Mar-25	282	124	51	15.96	22.04
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	323	163	72	21.76	35.12
Minimum	206	96	51	9.08	10.97
Average	255.17	135.83	62.83	13.89	21.14
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.13

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Kirulbal Village

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
03-Apr-24	234	135	58	14.51	14.51
24-Apr-24	212	134	46	12.80	17.83
14-May-24	274	120	71	17.43	11.89
23-May-24	310	144	67	10.08	9.18
07-Jun-24	237	124	57	15.79	23.40
21-Jun-24	259	134	67	14.08	19.26
06-Jul-24	263	132	66	11.95	23.34
22-Jul-24	240	118	63	12.07	21.12
07-Aug-24	268	131	67	9.33	11.52
20-Aug-24	262	148	71	9.77	15.01
07-Sep-24	296	146	70	12.41	11.26
21-Sep-24	260	118	66	16.21	33.84
09-Oct-24	217	103	58	16.62	30.48
28-Oct-24	219	112	58	19.61	31.96
06-Nov-24	278	148	71	15.51	23.33
20-Nov-24	289	178	73	13.06	34.37
07-Dec-24	256	146	68	14.09	26.53
18-Dec-24	248	143	65	14.15	34.29
06-Jan-25	271	164	68	17.21	30.04
18-Jan-25	266	161	66	11.69	21.51
07-Feb-25	268	158	63	12.64	23.10
17-Feb-25	253	153	60	16.25	30.96
07-Mar-25	244	143	57	11.79	20.09
22-Mar-25	219	138	55	12.87	24.23
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	310	178	73	19.61	34.37
Minimum	212	103	46	9.33	9.18
Average	255.96	138.79	63.79	13.83	22.63
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.14

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Lilari Magazine House

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
03-Apr-24	248	153	64	10.86	10.86
24-Apr-24	236	146	52	13.25	14.29
14-May-24	317	140	58	16.21	19.15
23-May-24	336	180	68	11.41	12.62
07-Jun-24	219	107	68	15.95	16.55
21-Jun-24	227	96	52	9.35	10.40
06-Jul-24	245	118	60	9.55	17.44
22-Jul-24	250	126	66	12.55	11.71
07-Aug-24	289	138	67	14.28	18.67
20-Aug-24	247	118	57	10.92	15.04
07-Sep-24	284	123	55	17.31	33.52
21-Sep-24	263	126	61	12.20	23.72
09-Oct-24	228	116	61	13.80	17.24
28-Oct-24	220	131	67	15.48	25.23
06-Nov-24	285	162	74	12.14	12.04
20-Nov-24	217	120	58	25.03	25.35
07-Dec-24	235	135	62	17.73	14.99
18-Dec-24	209	101	61	12.62	21.22
06-Jan-25	258	148	65	14.87	18.54
18-Jan-25	253	145	63	17.47	40.78
07-Feb-25	246	135	60	12.10	24.20
17-Feb-25	248	138	62	11.32	35.55
07-Mar-25	243	145	59	11.32	35.55
22-Mar-25	211	83	48	12.10	24.20
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	336	180	74	25.03	40.78
Minimum	209	83	48	9.35	10.40
Average	250.58	130.42	61.17	13.74	20.79
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

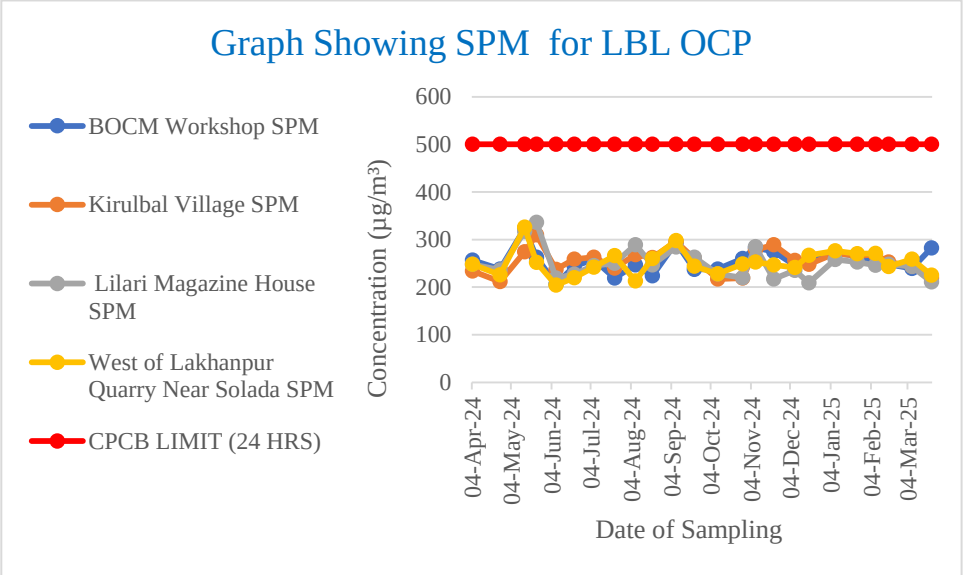
Table: 8.5.15

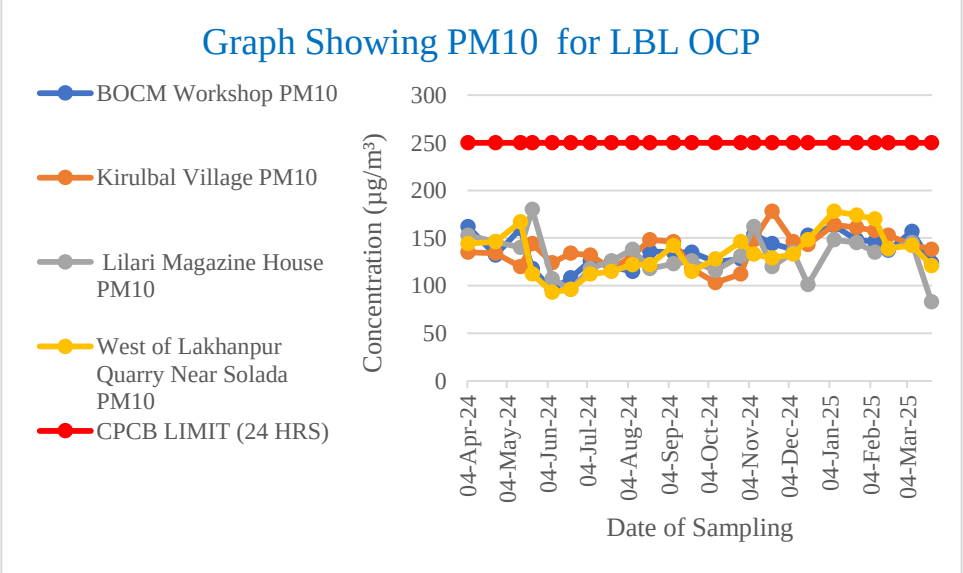
Area: Lakhanpur

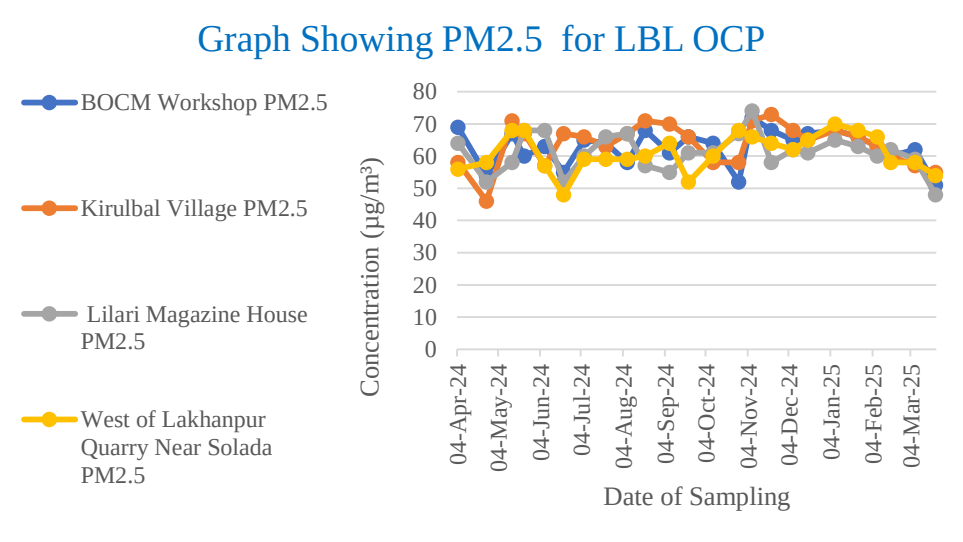
Project: LBL OCP

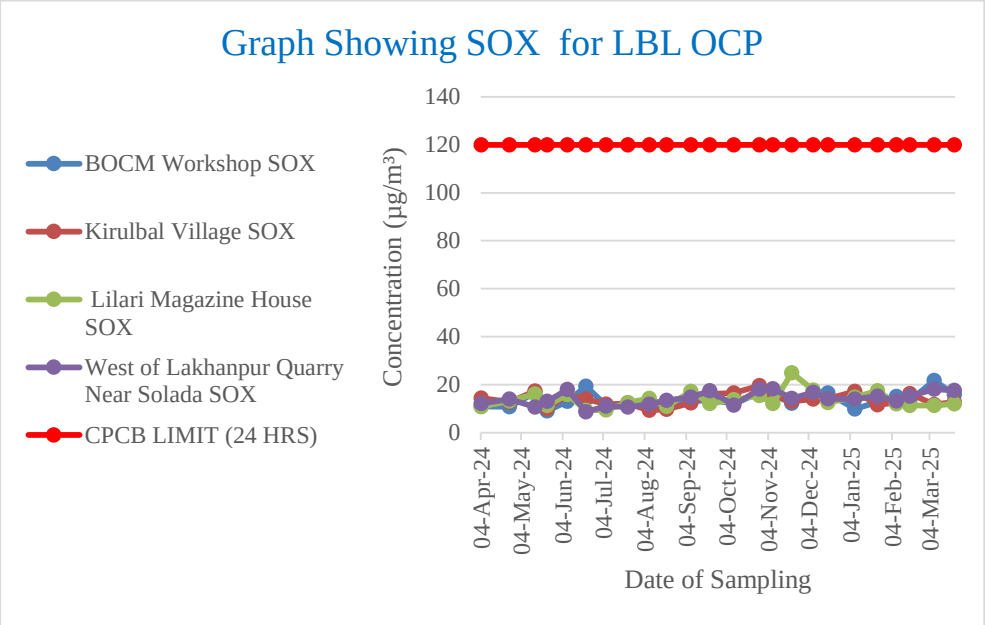
Monitoring Station: West of Lakhanpur Quarry Near Solada

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
04-Apr-24	248	144	56	12.23	12.23
25-Apr-24	226	146	58	14.04	18.19
14-May-24	326	167	68	10.71	11.02
23-May-24	252	112	68	13.09	8.31
07-Jun-24	204	93	57	18.06	23.15
21-Jun-24	220	96	48	8.67	14.36
06-Jul-24	242	112	59	11.15	21.14
22-Jul-24	266	115	59	10.65	37.26
07-Aug-24	213	122	59	11.86	16.92
20-Aug-24	260	122	60	13.53	16.37
07-Sep-24	298	142	64	14.78	23.20
21-Sep-24	244	115	52	17.52	11.29
09-Oct-24	228	128	60	11.45	24.60
28-Oct-24	249	146	68	18.24	29.74
07-Nov-24	253	133	66	18.35	23.98
20-Nov-24	247	129	64	14.36	19.26
07-Dec-24	241	133	62	16.87	12.35
18-Dec-24	267	148	65	14.17	26.75
07-Jan-25	276	178	70	14.06	35.54
24-Jan-25	270	174	68	15.18	23.48
07-Feb-25	271	170	66	13.26	28.96
17-Feb-25	243	139	58	15.19	36.51
07-Mar-25	259	142	58	18.15	33.89
22-Mar-25	225	121	54	17.62	23.11
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	326	178	70	18.35	37.26
Minimum	204	93	48	8.67	8.31
Average	251.17	134.46	61.13	14.30	22.15
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for LBL OCP
BOCM Workshop SPM
Kirulbal Village SPM
Lilari Magazine House SPM
West of Lakhanpur Quarry Near Solada SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
600
500
400
300
200
100
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling


Graph Showing PM10 for LBL OCP
BOCM Workshop PM10
Kirulbal Village PM10
Lilari Magazine House PM10
West of Lakhanpur Quarry Near Solada PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling


Graph Showing PM2.5 for LBL OCP
BOCM Workshop PM2.5
Kirulbal Village PM2.5
Lilari Magazine House PM2.5
West of Lakhanpur Quarry Near Solada PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling


Graph Showing SOX for LBL OCP
BOCM Workshop SOX
Kirulbal Village SOX
Lilari Magazine House SOX
West of Lakhanpur Quarry Near Solada SOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling

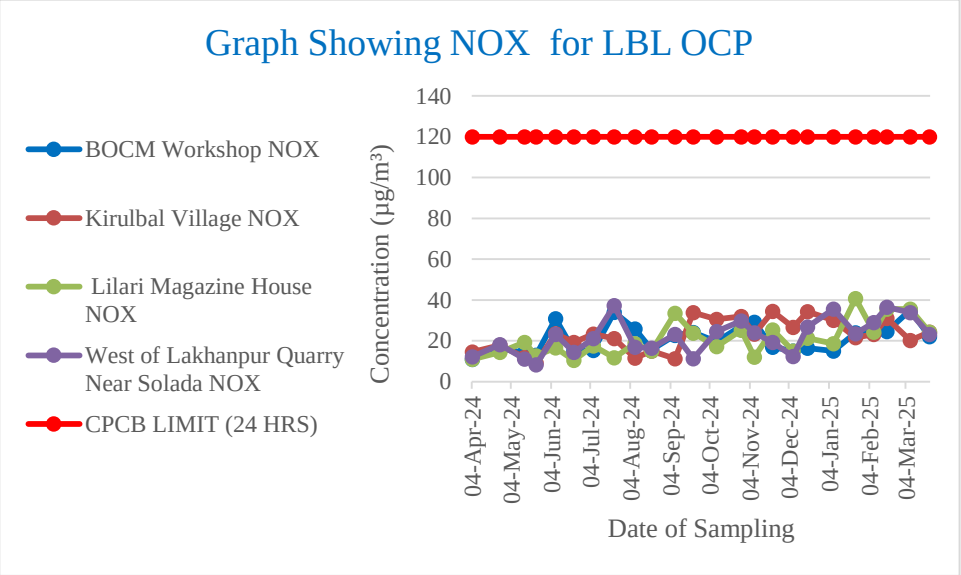

Graph Showing NOX for LBL OCP
BOCM Workshop NOX
Kirulbal Village NOX
Lilari Magazine House NOX
West of Lakhanpur Quarry Near Solada NOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
04-Apr-24
04-May-24
04-Jun-24
04-Jul-24
04-Aug-24
04-Sep-24
04-Oct-24
04-Nov-24
04-Dec-24
04-Jan-25
04-Feb-25
04-Mar-25
Date of Sampling

Table: 8.5.16

Area: Lakhanpur

Project: Lakhanpur OCP

Monitoring Station: Barihapali Village South West of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	202	83	39	13.86	13.86
02-Apr-24	192	76	34	17.49	17.49
08-Apr-24	174	84	32	17.79	17.79
09-Apr-24	184	88	37	14.20	14.20
16-Apr-24	168	72	30	11.47	14.47
17-Apr-24	188	82	37	16.71	18.72
22-Apr-24	204	86	40	12.99	13.17
23-Apr-24	178	84	35	14.93	17.30
29-Apr-24	164	81	26	14.67	17.17
30-Apr-24	245	92	37	15.45	16.56
06-May-24	170	85	37	10.57	14.33
07-May-24	166	83	55	14.80	19.67
10-May-24	193	86	52	12.24	22.48
11-May-24	172	72	44	14.45	16.63
20-May-24	165	74	52	12.98	12.61
21-May-24	186	71	44	16.13	10.27
27-May-24	182	86	37	11.00	15.43
28-May-24	196	92	48	15.60	16.22
03-Jun-24	206	89	50	19.38	25.02
04-Jun-24	169	71	37	20.78	16.66
10-Jun-24	167	73	35	11.91	25.21
11-Jun-24	188	76	43	12.69	10.97
17-Jun-24	235	86	54	12.37	37.43
18-Jun-24	218	78	44	13.11	33.57
24-Jun-24	225	91	50	8.57	15.09
25-Jun-24	210	83	40	8.44	15.65
01-Jul-24	214	88	44	12.07	21.97
02-Jul-24	168	74	37	14.63	15.82
08-Jul-24	179	78	41	11.06	27.43
09-Jul-24	191	85	43	12.91	19.36
16-Jul-24	203	93	49	13.00	28.62
17-Jul-24	164	70	32	11.44	24.48
24-Jul-24	206	91	40	13.97	26.08
25-Jul-24	160	76	37	10.90	33.76
30-Jul-24	196	83	38	15.33	23.25
31-Jul-24	176	79	33	9.14	33.45
05-Aug-24	202	86	44	14.86	18.83
06-Aug-24	180	89	47	15.37	15.67
13-Aug-24	196	92	51	11.98	16.92
14-Aug-24	179	93	49	11.46	15.20
21-Aug-24	195	96	52	12.85	14.84
22-Aug-24	207	91	49	11.94	17.81
28-Aug-24	181	88	45	15.32	22.10
29-Aug-24	185	73	35	16.81	26.26
02-Sep-24	200	83	41	14.16	12.97

03-Sep-24	214	78	46	14.19	30.41
09-Sep-24	215	85	50	16.34	22.23
10-Sep-24	180	76	39	17.16	31.52
16-Sep-24	185	85	44	14.39	33.44
17-Sep-24	198	82	42	16.98	25.94
23-Sep-24	190	85	46	17.01	33.62
24-Sep-24	216	92	45	16.85	27.45
03-Oct-24	194	89	51	16.00	24.39
04-Oct-24	186	78	42	10.78	33.60
14-Oct-24	180	93	43	15.60	31.36
15-Oct-24	214	91	53	15.83	37.95
21-Oct-24	175	73	36	16.94	27.60
22-Oct-24	188	86	45	14.52	23.67
25-Oct-24	182	78	39	16.32	26.60
26-Oct-24	176	75	37	20.27	33.03
01-Nov-24	199	83	44	14.14	30.68
02-Nov-24	165	72	35	11.63	29.60
08-Nov-24	161	68	30	11.33	34.77
09-Nov-24	167	75	36	14.77	22.92
15-Nov-24	192	79	40	17.45	28.12
16-Nov-24	183	75	38	12.56	17.24
22-Nov-24	184	76	38	13.93	27.35
23-Nov-24	192	78	41	11.38	24.93
29-Nov-24	187	83	40	12.87	33.80
30-Nov-24	202	84	45	16.68	31.49
04-Dec-24	198	81	44	15.30	28.76
05-Dec-24	211	86	49	16.86	36.24
12-Dec-24	203	83	45	14.20	17.82
13-Dec-24	218	90	51	21.59	24.44
20-Dec-24	195	75	46	17.71	20.60
21-Dec-24	212	84	53	21.52	26.97
27-Dec-24	206	83	52	16.29	28.32
28-Dec-24	229	92	58	13.83	22.26
01-Jan-25	194	77	43	14.67	31.91
02-Jan-25	218	91	50	13.88	22.85
08-Jan-25	204	82	47	9.90	29.77
09-Jan-25	210	87	49	16.30	33.76
16-Jan-25	217	92	49	12.88	26.51
17-Jan-25	207	85	48	12.60	26.97
22-Jan-25	227	93	51	17.87	24.65
23-Jan-25	205	83	47	17.80	20.09
30-Jan-25	193	81	45	12.20	24.27
31-Jan-25	205	77	43	14.49	31.81
03-Feb-25	214	88	47	15.80	24.97
04-Feb-25	204	84	46	15.97	32.69
10-Feb-25	195	75	43	13.26	31.46
11-Feb-25	210	82	45	16.17	26.77
18-Feb-25	198	80	44	16.12	25.97
19-Feb-25	186	76	43	11.09	34.57
25-Feb-25	179	74	41	19.05	39.60
26-Feb-25	193	77	42	16.65	35.78
03-Mar-25	203	88	46	10.75	20.34
04-Mar-25	188	83	41	20.26	26.91
10-Mar-25	173	74	39	12.80	22.69

11-Mar-25	186	77	40	12.66	20.04
17-Mar-25	206	83	45	11.86	19.99
18-Mar-25	187	75	41	12.77	34.99
24-Mar-25	177	72	38	14.37	36.75
25-Mar-25	186	78	44	13.19	31.09
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	245	96	58	21.59	39.6
Minimum	160	68	26	8.44	10.27
Average	193.18	82.11	43.04	14.45	24.51
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna

Table: 8.5.17

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Bartap Village North West of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	170	81	34	18.11	18.11
02-Apr-24	163	73	32	14.35	14.35
08-Apr-24	172	79	37	17.46	17.46
09-Apr-24	168	74	29	13.53	13.53
16-Apr-24	192	79	39	12.53	17.92
17-Apr-24	178	90	34	12.26	14.55
22-Apr-24	172	87	33	15.96	18.30
23-Apr-24	178	82	35	13.21	14.45
29-Apr-24	186	81	36	14.36	15.69
30-Apr-24	177	88	38	14.68	17.16
06-May-24	200	93	37	11.96	17.02
07-May-24	182	93	48	12.47	13.31
10-May-24	187	85	41	15.72	11.15
11-May-24	167	88	43	18.18	18.66
20-May-24	162	74	41	12.46	17.05
21-May-24	172	88	43	10.45	14.82
27-May-24	192	69	48	11.05	10.08
28-May-24	195	87	40	15.33	13.76
03-Jun-24	201	88	51	18.64	25.95
04-Jun-24	198	72	30	19.50	28.13
10-Jun-24	220	79	49	12.30	13.90
11-Jun-24	188	94	38	12.74	14.78
17-Jun-24	156	68	31	14.81	25.34
18-Jun-24	162	73	33	13.69	27.60
24-Jun-24	221	93	44	11.92	23.57
25-Jun-24	176	84	37	12.23	20.40
01-Jul-24	216	92	47	11.05	23.36
02-Jul-24	212	90	45	10.83	29.28
08-Jul-24	196	81	42	17.51	30.65
09-Jul-24	182	77	41	13.31	17.67
16-Jul-24	173	68	30	13.13	16.18
17-Jul-24	176	75	36	14.21	27.35
24-Jul-24	188	82	39	11.31	19.06
25-Jul-24	193	88	47	11.24	10.65
30-Jul-24	194	91	42	13.15	19.95
31-Jul-24	174	72	34	12.15	38.27
05-Aug-24	188	85	41	15.21	13.66
06-Aug-24	187	82	38	17.12	17.92
13-Aug-24	180	86	41	15.26	12.00
14-Aug-24	149	78	37	11.79	15.06
21-Aug-24	174	78	37	14.47	25.55
22-Aug-24	223	85	43	14.79	30.38
28-Aug-24	186	74	36	14.08	15.61
29-Aug-24	215	93	51	18.25	18.49
02-Sep-24	202	84	42	16.62	40.88

03-Sep-24	214	74	37	14.99	29.90
09-Sep-24	191	88	46	13.30	15.21
10-Sep-24	170	70	34	12.65	15.32
16-Sep-24	196	88	50	15.07	32.44
17-Sep-24	186	81	45	13.33	18.19
23-Sep-24	189	77	35	12.21	17.45
24-Sep-24	203	70	37	18.50	24.13
03-Oct-24	171	68	32	10.23	15.63
04-Oct-24	178	75	36	14.78	19.78
14-Oct-24	192	82	40	12.49	20.12
15-Oct-24	196	85	42	11.55	17.63
21-Oct-24	187	78	40	15.60	25.42
22-Oct-24	162	65	30	18.36	29.92
25-Oct-24	174	72	35	12.03	19.61
26-Oct-24	186	78	39	12.60	20.53
01-Nov-24	174	72	35	11.90	10.84
02-Nov-24	200	93	51	12.14	31.60
08-Nov-24	200	88	45	10.28	33.15
09-Nov-24	195	84	42	15.18	34.08
15-Nov-24	186	87	45	10.28	14.99
16-Nov-24	173	75	37	13.70	18.92
22-Nov-24	194	80	41	14.36	21.04
23-Nov-24	198	85	44	17.29	26.40
29-Nov-24	208	89	48	15.73	20.74
30-Nov-24	204	83	45	12.62	11.92
04-Dec-24	172	71	36	15.23	24.13
05-Dec-24	188	78	40	13.46	19.06
11-Dec-24	193	79	42	16.40	36.42
12-Dec-24	203	82	45	12.27	26.31
20-Dec-24	193	80	45	15.46	36.59
21-Dec-24	204	84	52	14.28	33.10
27-Dec-24	234	92	58	18.13	36.77
28-Dec-24	216	88	55	15.38	15.17
01-Jan-25	234	94	53	15.15	24.08
02-Jan-25	198	81	45	15.26	25.12
08-Jan-25	228	90	51	14.54	20.63
09-Jan-25	207	85	48	11.27	11.13
16-Jan-25	223	90	49	16.64	21.21
17-Jan-25	204	84	46	15.64	23.48
22-Jan-25	196	82	44	14.49	26.75
23-Jan-25	193	80	42	15.26	25.11
30-Jan-25	202	83	44	14.49	27.39
31-Jan-25	224	78	41	19.32	24.27
03-Feb-25	219	91	49	19.21	26.92
04-Feb-25	198	78	44	14.43	20.52
10-Feb-25	187	74	42	20.50	32.23
11-Feb-25	185	77	40	16.35	26.13
18-Feb-25	209	86	46	17.73	29.47
19-Feb-25	189	73	41	14.40	29.92
25-Feb-25	185	72	40	15.59	29.60
26-Feb-25	177	70	38	15.91	24.26
03-Mar-25	202	83	44	13.11	24.67
04-Mar-25	182	73	40	20.61	22.24
10-Mar-25	179	70	38	12.26	28.37

11-Mar-25	185	78	40	14.60	30.22
17-Mar-25	182	74	39	20.45	37.34
18-Mar-25	209	83	47	22.09	29.52
24-Mar-25	189	76	42	12.26	28.19
25-Mar-25	211	86	45	12.58	30.39
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	234	94	58	22.09	40.88
Minimum	149	65	29	10.23	10.08
Average	191.06	81.11	41.27	14.53	22.41
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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Table: 8.5.18

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Gumadera Village North of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	173	87	36	12.30	12.30
02-Apr-24	186	92	32	13.38	13.38
08-Apr-24	174	96	35	17.55	17.55
09-Apr-24	164	84	28	14.54	14.54
16-Apr-24	180	81	35	13.40	14.42
17-Apr-24	196	92	39	9.98	11.16
22-Apr-24	204	79	42	12.13	17.12
23-Apr-24	175	90	32	12.68	16.02
29-Apr-24	182	83	36	13.83	17.96
30-Apr-24	206	95	44	11.39	14.58
06-May-24	190	75	48	14.41	12.98
07-May-24	177	84	28	11.22	11.32
10-May-24	162	58	37	15.97	17.62
11-May-24	195	89	41	14.30	17.16
20-May-24	180	65	37	13.14	16.91
21-May-24	207	78	41	17.08	17.53
27-May-24	170	77	56	18.84	14.05
28-May-24	174	75	52	11.01	16.21
03-Jun-24	208	88	53	13.04	24.37
04-Jun-24	203	92	43	17.51	34.33
10-Jun-24	186	83	37	13.48	12.49
11-Jun-24	172	85	43	18.59	18.89
17-Jun-24	198	92	45	9.55	12.38
18-Jun-24	178	78	37	12.40	15.99
24-Jun-24	186	94	42	12.41	32.41
25-Jun-24	185	75	36	9.60	30.84
01-Jul-24	181	92	48	16.61	22.61
02-Jul-24	165	75	39	13.36	18.99
08-Jul-24	215	84	46	10.94	16.86
09-Jul-24	181	81	43	10.54	27.26
16-Jul-24	214	96	47	9.27	20.50
17-Jul-24	179	87	40	11.77	12.20
24-Jul-24	186	84	43	11.57	37.14
25-Jul-24	201	89	48	13.59	19.18
30-Jul-24	150	76	34	10.08	30.69
31-Jul-24	186	87	45	14.62	28.14
05-Aug-24	154	72	45	16.97	14.80
06-Aug-24	152	90	48	13.51	12.96
13-Aug-24	186	92	46	15.47	13.79
14-Aug-24	198	89	47	17.90	16.91
21-Aug-24	154	74	32	14.08	23.42
22-Aug-24	182	89	45	12.85	13.42
28-Aug-24	155	82	40	16.56	16.18
29-Aug-24	149	69	28	13.29	31.12
02-Sep-24	249	82	44	12.01	30.44

03-Sep-24	210	79	42	11.60	27.32
09-Sep-24	211	84	43	17.94	37.46
10-Sep-24	162	77	39	15.94	27.45
16-Sep-24	202	93	51	13.25	33.58
17-Sep-24	231	82	41	16.33	36.43
23-Sep-24	203	85	44	18.52	34.88
24-Sep-24	184	78	42	13.95	14.50
03-Oct-24	185	86	41	10.43	39.11
04-Oct-24	175	74	33	10.25	34.93
14-Oct-24	176	78	38	13.89	37.99
15-Oct-24	196	87	45	13.57	32.79
21-Oct-24	191	84	42	12.92	21.06
22-Oct-24	185	77	40	12.64	20.60
25-Oct-24	177	74	38	18.77	30.59
26-Oct-24	206	85	47	17.02	27.73
01-Nov-24	176	78	39	14.01	34.61
02-Nov-24	179	82	40	14.18	16.69
09-Nov-24	176	75	37	13.33	21.48
15-Nov-24	196	85	48	11.41	10.40
16-Nov-24	174	70	33	13.58	19.62
22-Nov-24	178	75	37	11.75	19.64
23-Nov-24	188	80	42	11.75	20.34
29-Nov-24	196	86	44	16.10	11.92
30-Nov-24	212	92	49	17.16	33.03
04-Dec-24	208	80	44	10.68	32.99
05-Dec-24	198	79	43	14.77	28.52
12-Dec-24	214	84	47	18.25	28.39
13-Dec-24	223	89	51	15.44	15.66
20-Dec-24	203	82	49	15.00	13.04
21-Dec-24	210	86	52	16.56	20.32
27-Dec-24	185	80	48	18.23	23.76
28-Dec-24	212	84	53	12.38	23.00
01-Jan-25	205	85	46	14.47	36.95
02-Jan-25	194	82	43	10.33	19.21
08-Jan-25	227	92	51	12.05	23.29
09-Jan-25	210	86	48	14.99	11.22
16-Jan-25	221	79	49	17.48	24.23
17-Jan-25	197	85	44	12.18	26.28
22-Jan-25	190	77	43	13.96	30.04
23-Jan-25	208	84	46	12.08	19.08
30-Jan-25	193	74	41	15.64	24.99
31-Jan-25	196	76	43	13.86	20.74
03-Feb-25	195	77	40	20.51	34.20
04-Feb-25	202	83	45	13.77	32.36
10-Feb-25	185	74	42	20.35	25.76
11-Feb-25	208	85	47	15.24	30.32
18-Feb-25	180	72	38	17.13	34.78
19-Feb-25	195	78	43	17.59	32.65
25-Feb-25	188	70	40	13.18	31.69
26-Feb-25	204	82	45	16.24	36.80
03-Mar-25	194	85	43	18.22	32.48
04-Mar-25	188	78	41	15.68	23.76
10-Mar-25	181	76	38	13.90	28.89
11-Mar-25	197	87	46	12.32	23.95

17-Mar-25	182	73	40	19.17	28.34
18-Mar-25	174	68	37	11.18	24.97
24-Mar-25	167	64	36	19.10	20.06
25-Mar-25	166	62	35	13.66	20.78
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	249	96	56	20.51	39.11
Minimum	149	58	28	9.27	10.4
Average	189.49	81.56	42.09	14.22	23.19
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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Table: 8.5.19

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Kadam Rehab Centre East of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	180	84	38	15.32	15.32
02-Apr-24	212	92	45	14.11	14.11
08-Apr-24	172	78	36	16.71	16.71
09-Apr-24	195	86	44	11.38	11.38
16-Apr-24	194	84	43	17.21	17.32
17-Apr-24	204	92	48	12.24	13.37
22-Apr-24	187	78	37	11.36	15.36
23-Apr-24	178	82	41	18.20	16.53
29-Apr-24	165	77	35	12.15	13.87
30-Apr-24	198	89	47	13.64	16.63
06-May-24	216	71	50	13.36	11.32
07-May-24	152	93	40	18.93	16.14
10-May-24	201	91	58	11.16	17.04
11-May-24	205	78	55	16.72	14.17
20-May-24	210	95	58	10.59	15.68
21-May-24	190	92	55	19.11	13.42
27-May-24	179	76	48	13.20	15.93
28-May-24	199	81	37	8.36	18.15
03-Jun-24	154	78	27	12.41	21.90
04-Jun-24	198	80	46	13.69	11.07
10-Jun-24	191	90	38	16.87	12.50
11-Jun-24	182	85	33	15.90	26.71
17-Jun-24	187	75	42	12.53	17.73
18-Jun-24	225	86	53	14.54	21.56
24-Jun-24	187	72	43	12.02	14.58
25-Jun-24	178	84	38	8.75	10.76
01-Jul-24	188	92	48	10.18	28.85
02-Jul-24	162	78	39	12.85	21.68
08-Jul-24	176	88	46	17.86	21.43
09-Jul-24	169	86	42	11.19	18.78
16-Jul-24	169	72	34	9.16	24.05
17-Jul-24	168	80	39	10.19	32.44
24-Jul-24	146	76	35	12.47	26.91
25-Jul-24	195	89	40	14.47	23.52
30-Jul-24	167	78	37	15.37	26.08
31-Jul-24	186	71	35	13.66	19.64
05-Aug-24	163	89	42	17.86	11.04
06-Aug-24	193	82	35	17.47	18.79
13-Aug-24	186	86	46	11.85	18.78
14-Aug-24	168	71	37	20.58	15.85
21-Aug-24	186	88	45	12.57	26.38
22-Aug-24	192	80	39	12.00	18.68
28-Aug-24	143	65	27	12.90	17.74
29-Aug-24	183	86	40	12.71	17.63
02-Sep-24	199	80	43	14.39	23.00

03-Sep-24	189	86	48	12.56	20.93
09-Sep-24	184	83	44	13.63	30.25
10-Sep-24	171	76	39	16.39	25.73
16-Sep-24	167	78	35	12.41	23.37
17-Sep-24	180	88	46	14.01	33.67
23-Sep-24	157	79	40	14.38	24.90
24-Sep-24	167	84	43	14.45	17.89
29-Sep-24	185	86	39	14.89	26.40
03-Oct-24	187	75	43	13.42	31.59
04-Oct-24	178	71	40	12.00	24.62
14-Oct-24	198	86	49	11.31	36.87
15-Oct-24	166	65	34	14.63	32.59
21-Oct-24	178	82	43	16.79	27.36
22-Oct-24	166	78	40	11.74	19.14
25-Oct-24	159	72	36	14.73	24.00
26-Oct-24	192	86	48	17.22	28.08
01-Nov-24	193	89	47	16.85	28.90
02-Nov-24	185	85	46	11.88	35.90
08-Nov-24	167	76	32	20.40	21.07
09-Nov-24	187	90	46	9.80	24.83
15-Nov-24	165	73	36	15.14	18.50
16-Nov-24	187	83	44	14.64	23.60
22-Nov-24	201	85	44	16.02	18.55
23-Nov-24	209	88	46	18.44	31.41
29-Nov-24	195	80	43	13.93	21.04
30-Nov-24	213	91	48	12.62	11.92
04-Dec-24	185	77	38	20.63	32.18
05-Dec-24	190	80	42	20.13	19.16
12-Dec-24	206	83	45	11.94	20.04
13-Dec-24	213	86	48	14.96	20.08
20-Dec-24	196	82	49	9.98	38.71
21-Dec-24	205	84	51	16.12	36.52
27-Dec-24	225	87	55	15.83	17.64
28-Dec-24	232	92	53	16.66	19.60
01-Jan-25	201	80	43	12.76	27.40
02-Jan-25	206	84	45	14.10	17.41
08-Jan-25	218	89	49	15.33	28.49
09-Jan-25	223	92	50	12.62	20.77
16-Jan-25	213	84	46	14.98	19.08
17-Jan-25	211	82	45	17.02	24.23
22-Jan-25	195	75	42	14.01	27.83
23-Jan-25	228	90	51	11.04	20.45
30-Jan-25	190	79	43	16.10	30.92
31-Jan-25	215	85	47	11.42	22.41
03-Feb-25	186	83	41	14.85	27.99
04-Feb-25	208	86	47	14.67	31.89
10-Feb-25	203	84	46	17.19	32.27
11-Feb-25	190	75	42	18.71	28.41
18-Feb-25	179	73	39	16.69	26.24
19-Feb-25	201	81	45	15.28	30.48
25-Feb-25	196	79	44	12.77	28.84
26-Feb-25	183	71	40	11.16	25.74
03-Mar-25	176	78	37	18.96	36.36
04-Mar-25	194	81	43	18.06	26.52

10-Mar-25	189	79	42	11.62	19.70
11-Mar-25	183	77	40	14.42	33.66
17-Mar-25	157	62	29	17.15	37.40
18-Mar-25	158	66	32	17.98	26.58
24-Mar-25	167	69	35	13.25	21.08
25-Mar-25	179	72	39	19.42	19.80
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	232	95	58	20.63	38.71
Minimum	143	62	27	8.36	10.76
Average	187.67	81.41	42.53	14.40	22.66
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
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Table: 8.5.20

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Lakhanpur Police Station West of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	187	88	40	10.50	10.50
02-Apr-24	182	81	34	13.48	13.48
08-Apr-24	178	92	35	15.27	15.27
09-Apr-24	169	75	31	12.46	12.46
16-Apr-24	185	78	40	12.82	15.15
17-Apr-24	191	82	38	11.39	12.69
22-Apr-24	170	92	31	10.11	12.68
23-Apr-24	194	78	39	11.98	12.37
29-Apr-24	174	86	32	17.43	17.94
30-Apr-24	163	76	28	13.92	14.45
06-May-24	182	73	48	14.89	16.91
07-May-24	187	76	37	12.47	18.14
10-May-24	179	90	46	13.58	13.19
11-May-24	190	87	38	13.36	10.04
20-May-24	153	77	46	11.01	12.87
21-May-24	191	88	38	14.53	11.81
27-May-24	177	75	48	17.35	15.69
28-May-24	186	88	28	15.66	15.68
03-Jun-24	155	78	52	16.66	17.96
04-Jun-24	184	91	42	21.31	26.85
10-Jun-24	144	69	43	20.49	26.23
11-Jun-24	157	85	37	13.23	29.05
17-Jun-24	194	92	48	10.19	27.95
18-Jun-24	181	78	45	9.08	31.13
24-Jun-24	169	73	37	14.19	36.18
25-Jun-24	214	88	51	11.55	25.32
01-Jul-24	192	84	44	15.44	18.99
02-Jul-24	182	72	40	11.77	16.78
08-Jul-24	194	78	43	11.96	29.50
09-Jul-24	161	68	34	19.31	18.59
16-Jul-24	210	95	41	10.99	10.42
17-Jul-24	201	92	48	8.48	31.16
24-Jul-24	211	86	41	11.36	37.94
25-Jul-24	206	94	51	13.57	36.78
30-Jul-24	160	76	37	13.35	31.41
31-Jul-24	151	70	34	11.23	16.97
05-Aug-24	191	74	27	10.89	16.22
06-Aug-24	206	88	47	13.43	12.66
13-Aug-24	160	72	36	14.58	14.85
14-Aug-24	190	83	48	14.36	13.03
21-Aug-24	167	77	33	15.32	22.10
22-Aug-24	163	75	32	16.50	13.55
28-Aug-24	167	68	29	12.43	18.67
29-Aug-24	171	83	39	16.21	28.65
02-Sep-24	209	79	41	13.46	14.17

03-Sep-24	205	90	46	16.39	19.80
09-Sep-24	215	81	42	13.91	12.33
10-Sep-24	228	86	48	12.92	17.04
16-Sep-24	180	78	41	16.40	22.40
17-Sep-24	165	76	40	14.52	15.64
23-Sep-24	145	68	31	12.80	18.67
24-Sep-24	189	90	50	13.19	35.90
03-Oct-24	171	69	36	14.31	24.99
04-Oct-24	182	78	40	14.65	26.05
14-Oct-24	158	64	28	15.43	24.25
15-Oct-24	174	73	38	10.76	19.73
21-Oct-24	184	84	45	14.77	24.07
22-Oct-24	184	82	41	17.98	29.31
25-Oct-24	195	90	46	14.74	24.03
26-Oct-24	214	93	47	13.63	22.21
01-Nov-24	162	72	31	11.38	22.71
02-Nov-24	190	86	45	12.12	11.27
08-Nov-24	183	78	41	15.58	25.89
09-Nov-24	177	78	39	11.99	22.84
15-Nov-24	169	68	32	15.16	30.73
16-Nov-24	175	73	36	13.54	26.33
22-Nov-24	175	74	37	14.22	31.41
23-Nov-24	194	79	40	16.68	19.97
29-Nov-24	198	84	43	16.97	25.95
30-Nov-24	213	88	46	16.10	18.94
04-Dec-24	204	84	46	17.19	30.71
05-Dec-24	196	79	42	14.83	14.06
12-Dec-24	205	83	46	17.76	19.78
13-Dec-24	216	85	49	14.21	35.05
20-Dec-24	202	75	41	19.15	29.78
21-Dec-24	215	84	46	14.09	19.14
27-Dec-24	206	81	44	11.62	22.53
28-Dec-24	225	89	52	14.60	25.37
01-Jan-25	196	81	43	18.48	20.03
02-Jan-25	214	86	47	10.38	26.01
08-Jan-25	208	84	45	16.22	20.67
09-Jan-25	225	91	50	14.98	24.66
16-Jan-25	225	88	49	12.45	22.09
17-Jan-25	208	81	45	13.44	39.28
22-Jan-25	193	78	43	11.00	33.88
23-Jan-25	212	84	46	12.73	38.58
30-Jan-25	187	75	41	10.75	24.47
31-Jan-25	196	80	44	12.99	33.16
03-Feb-25	203	78	44	18.73	33.99
04-Feb-25	218	85	48	11.60	24.54
10-Feb-25	189	75	42	13.89	29.89
11-Feb-25	207	83	46	12.37	41.22
18-Feb-25	196	75	42	11.84	33.71
19-Feb-25	210	85	46	15.88	28.84
25-Feb-25	184	74	40	13.89	29.89
26-Feb-25	200	80	44	12.37	41.22
03-Mar-25	189	75	40	21.77	36.06
04-Mar-25	203	82	44	15.25	24.99
10-Mar-25	178	74	38	13.89	29.89

11-Mar-25	193	78	42	12.37	41.22
17-Mar-25	191	77	42	14.54	16.50
18-Mar-25	166	66	37	13.89	29.89
24-Mar-25	156	64	33	12.37	41.22
25-Mar-25	186	75	40	11.32	35.55
Basic Stats	SPM	PM10	PM2 5	SO2	NOx
Maximum	228	95	52	21.77	41.22
Minimum	144	64	27	8.48	10.04
Average	188.03	80.25	41.09	14.01	23.51
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.21

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Ramada Village South of Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
01-Apr-24	175	78	30	13.44	13.44
02-Apr-24	165	84	33	11.15	11.15
08-Apr-24	194	81	38	12.73	12.73
09-Apr-24	215	89	42	12.90	12.90
16-Apr-24	175	86	37	13.54	15.53
17-Apr-24	314	91	46	17.17	20.01
22-Apr-24	196	95	42	18.30	19.45
23-Apr-24	181	83	35	15.14	15.80
29-Apr-24	176	88	33	11.78	13.45
30-Apr-24	198	96	43	10.51	12.14
06-May-24	180	97	56	10.62	14.93
07-May-24	209	95	52	12.64	11.70
10-May-24	145	78	49	14.14	14.40
11-May-24	138	84	42	16.97	20.72
20-May-24	155	74	49	9.86	11.67
21-May-24	151	83	42	8.90	12.15
27-May-24	178	88	37	11.86	17.32
28-May-24	168	84	55	13.50	12.48
03-Jun-24	204	79	41	13.15	23.02
04-Jun-24	190	82	34	14.43	19.60
10-Jun-24	197	86	40	14.40	24.50
11-Jun-24	188	91	41	13.71	32.70
17-Jun-24	208	83	52	14.35	17.02
18-Jun-24	177	88	40	9.20	28.08
24-Jun-24	169	78	37	12.86	22.24
25-Jun-24	178	83	39	13.43	29.14
01-Jul-24	188	78	40	18.38	23.70
02-Jul-24	209	85	44	16.77	17.93
08-Jul-24	168	66	34	14.17	20.15
09-Jul-24	178	72	38	13.74	16.84
16-Jul-24	189	80	37	15.65	37.05
17-Jul-24	196	93	45	12.47	39.28
24-Jul-24	177	79	41	13.61	36.57
25-Jul-24	194	85	42	10.71	20.45
30-Jul-24	155	68	34	10.71	21.30
31-Jul-24	199	91	44	15.62	11.10
05-Aug-24	180	92	49	18.64	14.33
06-Aug-24	211	84	37	19.77	22.73
13-Aug-24	209	84	43	18.31	20.89
14-Aug-24	189	80	41	15.21	16.03
21-Aug-24	169	72	30	10.51	31.09
22-Aug-24	158	75	32	15.43	28.01
28-Aug-24	164	68	29	16.29	23.34
29-Aug-24	156	83	42	13.98	11.98
02-Sep-24	175	70	35	12.66	10.22

03-Sep-24	211	81	42	13.07	16.75
09-Sep-24	193	87	45	17.07	23.38
10-Sep-24	208	92	54	14.49	33.67
16-Sep-24	227	85	46	11.87	18.06
17-Sep-24	167	72	36	14.67	10.57
23-Sep-24	164	68	33	13.51	33.67
24-Sep-24	182	78	40	16.64	18.15
03-Oct-24	174	74	35	12.14	20.68
04-Oct-24	170	70	33	14.58	21.47
14-Oct-24	184	77	38	14.00	16.90
15-Oct-24	190	83	44	11.37	37.06
21-Oct-24	216	93	48	15.85	25.83
22-Oct-24	169	71	36	12.49	20.36
25-Oct-24	168	68	33	16.69	27.21
26-Oct-24	180	77	35	14.27	23.25
01-Nov-24	187	76	38	13.54	18.06
02-Nov-24	188	83	42	19.54	22.74
08-Nov-24	195	89	46	13.20	22.85
09-Nov-24	181	78	39	10.93	17.61
15-Nov-24	204	86	45	13.54	33.10
16-Nov-24	195	82	43	11.77	28.86
22-Nov-24	179	76	39	18.11	28.42
23-Nov-24	188	80	42	19.54	19.20
29-Nov-24	196	86	45	12.19	21.04
30-Nov-24	208	91	49	16.10	30.16
04-Dec-24	177	70	37	17.46	22.99
05-Dec-24	216	78	42	11.34	19.01
12-Dec-24	212	85	48	19.78	30.85
13-Dec-24	207	83	46	20.34	33.72
20-Dec-24	194	78	41	14.38	14.58
21-Dec-24	203	83	45	15.89	39.33
27-Dec-24	210	91	49	13.59	41.53
28-Dec-24	235	95	54	13.53	24.36
01-Jan-25	195	81	42	14.58	14.57
02-Jan-25	203	85	44	15.85	26.86
08-Jan-25	217	88	49	19.39	19.84
09-Jan-25	230	94	52	10.75	20.64
16-Jan-25	222	93	49	12.42	29.54
17-Jan-25	213	85	47	12.56	19.88
22-Jan-25	204	82	45	15.76	20.93
23-Jan-25	228	90	50	13.73	27.62
30-Jan-25	188	76	42	18.82	23.44
31-Jan-25	204	83	45	13.22	30.13
03-Feb-25	225	93	50	17.47	40.78
04-Feb-25	211	82	45	12.54	25.41
10-Feb-25	219	86	48	13.94	37.64
11-Feb-25	197	78	44	11.09	18.82
18-Feb-25	218	87	48	12.99	33.16
19-Feb-25	197	79	43	17.47	40.78
25-Feb-25	208	85	45	12.54	25.41
26-Feb-25	196	83	42	13.94	37.64
03-Mar-25	210	87	46	12.99	33.16
04-Mar-25	190	79	41	17.47	40.78
10-Mar-25	201	85	43	12.54	25.41

11-Mar-25	188	83	41	13.94	37.64
17-Mar-25	201	83	42	17.47	40.78
18-Mar-25	163	65	29	12.54	25.41
24-Mar-25	168	68	32	13.94	37.64
25-Mar-25	179	74	37	11.09	18.82
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	314	97	56	20.34	41.53
Minimum	138	65	29	8.9	10.22
Average	191.740	82.202	41.837	14.248	23.552
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
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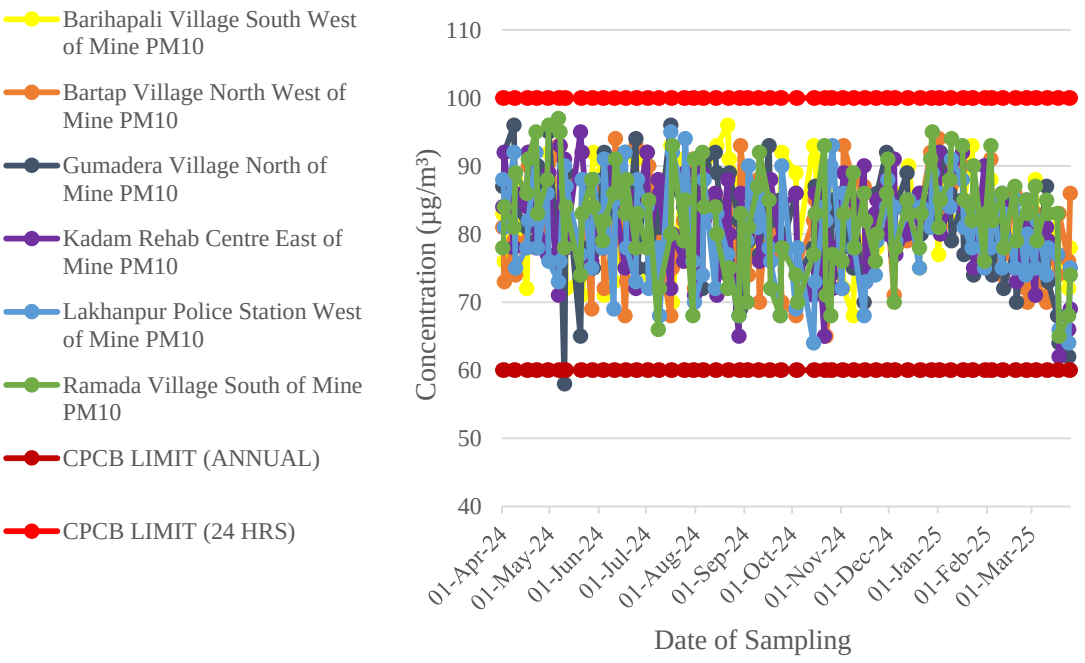
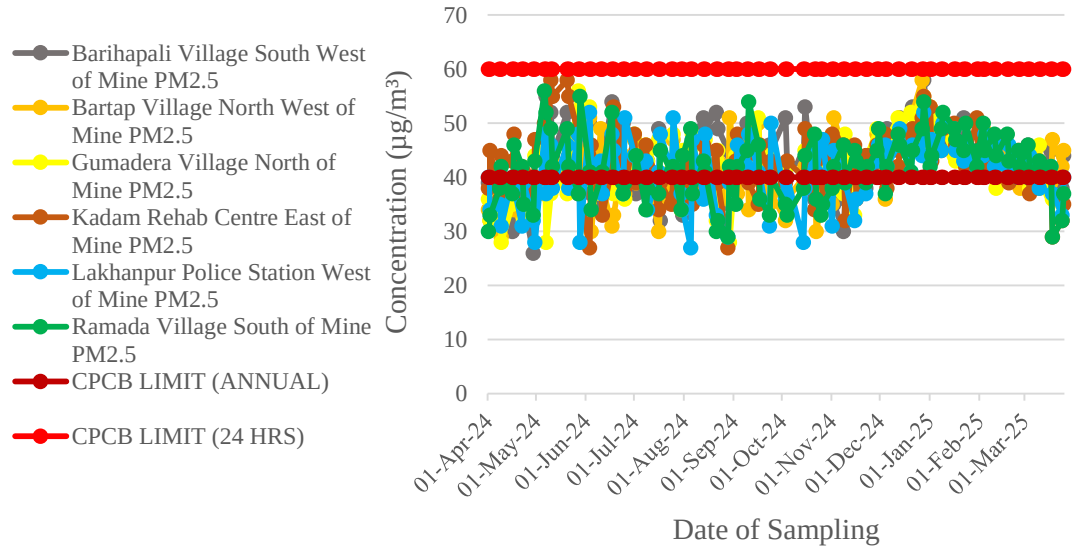
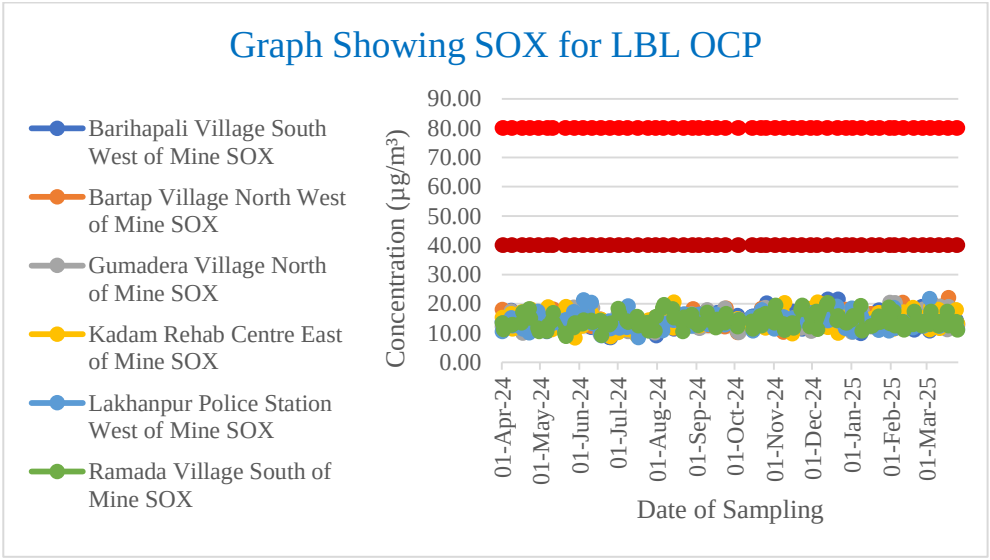
Graph Showing PM10 for LBL OCP



सीएमपीडीआई

Graph Showing PM2.5 for LBL OCP




Graph Showing SOX for LBL OCP
Barihapali Village South West of Mine SOX
Bartap Village North West of Mine SOX
Gumadera Village North of Mine SOX
Kadam Rehab Centre East of Mine SOX
Lakhanpur Police Station West of Mine SOX
Ramada Village South of Mine SOX
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling

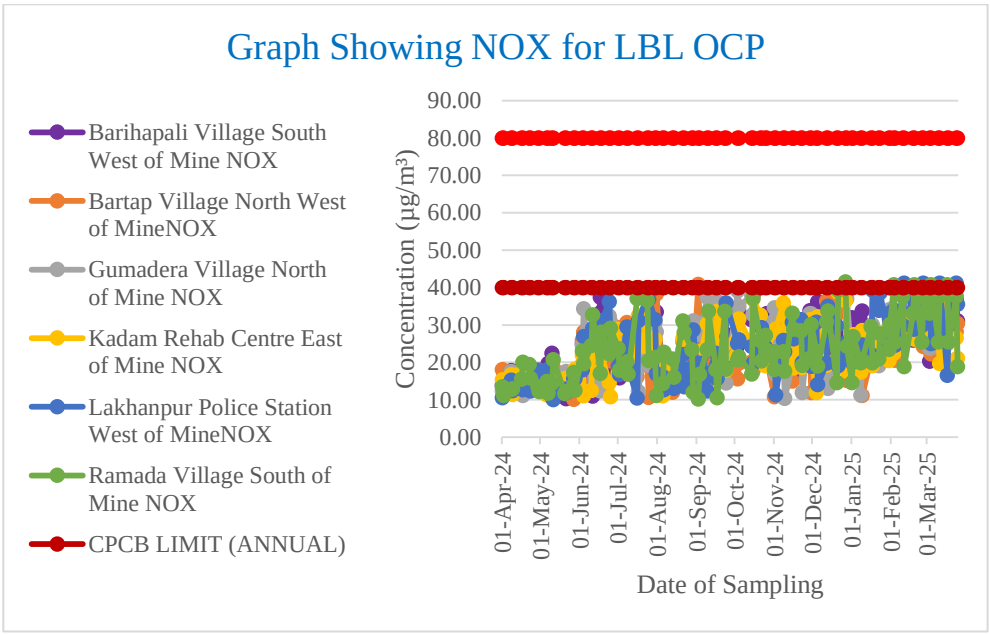

Graph Showing NOX for LBL OCP
Barihapali Village South West of Mine NOX
Bartap Village North West of MineNOX
Gumadera Village North of Mine NOX
Kadam Rehab Centre East of Mine NOX
Lakhanpur Police Station West of MineNOX
Ramada Village South of Mine NOX
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling

Table: 8.5.22

Area: Mahalaxmi

Project: Basundhara (w) OCP

Monitoring Station: Khamarpara, East Side of Sardega Railway Siding

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
06-Apr-24	253	148	64	14.61	15.48
20-Apr-24	228	138	52	13.56	17.16
13-May-24	309	145	73	12.41	15.09
22-May-24	348	169	62	15.73	18.98
08-Jun-24	236	107	69	18.47	29.15
22-Jun-24	246	110	58	8.30	29.67
12-Jul-24	266	128	67	11.43	21.83
23-Jul-24	237	127	65	12.54	16.82
08-Aug-24	271	143	63	13.98	10.57
26-Aug-24	235	126	64	13.15	21.14
13-Sep-24	275	135	61	16.40	10.90
25-Sep-24	224	125	63	13.98	13.52
05-Oct-24	237	118	64	14.69	31.13
19-Oct-24	208	85	52	15.85	21.32
13-Nov-24	223	112	57	11.75	11.84
21-Nov-24	241	138	64	15.47	38.13
14-Dec-24	286	168	72	18.72	38.11
19-Dec-24	263	159	68	14.49	30.53
13-Jan-25	279	174	70	12.22	36.36
25-Jan-25	273	171	68	12.37	41.23
08-Feb-25	269	168	65	14.78	32.14
22-Feb-25	256	155	62	16.20	31.65
08-Mar-25	247	150	59	17.17	24.39
28-Mar-25	228	136	57	19.07	23.22
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	348	174	73	19.07	41.23
Minimum	208	85	52	8.30	10.57
Average	255.75	138.96	63.29	14.47	24.18
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.23

Area: Mahalaxmi

Project: Basundhara (w) OCP

Monitoring Station: North of the Sardega Railway Siding, Kulapada

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
05-Apr-24	265	155	62	10.41	10.41
20-Apr-24	216	96	48	16.10	17.05
13-May-24	269	125	76	16.06	13.64
22-May-24	278	140	63	16.50	12.96
08-Jun-24	224	116	59	19.27	15.97
22-Jun-24	261	125	59	9.28	14.40
12-Jul-24	234	108	55	10.90	21.36
22-Jul-24	255	132	65	10.74	20.50
07-Aug-24	286	136	68	13.82	16.72
20-Aug-24	262	128	62	12.43	27.34
07-Sep-24	278	118	58	18.61	21.80
21-Sep-24	236	122	63	16.92	11.86
05-Oct-24	244	104	67	10.79	22.93
19-Oct-24	226	123	61	15.80	25.76
13-Nov-24	279	165	75	14.73	24.49
21-Nov-24	263	152	68	17.16	24.58
14-Dec-24	244	148	62	16.98	26.24
19-Dec-24	247	145	64	12.63	29.55
13-Jan-25	263	158	67	13.17	28.41
25-Jan-25	258	155	65	12.18	25.58
08-Feb-25	238	138	62	11.00	33.88
22-Feb-25	238	158	59	13.44	39.28
08-Mar-25	272	168	64	13.44	39.28
28-Mar-25	237	114	52	11.00	33.88
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	286	168	76	19.27	39.28
Minimum	216	96	48	9.28	10.41
Average	253.04	134.54	62.67	13.89	23.24
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.24

Area: Mahalaxmi

Project: Basundhara (w) OCP

Monitoring Station: South West of Working face Gopalpur Village, Near CMPDI Camp

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
05-Apr-24	244	134	56	11.05	11.05
20-Apr-24	234	144	55	17.02	18.68
13-May-24	331	167	63	14.78	16.94
22-May-24	311	160	67	17.91	16.01
08-Jun-24	177	92	51	11.29	19.64
22-Jun-24	206	92	48	11.21	29.27
12-Jul-24	256	124	63	11.91	14.43
23-Jul-24	268	136	67	12.37	20.75
08-Aug-24	293	138	65	15.71	11.88
26-Aug-24	221	115	59	10.55	15.04
13-Sep-24	274	154	70	16.53	16.39
25-Sep-24	209	110	56	14.31	12.33
05-Oct-24	214	107	56	17.78	38.94
19-Oct-24	241	130	63	16.43	26.78
13-Nov-24	243	136	66	12.07	31.42
21-Nov-24	264	158	69	18.44	21.23
14-Dec-24	227	121	59	16.53	38.83
19-Dec-24	267	135	62	15.69	17.36
13-Jan-25	261	163	66	11.05	18.19
25-Jan-25	256	160	64	14.98	31.01
08-Feb-25	237	144	61	14.34	20.38
22-Feb-25	246	154	58	15.55	25.88
08-Mar-25	241	138	56	18.71	28.60
28-Mar-25	228	125	53	15.80	31.49
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	331	167	70	18.71	38.94
Minimum	177	92	48	10.55	11.05
Average	247.9	134.88	60.54	14.67	22.19
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.25

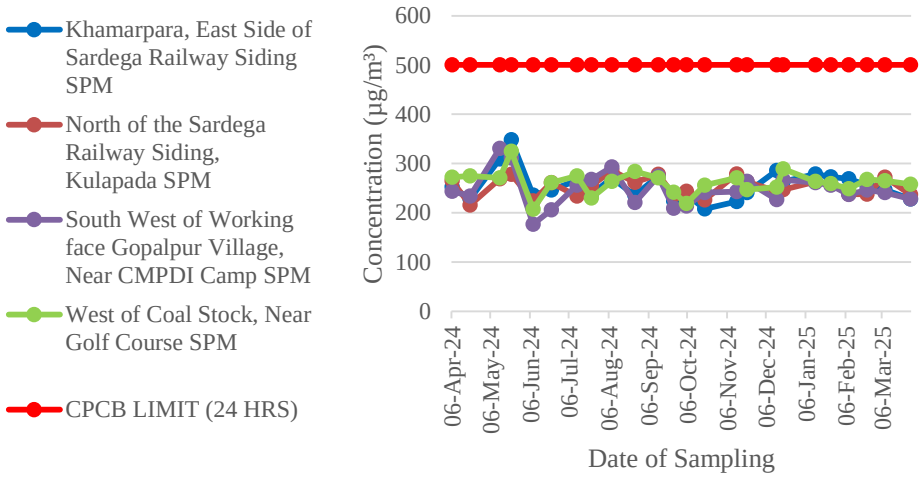
Area: Mahalaxmi

Project: Basundhara (w) OCP

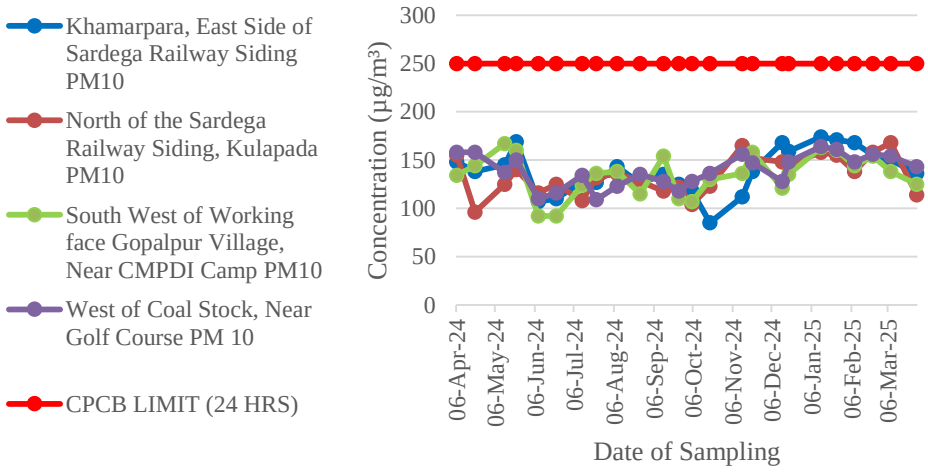
Monitoring Station: West of Coal Stock, Near Golf Course

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
05-Apr-24	272	158	65	13.40	13.40
20-Apr-24	275	158	65	17.55	19.87
13-May-24	271	137	72	11.30	11.23
22-May-24	325	150	70	12.01	17.54
08-Jun-24	207	110	56	9.26	15.79
22-Jun-24	261	116	57	12.07	8.20
12-Jul-24	275	134	68	15.43	18.91
22-Jul-24	230	109	56	13.33	26.55
07-Aug-24	264	123	67	13.39	10.88
20-Aug-24	284	135	64	10.90	30.01
07-Sep-24	271	128	62	18.98	10.22
21-Sep-24	242	118	61	16.66	13.68
05-Oct-24	219	128	58	18.74	21.21
19-Oct-24	256	136	68	20.98	34.19
13-Nov-24	271	156	71	11.94	30.62
21-Nov-24	247	147	66	13.93	31.56
14-Dec-24	252	128	63	13.30	36.34
19-Dec-24	289	148	65	15.41	43.76
07-Jan-25	264	164	67	13.82	15.69
25-Jan-25	259	161	65	11.76	26.28
08-Feb-25	249	148	63	12.45	23.51
22-Feb-25	268	156	60	12.81	34.67
08-Mar-25	265	154	62	18.00	21.66
28-Mar-25	258	143	60	13.10	21.45
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	325	164	72	20.98	43.76
Minimum	207	109	56	9.26	8.20
Average	261.4	139.38	63.79	14.19	22.38
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

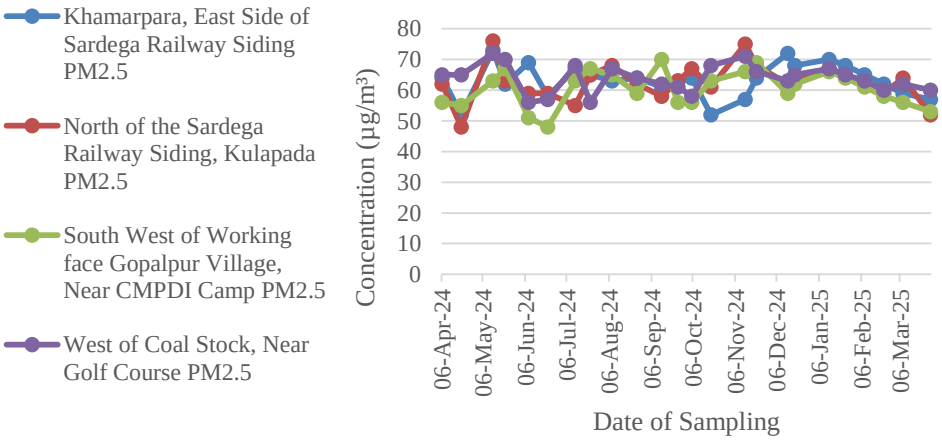
Graph Showing SPM for Bsundhara(w) OCP

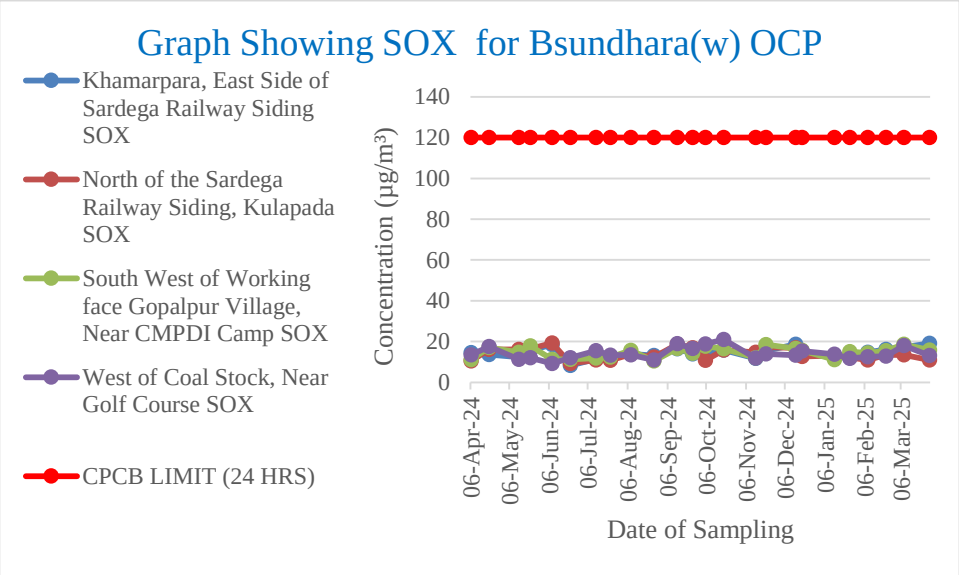


Graph Showing PM10 for Bsundhara(w) OCP



Graph Showing PM2.5 for Bsundhara(w) OCP




Graph Showing SOX for Bsundhara(w) OCP
Khamarpara, East Side of Sardega Railway Siding SOX
North of the Sardega Railway Siding, Kulapada SOX
South West of Working face Gopalpur Village, Near CMPDI Camp SOX
West of Coal Stock, Near Golf Course SOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
06-Apr-24
06-May-24
06-Jun-24
06-Jul-24
06-Aug-24
06-Sep-24
06-Oct-24
06-Nov-24
06-Dec-24
06-Jan-25
06-Feb-25
06-Mar-25
Date of Sampling

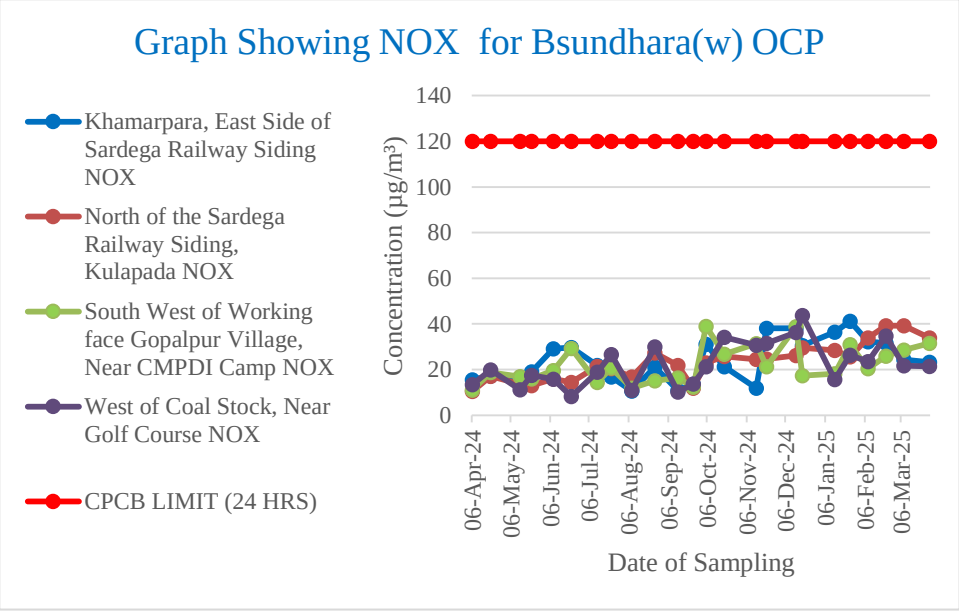

Graph Showing NOX for Bsundhara(w) OCP
Khamarpara, East Side of Sardega Railway Siding NOX
North of the Sardega Railway Siding, Kulapada NOX
South West of Working face Gopalpur Village, Near CMPDI Camp NOX
West of Coal Stock, Near Golf Course NOX
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
06-Apr-24
06-May-24
06-Jun-24
06-Jul-24
06-Aug-24
06-Sep-24
06-Oct-24
06-Nov-24
06-Dec-24
06-Jan-25
06-Feb-25
06-Mar-25
Date of Sampling

Table: 8.5.26

Area: Mahalaxmi

Project: Basundhara (w) OCP

Monitoring Station: Sarangijharia Village

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	193	88	41	14.47	14.47
04-Apr-24	164	75	29	17.80	17.80
10-Apr-24	176	84	37	14.71	14.71
11-Apr-24	172	79	38	15.24	15.24
18-Apr-24	205	93	46	10.18	14.11
19-Apr-24	192	89	41	13.58	16.77
24-Apr-24	192	82	38	13.73	16.68
25-Apr-24	177	87	35	12.45	15.85
02-May-24	162	87	50	15.68	15.69
03-May-24	153	93	39	11.18	12.81
08-May-24	146	77	38	15.62	18.95
09-May-24	183	87	58	7.48	9.79
16-May-24	219	92	46	12.26	13.56
17-May-24	195	81	40	15.63	16.52
24-May-24	172	76	35	10.52	14.12
25-May-24	186	84	42	13.25	18.56
05-Jun-24	186	87	52	19.24	31.98
06-Jun-24	212	96	42	13.91	9.90
12-Jun-24	120	74	38	20.40	29.38
13-Jun-24	151	93	46	14.07	29.19
19-Jun-24	186	86	42	8.72	15.96
20-Jun-24	178	83	39	12.08	23.41
26-Jun-24	204	86	47	11.78	55.65
27-Jun-24	184	89	44	10.87	8.44
03-Jul-24	217	84	42	11.19	17.95
04-Jul-24	165	78	40	12.46	17.45
10-Jul-24	195	86	43	13.76	18.92
11-Jul-24	186	92	45	10.96	18.42
18-Jul-24	178	82	40	14.38	17.54
19-Jul-24	167	78	36	10.96	32.23
26-Jul-24	158	66	32	8.72	33.45
27-Jul-24	206	92	46	14.54	32.23
01-Aug-24	166	82	37	9.71	11.29
02-Aug-24	173	81	43	11.39	16.48
09-Aug-24	164	88	47	15.24	13.98
10-Aug-24	211	92	50	12.95	20.98
16-Aug-24	156	78	36	11.39	27.09
17-Aug-24	191	87	43	14.01	21.90
23-Aug-24	141	90	45	15.68	31.30
24-Aug-24	190	80	42	14.14	37.07
30-Aug-24	155	84	30	12.81	28.02
31-Aug-24	184	76	38	10.55	15.04
04-Sep-24	232	92	47	15.68	18.05
05-Sep-24	246	95	49	15.34	27.04
11-Sep-24	243	88	46	20.59	17.45

12-Sep-24	232	85	44	20.62	23.49
19-Sep-24	195	89	52	14.60	10.31
20-Sep-24	171	86	45	15.48	15.64
27-Sep-24	187	92	47	20.32	26.10
28-Sep-24	167	81	32	21.06	21.00
07-Oct-24	168	74	32	17.63	37.19
08-Oct-24	186	83	46	13.32	19.46
16-Oct-24	172	72	36	15.67	34.90
17-Oct-24	166	68	33	15.18	15.96
23-Oct-24	194	83	41	18.26	29.76
24-Oct-24	205	86	44	14.06	22.91
29-Oct-24	213	92	48	19.30	31.45
30-Oct-24	174	70	36	18.66	30.41
04-Nov-24	192	88	45	16.83	25.37
05-Nov-24	173	76	37	11.60	14.95
11-Nov-24	183	79	38	10.31	20.99
12-Nov-24	172	73	36	10.77	18.94
18-Nov-24	186	78	40	15.67	29.46
19-Nov-24	195	81	43	19.49	23.77
25-Nov-24	210	86	48	16.68	21.51
26-Nov-24	204	84	46	20.02	23.04
02-Dec-24	180	74	38	15.02	29.28
03-Dec-24	188	77	42	12.42	26.57
09-Dec-24	197	79	43	14.06	36.66
10-Dec-24	207	82	46	14.55	27.40
16-Dec-24	184	83	53	11.13	34.98
17-Dec-24	187	82	48	11.97	34.92
23-Dec-24	197	54	50	16.51	41.11
24-Dec-24	187	79	46	14.52	31.74
30-Dec-24	208	85	51	10.91	16.26
31-Dec-24	192	87	54	10.83	21.84
03-Jan-25	206	86	45	19.91	35.36
04-Jan-25	235	93	52	15.13	31.12
10-Jan-25	211	87	48	14.43	33.82
11-Jan-25	243	96	54	13.55	18.71
20-Jan-25	201	85	46	10.54	25.30
21-Jan-25	207	87	48	13.44	23.51
28-Jan-25	194	78	43	12.30	18.80
29-Jan-25	189	73	41	14.98	24.65
05-Feb-25	216	89	48	20.87	30.02
06-Feb-25	210	85	46	15.97	28.15
12-Feb-25	197	69	38	18.60	28.23
13-Feb-25	195	91	41	13.74	29.41
20-Feb-25	217	84	48	18.67	31.17
21-Feb-25	208	80	44	16.13	40.37
27-Feb-25	186	71	37	18.25	27.10
28-Feb-25	193	73	39	10.40	26.79
05-Mar-25	209	84	46	13.56	19.10
06-Mar-25	219	92	49	12.66	33.57
12-Mar-25	188	71	40	16.03	22.59
13-Mar-25	182	73	39	19.96	21.54
19-Mar-25	165	66	28	12.67	35.53
20-Mar-25	188	77	40	11.41	24.56
26-Mar-25	206	89	45	18.19	24.08

27-Mar-25	176	73	36	16.43	30.00
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	246	96	58	21.06	55.65
Minimum	120	54	28	7.48	8.44
Average	189.45	82.59	42.61	14.47	23.84
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.27

Area: Mahalaxmi

Project: Basundhara (w) OCP

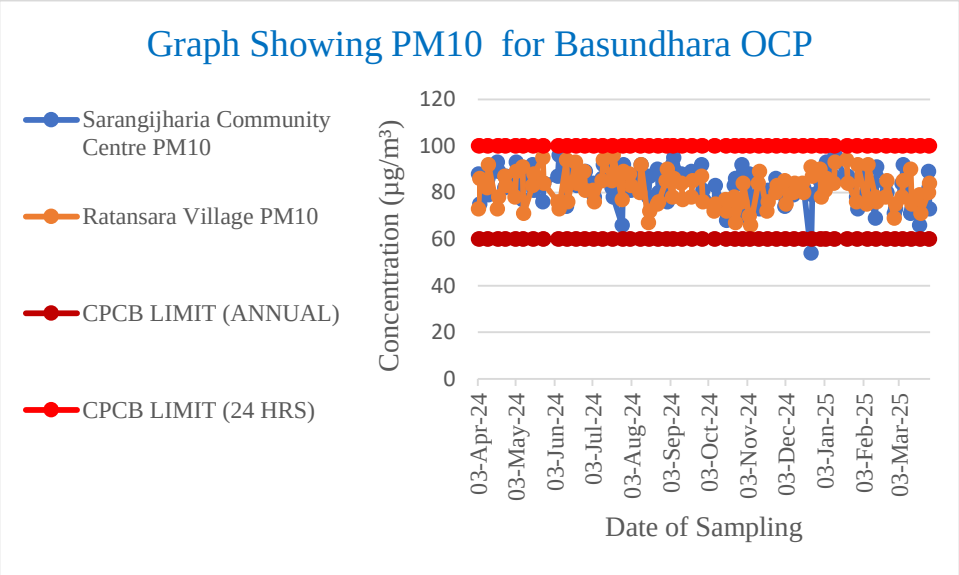
Monitoring Station: Ratansara Village

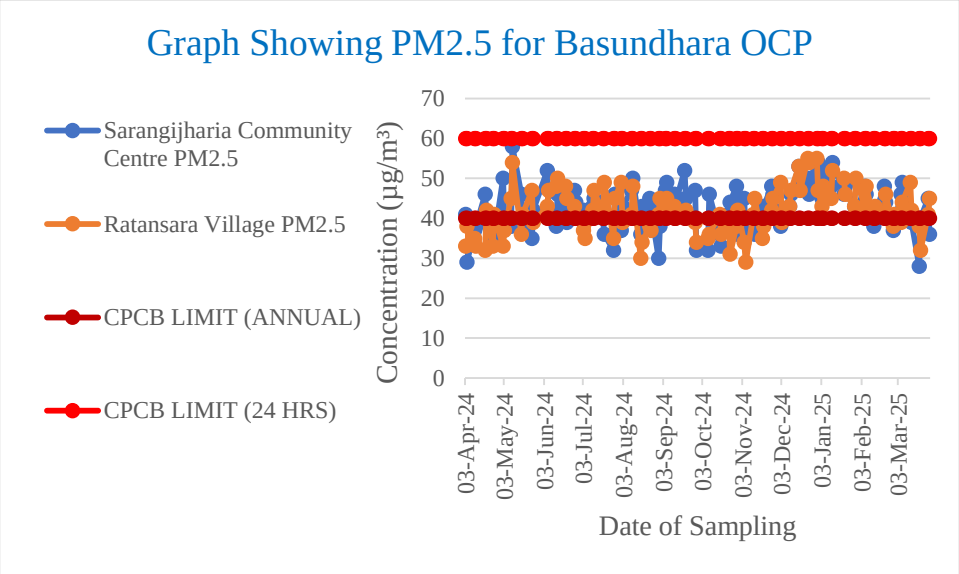
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	164	73	33	16.64	16.64
04-Apr-24	188	86	38	12.93	12.93
10-Apr-24	172	82	35	15.35	15.35
11-Apr-24	186	92	33	18.14	18.14
18-Apr-24	165	73	32	11.98	15.09
19-Apr-24	196	78	42	12.64	16.36
24-Apr-24	174	87	33	17.52	18.42
25-Apr-24	198	83	41	13.42	14.49
02-May-24	144	78	33	15.33	11.19
03-May-24	188	89	37	16.53	11.90
08-May-24	182	91	45	10.57	10.38
09-May-24	172	71	54	12.35	14.61
16-May-24	189	83	36	16.52	13.52
17-May-24	205	88	41	9.56	11.56
24-May-24	212	95	47	14.12	18.56
25-May-24	178	84	39	11.89	17.58
05-Jun-24	229	76	43	17.02	24.39
06-Jun-24	171	73	47	13.92	15.87
12-Jun-24	223	94	48	22.10	14.17
13-Jun-24	173	76	50	19.00	14.91
19-Jun-24	216	93	48	15.31	15.13
20-Jun-24	194	84	45	10.02	28.94
26-Jun-24	186	89	43	8.35	33.83
27-Jun-24	180	81	40	12.95	26.41
03-Jul-24	182	81	37	12.11	21.19
04-Jul-24	214	76	35	12.47	18.19
10-Jul-24	186	85	42	11.45	23.25
11-Jul-24	218	94	47	10.22	20.43
18-Jul-24	173	85	41	14.04	24.56
19-Jul-24	209	96	49	15.47	17.14
26-Jul-24	183	77	35	11.81	17.60
27-Jul-24	192	89	45	11.23	22.33
01-Aug-24	187	88	49	12.93	12.51
02-Aug-24	212	83	39	10.59	16.84
09-Aug-24	198	80	41	14.21	16.18
10-Aug-24	174	92	48	14.76	18.09
16-Aug-24	148	67	30	11.00	16.40
17-Aug-24	146	72	34	16.13	14.64
23-Aug-24	144	75	38	15.86	28.79
24-Aug-24	174	76	37	9.36	21.69
30-Aug-24	192	85	41	14.01	23.88
31-Aug-24	140	90	45	14.14	21.39
04-Sep-24	202	78	42	19.76	17.13
05-Sep-24	189	86	45	16.60	28.29
11-Sep-24	176	84	43	16.75	23.87

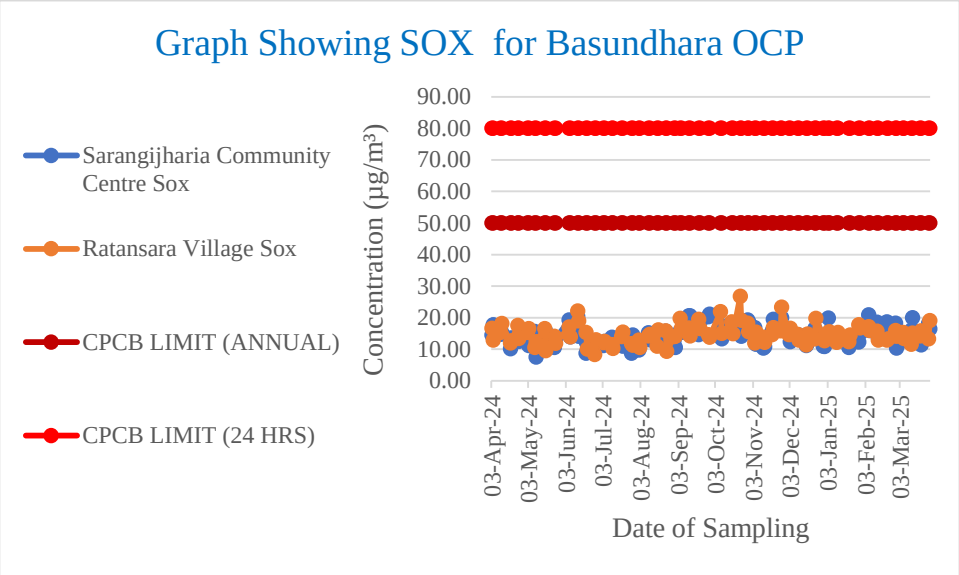
12-Sep-24	191	77	40	14.24	13.01
19-Sep-24	185	78	41	19.52	35.91
20-Sep-24	191	85	42	16.55	26.26
27-Sep-24	186	87	39	14.61	16.19
28-Sep-24	158	76	34	13.81	24.54
07-Oct-24	190	72	35	21.96	17.04
08-Oct-24	186	75	36	15.05	28.36
16-Oct-24	185	77	41	18.70	19.47
17-Oct-24	170	72	36	14.91	13.67
23-Oct-24	182	78	39	26.76	33.82
24-Oct-24	160	67	31	19.17	31.24
29-Oct-24	184	76	38	18.26	29.77
30-Oct-24	193	84	42	15.51	25.28
04-Nov-24	168	70	34	12.02	28.30
05-Nov-24	160	66	29	15.44	15.56
11-Nov-24	196	84	41	13.76	14.78
12-Nov-24	208	89	45	12.18	30.96
18-Nov-24	176	72	35	14.56	19.80
19-Nov-24	184	76	38	16.89	29.24
25-Nov-24	203	80	42	15.85	24.87
26-Nov-24	210	83	45	23.36	38.54
02-Dec-24	190	85	49	14.60	20.90
03-Dec-24	181	75	39	16.62	25.19
09-Dec-24	214	80	43	14.67	18.75
10-Dec-24	208	84	47	12.88	11.19
16-Dec-24	205	84	53	11.33	31.64
17-Dec-24	186	80	47	14.79	30.00
23-Dec-24	218	91	55	13.28	21.05
24-Dec-24	187	87	54	19.75	32.57
30-Dec-24	214	90	55	14.02	20.07
31-Dec-24	189	78	47	12.67	13.22
03-Jan-25	196	81	43	15.30	17.07
04-Jan-25	215	86	48	15.51	22.80
10-Jan-25	204	84	45	12.21	23.59
11-Jan-25	237	93	52	15.30	25.93
20-Jan-25	229	94	50	12.42	22.72
21-Jan-25	214	84	46	14.49	28.27
28-Jan-25	205	76	43	17.80	20.93
29-Jan-25	226	92	50	16.78	20.93
05-Feb-25	196	75	43	17.17	25.95
06-Feb-25	219	92	48	15.90	22.26
12-Feb-25	187	78	40	15.75	27.76
13-Feb-25	198	76	43	12.89	29.77
20-Feb-25	186	78	41	12.91	25.60
21-Feb-25	207	85	46	13.28	32.63
27-Feb-25	182	69	38	15.95	35.34
28-Feb-25	198	75	41	14.14	28.25
05-Mar-25	179	78	39	15.31	35.58
06-Mar-25	200	85	44	13.44	30.01
12-Mar-25	223	90	49	11.55	33.47
13-Mar-25	191	75	42	15.16	20.08
19-Mar-25	181	79	38	14.21	27.68
20-Mar-25	166	71	32	15.83	25.94
26-Mar-25	195	80	41	13.26	32.01

27-Mar-25	207	84	45	19.07	26.53
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	237	96	55	26.76	38.54
Minimum	140	66	29	8.35	10.38
Average	190.23	81.56	41.85	14.82	22.17
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna


Graph Showing PM10 for Basundhara OCP
Sarangijharia Community Centre PM10
Ratansara Village PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing PM2.5 for Basundhara OCP
Sarangijharia Community Centre PM2.5
Ratansara Village PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing SOX for Basundhara OCP
Sarangijharia Community Centre Sox
Ratansara Village Sox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

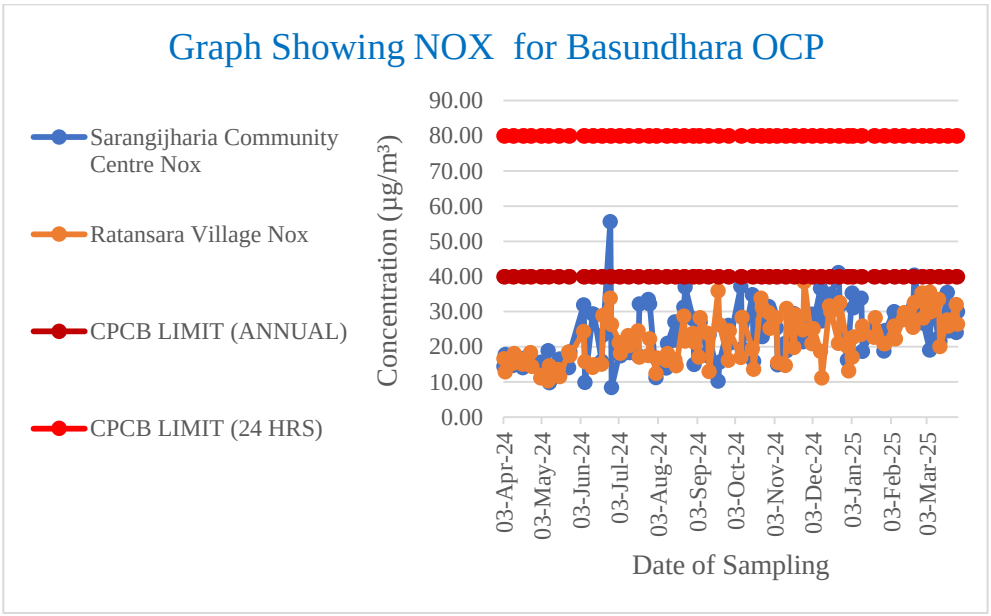

Graph Showing NOX for Basundhara OCP
Sarangijharia Community Centre Nox
Ratansara Village Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

Table: 8.5.28

Area: Basundhara

Project: Kulda OCP

Monitoring Station: External CT Road, Barpali

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
06-Apr-24	285	166	74	18.49	18.49
20-Apr-24	265	168	61	10.26	12.77
13-May-24	298	153	67	10.99	14.08
22-May-24	307	158	73	13.89	11.65
14-Jun-24	206	92	56	13.40	28.15
22-Jun-24	254	136	63	8.66	15.25
13-Jul-24	218	98	53	11.06	22.59
23-Jul-24	223	117	55	17.85	21.96
08-Aug-24	273	118	56	12.77	12.07
26-Aug-24	240	129	56	11.27	14.32
13-Sep-24	282	142	63	16.57	13.01
25-Sep-24	231	106	58	11.91	17.21
05-Oct-24	215	118	58	12.63	15.25
19-Oct-24	249	134	65	17.30	28.20
14-Nov-24	246	123	62	11.74	34.80
28-Nov-24	234	138	60	15.23	40.68
11-Dec-24	241	136	63	15.44	27.88
19-Dec-24	253	145	66	16.98	27.82
14-Jan-25	275	166	69	18.34	29.32
27-Jan-25	270	155	67	15.76	20.09
14-Feb-25	249	148	64	13.92	32.73
22-Feb-25	258	160	65	13.77	37.75
14-Mar-25	249	153	62	14.38	29.03
29-Mar-25	237	133	58	10.59	25.30
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	307	168	74	18.49	40.68
Minimum	206	92	53	8.66	11.65
Average	252.42	137.17	62.25	13.88	22.93
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.29

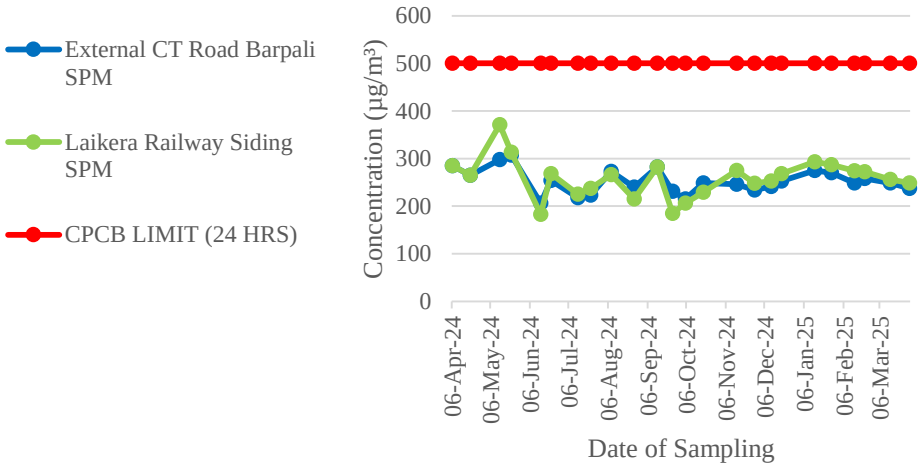
Area: Basundhara

Project: Kulda OCP

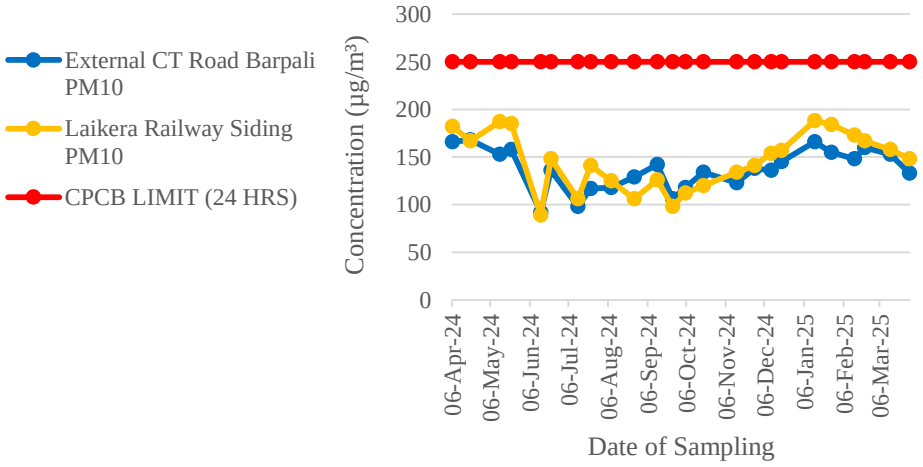
Monitoring Station: Laikera Railway Siding

Date of Sampling	SPM	PM10	PM2 5	SO2	NOx
06-Apr-24	285	182	78	19.35	20.32
20-Apr-24	265	167	69	10.29	13.25
13-May-24	371	187	62	11.39	12.05
22-May-24	313	185	66	17.41	12.88
14-Jun-24	183	89	66	13.48	26.65
22-Jun-24	268	148	72	12.45	22.47
13-Jul-24	225	106	55	11.68	18.97
23-Jul-24	237	141	68	12.21	22.91
08-Aug-24	266	125	62	13.69	12.91
26-Aug-24	215	106	60	13.56	14.35
13-Sep-24	282	126	60	14.27	17.61
25-Sep-24	185	98	51	10.99	38.34
05-Oct-24	206	112	53	17.22	22.96
19-Oct-24	229	120	61	15.61	25.45
14-Nov-24	275	134	69	11.67	29.34
28-Nov-24	248	141	65	21.45	22.28
11-Dec-24	253	154	68	18.45	24.54
19-Dec-24	268	157	70	10.59	32.93
14-Jan-25	293	188	75	13.08	38.91
27-Jan-25	287	184	73	12.99	38.69
14-Feb-25	274	173	68	20.09	33.60
22-Feb-25	272	167	65	19.07	32.75
14-Mar-25	256	158	62	16.43	23.68
29-Mar-25	249	148	60	16.66	24.34
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	371	188	78	21.45	38.91
Minimum	183	89	51	10.29	12.05
Average	258.54	145.67	64.92	14.75	24.26
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

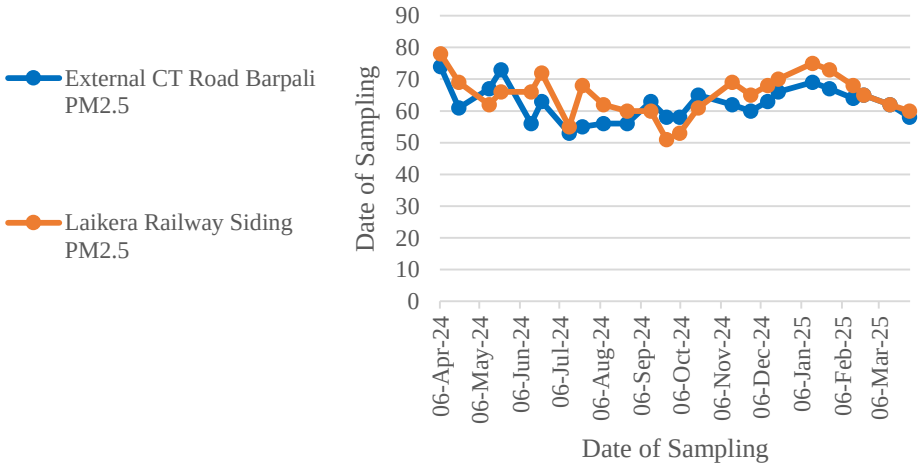
Graph Showing SPM for Kulda OCP

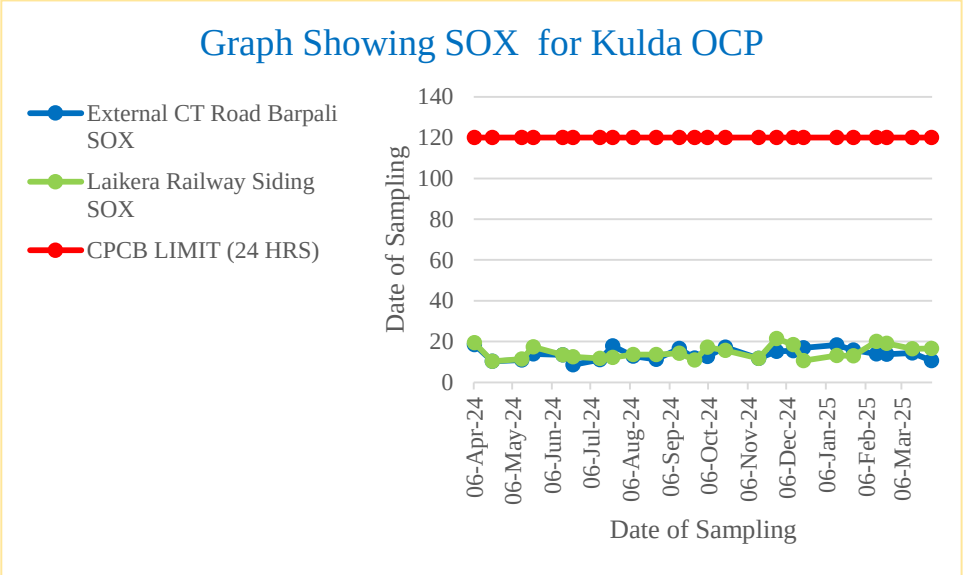


Graph Showing PM10 for Kulda OCP



Graph Showing PM2.5 for Kulda OCP




Graph Showing SOX for Kulda OCP
External CT Road Barpali SOX
Laikera Railway Siding SOX
CPCB LIMIT (24 HRS)
Date of Sampling
140
120
100
80
60
40
20
0
06-Apr-24
06-May-24
06-Jun-24
06-Jul-24
06-Aug-24
06-Sep-24
06-Oct-24
06-Nov-24
06-Dec-24
06-Jan-25
06-Feb-25
06-Mar-25
Date of Sampling

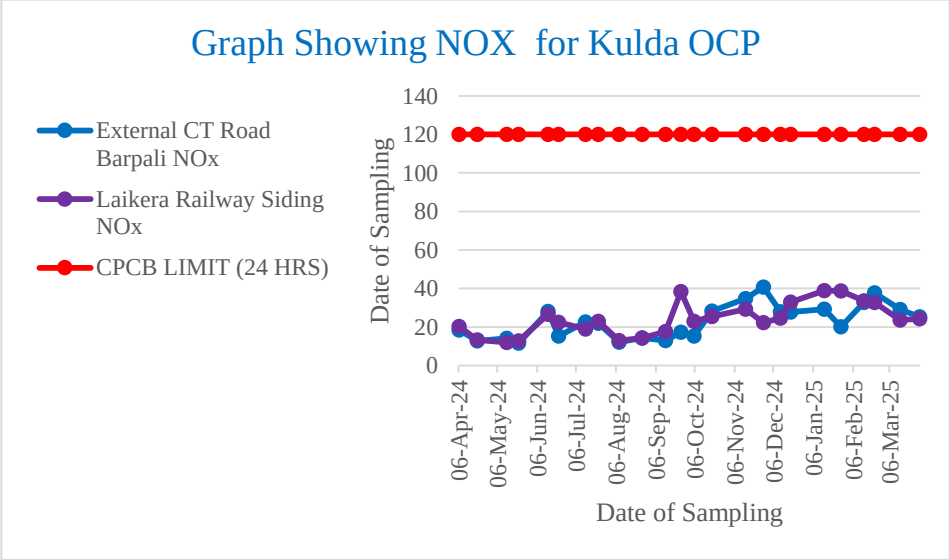

Graph Showing NOX for Kulda OCP
External CT Road Barpali NOx
Laikera Railway Siding NOx
CPCB LIMIT (24 HRS)
Date of Sampling
140
120
100
80
60
40
20
0
06-Apr-24
06-May-24
06-Jun-24
06-Jul-24
06-Aug-24
06-Sep-24
06-Oct-24
06-Nov-24
06-Dec-24
06-Jan-25
06-Feb-25
06-Mar-25
Date of Sampling

Table: 8.5.30

Area: Basundhara

Project: Kulda OCP

Monitoring Station: North of CHP, Teleimal

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	206	96	44	11.09	11.09
04-Apr-24	186	87	40	14.96	14.96
10-Apr-24	182	81	38	13.46	13.46
11-Apr-24	195	87	41	9.4	9.4
18-Apr-24	194	77	40	10.25	11.53
19-Apr-24	165	73	28	10.75	13.86
24-Apr-24	214	84	47	12.45	17.97
25-Apr-24	184	95	36	15.65	19.01
02-May-24	153	90	45	15.25	12.55
03-May-24	190	78	56	17.17	16.71
08-May-24	240	94	50	8.27	12.12
09-May-24	210	88	39	11.9	11.54
16-May-24	194	76	40	13.54	10.05
17-May-24	182	70	36	10.23	16.5
24-May-24	174	68	32	12.36	15.12
25-May-24	208	89	44	15.69	14.98
30-May-24	199	74	38	12.19	12.96
31-May-24	164	64	45	10.4	13.91
05-Jun-24	248	84	46	10.67	16.62
06-Jun-24	244	80	43	12.29	15.84
12-Jun-24	193	76	52	15.73	18.8
13-Jun-24	240	92	53	14.3	32.69
19-Jun-24	227	92	51	14.83	22.83
20-Jun-24	176	86	47	11.74	10.16
26-Jun-24	226	96	53	12.13	14.14
27-Jun-24	193	78	45	12.31	14.04
03-Jul-24	198	81	40	10.12	19.33
04-Jul-24	186	74	38	10.39	16
10-Jul-24	210	89	45	12.2	22.11
11-Jul-24	218	93	49	11.23	17.86
18-Jul-24	185	78	39	14.92	26.11
19-Jul-24	191	82	43	17.26	31.84
26-Jul-24	160	72	31	15.04	32.27
27-Jul-24	164	75	34	14.06	34.59
01-Aug-24	197	85	40	16.6	25.11
02-Aug-24	134	81	37	14.75	20.64
09-Aug-24	174	96	53	13.56	17.36
10-Aug-24	155	90	47	12.83	16.72
16-Aug-24	164	86	44	13.58	33.9
17-Aug-24	182	90	41	15.28	18.49
23-Aug-24	196	95	48	12	34.23
24-Aug-24	209	93	46	14.15	13.23
30-Aug-24	148	85	35	15.36	24
31-Aug-24	160	78	40	14.01	18.49
04-Sep-24	181	71	37	15.7	25.23

05-Sep-24	211	78	41	15.35	16.42
11-Sep-24	225	93	47	15.28	28.79
12-Sep-24	197	82	45	12.57	16.07
19-Sep-24	170	86	47	18.27	22.65
20-Sep-24	188	89	50	15.14	31.11
27-Sep-24	194	81	42	12.83	19.17
28-Sep-24	174	78	41	13.85	16.11
07-Oct-24	177	74	33	11.17	35.68
08-Oct-24	174	70	31	21.05	24.87
16-Oct-24	205	87	46	14.58	19.52
17-Oct-24	192	79	41	13.98	19.74
23-Oct-24	198	86	44	16.35	26.65
24-Oct-24	180	76	37	18.68	30.44
29-Oct-24	196	91	47	14.44	23.54
30-Oct-24	210	94	50	13.34	21.75
04-Nov-24	184	76	34	14.49	24.1
05-Nov-24	186	66	28	15.09	15.93
11-Nov-24	194	92	45	14.17	20.2
12-Nov-24	167	74	31	10.28	19.73
18-Nov-24	180	72	38	21.6	25.47
19-Nov-24	192	78	41	18.97	33.11
25-Nov-24	197	82	44	14.56	19.8
26-Nov-24	206	85	48	19.43	37.96
02-Dec-24	187	78	42	13.61	31.23
03-Dec-24	196	83	45	16.73	21.77
09-Dec-24	204	85	48	15.34	38.02
10-Dec-24	213	90	51	16.73	38.1
16-Dec-24	188	80	46	11.69	21.51
17-Dec-24	196	83	48	12.99	38.68
23-Dec-24	185	77	45	12.45	22.09
24-Dec-24	221	92	55	13.44	39.28
30-Dec-24	214	86	53	11	33.88
31-Dec-24	225	95	57	12.73	38.58
03-Jan-25	198	86	44	22.23	26.02
04-Jan-25	210	89	48	20.5	32.83
10-Jan-25	240	95	53	13.78	26.22
11-Jan-25	226	92	50	14.15	20.79
20-Jan-25	232	92	50	16.56	21.96
21-Jan-25	216	84	47	16.56	25.75
28-Jan-25	211	87	45	12.6	17.98
29-Jan-25	207	80	43	15.46	19.88
05-Feb-25	186	78	43	11.69	21.51
06-Feb-25	204	83	47	12.99	38.68
12-Feb-25	193	80	44	12.45	22.09
13-Feb-25	205	72	39	13.44	39.28
20-Feb-25	195	76	41	10.59	32.93
21-Feb-25	208	84	45	11.69	21.5
27-Feb-25	197	80	42	12.99	38.68
28-Feb-25	186	68	37	12.45	22.09
05-Mar-25	183	76	39	10.59	32.93
06-Mar-25	201	84	43	11.69	21.51
12-Mar-25	190	78	40	12.99	38.68
13-Mar-25	210	89	46	12.45	22.09
19-Mar-25	175	71	38	11.69	21.51

20-Mar-25	162	62	33	12.99	38.68
26-Mar-25	190	77	41	12.45	22.09
27-Mar-25	172	64	35	13.44	39.28
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	248	96	57	22.23	39.28
Minimum	134	62	28	8.27	9.4
Average	194.3	82.3	43.0	13.8	23.3
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna

Table: 8.5.31

Area: Basundhara

Project: Kulda OCP

Monitoring Station: South West of Working Face, Chakarpur

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	184	85	36	0.19	0.19
04-Apr-24	158	68	26	18.35	18.35
10-Apr-24	166	72	28	13.88	13.88
11-Apr-24	175	84	32	10.58	10.58
18-Apr-24	168	86	30	11.62	14.12
19-Apr-24	210	88	45	12.13	15.25
24-Apr-24	173	92	31	12.42	13.54
25-Apr-24	184	76	38	14.14	16.01
02-May-24	195	92	34	14.84	17.31
03-May-24	196	97	46	15.34	15.45
08-May-24	222	88	35	15.7	19.95
09-May-24	143	74	42	12.44	18.63
16-May-24	174	94	38	12.41	16
17-May-24	207	98	45	12.8	16.75
24-May-24	185	86	37	10.52	18.65
25-May-24	189	90	40	13.41	21.19
30-May-24	187	86	45	10.46	17.11
31-May-24	176	83	52	12.05	18.64
05-Jun-24	229	88	40	18.4	23.14
06-Jun-24	216	79	45	19.61	24.35
12-Jun-24	210	95	48	12.74	25.85
13-Jun-24	175	78	50	15.65	25.99
19-Jun-24	167	73	37	13.86	21.31
20-Jun-24	192	83	40	15.12	24.58
26-Jun-24	165	66	34	11.53	22.56
27-Jun-24	216	78	48	13.93	31.76
03-Jul-24	196	85	41	11.33	18.31
04-Jul-24	175	76	38	13.1	17.83
10-Jul-24	188	81	40	13.07	18.31
11-Jul-24	164	70	33	14.58	18.71
18-Jul-24	176	78	36	12.47	17.46
19-Jul-24	185	79	42	17.29	21.27
26-Jul-24	190	85	34	11.74	21.27
27-Jul-24	210	87	43	10.25	17.08
01-Aug-24	233	92	55	19.01	14.06
02-Aug-24	198	86	44	17.3	20.94
09-Aug-24	192	82	40	14.6	18.24
10-Aug-24	194	83	39	15.07	16.9
16-Aug-24	168	69	30	12.74	17.72
17-Aug-24	165	86	42	15.36	18.58
23-Aug-24	149	90	35	13.29	33.46
24-Aug-24	186	75	33	14.93	35.61
30-Aug-24	197	67	28	15.71	27.09
31-Aug-24	176	74	32	14.86	15.41
04-Sep-24	245	92	46	15.35	26.28

05-Sep-24	181	83	45	17.07	21.44
11-Sep-24	229	78	39	21.28	13.36
12-Sep-24	219	88	51	14.03	17.32
19-Sep-24	191	76	40	20.35	28.76
20-Sep-24	177	74	38	19.82	15.63
27-Sep-24	135	65	29	11.88	17.16
28-Sep-24	164	74	34	14.77	25.68
07-Oct-24	184	82	38	12.86	35.26
08-Oct-24	172	75	31	14.84	20.96
16-Oct-24	174	71	36	11.95	25.4
17-Oct-24	167	65	29	11.37	29.8
23-Oct-24	204	89	47	16.62	27.09
24-Oct-24	172	73	35	18.04	29.4
29-Oct-24	189	85	43	21.19	34.54
30-Oct-24	166	68	33	12.34	20.11
04-Nov-24	161	70	29	10.58	35.64
05-Nov-24	213	86	48	11.28	20.77
11-Nov-24	170	73	36	12.58	23.89
12-Nov-24	183	83	46	10.8	17.4
18-Nov-24	168	70	35	13.82	29.96
19-Nov-24	178	77	39	15.23	28.76
25-Nov-24	188	79	42	15.67	14.03
26-Nov-24	203	81	44	21.6	19.53
02-Dec-24	184	78	39	13.15	29.19
03-Dec-24	191	84	43	13.27	23.78
09-Dec-24	198	88	46	14.97	29.19
10-Dec-24	208	92	50	12.47	36.74
16-Dec-24	192	82	47	10.75	24.47
17-Dec-24	198	84	51	12.99	33.16
23-Dec-24	206	90	53	17.47	40.78
24-Dec-24	228	94	57	12.54	25.41
30-Dec-24	210	86	52	13.94	37.64
31-Dec-24	217	92	54	11.09	18.82
03-Jan-25	196	83	44	14.63	35.74
04-Jan-25	219	90	49	11.23	27.37
10-Jan-25	198	84	45	17.32	35.87
11-Jan-25	215	86	47	16.04	14.86
20-Jan-25	235	95	51	14.49	20.24
21-Jan-25	213	89	48	10.08	22.82
28-Jan-25	212	80	44	13.34	25.75
29-Jan-25	215	76	42	14.72	22.72
05-Feb-25	198	80	44	15.67	30.38
06-Feb-25	219	89	48	17.17	23.36
12-Feb-25	203	78	44	17.46	30.78
13-Feb-25	189	72	41	17.91	22.67
20-Feb-25	187	78	42	13.95	31.62
21-Feb-25	208	83	46	15.7	27.68
27-Feb-25	195	79	42	19.61	30.02
28-Feb-25	182	72	39	17.38	30.65
05-Mar-25	187	78	40	16.25	32.51
06-Mar-25	219	83	49	12.34	17.76
12-Mar-25	196	79	44	17.29	22.19
13-Mar-25	176	72	38	18.81	39.52
19-Mar-25	190	77	41	14.16	22.42

20-Mar-25	148	63	29	15.34	29.58
26-Mar-25	163	66	35	17.45	28.16
27-Mar-25	175	71	38	18.17	25.9
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	245	98	57	21.6	40.78
Minimum	135	63	26	0.19	0.19
Average	190.3	80.9	40.8	14.5	23.3
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.32

Area: Basundhara

Project: Kulda OCP

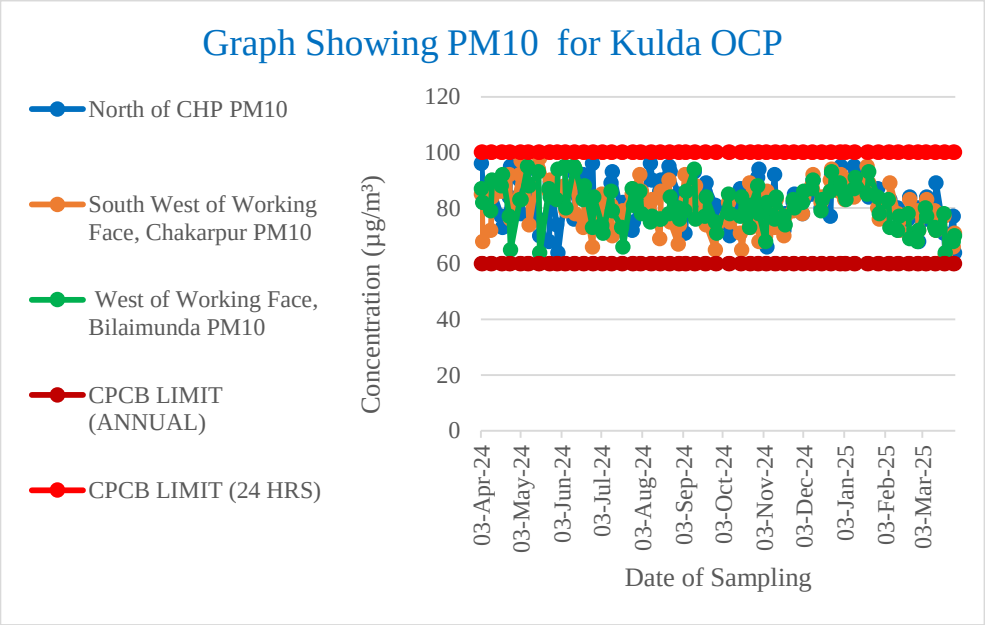
Monitoring Station: Bilaimunda Village

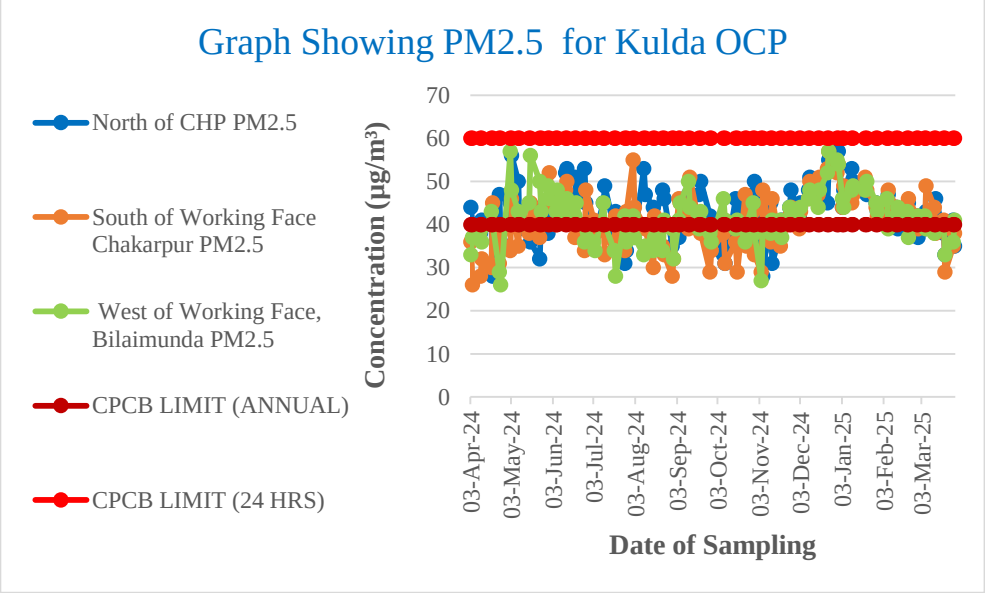
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	176	87	33	11.73	11.73
04-Apr-24	184	82	37	10.97	10.97
10-Apr-24	196	79	39	16.08	16.08
11-Apr-24	178	90	36	12.56	12.56
18-Apr-24	198	88	43	15.85	18.57
19-Apr-24	195	92	40	18.94	19.55
24-Apr-24	178	77	29	13.92	15.24
25-Apr-24	165	65	26	12.13	14.17
02-May-24	181	83	57	9.17	13.43
03-May-24	172	83	48	14.19	17.61
08-May-24	242	95	43	15.75	12.58
09-May-24	161	88	40	8.73	14.41
16-May-24	207	93	45	13.33	19.55
17-May-24	156	64	56	15.58	13.39
24-May-24	222	87	50	11.83	19.79
25-May-24	199	84	43	10.33	20.02
30-May-24	181	83	49	15.28	17.94
31-May-24	213	94	46	13.3	16.17
05-Jun-24	250	95	43	16.05	21.15
06-Jun-24	175	80	48	9.53	16.63
12-Jun-24	187	95	41	13.06	14.75
13-Jun-24	213	94	46	13.3	16.17
19-Jun-24	184	83	42	11.71	13.74
20-Jun-24	196	88	45	15.83	22.71
26-Jun-24	172	73	36	11.9	19.24
27-Jun-24	183	84	40	8.56	12.7
03-Jul-24	184	74	36	13.34	20.65
04-Jul-24	173	71	34	11.18	22.82
10-Jul-24	208	86	45	10.22	20.43
11-Jul-24	182	79	40	11.77	15.26
18-Jul-24	182	73	34	13.9	35.68
19-Jul-24	172	66	28	11.12	28.38
26-Jul-24	182	87	42	13.15	28.39
27-Jul-24	190	81	36	14.46	13.06
01-Aug-24	201	86	42	11.07	17.19
02-Aug-24	208	78	37	14.99	15.2
09-Aug-24	222	75	33	12.77	22.89
10-Aug-24	182	77	35	14.37	14.02
16-Aug-24	183	76	34	20.58	10.89
17-Aug-24	174	76	37	16.29	24.12
23-Aug-24	175	78	34	12.18	30.66
24-Aug-24	149	84	41	19.62	17.81
30-Aug-24	184	80	39	11.94	24
31-Aug-24	165	76	32	15.43	15.56
04-Sep-24	236	79	41	17.5	27.76

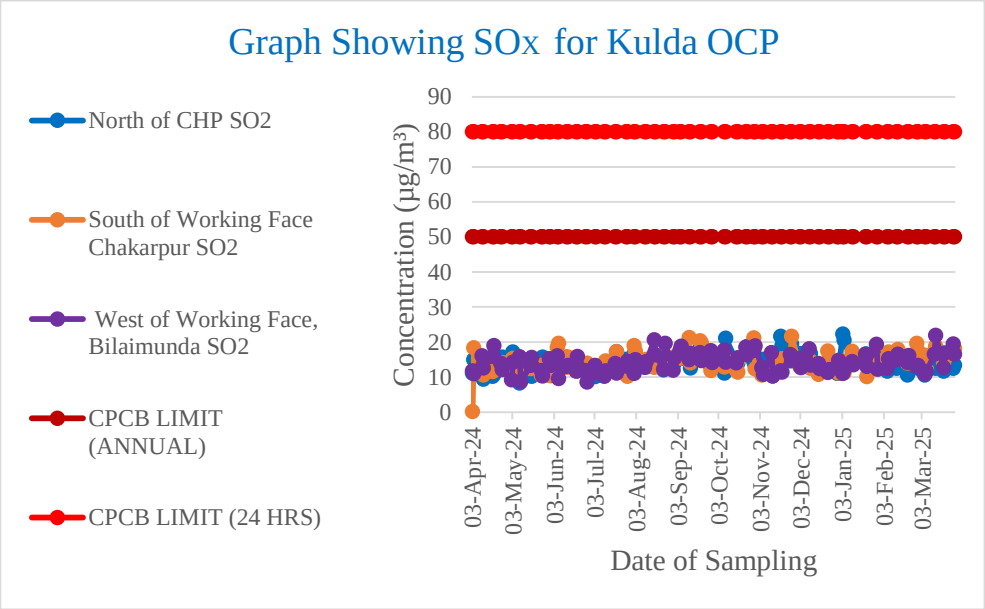
05-Sep-24	213	86	45	18.8	27.55
11-Sep-24	197	94	50	15	20.55
12-Sep-24	224	76	44	16.72	12.93
19-Sep-24	193	77	39	16.99	27.68
20-Sep-24	163	84	43	14.7	10.59
27-Sep-24	180	75	38	17.52	16.5
28-Sep-24	176	71	36	14.11	32.39
07-Oct-24	208	85	46	17.73	31.44
08-Oct-24	193	78	41	14.26	19.61
16-Oct-24	186	77	39	14.04	18.64
17-Oct-24	190	84	41	15.54	18.42
23-Oct-24	170	73	36	18.48	30.11
24-Oct-24	187	81	40	16.38	26.69
29-Oct-24	199	88	45	17.64	28.74
30-Oct-24	179	78	38	18.92	30.83
04-Nov-24	156	68	27	12.72	12.61
05-Nov-24	193	82	40	10.72	33.06
11-Nov-24	181	76	38	17	22.84
12-Nov-24	188	84	41	10.31	30.19
19-Nov-24	190	77	41	11.75	32.26
19-Nov-24	180	74	37	11.38	33.73
25-Nov-24	199	83	44	16.38	38.13
26-Nov-24	196	80	42	14.8	30.16
02-Dec-24	190	82	41	15.32	23.08
03-Dec-24	197	86	44	12.68	27.22
09-Dec-24	205	87	46	18.08	18.33
10-Dec-24	214	90	48	13.43	21.09
16-Dec-24	186	79	44	13.89	29.89
17-Dec-24	192	83	48	12.37	41.22
23-Dec-24	196	86	52	11.32	35.55
24-Dec-24	224	93	57	12.1	24.2
30-Dec-24	215	89	55	12.47	18.82
31-Dec-24	211	87	54	14.78	21.96
03-Jan-25	205	85	46	11	37.95
04-Jan-25	198	83	44	12.05	37.95
10-Jan-25	211	87	48	14.42	37.09
11-Jan-25	216	91	49	13.52	30.41
20-Jan-25	213	85	48	16.56	23.48
21-Jan-25	225	93	50	13.02	25.58
28-Jan-25	206	84	45	19.32	30.92
29-Jan-25	196	78	43	12.18	21.44
05-Feb-25	213	83	46	12.53	25.35
06-Feb-25	180	73	39	15.26	22.29
12-Feb-25	194	72	42	14.94	30.87
13-Feb-25	202	77	44	16.53	31.72
20-Feb-25	203	78	43	14.11	35.3
21-Feb-25	172	69	37	16.18	34.04
27-Feb-25	185	68	40	13.02	36.19
28-Feb-25	193	72	42	13.31	27.73
05-Mar-25	192	80	42	10.89	17.84
06-Mar-25	166	77	39	11.6	20.48
12-Mar-25	179	73	38	16.49	29.23
13-Mar-25	186	72	40	21.94	22.65
19-Mar-25	190	78	40	12.66	28.9

20-Mar-25	156	64	33	16.84	21.01
26-Mar-25	167	68	36	19.4	24.2
27-Mar-25	179	70	41	16.5	24.99
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	250	95	57	21.94	41.22
Minimum	149	64	26	8.56	10.59
Average	191.3	80.8	41.5	14.2	23.0
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna


Graph Showing PM10 for Kulda OCP
North of CHP PM10
South West of Working Face, Chakarpur PM10
West of Working Face, Bilaimunda PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing PM2.5 for Kulda OCP
North of CHP PM2.5
South of Working Face Chakarpur PM2.5
West of Working Face, Bilaimunda PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing SOx for Kulda OCP
North of CHP SO2
South of Working Face Chakarpur SO2
West of Working Face, Bilaimunda SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90
80
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

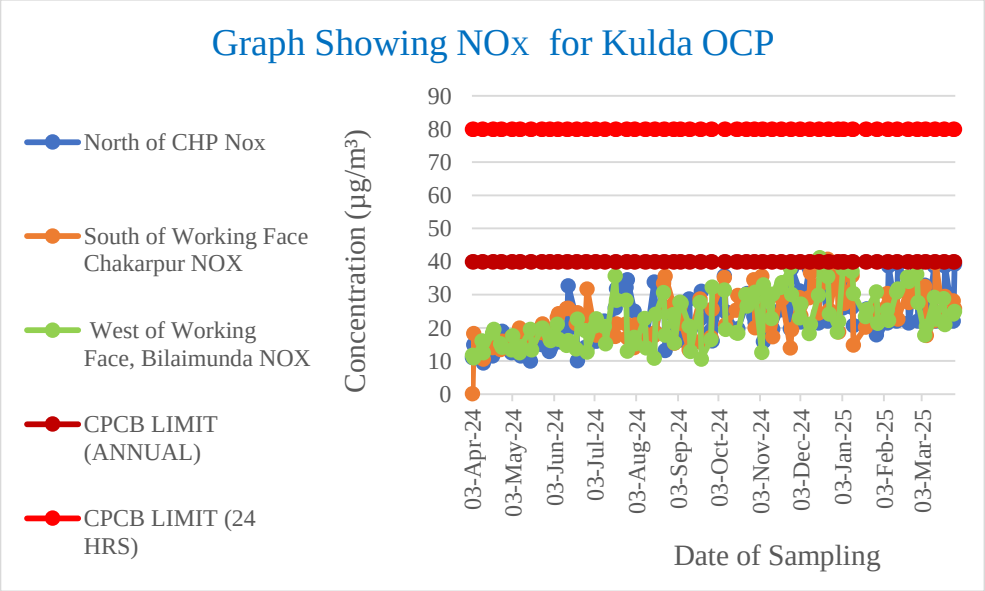

Graph Showing NOx for Kulda OCP
North of CHP Nox
South of Working Face Chakarpur NOX
West of Working Face, Bilaimunda NOX
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90
80
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

Table: 8.5.33

Area: Basundhara

Project: Garjanbahal OCP

Monitoring Station: Garjanbahal Village

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
08-Apr-24	278	175	70	17.00	17.00
20-Apr-24	232	128	55	14.73	15.29
13-May-24	298	158	73	26.66	28.19
22-May-24	352	178	71	8.42	17.12
14-Jun-24	238	110	49	9.06	20.55
22-Jun-24	248	128	66	12.69	14.11
13-Jul-24	252	134	65	10.72	21.43
23-Jul-24	221	126	60	12.30	30.13
08-Aug-24	295	132	61	9.02	19.10
26-Aug-24	221	116	63	12.83	19.18
13-Sep-24	284	148	67	14.98	26.50
25-Sep-24	237	112	55	19.00	15.21
05-Oct-24	241	120	62	10.96	23.81
19-Oct-24	217	104	57	12.24	19.95
14-Nov-24	234	119	62	14.20	20.52
28-Nov-24	263	142	65	14.36	32.96
11-Dec-24	226	114	59	13.86	21.62
19-Dec-24	232	102	57	17.85	25.16
14-Jan-25	249	149	63	13.35	39.69
27-Jan-25	244	138	61	13.22	23.44
14-Feb-25	258	163	65	19.68	29.21
22-Feb-25	248	153	62	16.15	26.94
14-Mar-25	239	144	59	13.05	28.03
29-Mar-25	254	142	60	12.52	24.44
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	352	178	73	26.66	39.69
Minimum	217	102	49	8.42	14.11
Average	252.54	134.79	61.96	14.12	23.32
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.34

Area: Basundhara

Project: Garjanbahal OCP

Monitoring Station: KAN-1 Near Coal Sampling Lab

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
08-Apr-24	294	184	76	11.47	11.47
20-Apr-24	264	145	65	17.81	13.23
13-May-24	370	176	65	16.66	13.51
22-May-24	292	173	58	21.06	14.08
14-Jun-24	209	116	52	9.35	27.02
22-Jun-24	242	125	61	17.50	20.08
13-Jul-24	214	108	52	10.93	21.25
23-Jul-24	242	123	58	14.06	23.52
08-Aug-24	259	116	60	11.77	15.85
26-Aug-24	259	142	65	16.49	10.24
13-Sep-24	271	116	57	18.61	11.68
25-Sep-24	252	124	59	15.88	12.82
05-Oct-24	267	141	70	14.04	32.03
19-Oct-24	210	96	55	15.82	25.78
14-Nov-24	286	148	74	17.05	20.39
28-Nov-24	285	162	70	15.93	22.00
11-Dec-24	232	134	72	16.42	21.64
19-Dec-24	246	141	68	11.45	30.88
14-Jan-25	286	186	73	12.40	12.25
27-Jan-25	280	182	71	14.28	22.13
14-Feb-25	261	172	67	14.68	27.44
22-Feb-25	275	162	64	16.45	34.49
14-Mar-25	265	156	61	14.29	29.62
29-Mar-25	235	139	59	16.81	18.56
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	370	186	76	21.06	34.49
Minimum	209	96	52	9.35	10.24
Average	262.33	144.46	63.83	15.05	20.50
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

Table: 8.5.35

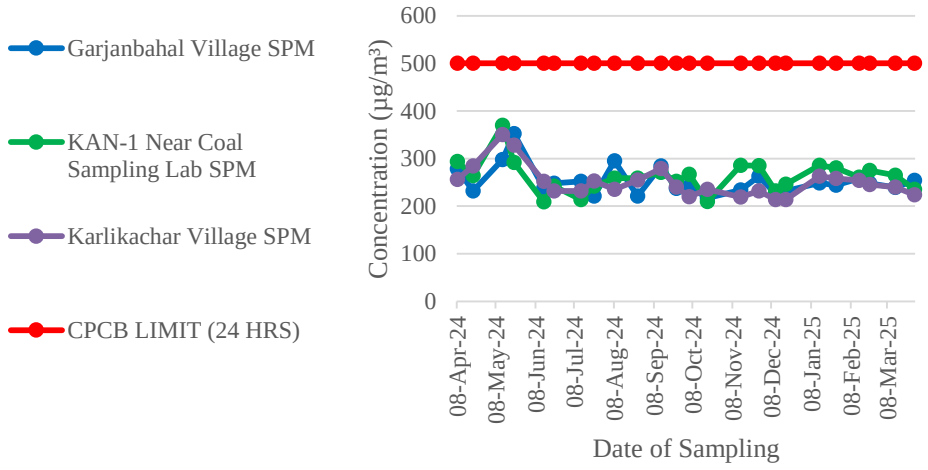
Area: Basundhara

Project: Garjanbahal OCP

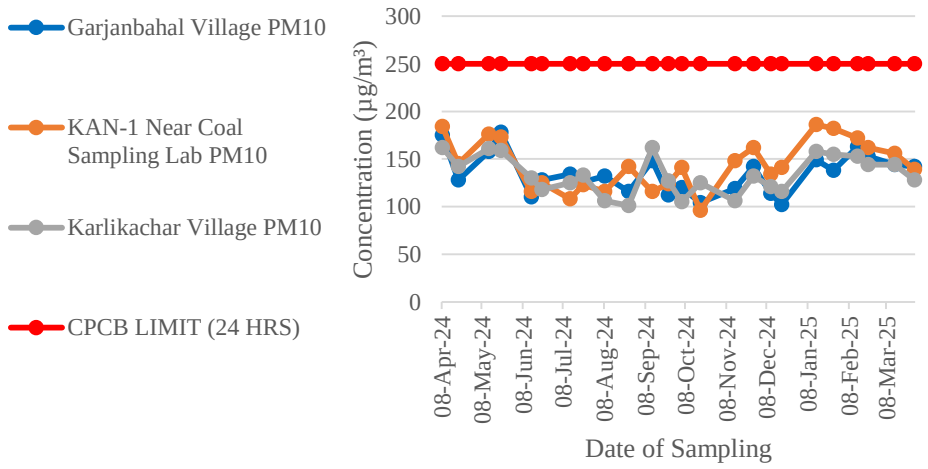
Monitoring Station: Karlikachar Village

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
08-Apr-24	256	162	66	17.30	17.41
20-Apr-24	284	142	64	13.04	11.31
13-May-24	350	161	86	12.98	12.62
22-May-24	328	159	59	12.01	16.94
14-Jun-24	252	130	53	14.08	14.78
22-Jun-24	232	118	55	9.52	15.68
13-Jul-24	232	125	61	16.04	18.71
24-Jul-24	253	133	59	15.59	12.79
08-Aug-24	235	106	50	12.53	16.01
26-Aug-24	255	101	57	20.74	21.01
13-Sep-24	279	162	75	10.65	35.51
25-Sep-24	240	127	62	15.70	30.44
05-Oct-24	220	105	56	11.72	35.13
19-Oct-24	235	125	64	12.51	20.39
14-Nov-24	219	106	55	15.14	15.15
28-Nov-24	232	132	60	13.65	35.93
11-Dec-24	214	121	58	12.86	32.48
19-Dec-24	214	116	54	14.34	26.31
14-Jan-25	263	158	66	13.89	20.65
27-Jan-25	258	155	64	13.89	29.89
14-Feb-25	254	153	61	12.18	32.64
22-Feb-25	245	144	60	11.49	34.49
14-Mar-25	240	144	57	13.35	23.51
29-Mar-25	224	128	53	17.89	32.68
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	350	162	86	20.74	35.93
Minimum	214	101	50	9.52	11.31
Average	250.58	133.88	60.6	13.88	23.44
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

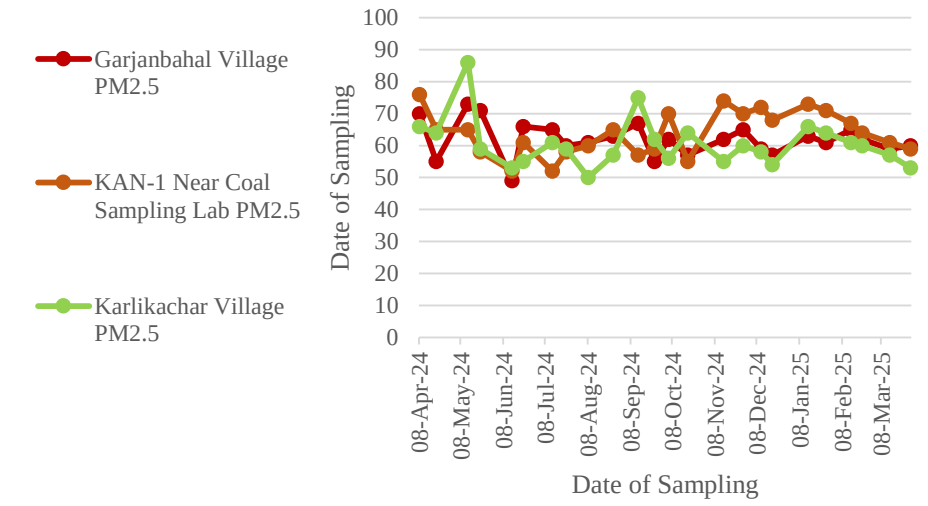
Graph Showing SPM for Garjanbahal OCP

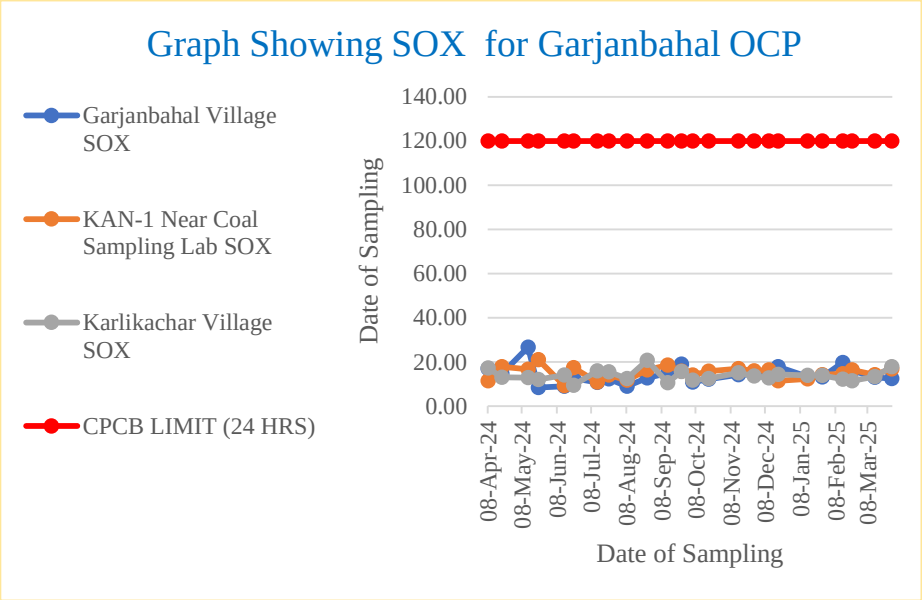


Graph Showing PM10 for Garjanbahal OCP



Graph Showing PM2.5 for Garjanbahal OCP




Graph Showing SOX for Garjanbahal OCP
Garjanbahal Village SOX
KAN-1 Near Coal Sampling Lab SOX
Karlikachar Village SOX
CPCB LIMIT (24 HRS)
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Date of Sampling
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

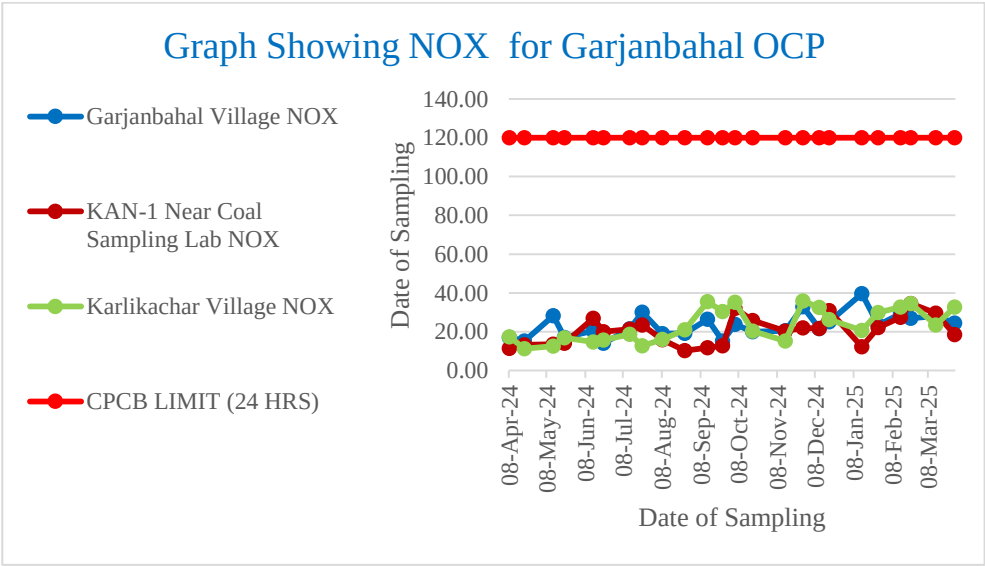

Graph Showing NOX for Garjanbahal OCP
Garjanbahal Village NOX
KAN-1 Near Coal Sampling Lab NOX
Karlikachar Village NOX
CPCB LIMIT (24 HRS)
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Date of Sampling
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

Table: 8.5.36

Area: Basundhara

Project: Garjanbahal OCP

Monitoring Station: South-East of Wokring Face, Kutabaga Village

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	184	78	32	11.44	11.44
04-Apr-24	174	73	30	13.77	13.77
10-Apr-24	192	84	38	16.86	16.86
11-Apr-24	216	91	45	13.07	13.07
18-Apr-24	184	83	38	11.82	14.75
19-Apr-24	180	85	36	13.68	17.49
24-Apr-24	175	96	33	10.93	12.93
25-Apr-24	208	89	42	10.93	12.09
02-May-24	186	72	51	12.75	13.53
03-May-24	216	85	42	13.83	17.30
08-May-24	107	89	57	15.60	12.14
09-May-24	189	94	42	10.24	15.65
16-May-24	220	87	35	10.02	13.95
17-May-24	194	70	42	17.43	16.43
24-May-24	181	83	57	10.64	12.38
25-May-24	164	79	48	11.46	16.74
30-May-24	233	92	43	17.16	14.27
31-May-24	168	79	40	11.80	17.77
05-Jun-24	203	77	44	12.19	14.15
06-Jun-24	203	71	38	9.05	20.88
12-Jun-24	196	90	44	15.83	23.46
13-Jun-24	189	75	34	16.73	19.55
19-Jun-24	214	93	50	12.93	31.14
20-Jun-24	178	74	36	9.24	35.00
26-Jun-24	186	86	42	12.99	25.67
27-Jun-24	218	91	54	12.86	8.39
03-Jul-24	189	84	42	12.12	17.95
04-Jul-24	201	88	46	12.19	19.81
10-Jul-24	192	83	44	12.47	28.20
11-Jul-24	187	78	42	12.15	15.54
18-Jul-24	184	77	39	16.65	15.38
19-Jul-24	149	82	40	13.36	10.23
26-Jul-24	188	72	30	12.83	15.23
27-Jul-24	165	68	28	14.56	18.69
01-Aug-24	237	83	41	16.02	18.25
02-Aug-24	245	92	48	15.33	17.06
09-Aug-24	230	85	39	12.26	11.65
10-Aug-24	159	95	44	14.22	14.42
16-Aug-24	169	86	42	15.64	22.00
17-Aug-24	168	68	29	14.83	14.87
23-Aug-24	194	72	31	14.14	11.41
24-Aug-24	141	79	35	11.65	18.42
30-Aug-24	169	82	30	15.03	15.69
31-Aug-24	210	85	37	16.81	22.00
04-Sep-24	211	76	39	14.83	31.54

05-Sep-24	222	88	46	12.92	35.15
11-Sep-24	215	94	48	15.77	25.59
12-Sep-24	224	90	45	17.45	21.63
19-Sep-24	187	88	53	10.65	30.81
20-Sep-24	166	83	41	14.60	26.01
27-Sep-24	176	72	37	18.02	25.24
28-Sep-24	181	92	40	15.26	12.44
07-Oct-24	215	92	48	15.54	18.57
08-Oct-24	188	84	43	11.56	14.31
16-Oct-24	181	81	39	15.29	19.58
17-Oct-24	160	68	29	13.40	36.40
23-Oct-24	174	70	33	15.56	25.36
24-Oct-24	186	79	43	14.35	23.38
29-Oct-24	195	85	46	15.57	25.38
30-Oct-24	175	74	39	19.10	31.12
04-Nov-24	205	85	46	14.34	18.33
05-Nov-24	213	90	49	16.20	18.86
11-Nov-24	178	73	35	12.76	22.85
12-Nov-24	172	70	33	13.83	10.78
18-Nov-24	175	76	38	16.10	12.62
19-Nov-24	186	81	42	15.02	16.86
25-Nov-24	198	84	46	15.93	19.06
26-Nov-24	212	88	49	12.74	22.00
02-Dec-24	205	92	47	12.23	23.54
03-Dec-24	200	88	46	15.62	22.16
09-Dec-24	189	84	43	14.86	24.78
10-Dec-24	181	87	45	19.63	21.36
16-Dec-24	178	79	43	15.86	35.16
17-Dec-24	196	76	41	14.32	40.79
23-Dec-24	192	78	45	14.03	34.43
24-Dec-24	184	74	47	14.24	25.64
30-Dec-24	178	78	51	11.46	21.33
31-Dec-24	174	76	53	17.82	14.67
03-Jan-25	194	82	43	18.39	17.18
04-Jan-25	208	85	46	14.79	11.80
10-Jan-25	216	90	48	15.19	18.11
11-Jan-25	236	94	53	14.85	18.92
20-Jan-25	207	84	46	10.50	21.44
21-Jan-25	193	75	41	15.76	30.97
28-Jan-25	189	72	40	13.73	22.60
29-Jan-25	206	75	43	15.12	25.58
05-Feb-25	210	88	47	20.87	28.08
06-Feb-25	199	83	44	14.46	34.60
12-Feb-25	208	84	46	11.45	26.98
13-Feb-25	186	73	41	12.94	27.38
20-Feb-25	214	85	47	14.16	24.23
21-Feb-25	203	75	42	13.51	38.47
27-Feb-25	203	79	44	19.54	34.45
28-Feb-25	183	73	39	15.18	23.78
05-Mar-25	207	85	45	19.18	42.41
06-Mar-25	196	75	41	12.75	35.77
12-Mar-25	196	79	42	16.42	19.50
13-Mar-25	176	73	37	17.36	25.07
19-Mar-25	168	65	33	13.79	20.84

20-Mar-25	153	67	28	11.88	28.43
26-Mar-25	179	77	34	14.38	31.19
27-Mar-25	197	94	28	19.00	35.57
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	245	96	57	20.87	42.41
Minimum	107	65	28	9.05	8.39
Average	191.51	81.49	41.63	14.3	21.6
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna

Table: 8.5.37

Area: Basundhara

Project: Garjanbahal OCP

Monitoring Station: West of working face, Bihaimunda

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
03-Apr-24	188	78	39	16.48	16.48
04-Apr-24	165	86	37	16.42	16.42
10-Apr-24	212	125	53	14.74	14.74
11-Apr-24	196	81	35	12.54	12.54
18-Apr-24	185	78	36	18.22	15.67
19-Apr-24	275	87	44	17.81	18.93
24-Apr-24	166	91	29	11.76	14.50
25-Apr-24	190	84	38	14.00	15.99
02-May-24	154	92	53	12.66	12.17
03-May-24	183	85	41	10.23	10.56
08-May-24	187	93	44	15.34	14.11
09-May-24	215	94	48	11.40	10.55
16-May-24	175	68	51	12.01	12.70
17-May-24	239	94	42	11.57	18.31
24-May-24	194	85	57	10.04	20.01
25-May-24	199	94	42	13.21	17.61
30-May-24	173	96	53	12.23	18.59
31-May-24	171	79	48	10.61	15.44
05-Jun-24	225	81	49	19.72	15.95
06-Jun-24	260	91	34	18.61	16.72
12-Jun-24	241	89	42	14.86	14.10
13-Jun-24	212	95	46	17.91	18.96
19-Jun-24	224	96	53	14.59	10.09
20-Jun-24	196	84	43	13.93	15.15
26-Jun-24	205	88	46	11.29	13.76
27-Jun-24	210	92	51	13.37	14.04
03-Jul-24	218	92	47	11.66	21.26
04-Jul-24	193	81	43	11.33	15.25
10-Jul-24	187	77	41	13.04	19.56
11-Jul-24	210	88	46	11.77	18.31
18-Jul-24	183	78	34	11.25	22.26
19-Jul-24	163	75	33	7.99	37.06
26-Jul-24	191	86	36	10.79	26.57
27-Jul-24	174	82	44	13.78	14.62
01-Aug-24	187	80	46	12.81	20.30
02-Aug-24	217	84	36	13.83	20.03
09-Aug-24	212	92	41	18.70	21.14
10-Aug-24	204	84	33	15.26	14.83
16-Aug-24	182	82	41	19.64	19.96
17-Aug-24	176	89	34	15.82	29.39
23-Aug-24	197	85	39	13.93	22.56
24-Aug-24	176	74	36	12.96	14.97
30-Aug-24	153	70	33	14.58	26.45
31-Aug-24	190	84	43	13.90	17.73
04-Sep-24	224	87	43	15.61	17.16

05-Sep-24	187	74	35	14.22	12.98
11-Sep-24	172	77	38	12.59	15.25
12-Sep-24	211	84	41	16.72	21.00
19-Sep-24	196	81	39	17.30	19.17
20-Sep-24	170	77	41	11.30	16.15
27-Sep-24	223	85	48	19.51	27.57
28-Sep-24	181	98	42	20.02	30.86
07-Oct-24	192	78	40	15.89	22.08
08-Oct-24	176	72	35	18.39	29.97
16-Oct-24	176	72	34	16.90	28.40
17-Oct-24	183	76	38	12.05	18.13
23-Oct-24	194	84	45	17.14	27.93
24-Oct-24	186	80	41	15.05	24.54
29-Oct-24	193	88	46	12.47	20.32
30-Oct-24	173	75	37	16.95	27.63
04-Nov-24	193	78	40	18.60	29.09
05-Nov-24	168	74	32	17.18	20.20
11-Nov-24	175	76	34	13.93	24.05
12-Nov-24	197	86	48	15.01	32.56
18-Nov-24	181	77	39	19.39	24.20
19-Nov-24	196	82	43	10.43	18.82
25-Nov-24	206	85	47	15.57	25.09
26-Nov-24	218	93	51	13.06	20.34
02-Dec-24	192	86	52	18.85	19.26
03-Dec-24	191	78	49	13.57	21.32
09-Dec-24	191	84	48	13.88	21.46
10-Dec-24	178	83	47	11.18	24.56
16-Dec-24	196	74	46	17.51	36.20
17-Dec-24	192	78	47	14.54	29.11
23-Dec-24	176	77	52	13.97	24.96
24-Dec-24	180	74	51	14.58	40.39
30-Dec-24	191	89	56	15.71	23.51
31-Dec-24	202	86	55	11.08	35.09
03-Jan-25	213	89	48	14.15	18.98
04-Jan-25	203	84	45	9.41	19.17
10-Jan-25	234	93	51	13.22	23.57
11-Jan-25	245	96	54	13.06	22.32
05-Feb-25	210	94	46	18.75	26.96
06-Feb-25	201	81	44	15.41	23.05
12-Feb-25	183	72	39	18.76	23.49
13-Feb-25	198	75	43	15.40	23.86
20-Feb-25	203	79	42	17.14	39.38
21-Feb-25	178	68	37	16.74	31.78
27-Feb-25	188	76	41	16.80	31.25
28-Feb-25	209	84	45	18.53	30.89
05-Mar-25	266	86	47	16.04	30.10
06-Mar-25	187	79	40	11.81	20.88
12-Mar-25	195	81	43	16.21	27.38
13-Mar-25	181	76	39	14.32	34.62
19-Mar-25	182	74	39	18.50	20.80
20-Mar-25	174	68	35	18.13	25.23
26-Mar-25	184	74	40	18.22	19.81
27-Mar-25	195	78	43	13.62	25.71
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**

Maximum	275	125	57	20.02	40.39
Minimum	153	68	29	7.99	10.09
Average	195.33	83.10	42.87	14.72	21.68
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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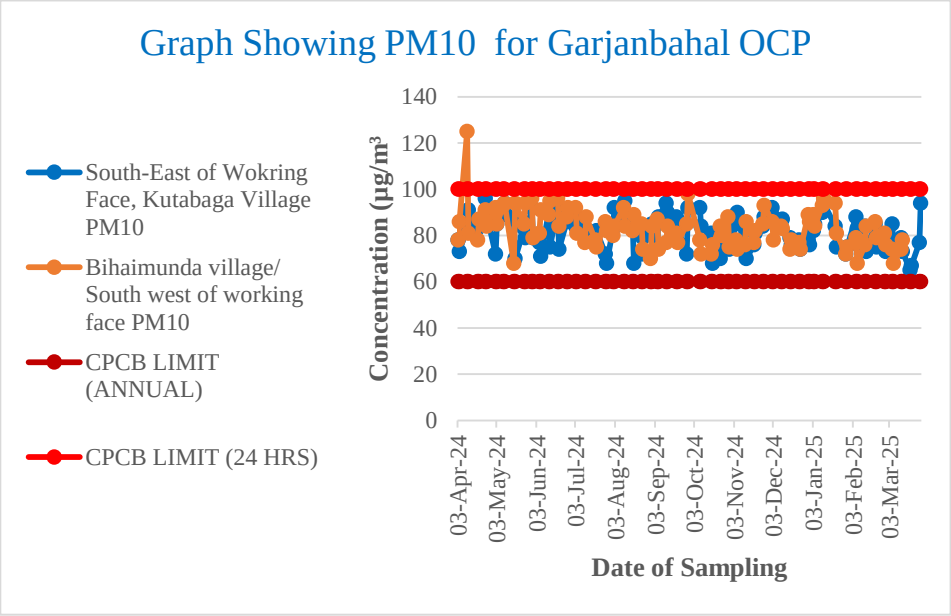
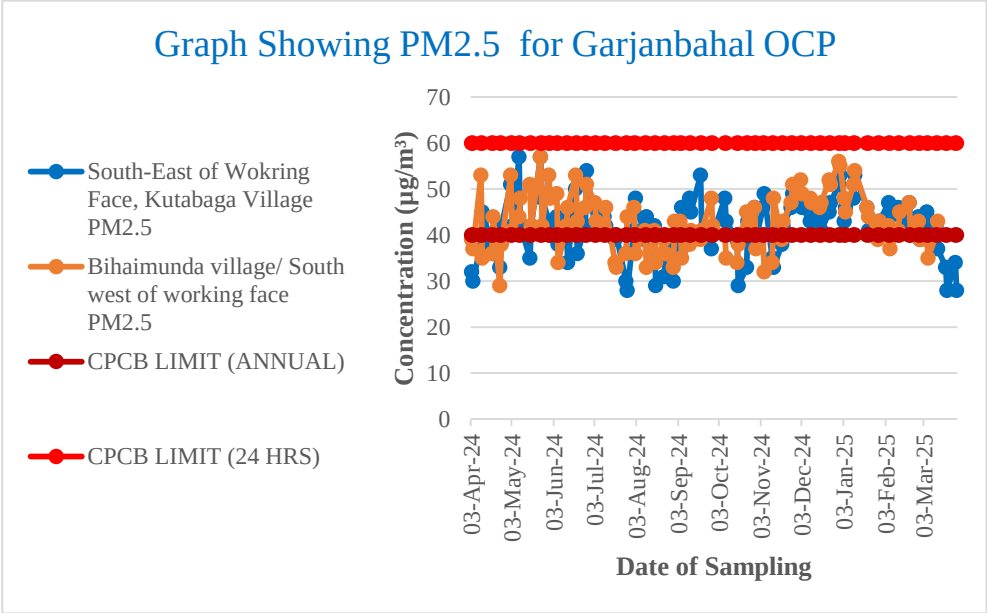
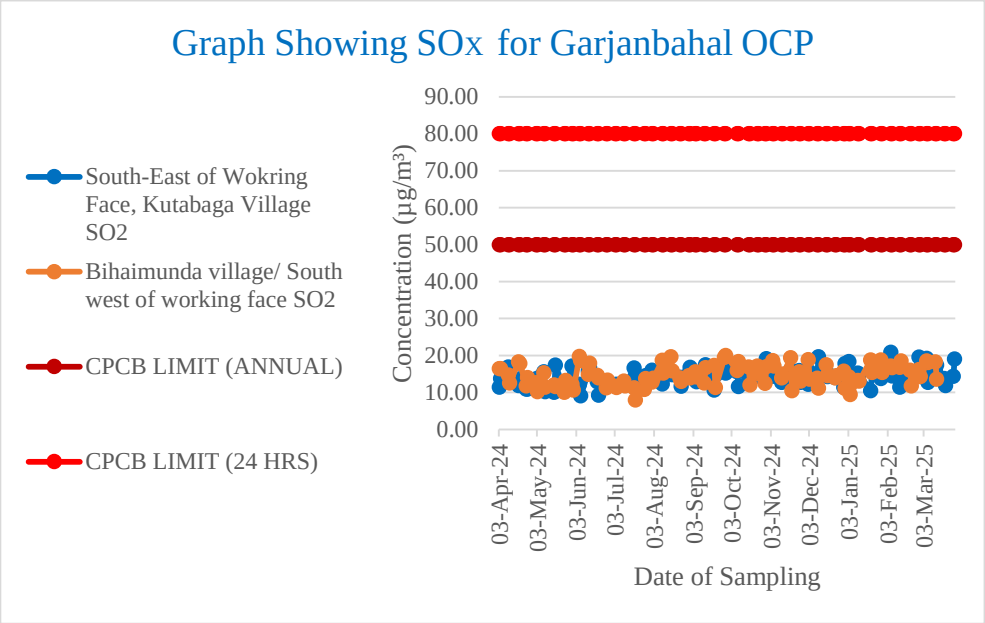

Graph Showing PM10 for Garjanbahal OCP
South-East of Wokring Face, Kutabaga Village PM10
Bihaimunda village/ South west of working face PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing PM2.5 for Garjanbahal OCP
South-East of Wokring Face, Kutabaga Village PM2.5
Bihaimunda village/ South west of working face PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling


Graph Showing SOx for Garjanbahal OCP
South-East of Wokring Face, Kutabaga Village SO2
Bihaimunda village/ South west of working face SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

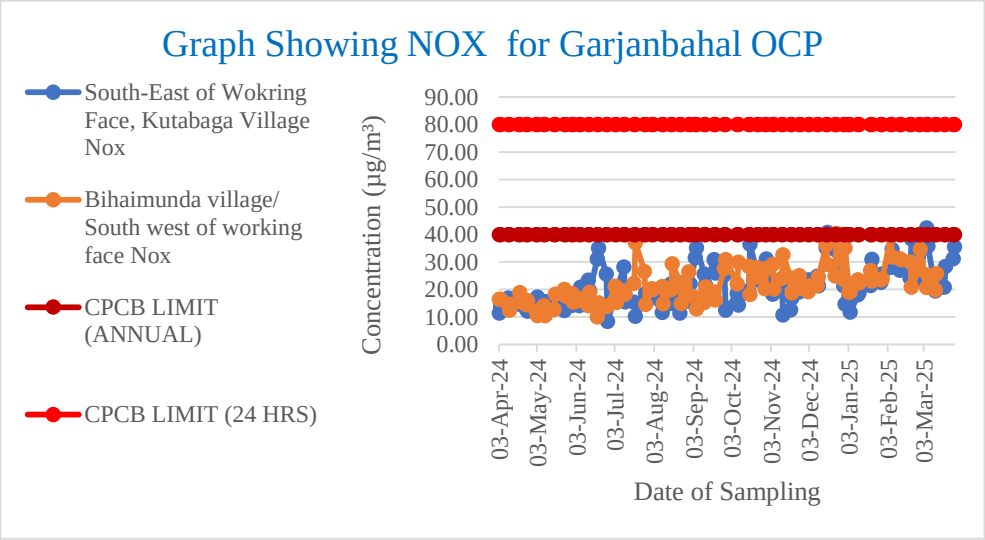

Graph Showing NOX for Garjanbahal OCP
South-East of Wokring Face, Kutabaga Village Nox
Bihaimunda village/ South west of working face Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
03-Apr-24
03-May-24
03-Jun-24
03-Jul-24
03-Aug-24
03-Sep-24
03-Oct-24
03-Nov-24
03-Dec-24
03-Jan-25
03-Feb-25
03-Mar-25
Date of Sampling

Table: 8.5.39

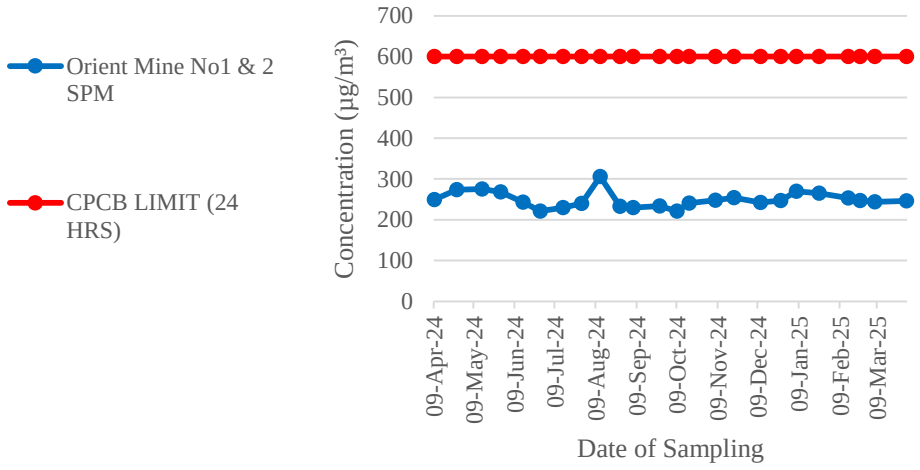
Area: Orient

Project: Orient Mine No.1 & 2

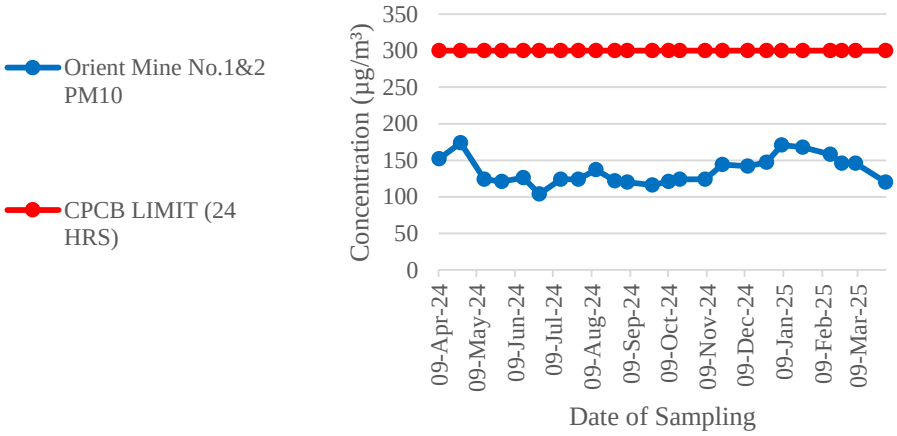
Monitoring Station: Orient Mine No1 & 2

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
09-Apr-24	249	152	66	11.00	11.00
26-Apr-24	274	174	66	11.08	15.01
15-May-24	275	124	60	22.55	10.51
29-May-24	268	121	72	10.17	9.27
15-Jun-24	243	126	66	10.60	25.65
28-Jun-24	221	104	56	11.87	20.00
15-Jul-24	230	124	62	9.14	16.73
29-Jul-24	240	124	66	11.19	18.19
12-Aug-24	306	137	78	14.40	12.01
27-Aug-24	233	122	64	14.21	28.65
06-Sep-24	230	120	62	14.12	23.26
26-Sep-24	234	116	54	14.71	30.98
09-Oct-24	221	121	58	14.07	25.72
18-Oct-24	241	124	66	14.95	24.37
07-Nov-24	248	124	64	18.59	32.46
21-Nov-24	254	144	66	13.49	30.16
11-Dec-24	242	142	64	15.84	33.38
26-Dec-24	247	147	66	12.82	20.81
07-Jan-25	270	171	69	15.13	23.34
24-Jan-25	265	168	67	16.10	23.86
15-Feb-25	253	158	64	12.73	38.58
24-Feb-25	247	146	61	11.00	33.88
07-Mar-25	244	146	58	11.00	33.88
31-Mar-25	246	120	55	12.73	38.58
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	306	174	78	22.55	38.58
Minimum	221	104	54	9.14	9.27
Average	249.21	135.63	63.75	13.48	24.18
Standard 24 hr	600	300	-	120	120
Standard Annual	430	215	-	80	80

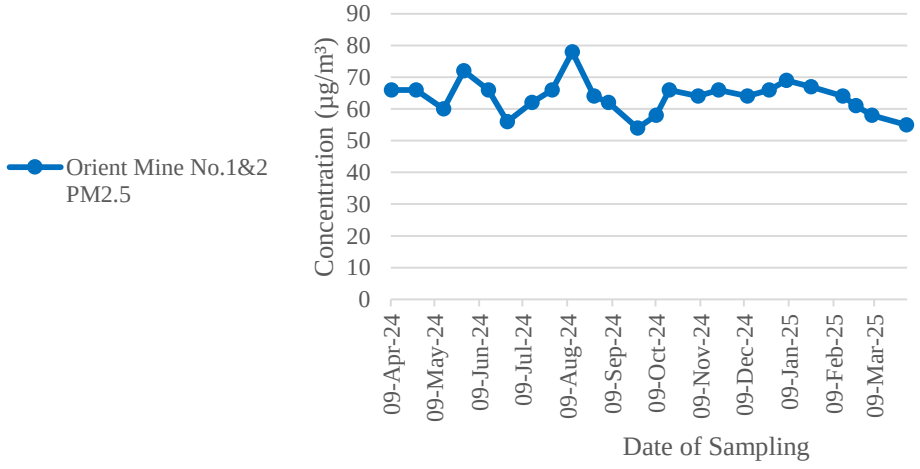
Graph Showing SPM for Orient Mine No.1&2

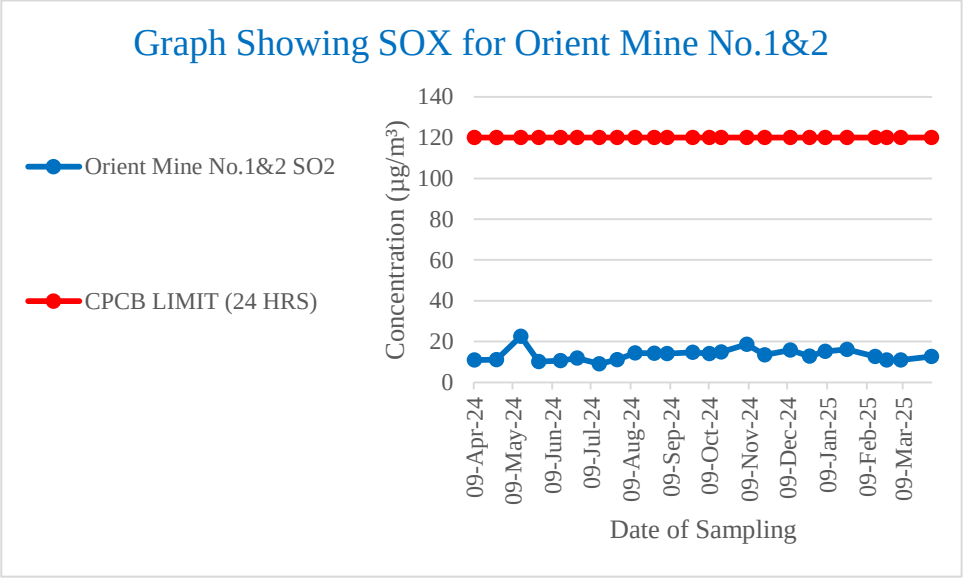


Graph Showing PM10 for Orient Mine No.1&2



Graph Showing PM2.5 for Orient Mine No.1&2




Graph Showing SOX for Orient Mine No.1&2
Orient Mine No.1&2 SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

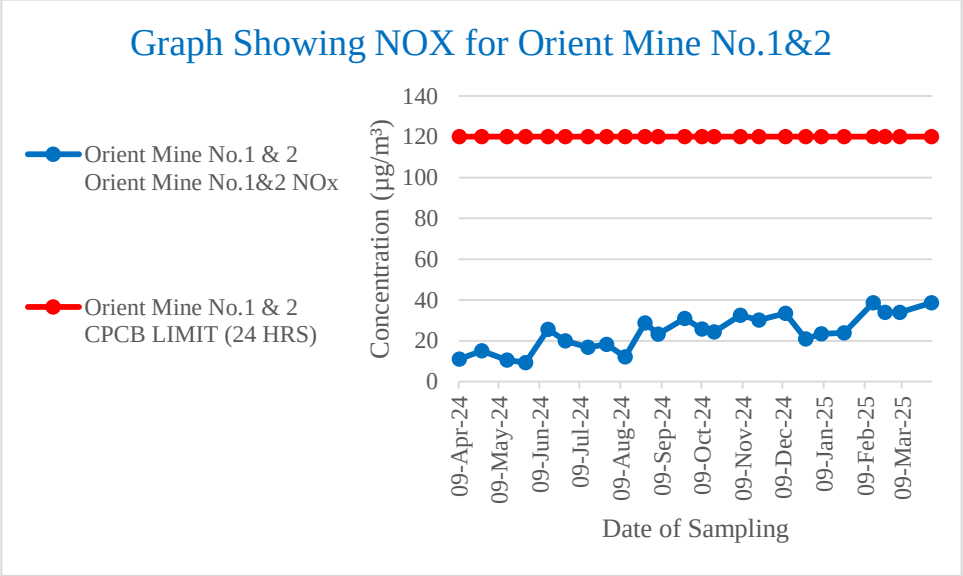

Graph Showing NOX for Orient Mine No.1&2
Orient Mine No.1 & 2
Orient Mine No.1&2 NOx
Orient Mine No.1 & 2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

Table: 8.5.40

Area: Orient

Project: Orient Mine No.1 & 2

Monitoring Station: IB Valley GM Office

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	190	95	42	10.42	10.42
06-Apr-24	178	88	38	12.20	12.20
12-Apr-24	171	84	36	14.14	14.14
13-Apr-24	238	80	33	15.15	15.15
22-Apr-24	168	87	33	16.92	17.55
23-Apr-24	164	74	29	13.17	19.47
26-Apr-24	205	88	42	12.02	13.30
27-Apr-24	186	94	38	12.42	15.41
02-May-24	196	87	36	9.70	16.93
03-May-24	198	91	58	11.41	12.10
08-May-24	144	84	39	17.53	16.06
09-May-24	184	77	50	14.42	11.99
16-May-24	195	86	44	13.19	16.98
17-May-24	221	96	48	10.57	18.37
24-May-24	210	93	36	13.49	17.39
25-May-24	182	84	45	9.86	9.44
03-Jun-24	182	83	43	19.91	15.89
04-Jun-24	158	73	49	13.19	13.03
10-Jun-24	175	87	45	18.70	18.73
11-Jun-24	138	72	54	22.71	25.79
19-Jun-24	206	82	48	13.67	20.27
20-Jun-24	238	93	56	14.08	14.45
27-Jun-24	223	88	51	12.99	13.82
28-Jun-24	196	88	46	10.05	29.79
29-Jun-24	230	96	55	14.81	15.68
03-Jul-24	222	95	48	12.95	21.05
04-Jul-24	183	86	41	10.02	15.26
10-Jul-24	195	89	43	14.39	21.58
11-Jul-24	178	83	39	10.75	20.44
18-Jul-24	184	82	41	12.48	18.61
19-Jul-24	190	86	44	12.20	27.45
26-Jul-24	178	83	45	14.98	23.69
27-Jul-24	194	86	48	13.11	29.73
01-Aug-24	155	85	41	14.55	18.75
02-Aug-24	208	95	57	11.86	18.24
09-Aug-24	206	82	43	12.11	20.00
10-Aug-24	235	90	46	15.12	18.30
16-Aug-24	146	75	33	12.79	23.21
17-Aug-24	153	88	39	9.79	19.14
23-Aug-24	144	78	34	10.52	25.92
24-Aug-24	148	84	38	13.56	23.92
24-Aug-24	195	87	42	13.56	23.44
30-Aug-24	184	87	44	12.78	16.37
04-Sep-24	194	78	37	11.88	27.43
05-Sep-24	207	89	51	16.19	35.72

11-Sep-24	199	83	42	16.34	25.40
12-Sep-24	220	77	37	13.69	11.05
19-Sep-24	186	88	46	15.76	37.12
20-Sep-24	182	84	39	17.72	30.12
27-Sep-24	170	75	36	16.63	16.54
28-Sep-24	170	73	35	20.57	10.28
07-Oct-24	174	72	35	12.85	25.83
08-Oct-24	196	82	44	12.58	22.78
16-Oct-24	196	83	44	13.39	20.37
17-Oct-24	166	74	35	15.53	20.52
23-Oct-24	165	69	34	14.00	22.81
24-Oct-24	198	88	46	17.74	28.91
29-Oct-24	171	75	34	18.25	29.74
30-Oct-24	166	67	32	15.11	24.62
04-Nov-24	219	94	50	13.63	37.66
05-Nov-24	182	83	41	16.89	32.99
11-Nov-24	194	89	46	13.07	16.55
12-Nov-24	175	74	32	18.35	11.54
18-Nov-24	186	80	41	15.23	25.25
19-Nov-24	197	82	44	14.11	36.66
25-Nov-24	206	86	47	15.23	21.04
26-Nov-24	214	93	51	11.75	35.07
02-Dec-24	183	77	39	14.46	15.52
03-Dec-24	191	80	42	14.14	16.39
09-Dec-24	206	84	45	11.97	20.09
10-Dec-24	214	83	49	11.00	25.74
16-Dec-24	194	77	46	12.09	19.61
17-Dec-24	207	82	50	16.23	21.94
23-Dec-24	190	87	53	20.85	26.13
24-Dec-24	210	90	54	16.13	28.86
30-Dec-24	219	88	56	16.51	15.11
31-Dec-24	221	92	58	16.62	37.72
03-Jan-25	202	82	44	11.90	24.48
04-Jan-25	237	92	53	14.57	26.30
10-Jan-25	204	84	45	13.61	39.82
11-Jan-25	212	87	48	14.10	20.97
20-Jan-25	216	85	48	19.32	26.79
21-Jan-25	210	77	44	17.80	27.62
28-Jan-25	195	74	41	14.28	25.58
29-Jan-25	223	91	49	13.42	29.16
05-Feb-25	205	85	46	16.97	25.65
06-Feb-25	193	76	41	18.05	26.11
12-Feb-25	198	80	44	12.88	20.35
13-Feb-25	178	76	39	16.77	20.87
20-Feb-25	198	80	44	15.69	28.40
21-Feb-25	183	72	39	13.54	27.05
27-Feb-25	191	75	42	16.99	34.94
28-Feb-25	172	71	37	10.80	23.98
05-Mar-25	191	80	42	17.57	25.82
06-Mar-25	177	72	37	17.77	28.13
12-Mar-25	184	78	40	19.93	22.53
13-Mar-25	211	84	45	15.56	20.95
19-Mar-25	192	77	42	12.85	30.58
20-Mar-25	175	69	36	17.89	31.90

26-Mar-25	169	65	33	10.90	25.60
27-Mar-25	182	74	39	18.37	24.97
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	238	96	58	22.71	39.82
Minimum	138	65	29	9.70	9.44
Average	191.49	82.72	43.06	14.48	22.39
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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Table: 8.5.41

Area: Orient

Project: Orient Mine No.1 & 2

Monitoring Station: VIP Guest House IB Valley (Reported Only)

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	218	96	52	13.98	13.98
06-Apr-24	210	89	44	15.41	15.41
12-Apr-24	188	78	35	17.17	17.17
13-Apr-24	204	86	39	18.14	18.14
18-Apr-24	193	82	41	13.94	16.46
19-Apr-24	198	89	43	10.28	15.57
26-Apr-24	168	76	29	13.75	14.98
27-Apr-24	169	82	31	14.88	18.56
06-May-24	165	85	30	13.69	12.20
07-May-24	158	99	47	15.13	17.47
10-May-24	194	91	42	16.28	13.99
11-May-24	154	74	33	20.32	15.72
20-May-24	205	96	42	11.39	16.63
21-May-24	159	76	33	14.55	19.31
27-May-24	175	79	48	13.14	13.77
28-May-24	180	84	42	13.71	9.79
03-Jun-24	199	80	52	9.60	10.05
04-Jun-24	174	75	47	11.14	14.36
10-Jun-24	169	93	57	20.77	21.03
11-Jun-24	171	78	50	13.03	13.63
17-Jun-24	165	76	30	9.76	29.67
18-Jun-24	182	82	34	11.72	36.19
24-Jun-24	186	88	40	8.15	30.97
25-Jun-24	193	94	43	11.92	11.78
28-Jun-24	215	96	46	14.56	25.18
29-Jun-24	206	85	42	11.31	16.80
01-Jul-24	157	70	32	10.32	18.07
02-Jul-24	170	76	38	10.40	17.48
08-Jul-24	162	72	36	11.70	16.09
09-Jul-24	200	88	45	11.11	22.68
16-Jul-24	175	83	46	11.58	33.55
17-Jul-24	203	96	49	15.74	32.40
24-Jul-24	191	86	45	12.05	16.00
25-Jul-24	185	84	42	19.43	12.95
30-Jul-24	164	75	34	14.77	26.65
31-Jul-24	185	89	44	10.42	32.84
05-Aug-24	181	72	30	15.74	18.51
06-Aug-24	175	68	27	14.23	16.71
13-Aug-24	166	74	34	11.99	10.99
14-Aug-24	186	81	38	15.04	13.28
21-Aug-24	191	81	46	13.30	19.16
22-Aug-24	222	88	45	11.57	14.00
28-Aug-24	189	92	48	15.36	32.52
29-Aug-24	159	81	43	12.86	25.68
02-Sep-24	188	75	38	15.97	20.59

03-Sep-24	179	68	32	15.57	25.36
09-Sep-24	217	73	35	13.61	20.21
10-Sep-24	177	76	37	13.58	17.76
16-Sep-24	182	76	40	15.48	27.63
17-Sep-24	169	72	35	13.24	22.01
23-Sep-24	213	83	40	17.07	25.20
24-Sep-24	191	74	35	15.22	37.36
03-Oct-24	158	64	31	12.79	22.94
04-Oct-24	168	69	33	12.44	34.03
14-Oct-24	189	85	42	11.44	23.73
15-Oct-24	176	78	36	11.63	21.14
21-Oct-24	207	85	44	20.44	33.31
22-Oct-24	206	88	46	20.07	32.71
25-Oct-24	215	92	50	14.20	23.15
26-Oct-24	172	73	36	16.40	26.73
01-Nov-24	171	76	38	15.61	21.80
02-Nov-24	168	75	37	12.65	19.64
08-Nov-24	187	83	40	12.97	25.95
09-Nov-24	181	74	35	13.59	31.72
15-Nov-24	163	73	30	14.29	32.68
16-Nov-24	168	76	33	13.01	36.89
22-Nov-24	173	73	36	11.92	26.89
23-Nov-24	187	79	40	13.93	29.46
29-Nov-24	196	83	44	16.54	16.83
30-Nov-24	208	89	47	14.36	15.43
04-Dec-24	178	75	37	15.54	17.77
05-Dec-24	191	78	41	15.58	15.05
12-Dec-24	198	82	44	14.71	14.02
13-Dec-24	210	85	48	15.70	18.42
20-Dec-24	189	78	47	17.47	29.58
21-Dec-24	197	83	51	16.85	29.97
27-Dec-24	214	85	53	14.25	28.78
28-Dec-24	227	88	57	17.75	40.60
01-Jan-25	195	81	43	10.33	19.84
02-Jan-25	223	91	49	11.03	26.81
08-Jan-25	234	93	51	12.05	28.32
09-Jan-25	246	97	55	16.05	17.09
16-Jan-25	236	93	52	10.08	25.58
17-Jan-25	207	83	45	19.86	26.51
22-Jan-25	215	85	48	19.32	30.13
23-Jan-25	208	81	45	11.76	20.74
30-Jan-25	196	76	44	16.78	25.11
31-Jan-25	186	73	42	15.12	20.05
03-Feb-25	175	70	39	13.68	23.34
04-Feb-25	200	86	45	12.99	27.32
10-Feb-25	195	79	44	12.99	23.72
11-Feb-25	212	84	46	10.96	27.83
17-Feb-25	175	70	37	18.52	36.28
18-Feb-25	189	81	43	16.71	27.13
19-Feb-25	185	77	42	11.33	27.65
25-Feb-25	201	82	44	13.88	25.21
26-Feb-25	189	80	40	11.67	31.59
03-Mar-25	201	81	43	14.95	21.55
04-Mar-25	182	78	41	10.76	23.86

10-Mar-25	228	77	50	12.26	23.15
11-Mar-25	194	85	42	15.03	34.31
17-Mar-25	169	68	37	13.30	29.30
18-Mar-25	163	66	35	17.15	26.11
24-Mar-25	175	71	38	9.81	16.54
25-Mar-25	194	78	42	17.40	21.18
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	246	99	57	20.77	40.6
Minimum	154	64	27	8.15	9.79
Average	189.0	80.9	41.4	14.1	22.8
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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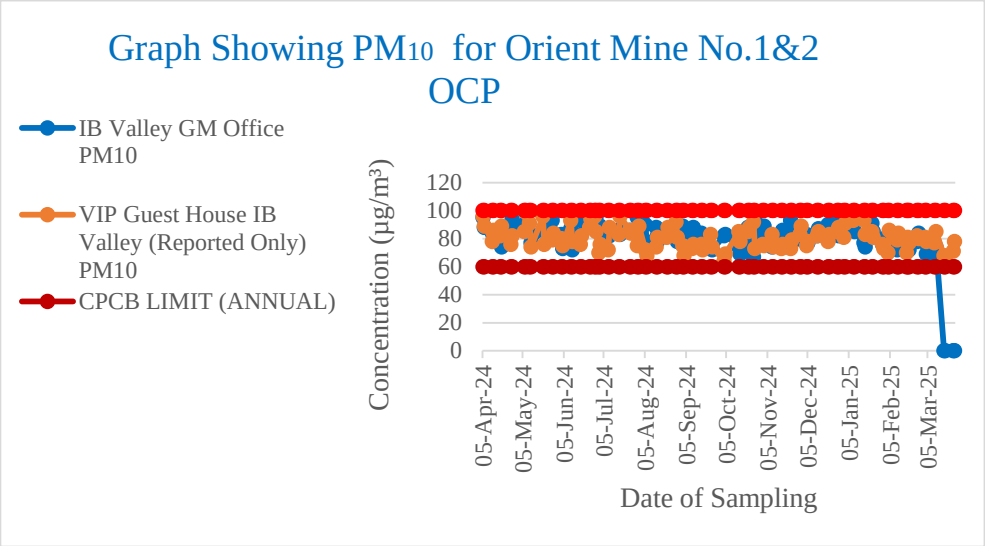
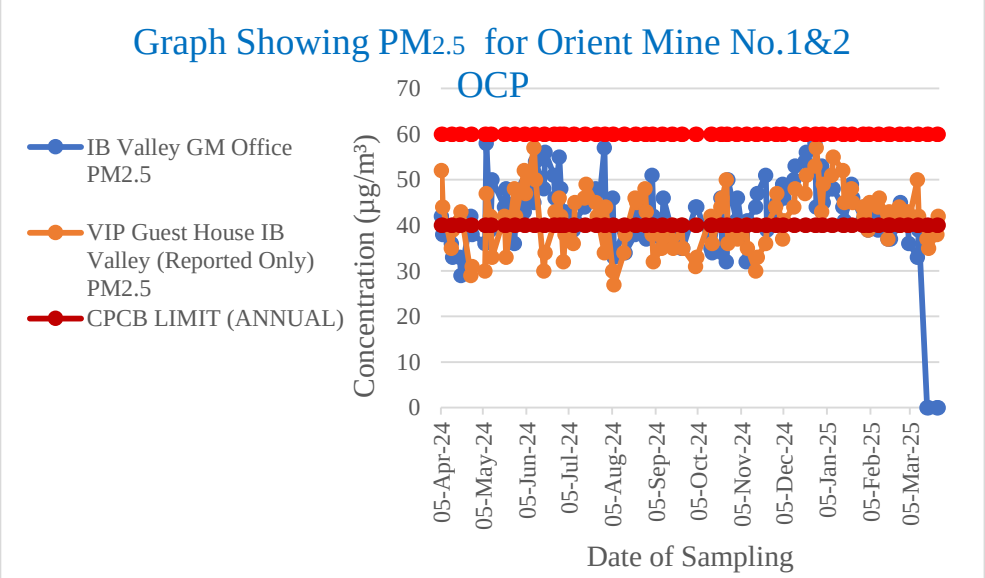
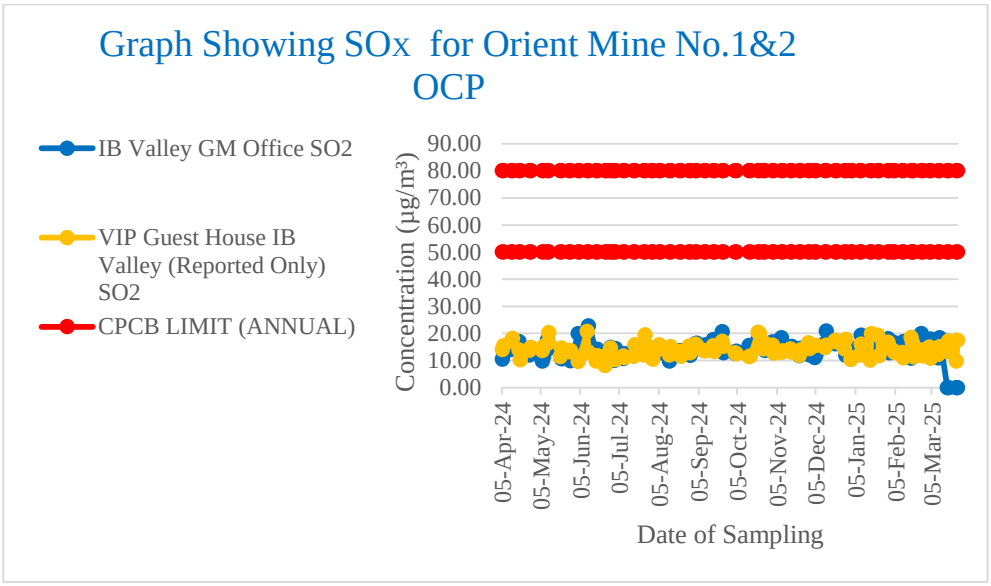

Graph Showing PM10 for Orient Mine No.1&2 OCP
IB Valley GM Office PM10
VIP Guest House IB Valley (Reported Only) PM10
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
120
100
80
60
40
20
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for Orient Mine No.1&2 OCP
IB Valley GM Office PM2.5
VIP Guest House IB Valley (Reported Only) PM2.5
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOx for Orient Mine No.1&2 OCP
IB Valley GM Office SO2
VIP Guest House IB Valley (Reported Only) SO2
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

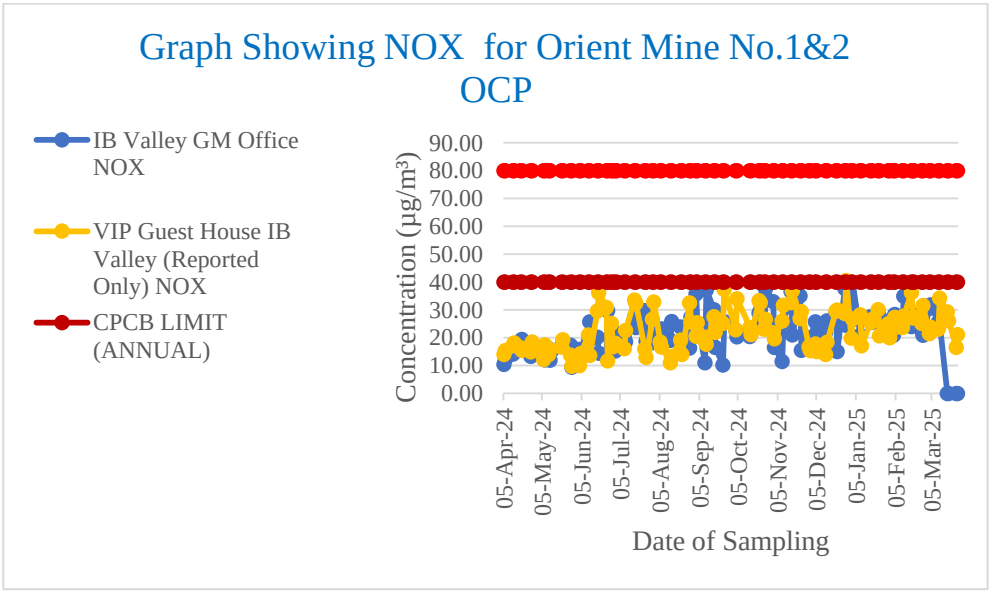

Graph Showing NOX for Orient Mine No.1&2 OCP
IB Valley GM Office NOX
VIP Guest House IB Valley (Reported Only) NOX
CPCB LIMIT (ANNUAL)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

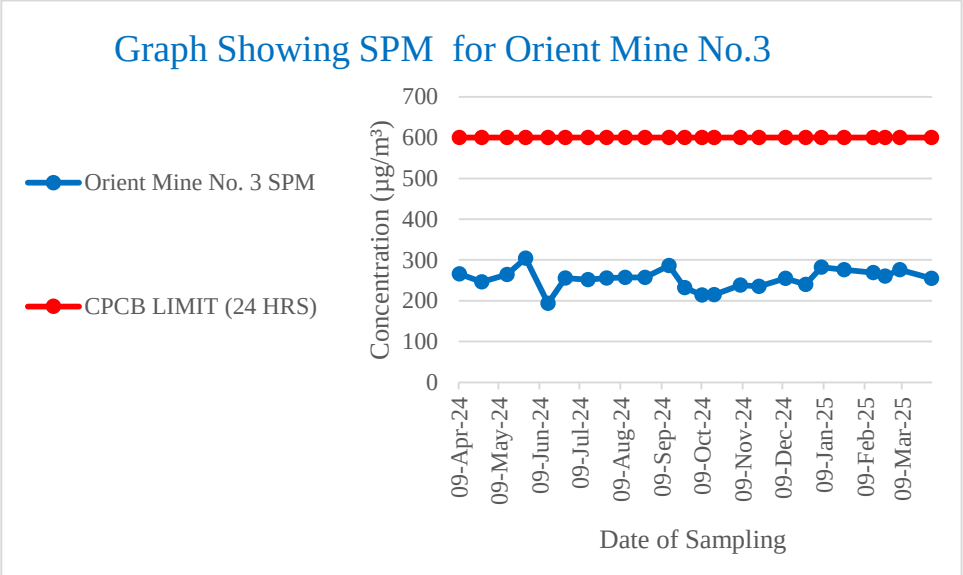
Table: 8.5.42

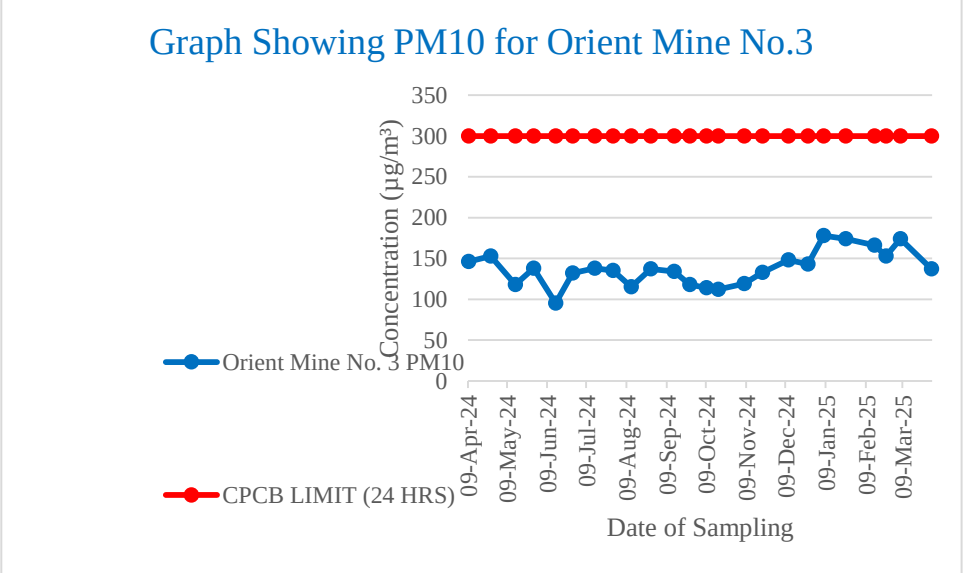
Area: Orient

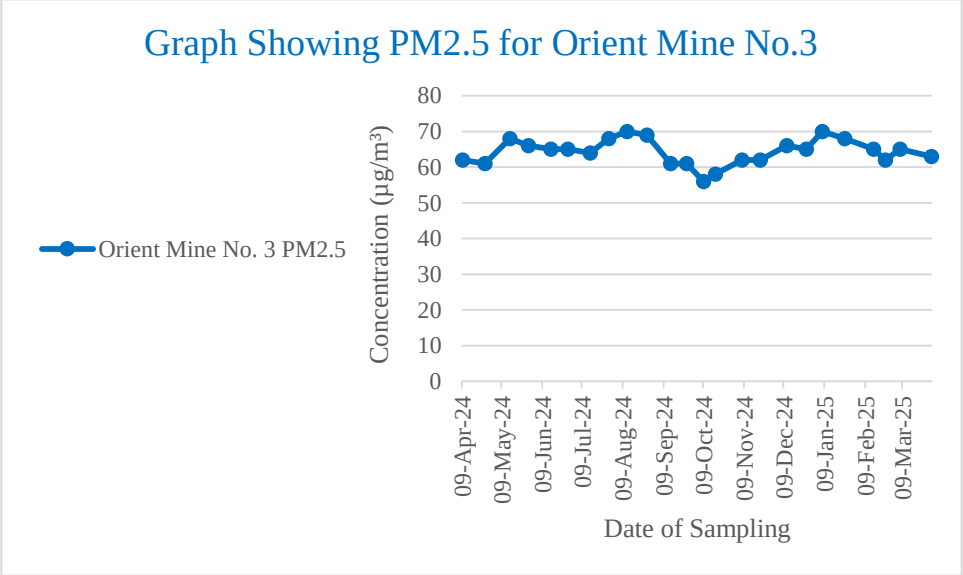
Project: Orient Mine No. 3

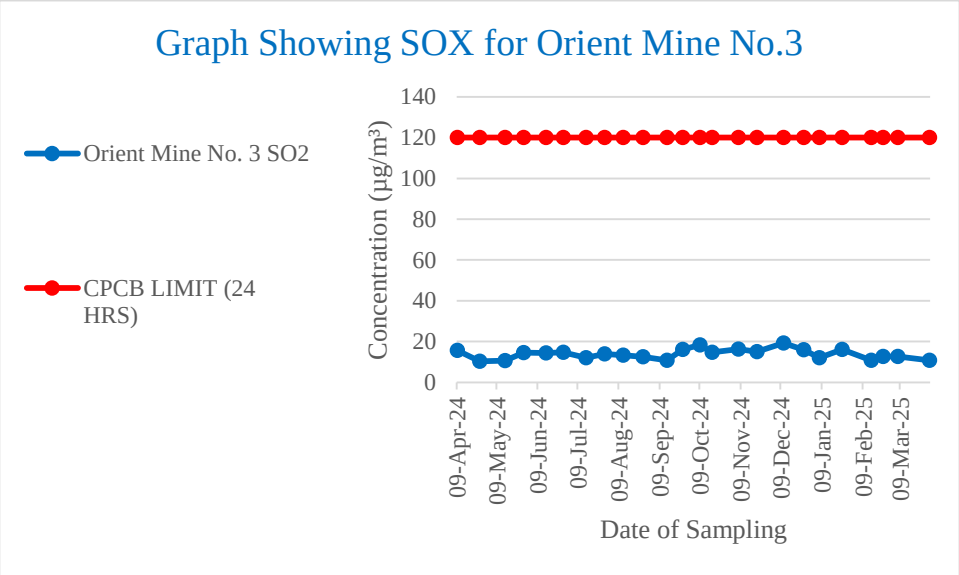
Monitoring Station: Orient Mine No. 3

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
09-Apr-24	266	146	62	15.73	15.73
26-Apr-24	246	153	61	10.40	11.87
15-May-24	264	118	68	10.67	15.94
29-May-24	304	138	66	14.62	14.49
15-Jun-24	194	95	65	14.40	27.66
28-Jun-24	256	132	65	14.76	8.76
15-Jul-24	252	138	64	12.03	16.20
29-Jul-24	256	135	68	13.89	29.16
12-Aug-24	257	115	70	13.27	12.29
27-Aug-24	257	137	69	12.53	16.44
14-Sep-24	286	134	61	10.79	13.30
26-Sep-24	232	118	61	16.08	20.20
09-Oct-24	214	114	56	18.29	34.64
18-Oct-24	215	112	58	14.75	24.04
07-Nov-24	238	119	62	16.32	33.31
21-Nov-24	235	133	62	15.02	26.89
11-Dec-24	255	148	66	19.26	18.88
26-Dec-24	240	143	65	15.91	25.21
07-Jan-25	282	178	70	12.09	30.23
24-Jan-25	276	174	68	16.10	21.96
15-Feb-25	269	166	65	10.75	24.47
24-Feb-25	260	153	62	12.73	38.58
07-Mar-25	276	174	65	12.73	38.58
31-Mar-25	255	137	63	10.75	24.47
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	304	178	70	19.26	38.58
Minimum	194	95	56	10.40	8.76
Average	253.54	137.92	64.25	13.91	22.64
Standard 24 hr	600	300		120	120
Standard Annual	430	215	-	80	80


Graph Showing SPM for Orient Mine No.3
Orient Mine No. 3 SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
700
600
500
400
300
200
100
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing PM10 for Orient Mine No.3
Orient Mine No. 3 PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
350
300
250
200
150
100
50
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing PM2.5 for Orient Mine No.3
Orient Mine No. 3 PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing SOX for Orient Mine No.3
Orient Mine No. 3 SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

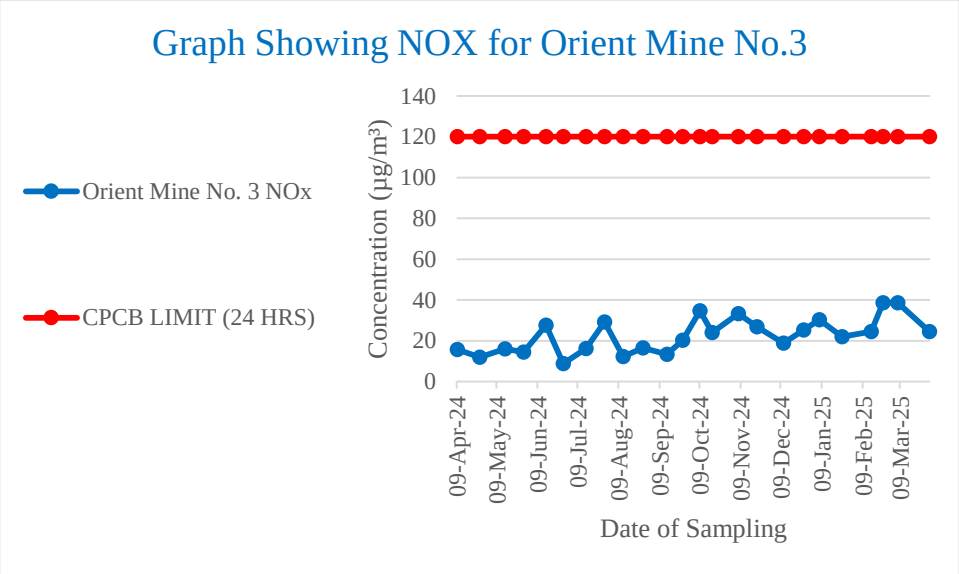

Graph Showing NOX for Orient Mine No.3
Orient Mine No. 3 NOx
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

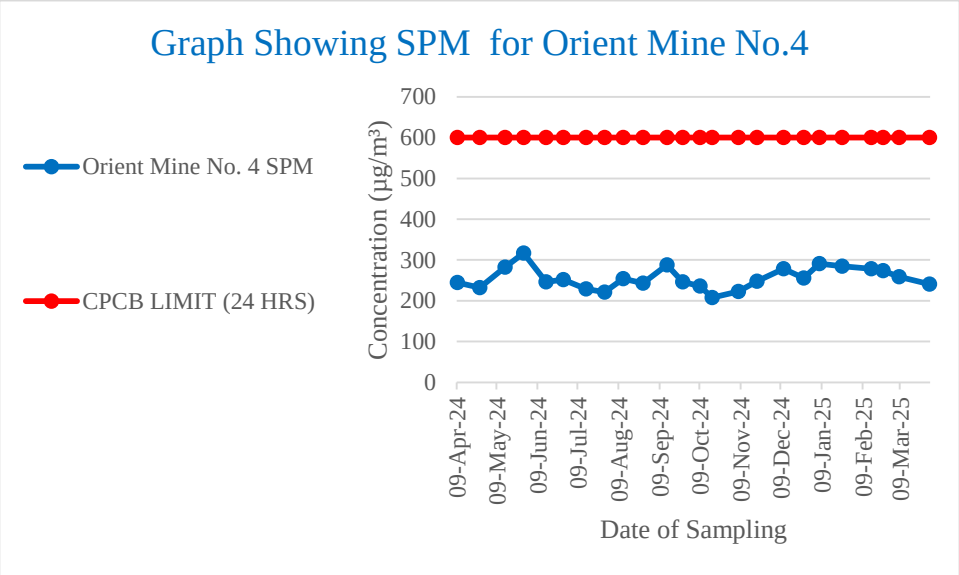
Table: 8.5.43

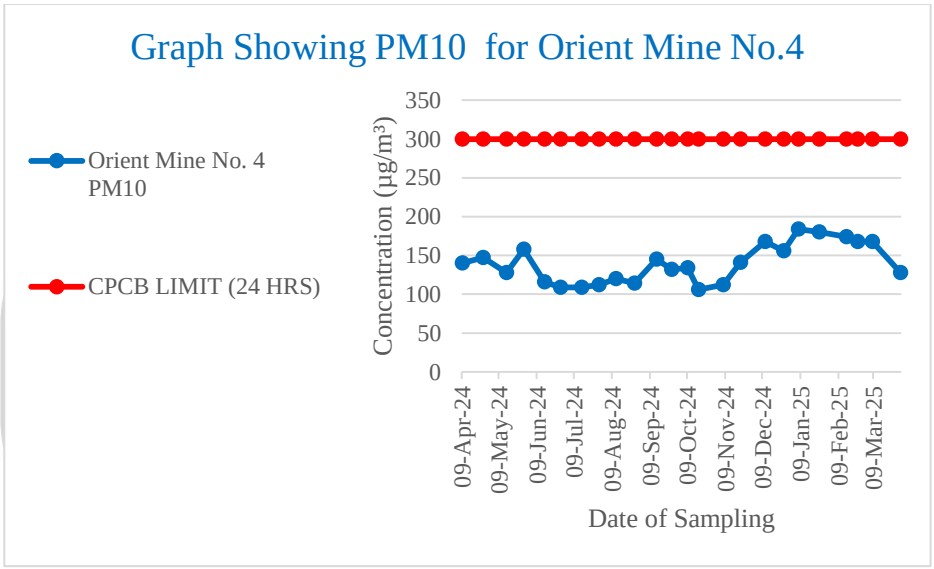
Area: Orient

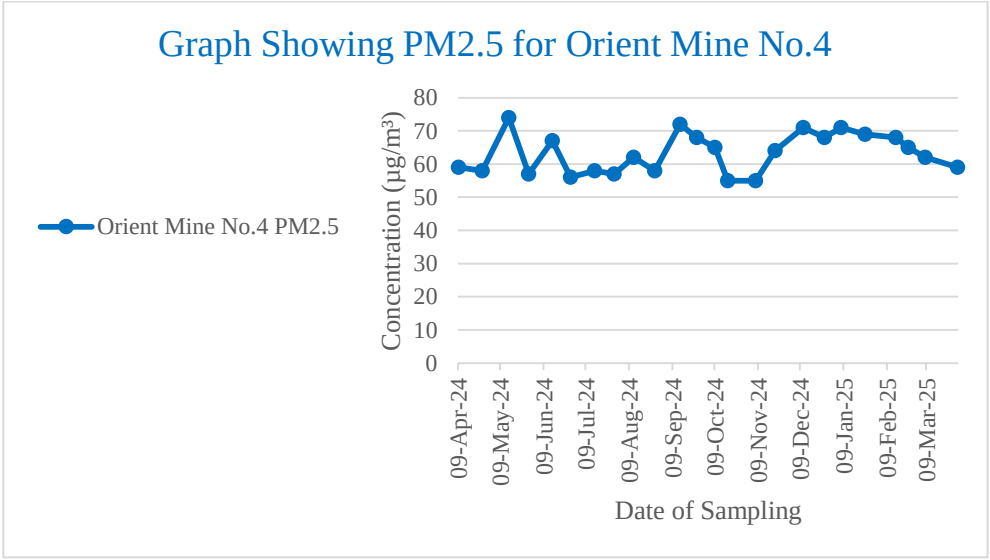
Project: Orient Mine No. 4

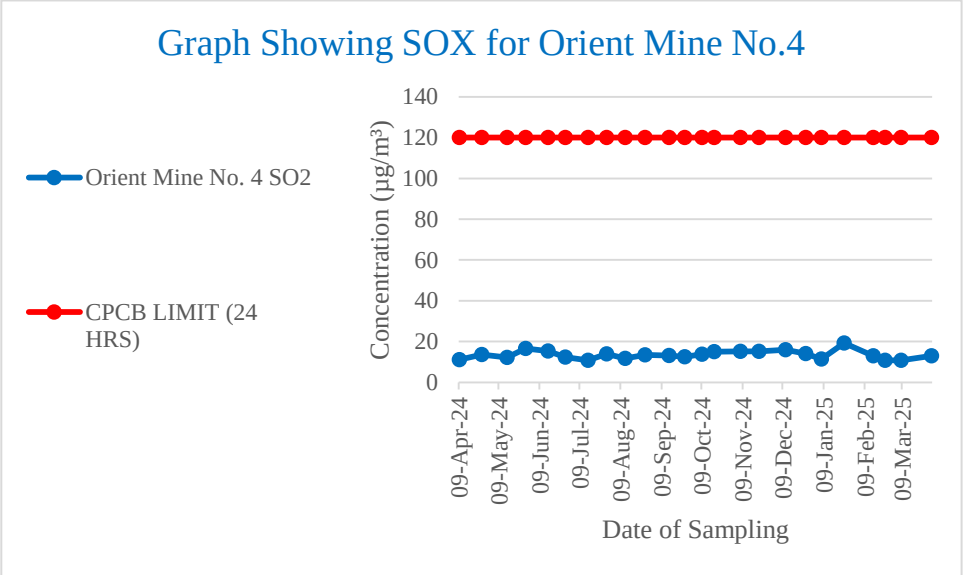
Monitoring Station: Orient Mine No. 4

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
09-Apr-24	245	140	59	11.16	11.16
26-Apr-24	232	147	58	13.58	14.97
15-May-24	282	128	74	12.26	13.47
29-May-24	317	158	57	16.65	13.35
15-Jun-24	246	116	67	15.29	30.22
28-Jun-24	252	109	56	12.30	28.10
15-Jul-24	229	109	58	10.87	19.02
29-Jul-24	221	112	57	13.94	33.55
12-Aug-24	254	120	62	11.79	16.56
27-Aug-24	243	114	58	13.42	17.19
14-Sep-24	288	145	72	13.16	14.53
26-Sep-24	246	132	68	12.47	12.10
09-Oct-24	236	134	65	13.83	30.54
18-Oct-24	208	106	55	14.99	24.44
07-Nov-24	223	112	55	15.24	35.65
21-Nov-24	248	141	64	15.25	14.59
11-Dec-24	278	168	71	16.04	16.40
26-Dec-24	256	156	68	14.17	28.05
07-Jan-25	291	184	71	11.47	22.98
24-Jan-25	285	180	69	19.32	30.13
15-Feb-25	278	174	68	12.99	33.16
24-Feb-25	274	168	65	10.75	24.47
08-Mar-25	259	168	62	10.75	24.47
31-Mar-25	241	128	59	12.99	33.16
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	317	184	74	19.32	35.65
Minimum	208	106	55	10.75	11.16
Average	255.50	139.54	63.25	13.53	22.59
Standard 24 hr	600	300		120	120
Standard Annual	430	215	-	80	80


Graph Showing SPM for Orient Mine No.4
Orient Mine No. 4 SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
700
600
500
400
300
200
100
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing PM10 for Orient Mine No.4
Orient Mine No. 4 PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
350
300
250
200
150
100
50
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing PM2.5 for Orient Mine No.4
Orient Mine No.4 PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing SOX for Orient Mine No.4
Orient Mine No. 4 SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

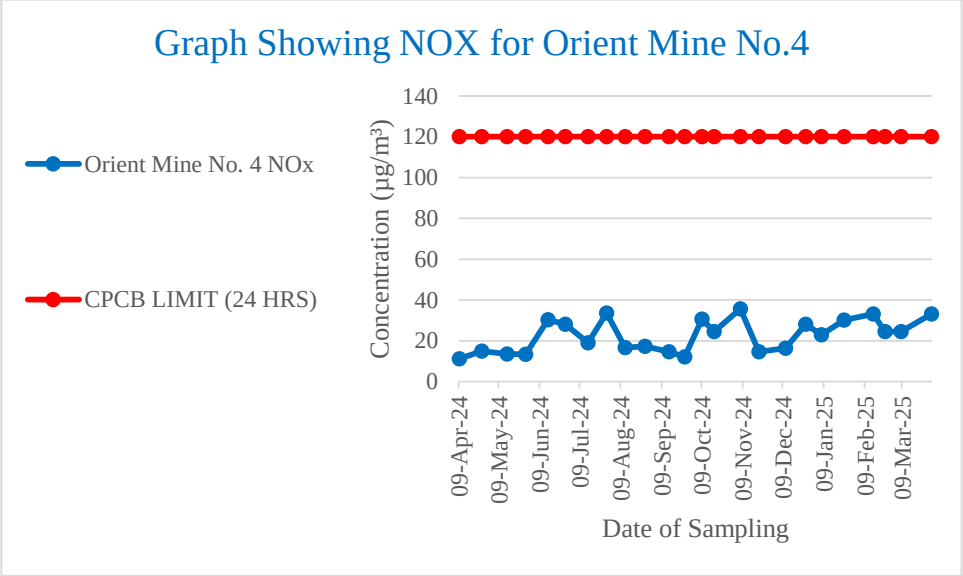

Graph Showing NOX for Orient Mine No.4
Orient Mine No. 4 NOx
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

Table: 8.5.44

Area: Orient

Project: HBI Mine

Monitoring Station: Bundia Colony Pump House

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
10-Apr-24	274	172	69	14.67	14.67
27-Apr-24	285	178	67	12.13	15.52
15-May-24	365	152	57	11.71	11.79
29-May-24	284	134	64	9.95	14.78
15-Jun-24	213	103	61	12.32	16.67
29-Jun-24	226	112	50	11.91	16.85
15-Jul-24	243	123	65	14.93	19.59
29-Jul-24	237	131	67	24.11	24.61
12-Aug-24	269	124	66	13.30	13.68
27-Aug-24	284	148	72	14.34	28.77
14-Sep-24	230	122	58	13.53	26.26
26-Sep-24	212	112	58	12.37	16.31
01-Oct-24	231	106	59	14.40	38.82
28-Oct-24	238	128	64	13.83	22.54
07-Nov-24	293	158	72	17.93	26.27
21-Nov-24	305	158	74	10.45	19.64
14-Dec-24	244	140	66	12.03	26.03
26-Dec-24	253	148	68	13.59	17.18
07-Jan-25	277	178	71	9.98	21.35
24-Jan-25	271	166	69	15.94	19.08
15-Feb-25	260	164	65	14.00	24.67
24-Feb-25	259	158	63	13.74	36.77
14-Mar-25	255	146	60	21.13	38.60
31-Mar-25	245	136	57	17.52	32.00
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	365	178	74	24.11	38.82
Minimum	212	103	50	9.95	11.79
Average	260.54	141.54	64.25	14.16	22.60
Standard 24 hr	500	250	-	120	120
Standard Annual	360	180	-	80	80

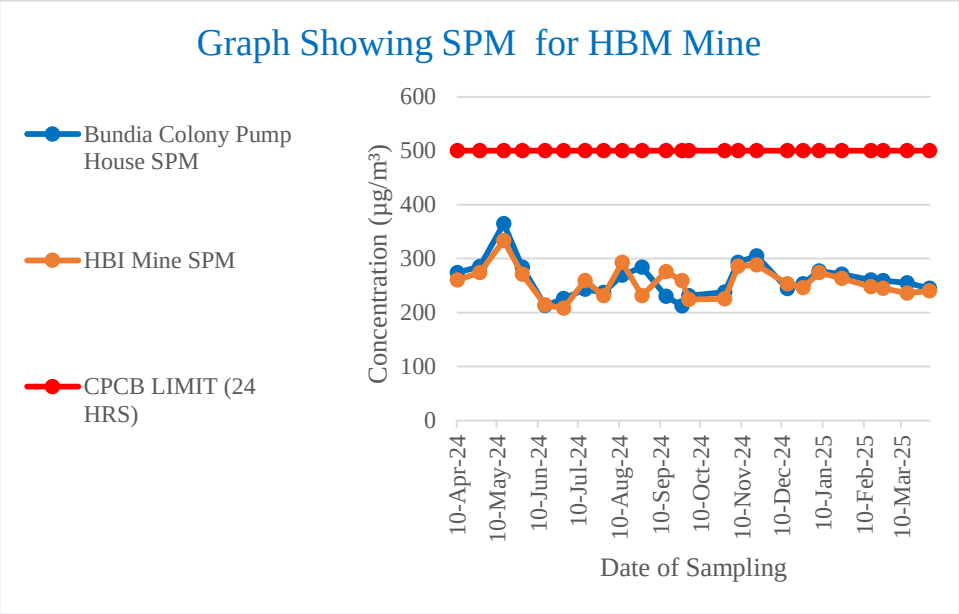
Table: 8.5.45

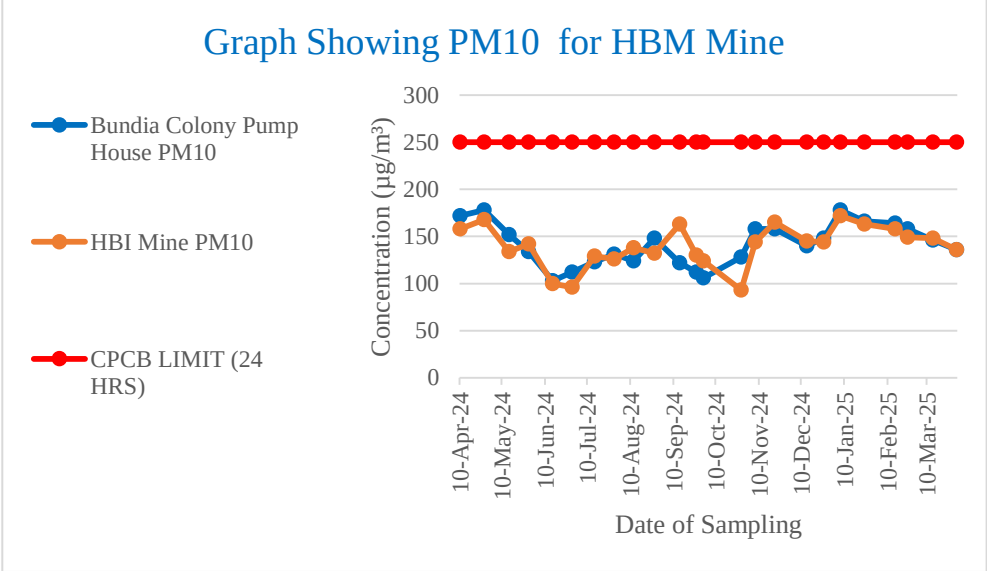
Area: Orient

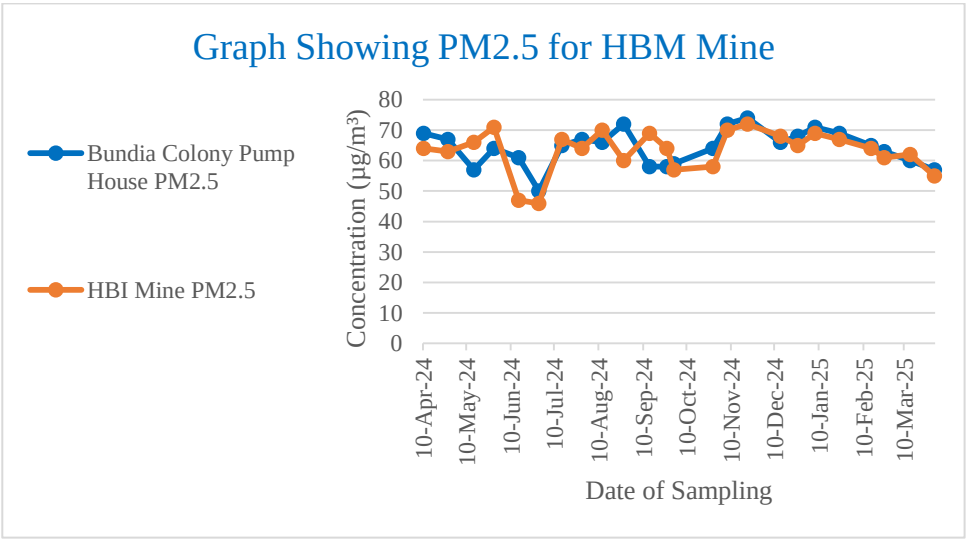
Project: HBI Mine

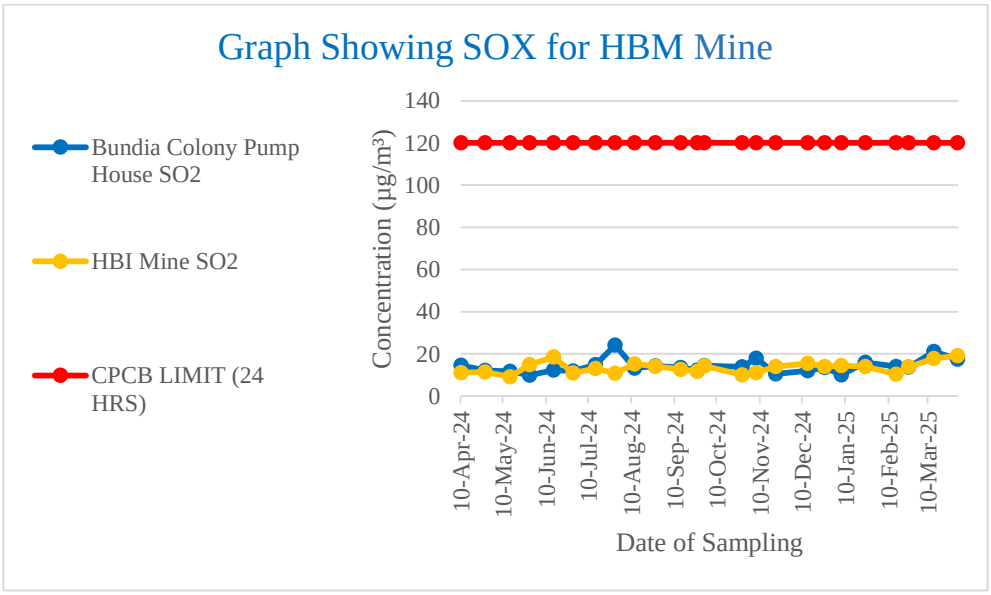
Monitoring Station: HBI Mine

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
10-Apr-24	260	158	64	11.11	11.11
27-Apr-24	274	168	63	11.43	13.43
15-May-24	333	134	66	9.11	10.89
29-May-24	271	142	71	14.91	15.77
15-Jun-24	214	100	47	18.48	17.81
28-Jun-24	208	96	46	10.97	16.11
15-Jul-24	259	129	67	13.07	16.01
29-Jul-24	231	126	64	10.84	32.11
12-Aug-24	293	138	70	15.14	15.27
27-Aug-24	231	132	60	14.21	24.35
14-Sep-24	276	163	69	12.62	13.28
26-Sep-24	259	130	64	11.70	17.14
09-Oct-24	224	124	57	14.28	35.63
18-Oct-24	225	93	58	10.12	18.32
07-Nov-24	286	144	70	11.16	33.72
21-Nov-24	288	165	72	13.93	25.95
11-Dec-24	253	145	68	15.52	14.98
26-Dec-24	246	144	65	13.92	25.55
07-Jan-25	274	172	69	14.40	30.37
24-Jan-25	263	163	67	14.01	27.83
15-Feb-25	248	158	64	10.40	22.57
24-Feb-25	245	149	61	13.81	30.83
08-Mar-25	236	148	62	17.84	28.17
31-Mar-25	240	136	55	19.20	27.55
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	333	172	72	19.20	35.63
Minimum	208	93	46	9.11	10.89
Average	255.71	139.88	63.29	13.42	21.86
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for HBM Mine
Bundia Colony Pump House SPM
HBI Mine SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
600
500
400
300
200
100
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing PM10 for HBM Mine
Bundia Colony Pump House PM10
HBI Mine PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing PM2.5 for HBM Mine
Bundia Colony Pump House PM2.5
HBI Mine PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing SOX for HBM Mine
Bundia Colony Pump House SO2
HBI Mine SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

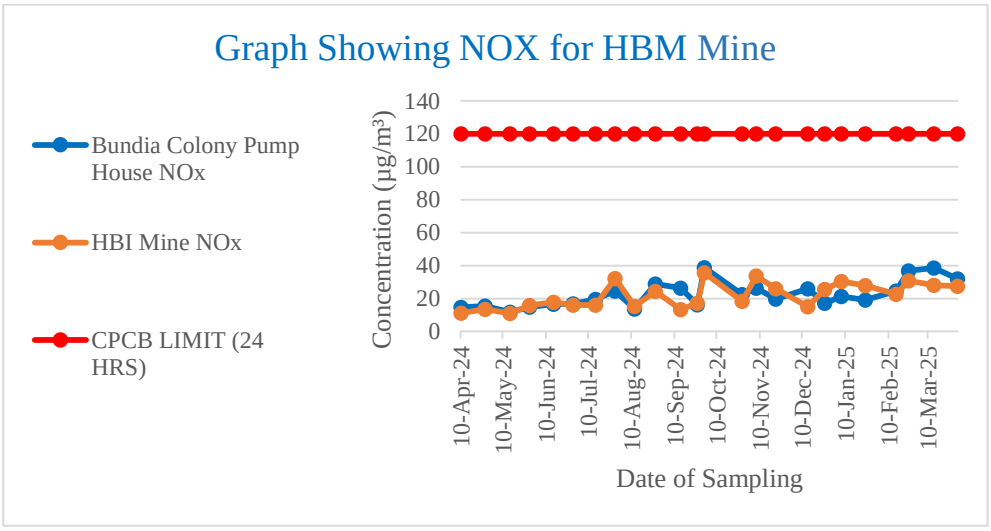

Graph Showing NOX for HBM Mine
Bundia Colony Pump House NOx
HBI Mine NOx
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 8.5.46

Area: Orient

Project: Hirakand Bundia Mine (HBM)

Monitoring Station: Rampur Sub Area

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	188	85	37	17.16	19.55
06-Apr-24	168	74	28	13.30	14.30
12-Apr-24	180	88	33	15.60	16.21
13-Apr-24	161	81	38	17.16	19.66
22-Apr-24	172	83	37	13.08	14.67
23-Apr-24	189	94	42	10.62	13.64
26-Apr-24	166	78	29	12.61	13.64
27-Apr-24	174	87	33	12.54	12.67
02-May-24	175	87	40	9.79	14.87
03-May-24	155	85	50	21.61	13.50
08-May-24	157	94	37	13.75	10.61
09-May-24	176	91	35	13.77	9.01
16-May-24	173	88	46	18.93	13.30
17-May-24	178	82	39	10.23	12.62
24-May-24	185	92	40	16.21	19.50
25-May-24	152	72	50	11.30	18.88
05-Jun-24	161	75	58	11.10	25.44
06-Jun-24	176	81	34	13.92	19.92
12-Jun-24	182	85	41	15.08	34.27
13-Jun-24	175	80	38	15.90	27.14
19-Jun-24	183	88	43	13.54	40.13
20-Jun-24	167	86	38	10.83	27.29
26-Jun-24	221	92	44	9.63	18.74
27-Jun-24	191	89	43	10.70	7.55
28-Jun-24	208	94	47	15.41	23.70
29-Jun-24	172	75	38	16.94	25.12
03-Jul-24	183	78	36	15.15	13.26
04-Jul-24	193	86	43	12.25	22.33
10-Jul-24	188	90	45	13.85	20.77
11-Jul-24	164	75	36	11.90	20.83
18-Jul-24	166	77	41	11.78	23.31
19-Jul-24	199	91	39	14.66	31.27
26-Jul-24	207	96	30	14.61	29.83
27-Jul-24	205	85	41	13.19	13.68
01-Aug-24	211	76	35	11.11	20.44
02-Aug-24	187	82	38	11.98	20.35
09-Aug-24	149	80	35	13.30	18.16
10-Aug-24	207	74	31	15.27	19.60
16-Aug-24	186	81	43	13.18	25.29
17-Aug-24	146	84	45	10.52	11.59
23-Aug-24	186	78	37	9.40	15.01
24-Aug-24	167	74	33	12.90	13.48
30-Aug-24	154	69	31	11.68	29.67
31-Aug-24	154	72	30	14.47	16.32
04-Sep-24	208	84	45	11.66	20.40

05-Sep-24	202	82	43	17.61	13.82
11-Sep-24	212	78	39	15.79	19.33
12-Sep-24	195	85	44	14.29	11.33
19-Sep-24	170	83	39	15.26	14.77
20-Sep-24	187	90	36	18.19	25.07
27-Sep-24	164	75	33	15.34	14.82
28-Sep-24	164	84	42	15.41	11.77
07-Oct-24	172	73	36	11.21	35.81
08-Oct-24	159	68	28	14.35	36.29
16-Oct-24	174	70	32	14.07	36.70
17-Oct-24	198	86	44	11.63	30.81
23-Oct-24	168	72	34	12.65	20.62
24-Oct-24	179	80	39	15.43	25.14
29-Oct-24	175	74	37	19.10	31.13
30-Oct-24	175	69	40	16.53	26.94
04-Nov-24	175	74	35	14.56	16.51
05-Nov-24	201	92	50	13.52	16.53
11-Nov-24	186	79	38	10.77	20.52
12-Nov-24	173	70	32	10.30	28.82
18-Nov-24	182	75	38	11.32	35.07
19-Nov-24	193	78	40	15.23	29.46
25-Nov-24	196	82	43	16.10	25.25
26-Nov-24	204	84	45	15.23	16.13
02-Dec-24	181	84	39	16.81	28.34
03-Dec-24	196	80	43	15.04	23.34
09-Dec-24	212	85	48	17.61	25.49
10-Dec-24	205	83	46	13.38	27.73
16-Dec-24	191	77	46	13.79	18.49
17-Dec-24	206	82	50	22.92	17.43
23-Dec-24	211	85	52	17.20	29.90
24-Dec-24	195	83	51	12.56	35.21
30-Dec-24	212	86	53	21.37	24.22
31-Dec-24	218	90	56	11.10	26.18
03-Jan-25	188	83	42	11.19	31.18
04-Jan-25	199	83	45	9.94	35.69
10-Jan-25	208	88	47	16.20	34.41
11-Jan-25	227	92	50	14.87	25.22
20-Jan-25	206	84	45	12.88	21.96
21-Jan-25	210	90	48	15.18	19.69
28-Jan-25	206	79	44	11.34	18.67
29-Jan-25	208	87	46	14.05	27.47
05-Feb-25	198	75	43	19.50	23.52
06-Feb-25	209	84	45	16.57	21.47
12-Feb-25	220	88	48	12.91	21.12
13-Feb-25	206	81	45	14.86	24.65
20-Feb-25	213	84	46	14.73	28.08
21-Feb-25	194	80	43	14.55	39.32
27-Feb-25	193	76	41	17.05	35.52
28-Feb-25	198	75	43	16.26	29.51
05-Mar-25	186	76	39	14.28	36.51
06-Mar-25	191	86	47	21.18	34.38
12-Mar-25	206	84	44	17.39	25.41
13-Mar-25	187	80	41	14.68	27.67
19-Mar-25	180	74	38	20.42	25.16

20-Mar-25	152	64	30	10.95	18.52
26-Mar-25	172	68	35	11.83	28.32
27-Mar-25	168	74	32	12.64	24.74
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	227	96	58	22.92	40.13
Minimum	146	64	28	9.4	7.55
Average	186.3	81.5	40.7	14.3	22.8
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 8.5.47

Area: Orient

Project: Hirakand Bundia Mine (HBM)

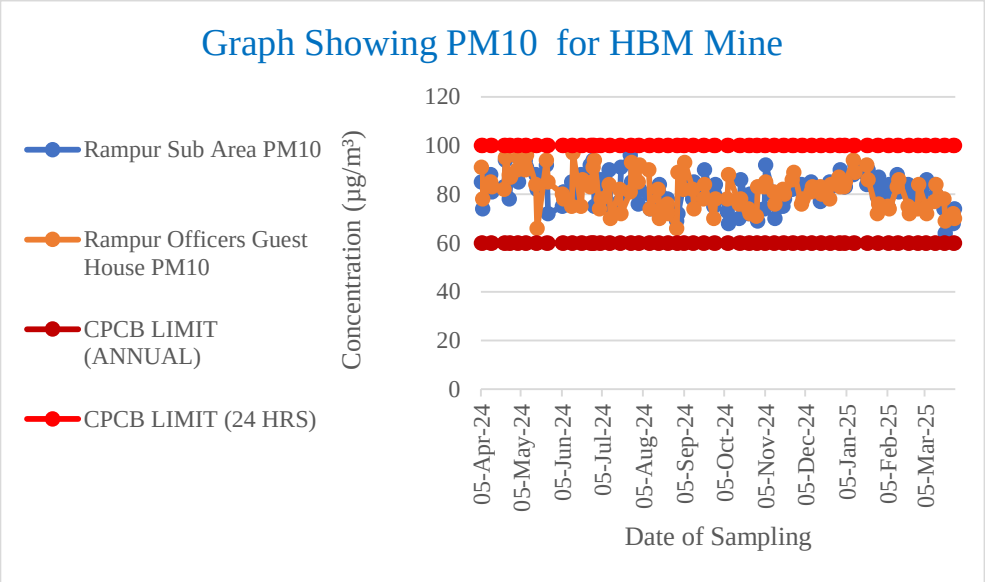
Monitoring Station: Rampur Officers Guest House

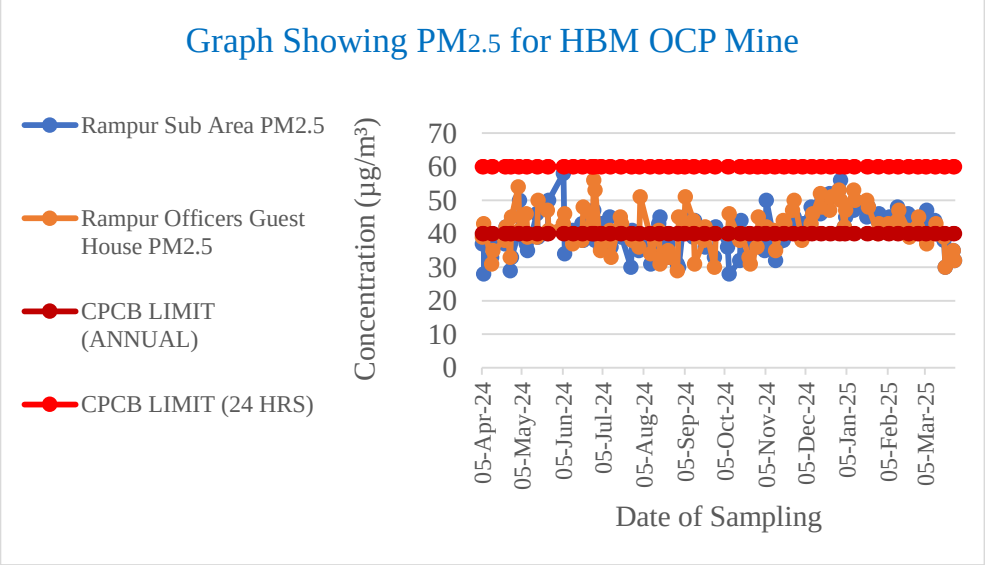
Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	172	91	39	17.55	19.46
06-Apr-24	158	78	43	14.83	15.88
12-Apr-24	172	85	31	12.13	13.42
13-Apr-24	195	83	35	15.68	16.74
22-Apr-24	192	82	38	10.54	14.48
23-Apr-24	208	95	42	16.30	17.41
26-Apr-24	176	88	33	12.43	13.65
27-Apr-24	218	87	45	13.02	16.78
02-May-24	207	90	54	13.30	15.62
03-May-24	197	95	41	9.12	11.94
08-May-24	150	90	46	14.66	16.80
09-May-24	207	96	39	13.19	15.83
16-May-24	169	84	39	15.43	14.63
17-May-24	157	66	50	15.74	15.20
24-May-24	202	94	47	10.78	19.21
25-May-24	177	85	41	13.76	20.90
05-Jun-24	170	80	43	11.92	31.13
06-Jun-24	227	78	46	10.15	22.96
12-Jun-24	136	75	37	12.87	14.10
13-Jun-24	228	97	39	12.37	24.72
19-Jun-24	160	75	38	17.50	39.33
20-Jun-24	196	86	48	20.51	20.00
26-Jun-24	187	83	46	17.03	33.67
27-Jun-24	178	85	43	12.81	22.78
28-Jun-24	218	91	56	10.87	13.81
29-Jun-24	208	94	53	10.30	35.40
03-Jul-24	170	74	35	16.59	22.59
04-Jul-24	176	78	37	10.84	20.43
10-Jul-24	197	84	41	12.70	17.20
11-Jul-24	177	70	33	15.68	16.77
18-Jul-24	174	82	45	9.14	18.91
19-Jul-24	183	72	43	12.49	12.14
26-Jul-24	179	81	39	13.77	24.11
27-Jul-24	199	93	38	16.63	16.98
01-Aug-24	210	85	36	13.46	14.50
02-Aug-24	214	92	51	16.39	16.88
09-Aug-24	152	90	40	13.36	13.64
10-Aug-24	165	74	34	11.26	10.70
16-Aug-24	143	82	41	14.69	20.51
17-Aug-24	156	70	31	12.78	14.32
23-Aug-24	168	76	35	11.27	12.28
24-Aug-24	161	72	33	9.79	27.34
30-Aug-24	159	66	29	10.55	27.34
31-Aug-24	203	89	45	13.90	31.37
04-Sep-24	198	82	42	19.22	20.37

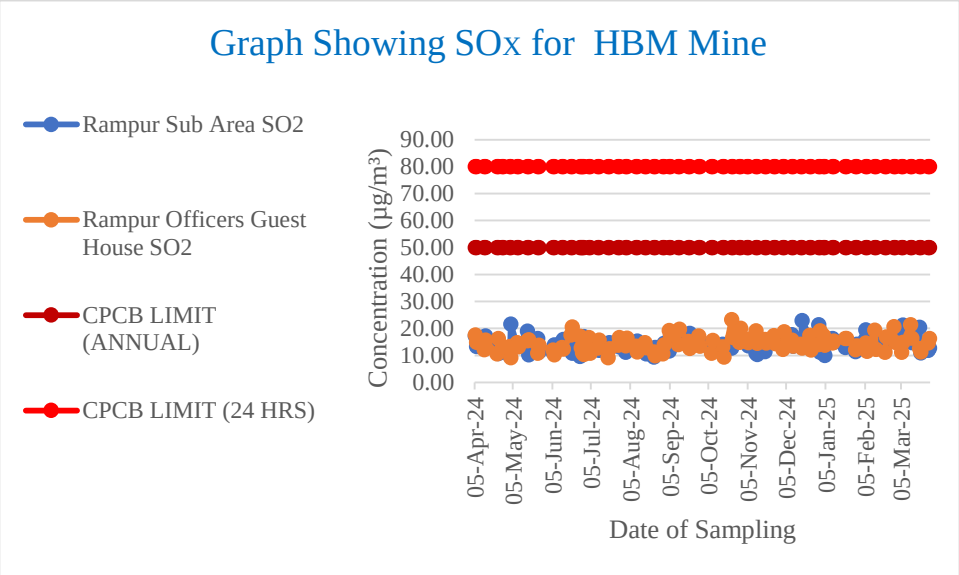
05-Sep-24	262	93	51	17.45	22.49
11-Sep-24	204	82	44	14.01	32.35
12-Sep-24	196	74	31	19.71	14.53
19-Sep-24	179	78	38	15.12	21.91
20-Sep-24	172	84	42	12.59	31.13
27-Sep-24	151	70	30	17.17	15.67
28-Sep-24	195	78	40	13.38	26.07
07-Oct-24	188	78	40	10.76	22.66
08-Oct-24	198	88	46	15.48	25.23
16-Oct-24	178	76	38	13.12	25.20
17-Oct-24	188	78	40	9.36	17.44
23-Oct-24	170	74	33	23.25	37.90
24-Oct-24	162	72	31	16.56	26.99
29-Oct-24	177	71	36	14.83	24.17
30-Oct-24	196	83	45	20.08	32.72
04-Nov-24	185	83	41	16.00	32.90
05-Nov-24	191	85	42	14.67	12.61
11-Nov-24	186	81	41	19.07	16.68
12-Nov-24	170	76	35	14.47	10.53
18-Nov-24	193	82	44	15.93	28.60
19-Nov-24	190	80	43	14.56	14.66
25-Nov-24	205	86	47	17.29	19.80
26-Nov-24	216	89	50	14.30	35.33
02-Dec-24	184	76	38	12.26	20.55
03-Dec-24	192	78	40	18.74	12.86
09-Dec-24	197	81	43	15.67	30.19
10-Dec-24	200	83	46	13.36	24.63
16-Dec-24	214	83	52	14.06	22.96
17-Dec-24	205	80	48	12.72	13.27
23-Dec-24	199	78	47	17.44	26.10
24-Dec-24	188	84	51	12.02	33.70
30-Dec-24	206	87	53	13.98	36.80
31-Dec-24	199	83	50	19.11	37.37
03-Jan-25	196	83	42	17.37	35.52
04-Jan-25	208	85	47	13.80	27.12
10-Jan-25	241	94	53	14.58	15.42
11-Jan-25	227	89	50	15.30	15.82
20-Jan-25	228	92	50	16.25	18.80
21-Jan-25	214	86	48	16.27	29.30
28-Jan-25	185	72	40	12.08	23.86
29-Jan-25	191	76	43	13.53	23.06
05-Feb-25	195	75	43	14.56	20.54
06-Feb-25	188	74	41	11.46	29.10
12-Feb-25	201	83	44	19.36	33.22
13-Feb-25	208	86	47	12.21	29.28
20-Feb-25	190	75	41	11.09	18.82
21-Feb-25	188	72	39	16.87	36.18
27-Feb-25	185	74	42	20.60	32.59
28-Feb-25	204	84	45	14.85	37.40
05-Mar-25	183	75	39	11.09	18.82
06-Mar-25	179	72	37	14.76	29.41
12-Mar-25	183	77	40	21.31	37.07
13-Mar-25	197	84	43	16.32	33.62
19-Mar-25	188	78	39	12.60	24.49

20-Mar-25	169	69	30	11.28	19.89
26-Mar-25	172	72	35	14.60	26.67
27-Mar-25	164	70	32	16.26	25.57
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	262	97	56	23.25	39.33
Minimum	136	66	29	9.12	10.53
Average	188.91	81.33	41.63	14.47	22.76
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna


Graph Showing PM10 for HBM Mine
Rampur Sub Area PM10
Rampur Officers Guest House PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for HBM OCP Mine
Rampur Sub Area PM2.5
Rampur Officers Guest House PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOx for HBM Mine
Rampur Sub Area SO2
Rampur Officers Guest House SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

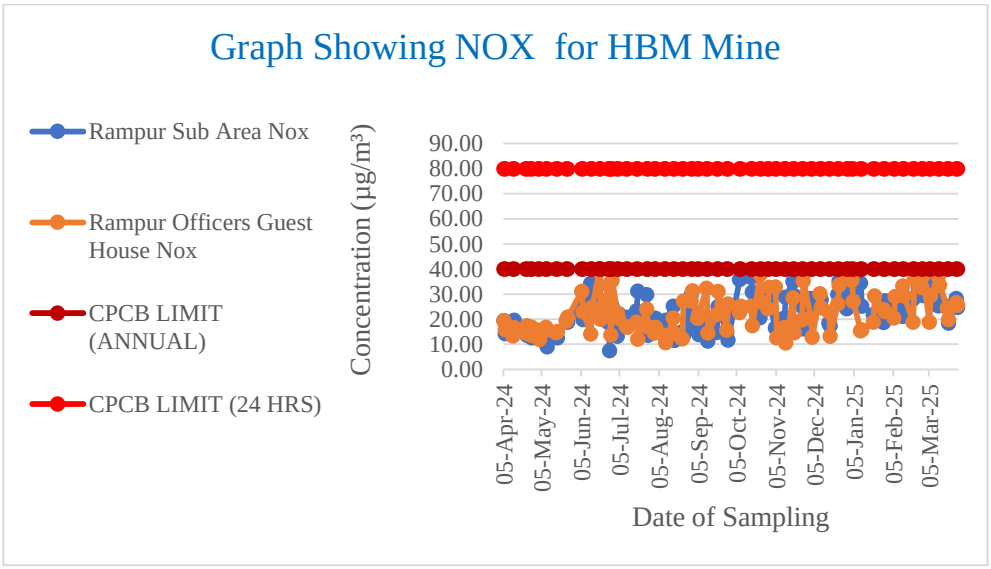

Graph Showing NOX for HBM Mine
Rampur Sub Area Nox
Rampur Officers Guest House Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

Table: 8.5.48

Area: Orient

Project: HRC

Monitoring Station: Near CHP HRC

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
11-Apr-24	256	148	64	16.92	17.48
29-Apr-24	249	138	55	10.72	11.68
15-May-24	241	132	54	10.66	11.42
29-May-24	209	94	58	15.39	15.54
15-Jun-24	258	129	54	10.06	23.19
29-Jun-24	198	94	45	12.35	23.65
15-Jul-24	216	106	55	14.12	18.9
29-Jul-24	260	76	54	14.61	20.19
03-Aug-24	216	106	55	14.12	18.9
27-Aug-24	256	127	63	10.12	16.89
14-Sep-24	299	135	68	17.06	18.61
26-Sep-24	240	132	66	11.88	15.39
01-Oct-24	238	118	65	10.31	22.91
28-Oct-24	221	110	54	12.35	20.13
07-Nov-24	243	127	62	16.71	19.35
21-Nov-24	252	138	65	13.06	13.33
11-Dec-24	244	137	63	13.28	29.56
26-Dec-24	254	148	66	14.36	27.63
07-Jan-25	23	160	68	13.97	14.84
24-Jan-25	268	157	66	12.54	25.41
15-Feb-25	256	143	62	12.47	18.82
24-Feb-25	237	133	57	12.1	24.2
14-Mar-25	275	172	66	12.1	24.2
31-Mar-25	227	144	59	12.47	18.82
Brief Statistics	SPM	PM10	PM2 5	SO2	NOx
Maximum	299	172	68	17.06	29.56
Minimum	23	76	45	10.06	11.42
Average	234.8	129.33	60.17	13.07	19.63
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80

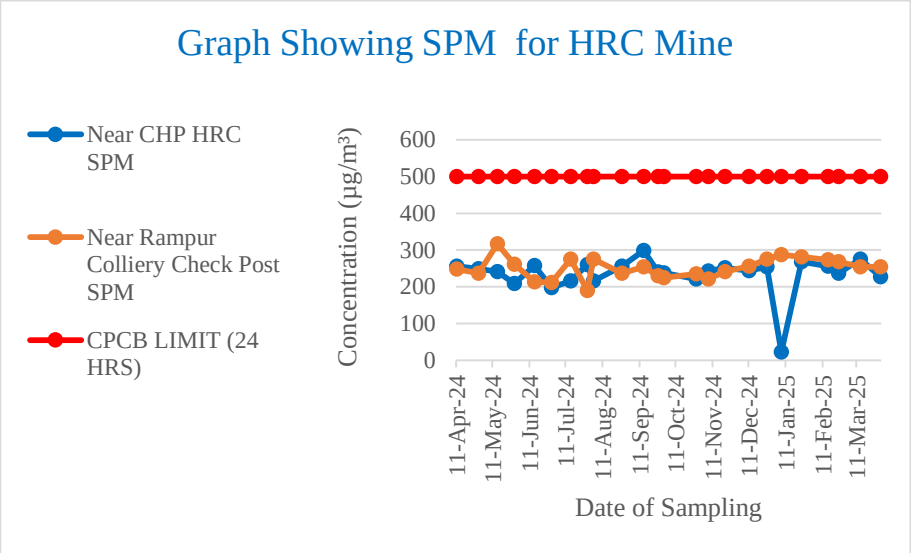
Table: 8.5.49

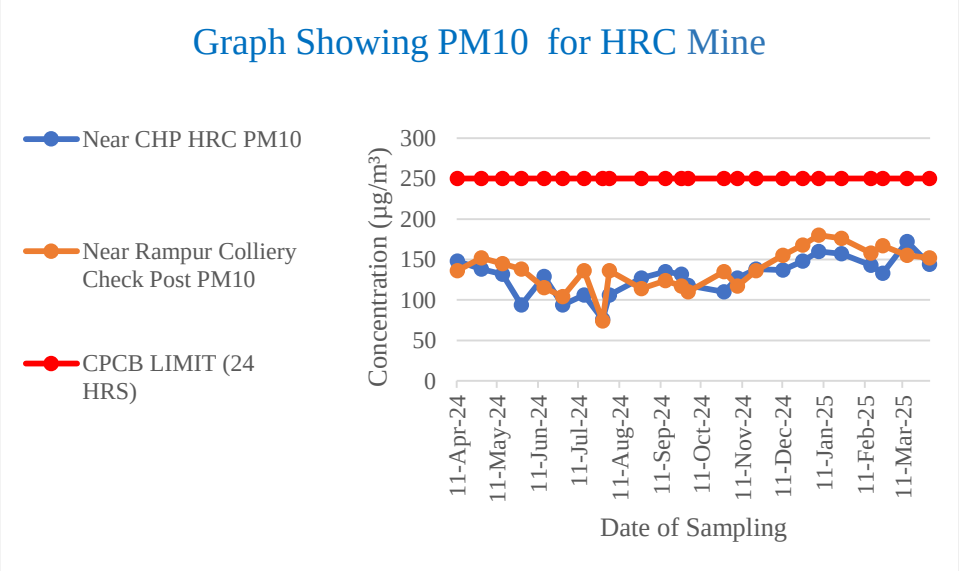
Area: Orient

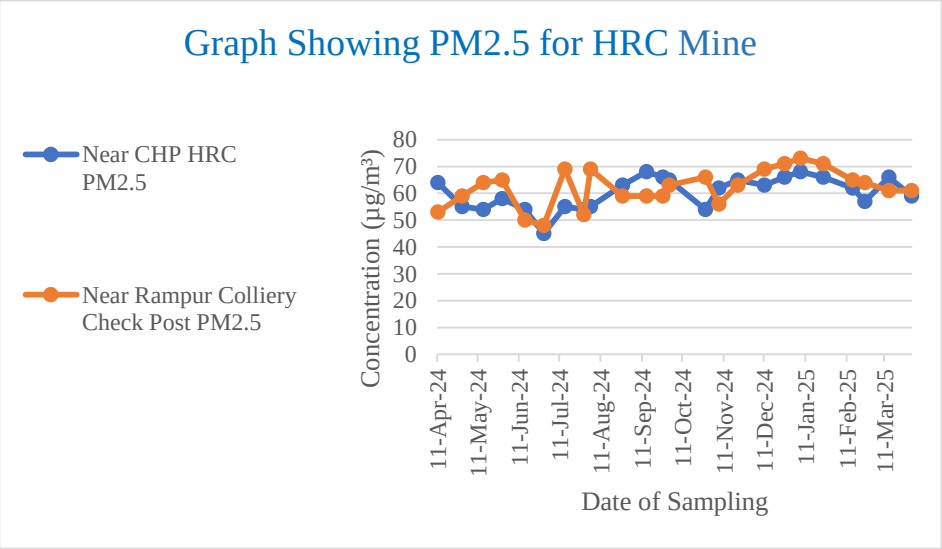
Project: HRC

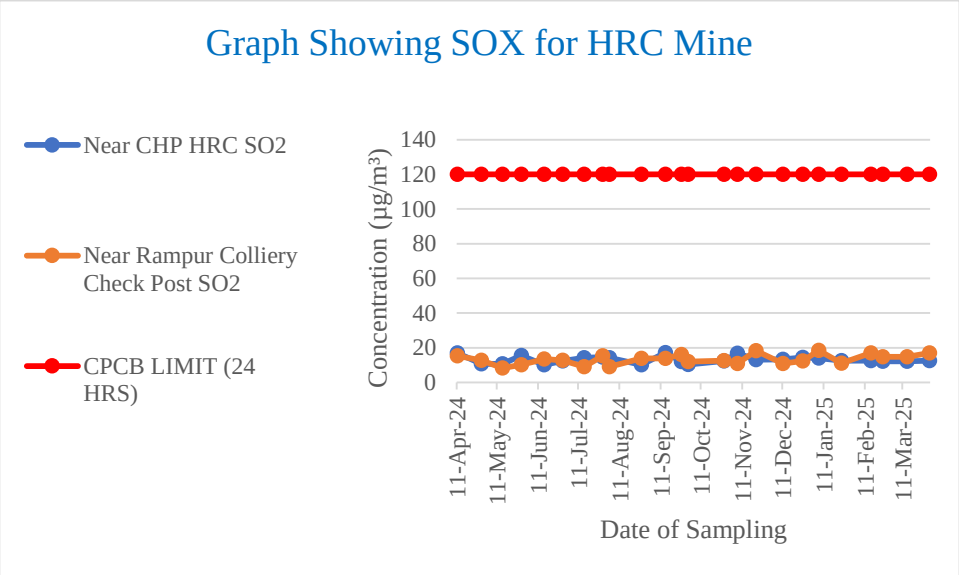
Monitoring Station: Near Rampur Colliery Check Post

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
11-Apr-24	248	136	53	15.28	17.74
29-Apr-24	237	152	59	12.69	13.87
15-May-24	317	145	64	8.32	11.39
29-May-24	261	138	65	10.07	17.77
15-Jun-24	213	115	50	13.53	23.91
29-Jun-24	212	104	48	12.64	28.11
15-Jul-24	275	136	69	9.08	23.43
29-Jul-24	190	74	52	15.31	27.45
03-Aug-24	275	136	69	9.08	23.43
27-Aug-24	237	114	59	13.88	20.47
14-Sep-24	254	124	59	13.79	10.55
26-Sep-24	230	117	59	16.05	10.62
01-Oct-24	225	110	63	12	13.76
28-Oct-24	235	135	66	12.46	20.31
07-Nov-24	221	117	56	10.9	24.6
21-Nov-24	241	136	63	18.28	25.95
14-Dec-24	256	155	69	10.78	25.33
26-Dec-24	275	168	71	12.35	29.32
07-Jan-25	287	180	73	18.38	23.34
24-Jan-25	281	176	71	11.09	18.82
15-Feb-25	273	158	65	16.98	27.82
24-Feb-25	268	167	64	14.78	21.96
14-Mar-25	254	155	61	14.78	21.96
31-Mar-25	254	152	61	16.98	27.82
Brief Statistics	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	317	180	73	18.38	29.32
Minimum	190	74	48	8.32	10.55
Average	250.8	137.50	62.04	13.31	21.24
Standard 24 hr	500	250		120	120
Standard Annual	360	180	-	80	80


Graph Showing SPM for HRC Mine
Near CHP HRC SPM
Near Rampur Colliery Check Post SPM
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
600
500
400
300
200
100
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling


Graph Showing PM10 for HRC Mine
Near CHP HRC PM10
Near Rampur Colliery Check Post PM10
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
300
250
200
150
100
50
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling


Graph Showing PM2.5 for HRC Mine
Near CHP HRC PM2.5
Near Rampur Colliery Check Post PM2.5
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling


Graph Showing SOX for HRC Mine
Near CHP HRC SO2
Near Rampur Colliery Check Post SO2
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling

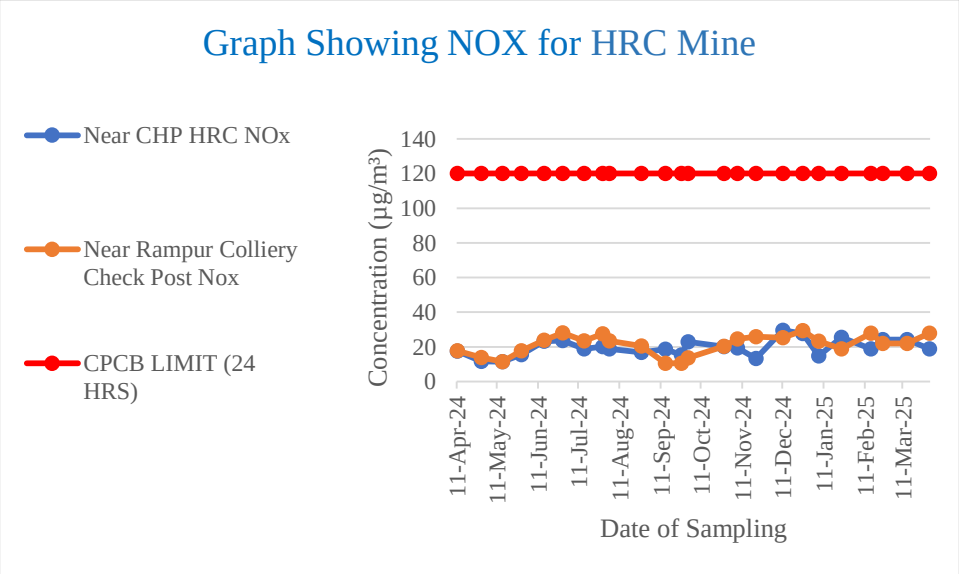

Graph Showing NOX for HRC Mine
Near CHP HRC NOx
Near Rampur Colliery Check Post Nox
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
140
120
100
80
60
40
20
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling

Table: 8.5.50

Area: Orient

Project: HRC

Monitoring Station: Rampur Sub Area (Reported only)

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	188	85	37	17.16	19.55
06-Apr-24	168	74	28	13.30	14.30
12-Apr-24	180	88	33	15.60	16.21
13-Apr-24	161	81	38	17.16	19.66
22-Apr-24	172	83	37	13.08	14.67
23-Apr-24	189	94	42	10.62	13.64
26-Apr-24	166	78	29	12.61	13.64
27-Apr-24	174	87	33	12.54	12.67
02-May-24	175	87	40	9.79	14.87
03-May-24	155	85	50	21.61	13.50
08-May-24	157	94	37	13.75	10.61
09-May-24	176	91	35	13.77	9.01
16-May-24	173	88	46	18.93	13.30
17-May-24	178	82	39	10.23	12.62
24-May-24	185	92	40	16.21	19.50
25-May-24	152	72	50	11.30	18.88
05-Jun-24	161	75	58	11.10	25.44
06-Jun-24	176	81	34	13.92	19.92
12-Jun-24	182	85	41	15.08	34.27
13-Jun-24	175	80	38	15.90	27.14
19-Jun-24	183	88	43	13.54	40.13
20-Jun-24	167	86	38	10.83	27.29
26-Jun-24	221	92	44	9.63	18.74
27-Jun-24	191	89	43	10.70	7.55
28-Jun-24	208	94	47	15.41	23.70
29-Jun-24	172	75	38	16.94	25.12
03-Jul-24	183	78	36	15.15	13.26
04-Jul-24	193	86	43	12.25	22.33
10-Jul-24	188	90	45	13.85	20.77
11-Jul-24	164	75	36	11.90	20.83
18-Jul-24	166	77	41	11.78	23.31
19-Jul-24	199	91	39	14.66	31.27
26-Jul-24	207	96	30	14.61	29.83
27-Jul-24	205	85	41	13.19	13.68
01-Aug-24	211	76	35	11.11	20.44
02-Aug-24	187	82	38	11.98	20.35
09-Aug-24	149	80	35	13.30	18.16
10-Aug-24	207	74	31	15.27	19.60
16-Aug-24	186	81	43	13.18	25.29
17-Aug-24	146	84	45	10.52	11.59
23-Aug-24	186	78	37	9.40	15.01
24-Aug-24	167	74	33	12.90	13.48
30-Aug-24	154	69	31	11.68	29.67
31-Aug-24	154	72	30	14.47	16.32
04-Sep-24	208	84	45	11.66	20.40

05-Sep-24	202	82	43	17.61	13.82
11-Sep-24	212	78	39	15.79	19.33
12-Sep-24	195	85	44	14.29	11.33
19-Sep-24	170	83	39	15.26	14.77
20-Sep-24	187	90	36	18.19	25.07
27-Sep-24	164	75	33	15.34	14.82
28-Sep-24	164	84	42	15.41	11.77
07-Oct-24	172	73	36	11.21	35.81
08-Oct-24	159	68	28	14.35	36.29
16-Oct-24	174	70	32	14.07	36.70
17-Oct-24	198	86	44	11.63	30.81
23-Oct-24	168	72	34	12.65	20.62
24-Oct-24	179	80	39	15.43	25.14
29-Oct-24	175	74	37	19.10	31.13
30-Oct-24	175	69	40	16.53	26.94
04-Nov-24	175	74	35	14.56	16.51
05-Nov-24	201	92	50	13.52	16.53
11-Nov-24	186	79	38	10.77	20.52
12-Nov-24	173	70	32	10.30	28.82
18-Nov-24	182	75	38	11.32	35.07
19-Nov-24	193	78	40	15.23	29.46
25-Nov-24	196	82	43	16.10	25.25
26-Nov-24	204	84	45	15.23	16.13
02-Dec-24	181	84	39	16.81	28.34
03-Dec-24	196	80	43	15.04	23.34
09-Dec-24	212	85	48	17.61	25.49
10-Dec-24	205	83	46	13.38	27.73
16-Dec-24	191	77	46	13.79	18.49
17-Dec-24	206	82	50	22.92	17.43
23-Dec-24	211	85	52	17.20	29.90
24-Dec-24	195	83	51	12.56	35.21
30-Dec-24	212	86	53	21.37	24.22
31-Dec-24	218	90	56	11.10	26.18
03-Jan-25	188	83	42	11.19	31.18
04-Jan-25	199	83	45	9.94	35.69
10-Jan-25	208	88	47	16.20	34.41
11-Jan-25	227	92	50	14.87	25.22
20-Jan-25	206	84	45	12.88	21.96
21-Jan-25	210	90	48	15.18	19.69
28-Jan-25	206	79	44	11.34	18.67
29-Jan-25	208	87	46	14.05	27.47
05-Feb-25	198	75	43	19.50	23.52
06-Feb-25	209	84	45	16.57	21.47
12-Feb-25	220	88	48	12.91	21.12
13-Feb-25	206	81	45	14.86	24.65
20-Feb-25	213	84	46	14.73	28.08
21-Feb-25	194	80	43	14.55	39.32
27-Feb-25	193	76	41	17.05	35.52
28-Feb-25	198	75	43	16.26	29.51
05-Mar-25	186	76	39	14.28	36.51
06-Mar-25	191	86	47	21.18	34.38
12-Mar-25	206	84	44	17.39	25.41
13-Mar-25	187	80	41	14.68	27.67
19-Mar-25	180	74	38	20.42	25.16

20-Mar-25	152	64	30	10.95	18.52
26-Mar-25	172	68	35	11.83	28.32
27-Mar-25	168	74	32	12.64	24.74
Basic Stats	SPM	PM10	PM2 5	SO2	NOx
Maximum	227	96	58	22.92	40.13
Minimum	146	64	28	9.40	7.55
Average	186.28	81.48	40.69	14.26	22.83
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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Table: 8.5.51

Area: Orient

Project: HRC

Monitoring Station: Rampur Officers Guest House (Reported only)

Date of Sampling	SPM	PM10	PM2.5	SO2	NOx
05-Apr-24	172	91	39	17.55	19.46
06-Apr-24	158	78	43	14.83	15.88
12-Apr-24	172	85	31	12.13	13.42
13-Apr-24	195	83	35	15.68	16.74
22-Apr-24	168	87	33	16.92	17.55
23-Apr-24	164	74	29	13.17	19.47
26-Apr-24	205	88	42	12.02	13.30
27-Apr-24	186	94	38	12.42	15.41
02-May-24	207	90	54	13.30	15.62
03-May-24	197	95	41	9.12	11.94
08-May-24	150	90	46	14.66	16.80
09-May-24	207	96	39	13.19	15.83
16-May-24	169	84	39	15.43	14.63
17-May-24	157	66	50	15.74	15.20
24-May-24	202	94	47	10.78	19.21
25-May-24	177	85	41	13.76	20.90
05-Jun-24	170	80	43	11.92	31.13
06-Jun-24	227	78	46	10.15	22.96
12-Jun-24	136	75	37	12.87	14.10
13-Jun-24	228	97	39	12.37	24.72
19-Jun-24	160	75	38	17.50	39.33
20-Jun-24	196	86	48	20.51	20.00
26-Jun-24	187	83	46	17.03	33.67
27-Jun-24	178	85	43	12.81	22.78
28-Jun-24	218	91	56	10.87	13.81
29-Jun-24	208	94	53	10.30	35.40
03-Jul-24	170	74	35	16.59	22.59
04-Jul-24	176	78	37	10.84	20.43
10-Jul-24	197	84	41	12.70	17.20
11-Jul-24	177	70	33	15.68	16.77
18-Jul-24	174	82	45	9.14	18.91
19-Jul-24	183	72	43	12.49	12.14
26-Jul-24	179	81	39	13.77	24.11
27-Jul-24	199	93	38	16.63	16.98
01-Aug-24	210	85	36	13.46	14.50
02-Aug-24	214	92	51	16.39	16.88
09-Aug-24	152	90	40	13.36	13.64
10-Aug-24	165	74	34	11.26	10.70
16-Aug-24	143	82	41	14.69	20.51
17-Aug-24	156	70	31	12.78	14.32
23-Aug-24	168	76	35	11.27	12.28
24-Aug-24	161	72	33	9.79	27.34
30-Aug-24	159	66	29	10.55	27.34
31-Aug-24	203	89	45	13.90	31.37
04-Sep-24	198	82	42	19.22	20.37

05-Sep-24	262	93	51	17.45	22.49
11-Sep-24	204	82	44	14.01	32.35
12-Sep-24	196	74	31	19.71	14.53
19-Sep-24	179	78	38	15.12	21.91
20-Sep-24	172	84	42	12.59	31.13
27-Sep-24	151	70	30	17.17	15.67
28-Sep-24	195	78	40	13.38	26.07
07-Oct-24	188	78	40	10.76	22.66
08-Oct-24	198	88	46	15.48	25.23
16-Oct-24	178	76	38	13.12	25.20
17-Oct-24	188	78	40	9.36	17.44
23-Oct-24	170	74	33	23.25	37.90
24-Oct-24	162	72	31	16.56	26.99
29-Oct-24	177	71	36	14.83	24.17
30-Oct-24	196	83	45	20.08	32.72
04-Nov-24	185	83	41	16.00	32.90
05-Nov-24	191	85	42	14.67	12.61
11-Nov-24	186	81	41	19.07	16.68
12-Nov-24	170	76	35	14.47	10.53
18-Nov-24	193	82	44	15.93	28.60
19-Nov-24	190	80	43	14.56	14.66
25-Nov-24	205	86	47	17.29	19.80
26-Nov-24	216	89	50	14.30	35.33
02-Dec-24	184	76	38	12.26	20.55
03-Dec-24	192	78	40	18.74	12.86
09-Dec-24	197	81	43	15.67	30.19
10-Dec-24	200	83	46	13.36	24.63
16-Dec-24	214	83	52	14.06	22.96
17-Dec-24	205	80	48	12.72	13.27
23-Dec-24	199	78	47	17.44	26.10
24-Dec-24	188	84	51	12.02	33.70
30-Dec-24	206	87	53	13.98	36.80
31-Dec-24	199	83	50	19.11	37.37
03-Jan-25	196	83	42	17.37	35.52
04-Jan-25	208	85	47	13.80	27.12
10-Jan-25	241	94	53	14.58	15.42
11-Jan-25	227	89	50	15.30	15.82
20-Jan-25	228	92	50	16.25	18.80
21-Jan-25	214	86	48	16.27	29.30
28-Jan-25	185	72	40	12.08	23.86
29-Jan-25	191	76	43	13.53	23.06
05-Feb-25	195	75	43	14.56	20.54
06-Feb-25	188	74	41	11.46	29.10
12-Feb-25	201	83	44	19.36	33.22
13-Feb-25	208	86	47	12.21	29.28
20-Feb-25	190	75	41	11.09	18.82
21-Feb-25	188	72	39	16.87	36.18
27-Feb-25	185	74	42	20.60	32.59
28-Feb-25	204	84	45	14.85	37.40
05-Mar-25	183	75	39	11.09	18.82
06-Mar-25	179	72	37	14.76	29.41
12-Mar-25	176	77	40	21.31	37.07
13-Mar-25	197	84	43	16.32	33.62
19-Mar-25	188	78	39	12.60	24.49

20-Mar-25	169	69	30	11.28	19.89
26-Mar-25	168	72	36	14.60	26.67
27-Mar-25	164	70	32	16.26	25.57
Basic Stats	**SPM**	**PM10**	**PM2 5**	**SO2**	**NOx**
Maximum	262	97	56	23.25	39.33
Minimum	136	66	29	9.12	10.53
Average	188.11	81.25	41.48	14.49	22.80
Standard 24 hr	-	100	60	80	80
Standard Annual	-	60	40	50	40

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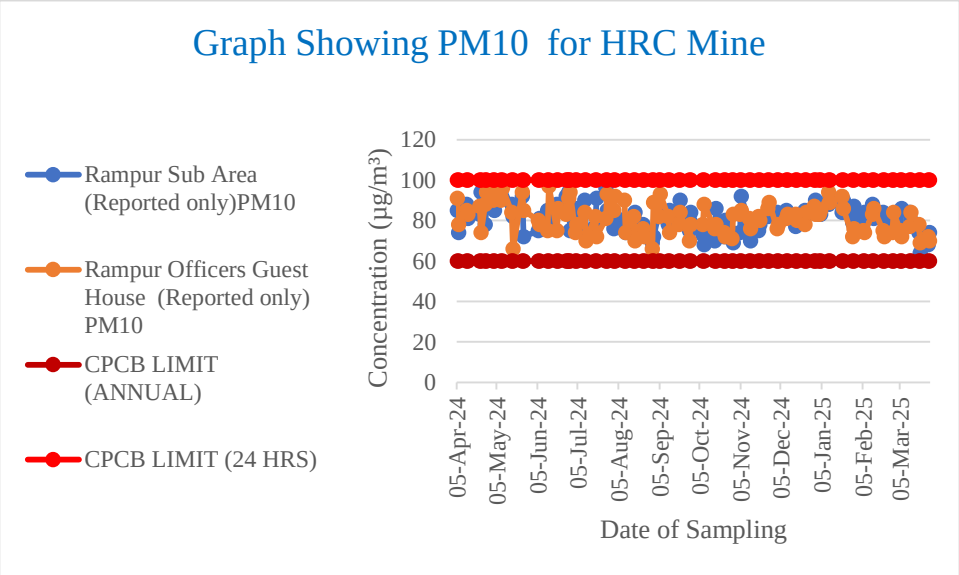
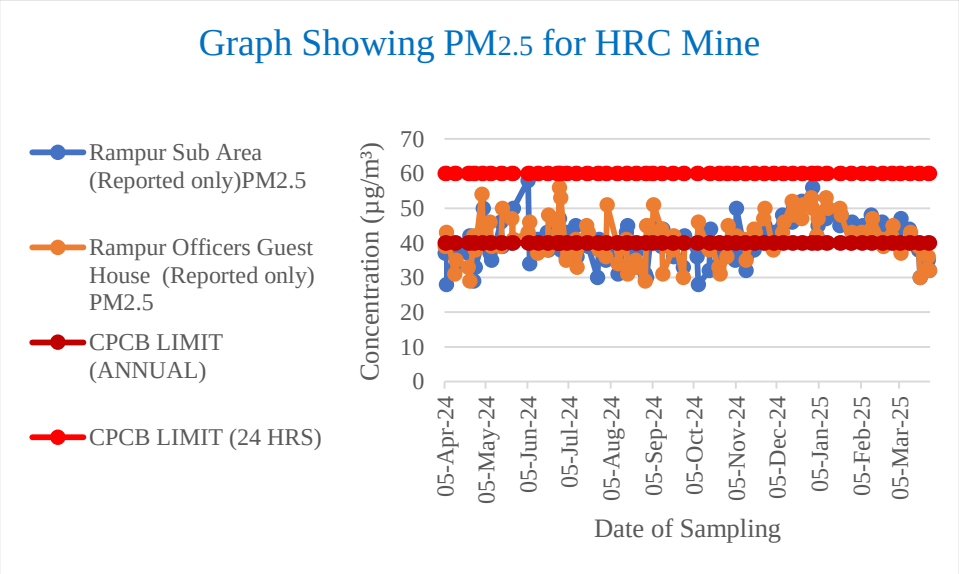
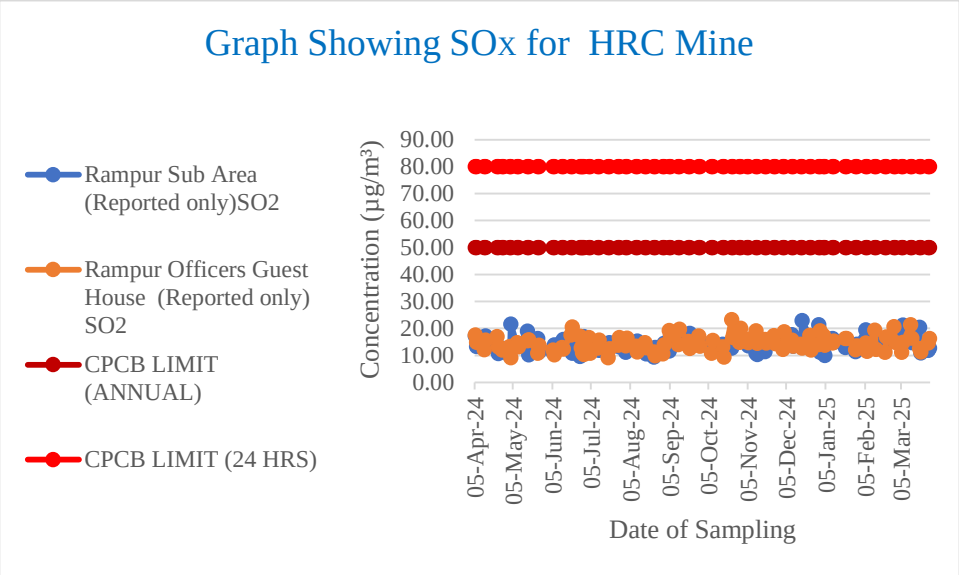
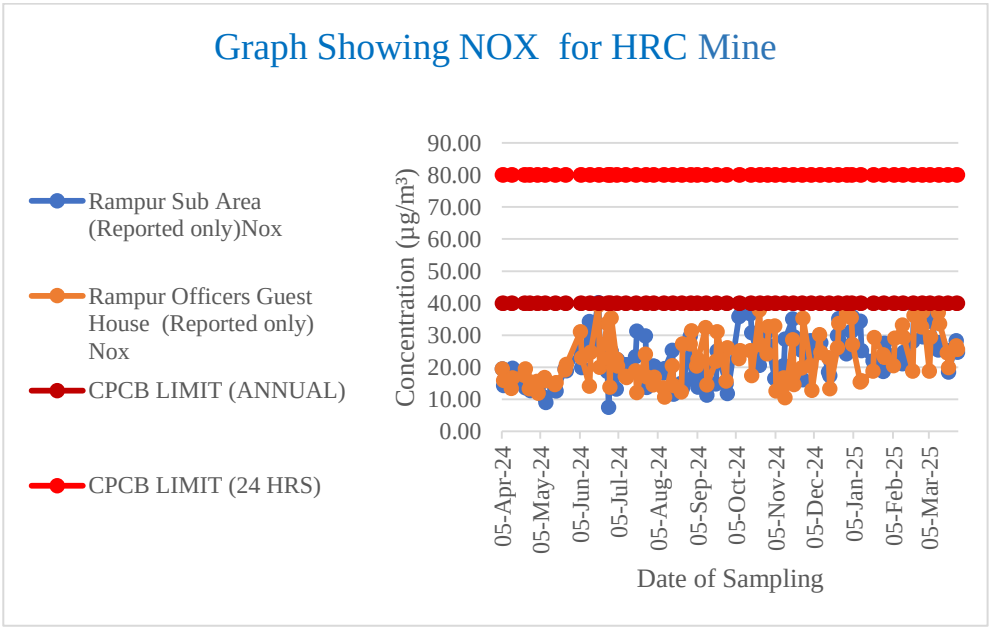

Graph Showing PM10 for HRC Mine
Rampur Sub Area (Reported only)PM10
Rampur Officers Guest House (Reported only) PM10
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
120
100
80
60
40
20
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing PM2.5 for HRC Mine
Rampur Sub Area (Reported only)PM2.5
Rampur Officers Guest House (Reported only) PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
70
60
50
40
30
20
10
0
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing SOx for HRC Mine
Rampur Sub Area (Reported only)SO2
Rampur Officers Guest House (Reported only) SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling


Graph Showing NOX for HRC Mine
Rampur Sub Area (Reported only)Nox
Rampur Officers Guest House (Reported only) Nox
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
Concentration (µg/m³)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
05-Apr-24
05-May-24
05-Jun-24
05-Jul-24
05-Aug-24
05-Sep-24
05-Oct-24
05-Nov-24
05-Dec-24
05-Jan-25
05-Feb-25
05-Mar-25
Date of Sampling

8.6 EXECUTIVE SUMMARY OF AAQM

Observation for PM10

PM10 at Compliance stations ranges from 74.0 µg/m^3 (HRC Project in Orient area) to 187.0 µg/m^3 (Kulda OCP. Basundhara Area). As per Coal Mine Standard, (GSR 742(E) the annual average limit is -250 µg/$m^{3.}$ The values are well within the permissible limits. For reference stations, PM10 varies from minimum 58.0 µg/m3 LBL OCP, Lakhanpur) to maximum 172.0 µg/m3 (Lajkura OCP, Ib valley).

Observation for PM2.5

PM2.5 at Compliance stations varies from 41.0 µg/m3 (Lajkura OCP, Ib valley Area) to 86.0 µg/m3 (Garjanbahal OCP, Basundhara Area). At reference stations, PM2.5 varies from 26.0 µg/m3 (Kulda OCP, Basundhara Area & LBL OCP , Lakhanpur Area) to 65.0 µg/m3 (Lajkura OCP, Ib valley Area).

Observation for SO_2 and NO_x

Values of both SO_2 and NOx was observed very low compared to the limits of Coal mine Standard (80 µg/m3) and NAAQS-2009 (50 µg/m3 & 40 µg/m3). The minimum value in core zone for SO_2 was 8.3 µg/m^3 (Basundhara (w) OCP, Mahalaxmi Area) and maximum was 26.66 µg/m^3 (Garjanbahal OCP, Basundhara Area). Likewise, for NO_X minimium was 8.2 µg/m^3 (Basundhara (w) OCP, Mahalaxmi Area) and maximum was 40.49 µg/m^3 (Samleswari OCP, Ib valley Area). For reference stations, SO2 ranges from 7.48 µg/m3 at (Basundhara (w) OCP, Mahalaxmi Area) to 23.81 µg/m^3 at (Lajkura OCP, Ib valley Area). Similarly NOx, varies from minimum 7.09 µg/m3 (Lajkura OCP, Samleswari OCP, Ib valley Area) to maximum 55.65 µg/m3 ((Basundhara (w) OCP, Mahalaxmi Area)).

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

TABLE FOR CARBON MONOXIDE (CO) DATA AT COMPLIANCE STATIONS

Table: 8.9.1
Area: Lakhanpur

Project	**LBL OCP**
Monitoring Station	**Kirulbal Village**
Date of sampling	**Carbon Monoxide (CO)**
	mg/m^3
03-Apr-24	0.1
24-Apr-24	0.2
14-May-2024	0.7
23-May-2024	0.8
07-Jun-24	0.9
21-Jun-24	1.0
06-Jul-24	0.6
22-Jul-24	0.5
07-Aug-24	0.6
20-Aug-24	0.6
07-Sep-24	0.7
21-Sep-24	0.67
09-Oct-24	1.21
28-Oct-24	1.24
06-Nov-24	1.3
20-Nov-24	1.2
07-Dec-2025	1.1
18-Dec-2025	1.3
06-Jan-2025	1.8
18-Jan-2025	2.4
07-Feb-2025	1.6
17-Feb-2025	1.4
07-Mar-2025	1.6
22-Mar-2025	1.5
Standard	**02(8 Hours)**

Table: 8.9.2

Area: Lakhanpur

Project	**LBL OCP**
Monitoring Station	**Lilari Magazine House**
Date of sampling	**Carbon Monoxide (CO)**
	mg/m^3
03-Apr-24	0.2
24-Apr-24	0.3
14-May-2024	0.8
23-May-2024	0.8
07-Jun-24	0.8
21-Jun-24	0.9
06-Jul-24	0.4
22-Jul-24	0.4
07-Aug-24	0.5
20-Aug-24	0.7
07-Sep-24	0.7
21-Sep-24	0.73
09-Oct-24	0.96
28-Oct-24	0.98
06-Nov-24	1.1
20-Nov-24	1.4
07-Dec-24	1.5
18-Dec-24	1.1
06-Jan-24	2.1
18-Jan-24	1.8
07-Feb-2025	1.8
17-Feb-2025	1.7
07-Mar-2025	1.5
22-Mar-2025	1.4
Standard	**02(8 Hours)**

Table: 8.9.3
Area: Lakhanpur

Project	**LBL OCP**
Monitoring Station	**BOCM Workshop**
Date of sampling	**Carbon Monoxide (CO)**
	mg/m^3
04-Apr-24	0.1
25-Apr-24	0.3
14-May-2024	0.6
23-May-2024	0.7
07-Jun-24	0.9
21-Jun-24	1.01
06-Jul-24	0.4
22-Jul-24	0.5
07-Aug-24	0.7
20-Aug-24	0.6
07-Sep-24	0.61
21-Sep-24	0.8
09-Oct-24	1.26
28-Oct-24	1.20
07-Nov-24	1.6
21-Nov-24	1.4
07-Dec-2025	1.6
18-Dec-2025	1.8
07-Jan-2025	2.4
24-Jan-2025	2.1
07-Feb-2025	1.9
17-Feb-2025	2.1
07-Mar-2025	1.6
22-Mar-2025	1.5
Standard	**02(8 Hours)**

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Table: 8.9.4
Area: Lakhanpur

Project	**LBL OCP**
Monitoring Station	**West of Lakhanpur Quarry Near Solada**
Date of sampling	**Carbon Monoxide (CO)**
	mg/m^3
04-Apr-24	01
25-Apr-24	0.3
14-May-2024	0.7
23-May-2024	0.6
07-Jun-24	1.01
21-Jun-24	1.02
06-Jul-24	0.5
22-Jul-24	0.3
07-Aug-24	0.9
20-Aug-24	0.7
07-Sep-24	0.71
21-Sep-24	0.62
09-Oct-24	0.96
28-Oct-24	0.98
07-Nov-24	1.2
21-Nov-24	1.3
07-Dec-2025	1.5
18-Dec-2025	1.2
07-Jan-2025	1.8
24-Jan-2025	1.6
07-Feb-2025	1.8
17-Feb-2025	1.6
07-Mar-2025	1.7
22-Mar-2025	1.5
Standard	**02(8 Hours)**

Table: 8.9.5
Area: Mahalaxmi

Project	**Basundhara (W) OCP**
Monitoring Station	**North of the Sardega Railway Siding, Kulapada**
Date of sampling	**Carbon Monoxide (CO)**
	mg/m^3
05-Apr-24	0.1
20-Apr-24	0.1
13-May-2024	0.6
22-May-2024	0.7
08-Jun-24	0.9
22-Jun-24	1.01
12-Jul-24	0.5
22-Jul-24	0.4
07-Aug-24	0.8
20-Aug-24	0.6
07-Sep-24	0.65
21-Sep-24	0.71
01-Oct-24	0.65
19-Oct-24	0.71
13-Nov-24	1.4
21-Nov-24	1.6
14-Dec-2025	1.8
19-Dec-2025	1.3
13-Jan-2025	1.6
25-Jan-2025	1.4
08-Feb-2025	1.2
22-Feb-2025	1.1
08-Mar-2025	1.6
28-Mar-2025	1.5
Standard	**02 (8 Hours)**

Table: 8.9.6
Area: Mahalaxmi

Project	**Basundhara (W) OCP**
Monitoring Station	**West of Coal Stock, Near Golf Course**
Date of sampling	**Carbon Monoxide (CO)**
	mg/m^3
05-Apr-24	0.1
20-Apr-24	0.2
13-May-2024	0.6
22-May-2024	0.8
08-Jun-24	1.01
22-Jun-24	1.0
12-Jul-24	0.4
22-Jul-24	0.5
07-Aug-24	0.7
20-Aug-24	0.7
07-Sep-24	0.7
21-Sep-24	0.75
05-Oct-24	0.76
19-Oct-24	0.72
13-Nov-24	1.2
21-Nov-24	1.1
14-Dec-2025	1.5
19-Dec-2025	1.1
07-Jan-2025	1.5
25-Jan-2025	1.8
08-Feb-2025	1.3
22-Feb-2025	1.4
08-Mar-2025	1.7
28-Mar-2025	1.4
Standard	**02 (8 Hours)**

Table: 8.9.7

Area: Mahalaxmi

Project	**Basundhara (W) OCP**
Monitoring Station	**South West of Working face Gopalpur Village, Near CMPDI Camp**
Date of sampling	**Carbon Monoxide (CO)**
	mg/m^3
05-Apr-24	0.1
20-Apr-24	0.3
13-May-2024	0.7
22-May-2024	0.7
08-Jun-24	0.9
22-Jun-24	0.8
12-Jul-24	0.6
23-Jul-24	0.4
08-Aug-24	0.8
26-Aug-24	0.8
13-Sep-24	0.69
25-Sep-24	0.72
05-Oct-24	0.74
19-Oct-24	0.78
13-Nov-24	1.4
21-Nov-24	1.6
13-Jan-2025	2.4
25-Jan-2025	2.2
08-Feb-2025	0.9
22-Feb-2025	1.2
08-Mar-2025	1.8
28-Mar-2025	1.6
Standard	**02 (8 Hours)**

Table: 8.9.8

Area: Mahalaxmi

Project	**Basundhara (W) OCP**
Monitoring Station	**Khamarpara, East Side of Sardega Railway Siding**
Date of sampling	**Carbon Monoxide (CO)**
	mg/m^3
06-Apr-24	0.3
20-Apr-24	0.1
13-May-2024	0.8
22-May-2024	0.8
08-Jun-24	1.1
22-Jun-24	1.1
12-Jul-24	0.4
23-Jul-24	0.5
08-Aug-24	0.8
26-Aug-24	0.4
13-Sep-24	0.77
25-Sep-24	0.64
05-Oct-24	0.62
19-Oct-24	0.64
13-Nov-24	1.2
21-Nov-24	1.4
14-Dec-2025	1.5
19-Dec-2025	1.4
13-Jan-2025	2.0
25-Jan-2025	1.8
08-Feb-2025	1.4
22-Feb-2025	1.8
08-Mar-2025	1.3
28-Mar-2025	1.4
Standard	**02 (8 Hours)**

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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 station 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: 9.1.1

Area: Ib Valley

Project: Samleswari OCP

Monitoring Station: West of the Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	61.7	56.4	59.8
25-Apr-24	62.4	56.7	60.4
06-May-24	69.4	65.1	67.8
23-May-24	65.4	62.9	64.3
05-Jun-24	60.7	54.3	58.6
19-Jun-24	62.4	58.7	60.9
08-Jul-24	64.2	59.4	62.4
16-Jul-24	64.4	61.7	63.3
07-Aug-24	63.6	58.9	61.9
21-Aug-24	63.4	60.8	62.3
11-Sep-24	62.4	57.7	60.7
19-Sep-24	62.2	59.7	61.1
01-Oct-24	64.8	58.6	62.7
21-Oct-24	64.7	59.4	62.8
07-Nov-24	63.5	59.4	61.9
21-Nov-24	63.4	59.4	61.8
09-Dec-24	61.7	58.4	60.4
18-Dec-24	64.6	60.9	63.1
09-Jan-25	64.3	61.9	63.3
20-Jan-25	63.6	60.9	62.5
05-Feb-25	63.5	59.3	61.9
20-Feb-25	62.4	56.7	60.4
06-Mar-25	60.5	57.4	59.2
24-Mar-25	60.7	58.6	59.8
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	60.50	54.30	58.59
Maximum	69.40	65.10	67.76
Mean	63.33	59.30	61.80

MoEF Standard Notification dated 25th 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)

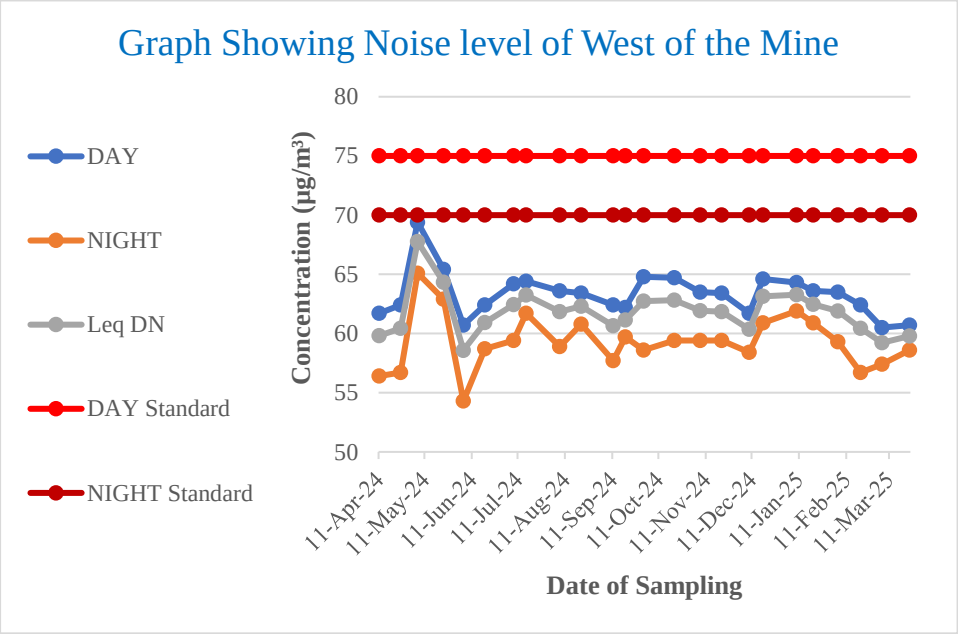

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Table: 9.1.2

Area: Ib Valley

Project: Samleswari OCP

Monitoring Station: South of the Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	63.4	52.1	60.7
25-Apr-24	60.8	54.3	65.2
06-May-24	67.1	62.7	61.1
23-May-24	69.2	65.1	60.9
05-Jun-24	59.9	57.4	62.2
19-Jun-24	60.8	59.3	61.9
08-Jul-24	60.8	58.2	60.1
16-Jul-24	67.9	64.3	63.4
07-Aug-24	67.4	64.1	62.6
21-Aug-24	66.7	63.6	61.2
11-Sep-24	60.8	59.3	60.1
19-Sep-24	60.6	58.4	59.6
01-Oct-24	60.3	59.3	59.8
21-Oct-24	66.3	61.2	64.5
07-Nov-24	65.3	60.2	63.5
21-Nov-24	60.3	58.3	59.4
09-Dec-24	64.3	60.9	62.9
18-Dec-24	66.7	62.3	65.0
09-Jan-25	66.2	64.2	65.3
20-Jan-25	60.4	58.3	59.5
05-Feb-25	60.9	58.6	59.9
20-Feb-25	60.8	54.3	58.7
06-Mar-25	63.7	60.6	62.4
24-Mar-25	63.4	60.4	62.2
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	59.90	52.10	58.67
Maximum	69.20	65.10	65.31
Mean	63.50	59.89	61.75

MoEF Standard Notification dated 25th 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)

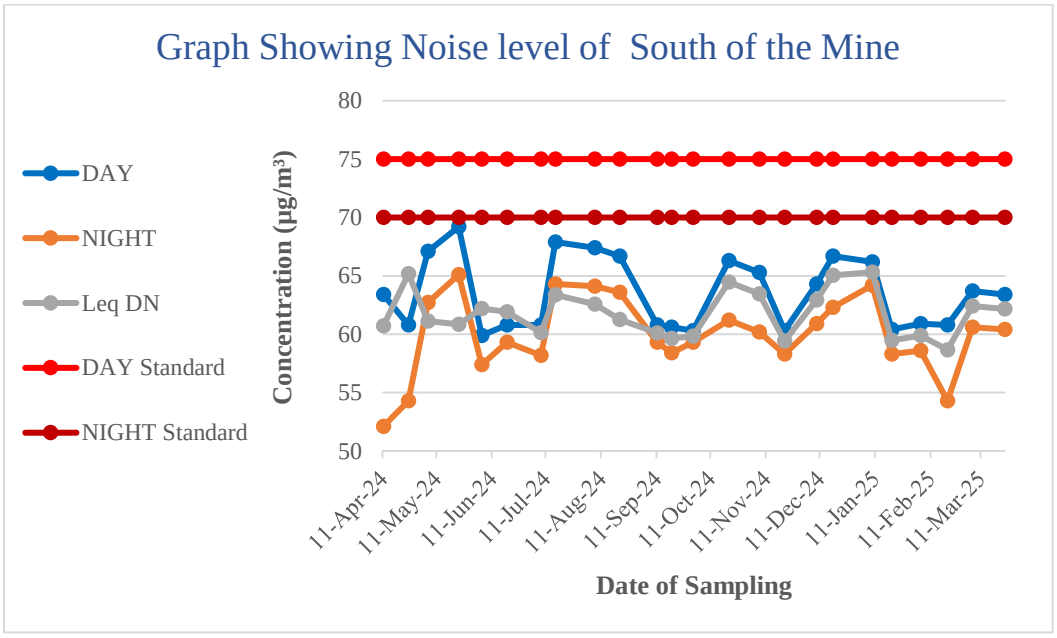

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Table: 9.1.3

Area: Ib Valley

Project: Samleswari OCP

Monitoring Station: East of the Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	59.3	54.8	57.6
25-Apr-24	59.2	53.6	57.2
06-May-24	65.8	60.4	63.9
23-May-24	66.5	63.7	65.3
05-Jun-24	61.2	55.8	59.3
19-Jun-24	58.4	53.7	56.7
08-Jul-24	58.4	53.7	56.7
16-Jul-24	68.1	65.6	67.0
07-Aug-24	64.2	60.8	62.8
21-Aug-24	64.3	60.5	62.8
11-Sep-24	64.6	60.9	63.1
19-Sep-24	58.4	53.6	56.6
01-Oct-24	56.4	53.7	55.3
21-Oct-24	60.8	58.4	59.8
07-Nov-24	60.4	58.5	59.6
21-Nov-24	58.4	54.9	57.0
09-Dec-24	58.2	54.5	56.7
18-Dec-24	60.4	59.6	60.0
09-Jan-25	63.9	59.4	62.2
20-Jan-25	59.1	55.6	57.7
05-Feb-25	58.4	55.2	57.1
20-Feb-25	59.2	53.6	57.2
06-Mar-25	65.3	62.9	64.3
24-Mar-25	58.6	54.9	57.1
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	56.40	53.60	55.26
Maximum	68.10	65.60	67.03
Mean	61.15	57.43	59.71

MoEF Standard Notification dated 25th 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)

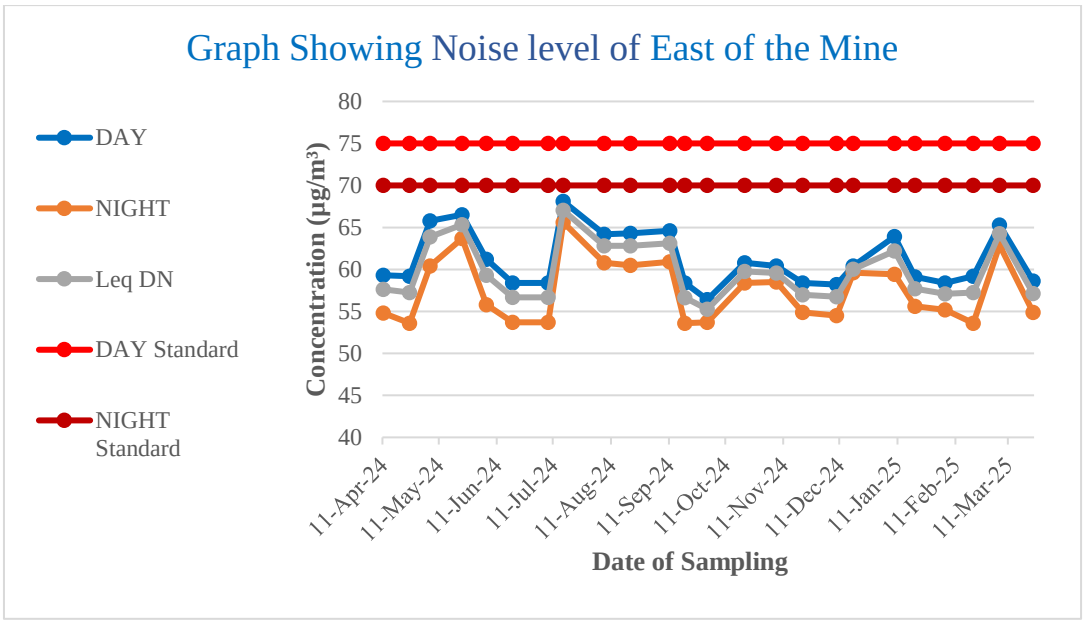

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Table: 9.1.4

Area: Ib Valley

Project: Samleswari OCP

Monitoring Station: South East of the Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	62.8	58.5	61.2
25-Apr-24	64.5	58.2	62.4
06-May-24	62.7	58.9	61.2
23-May-24	68.7	65.6	67.4
05-Jun-24	60.4	57.9	59.3
19-Jun-24	61.8	55.2	59.6
08-Jul-24	62.6	58.4	61.0
16-Jul-24	65.7	63.9	64.9
07-Aug-24	66.7	59.4	64.4
21-Aug-24	52.1	42.9	49.6
11-Sep-24	66.5	63.4	65.2
19-Sep-24	61.8	55.2	59.6
01-Oct-24	61.8	56.2	59.8
21-Oct-24	67.2	64.7	66.1
07-Nov-24	64.8	62.7	63.9
21-Nov-24	61.8	54.2	59.5
09-Dec-24	62.8	58.3	61.1
18-Dec-24	62.6	58.2	60.9
09-Jan-25	66.4	64.3	65.5
20-Jan-25	61.8	58.4	60.4
05-Feb-25	62.8	58.9	61.3
20-Feb-25	64.5	58.2	62.4
06-Mar-25	61.8	58.4	60.4
24-Mar-25	61.2	55.5	59.2
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	52.10	42.90	49.58
Maximum	68.70	65.60	67.42
Mean	63.16	58.56	61.52

MoEF Standard Notification dated 25th 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)

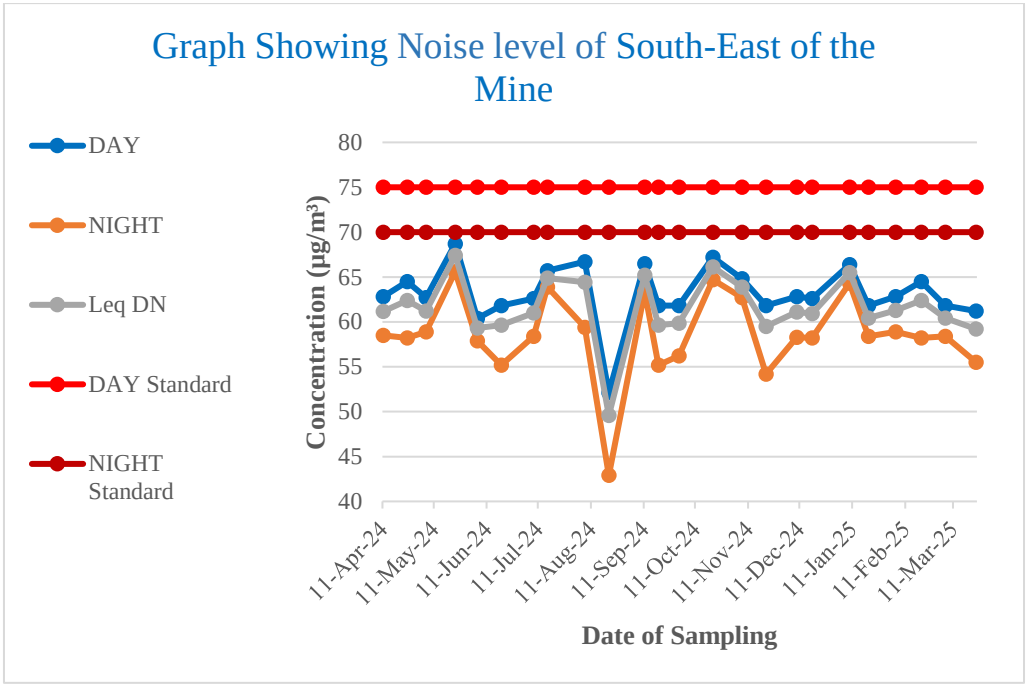

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Table: 9.1.5

Area: Ib Valley

Project: Samleswari OCP

Monitoring Station: Rampur Sub Area

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	54.6	38.2	51.7
25-Apr-24	51.6	41.4	49.0
06-May-24	54.4	42.1	51.6
23-May-24	54.9	44.5	52.3
05-Jun-24	51.4	44.1	49.1
19-Jun-24	54.1	44.3	51.5
08-Jul-24	57.1	44.3	54.3
16-Jul-24	53.2	44.1	50.7
07-Aug-24	54.1	44.3	51.5
21-Aug-24	51.9	44.3	49.6
11-Sep-24	53.1	42.2	50.4
19-Sep-24	54.1	44.3	51.5
01-Oct-24	57.6	44.3	54.8
21-Oct-24	57.1	44.3	54.3
07-Nov-24	56.1	44.4	53.4
21-Nov-24	53.6	44.3	51.1
09-Dec-24	54.5	44.3	51.9
18-Dec-24	53.1	42.9	50.5
09-Jan-25	54.1	43.9	51.5
20-Jan-25	57.5	49.3	55.1
05-Feb-25	56.1	44.7	53.4
20-Feb-25	51.4	43.2	49.0
06-Mar-25	57.6	44.8	54.8
24-Mar-25	56.1	44.7	53.4
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	51.40	38.20	48.99
Maximum	57.60	49.30	55.10
Mean	54.55	43.88	51.93

MoEF Standard Notification dated 25th 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)

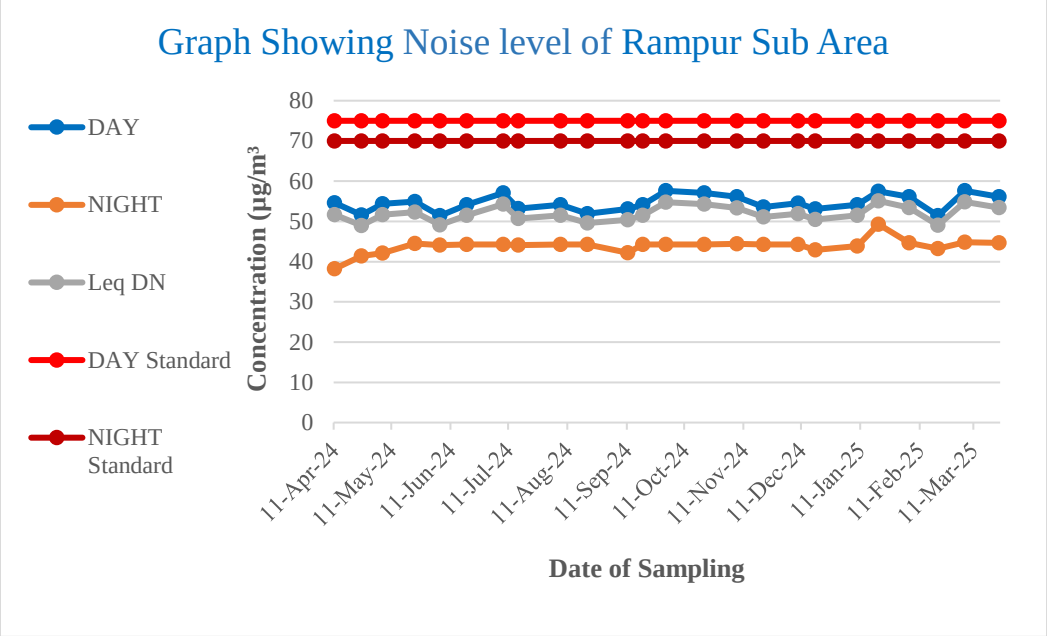

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Table: 9.1.6

Area: Ib Valley

Project: Samleswari OCP

Monitoring Station: Khokelmal (Reported)

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	50.3	44.9	48.4
25-Apr-24	50.2	35.7	47.3
06-May-24	54.1	39.1	51.2
23-May-24	53.2	42.9	50.6
05-Jun-24	53.4	44.1	50.9
19-Jun-24	52.1	43.7	49.7
08-Jul-24	52.1	43.7	49.7
16-Jul-24	53.1	43.3	50.5
07-Aug-24	52.1	42.6	49.6
21-Aug-24	52.1	43.7	49.7
11-Sep-24	52.1	43.7	49.7
19-Sep-24	52.4	43.9	50.0
01-Oct-24	54.1	43.5	51.5
21-Oct-24	52.1	43.7	49.7
07-Nov-24	52.9	43.6	50.4
21-Nov-24	51.9	43.7	49.5
09-Dec-24	54.7	43.4	52.0
18-Dec-24	51.9	42.6	49.4
09-Jan-25	52.4	42.6	49.8
20-Jan-25	53.2	44.4	50.7
05-Feb-25	52.1	41.7	49.5
20-Feb-25	54.7	43.8	52.0
06-Mar-25	51.6	40.3	48.9
24-Mar-25	50.1	36.9	47.3
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	50.10	35.70	47.29
Maximum	54.70	44.90	52.03
Mean	52.45	42.56	49.91

MoEF Standard Notification dated 25th 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)

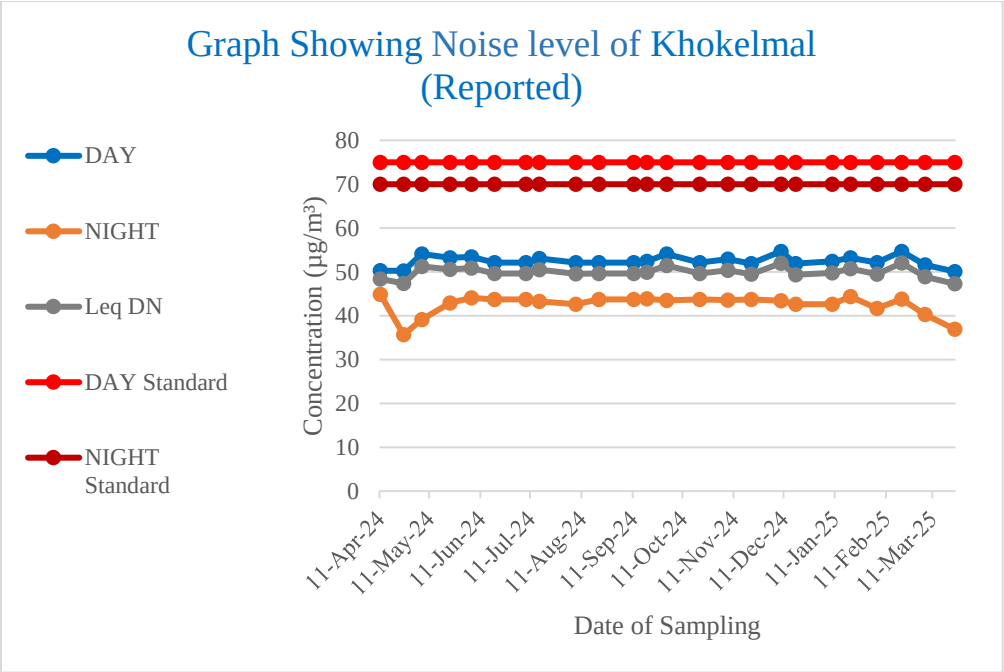

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Table: 9.1.7

Area: Ib Valley

Project: Lajkura OCP

Monitoring Station: Near Project Office

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	62.4	59.7	61.26
25-Apr-24	59.3	54.8	57.61
06-May-24	60.4	55.6	58.63
23-May-24	69.4	66.2	68.09
05-Jun-24	60.7	56.2	59.01
19-Jun-24	62.4	56.9	60.47
08-Jul-24	68.7	65.3	67.32
16-Jul-24	70.3	67.3	69.05
07-Aug-24	63.4	56.9	61.27
21-Aug-24	63.2	56.4	61.01
11-Sep-24	67.3	64.8	66.23
19-Sep-24	66.9	60.3	64.75
01-Oct-24	66.7	62.7	65.15
21-Oct-24	68.5	65.3	67.19
07-Nov-24	66.7	63.5	65.39
21-Nov-24	62.9	56.3	60.75
09-Dec-24	64.9	60.7	63.29
18-Dec-24	68.6	65.3	67.26
09-Jan-25	65.7	62.8	64.49
20-Jan-25	67.6	64.2	66.22
05-Feb-25	62.4	56.5	60.38
20-Feb-25	59.3	54.8	57.61
06-Mar-25	65.3	62.3	64.05
24-Mar-25	65.9	63.2	64.76
Brief Statistic	**DAY**	**NIGHT**	**Leq DN**
Minimum	59.30	54.80	57.61
Maximum	70.30	67.30	69.05
Mean	64.95	60.75	63.38

MoEF Standard Notification dated 25th 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)

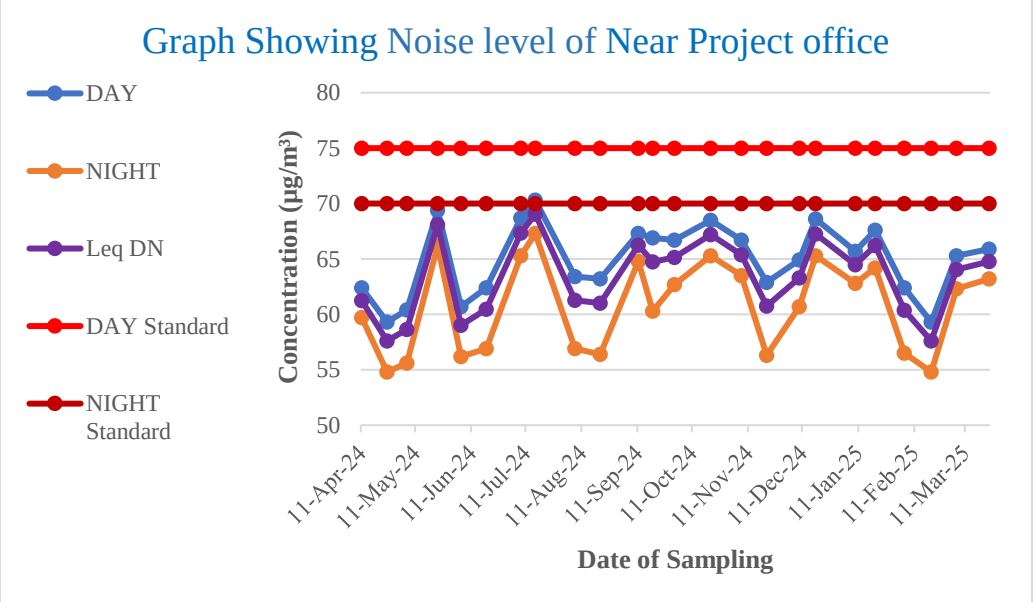

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Table: 9.1.8

Area: Ib Valley

Project: Lajkura OCP

Monitoring Station: Near South Coal Stock

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	60.9	56.2	59.16
25-Apr-24	62.6	58.2	60.93
06-May-24	66.7	60.2	64.57
23-May-24	70.1	68.4	69.33
05-Jun-24	59.4	53.8	57.45
19-Jun-24	60.2	54.6	58.25
08-Jul-24	70.4	68.8	69.67
16-Jul-24	69.8	65.4	68.13
07-Aug-24	60.6	58.3	59.60
21-Aug-24	60.2	57.8	59.16
11-Sep-24	68.7	65.7	67.45
19-Sep-24	68.3	65.8	67.23
01-Oct-24	68.4	65.3	67.12
21-Oct-24	66.9	64.1	65.72
07-Nov-24	68.3	65.4	67.09
21-Nov-24	60.8	54.6	58.72
09-Dec-24	67.2	65.4	66.39
18-Dec-24	66.3	62.7	64.86
09-Jan-25	68.3	65.1	66.99
20-Jan-25	64.3	62.4	63.45
05-Feb-25	60.7	54.6	58.64
20-Feb-25	62.6	58.2	60.93
06-Mar-25	68.9	65.4	67.49
24-Mar-25	68.4	65.9	67.33
Brief Statistic	**DAY**	**NIGHT**	**Leq DN**
Minimum	59.40	53.80	57.45
Maximum	70.40	68.80	69.67
Mean	65.38	61.76	63.99

MoEF Standard Notification dated 25th 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)

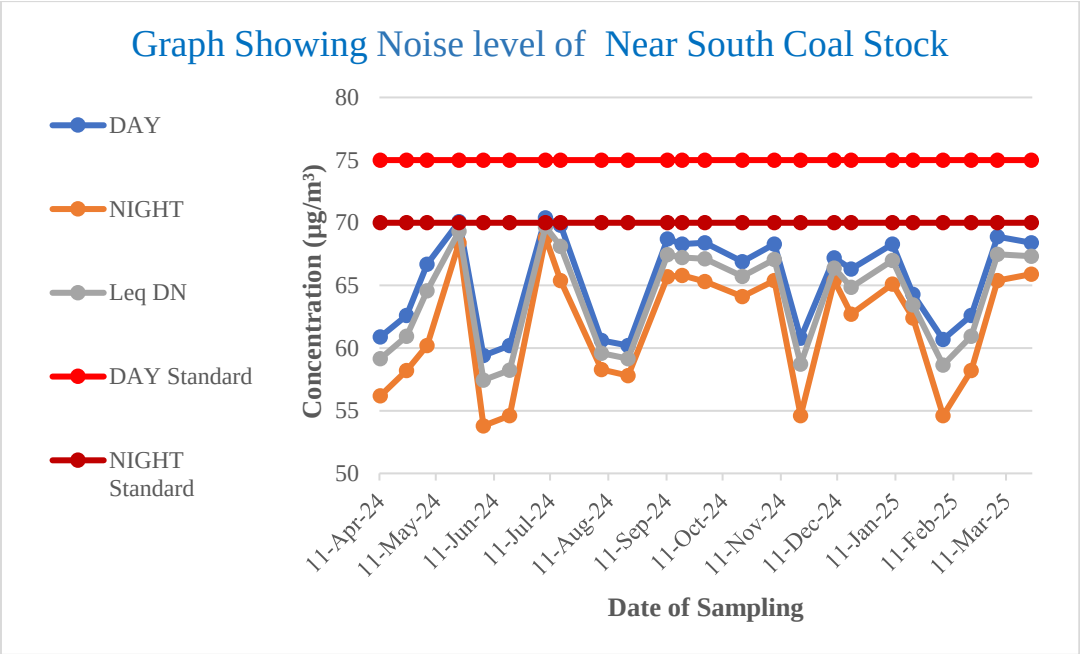

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Table: 9.1.9

Area: Ib Valley

Project: Lajkura OCP

Monitoring Station: VIP guest house, IB Valley

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	50.4	43.7	48.23
25-Apr-24	54.5	38.3	51.59
06-May-24	52.4	42.4	49.80
23-May-24	54.1	43.6	51.46
05-Jun-24	52.1	43.2	49.62
19-Jun-24	53.2	46.9	51.10
08-Jul-24	57.2	46.9	54.58
16-Jul-24	54.1	43.2	51.43
07-Aug-24	53.2	43.7	50.65
21-Aug-24	53.2	43.2	50.60
11-Sep-24	53.2	46.9	51.10
19-Sep-24	53.2	43.2	50.60
01-Oct-24	53.2	46.7	51.07
21-Oct-24	53.2	46.9	51.10
07-Nov-24	53.2	46.8	51.09
21-Nov-24	53.4	44.9	50.96
09-Dec-24	53.2	44.8	50.78
18-Dec-24	49.8	46.4	48.42
09-Jan-25	53.8	43.2	51.15
20-Jan-25	54.8	47.3	52.50
05-Feb-25	51.6	43.8	49.26
20-Feb-25	51.4	39.8	48.68
06-Mar-25	49.8	38.6	47.11
24-Mar-25	59.8	37.8	56.82
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	49.80	37.80	47.11
Maximum	59.80	47.30	56.82
Mean	53.25	43.84	50.82

MoEF Standard Notification dated 25th 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)

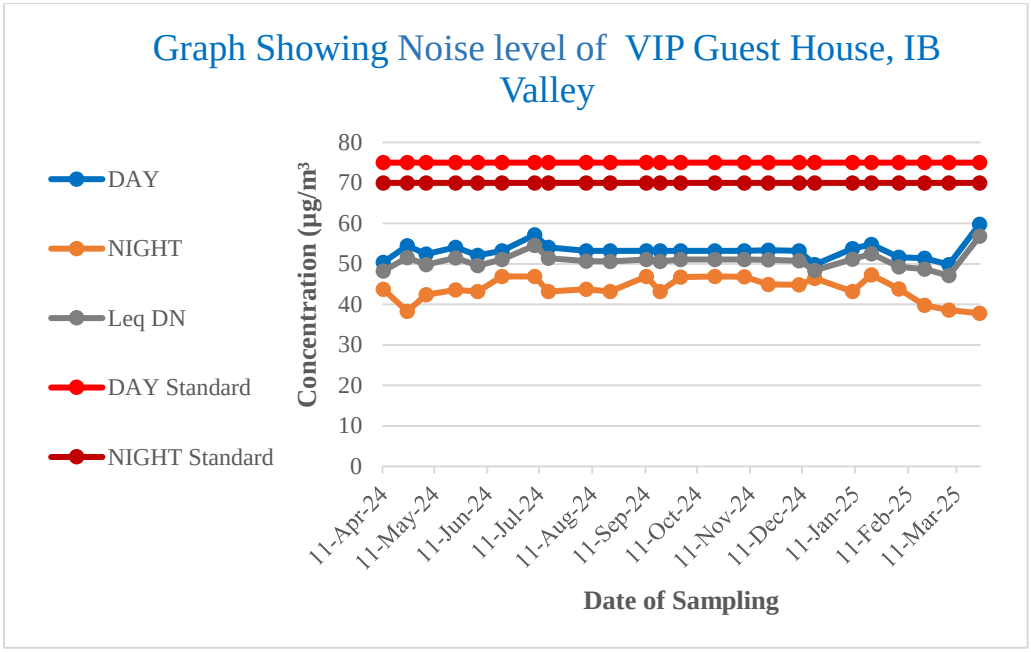

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Table: 9.1.10

Area: Ib Valley

Project: Lajkura OCP

Monitoring Station: Khokelmal

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	50.3	44.9	48.39
25-Apr-24	50.2	35.7	47.34
06-May-24	54.1	39.1	51.22
23-May-24	53.2	42.9	50.58
05-Jun-24	53.4	44.1	50.87
19-Jun-24	52.1	43.7	49.68
08-Jul-24	52.1	43.7	49.68
16-Jul-24	53.1	43.3	50.52
07-Aug-24	52.1	42.6	49.55
21-Aug-24	52.1	43.7	49.68
11-Sep-24	52.1	43.7	49.68
19-Sep-24	52.4	43.9	49.96
01-Oct-24	54.1	43.5	51.45
21-Oct-24	52.1	43.7	49.68
07-Nov-24	52.9	43.6	50.37
21-Nov-24	51.9	43.7	49.50
09-Dec-24	54.7	43.4	52.00
18-Dec-24	51.9	42.6	49.37
09-Jan-25	52.4	42.6	49.82
20-Jan-25	53.2	44.4	50.73
05-Feb-25	52.1	41.7	49.47
20-Feb-25	54.7	43.8	52.03
06-Mar-25	51.6	40.3	48.90
24-Mar-25	50.1	36.9	47.29
Brief Statistic	**DAY**	**NIGHT**	**Leq DN**
Minimum	50.10	35.70	47.29
Maximum	54.70	44.90	52.03
Mean	52.45	42.56	49.91

MoEF Standard Notification dated 25th 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)

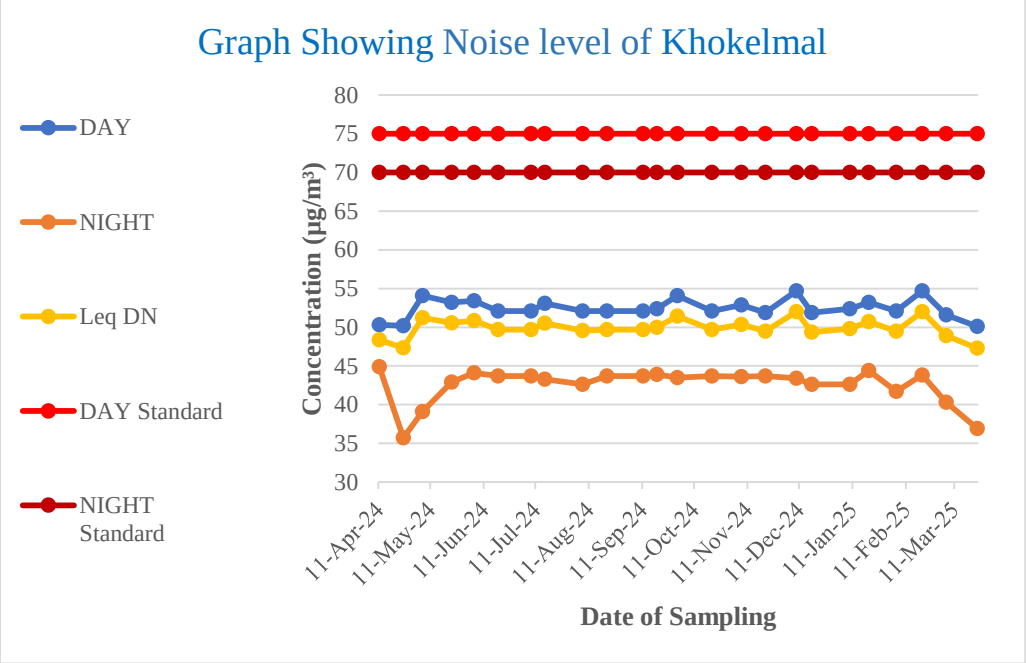

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Table: 9.1.11
Area: Ib Valley
Project: Lajkura OCP
Monitoring Station: Chuakani
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	51.2	40.4	48.5
25-Apr-24	57.4	38.4	54.4
06-May-24	54	42.1	51.3
23-May-24	53.7	41.2	50.9
05-Jun-24	51.6	43.6	49.2
19-Jun-24	54.6	42.6	51.9
08-Jul-24	54.6	42.6	51.9
16-Jul-24	52.9	43.3	50.3
07-Aug-24	54.9	43.4	52.2
21-Aug-24	54.6	42.6	51.9
11-Sep-24	54.6	42.6	51.9
19-Sep-24	54.8	42.9	52.1
01-Oct-24	54.6	42.6	51.9
21-Oct-24	54.6	42.6	51.9
07-Nov-24	54.3	42.8	51.6
21-Nov-24	54.5	43.5	51.8
09-Dec-24	54.6	42.7	51.9
18-Dec-24	49.7	43.1	47.5
09-Jan-25	54	44.2	51.4
20-Jan-25	52.2	41.9	49.6
05-Feb-25	52.1	40.6	49.4
20-Feb-25	51.8	49.3	50.7
06-Mar-25	50.8	39.6	48.1
24-Mar-25	49.8	34.7	46.9
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	49.70	34.70	46.92
Maximum	57.40	49.30	54.44
Mean	53.41	42.22	50.80

MoEF Standard Notification dated 25th 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)

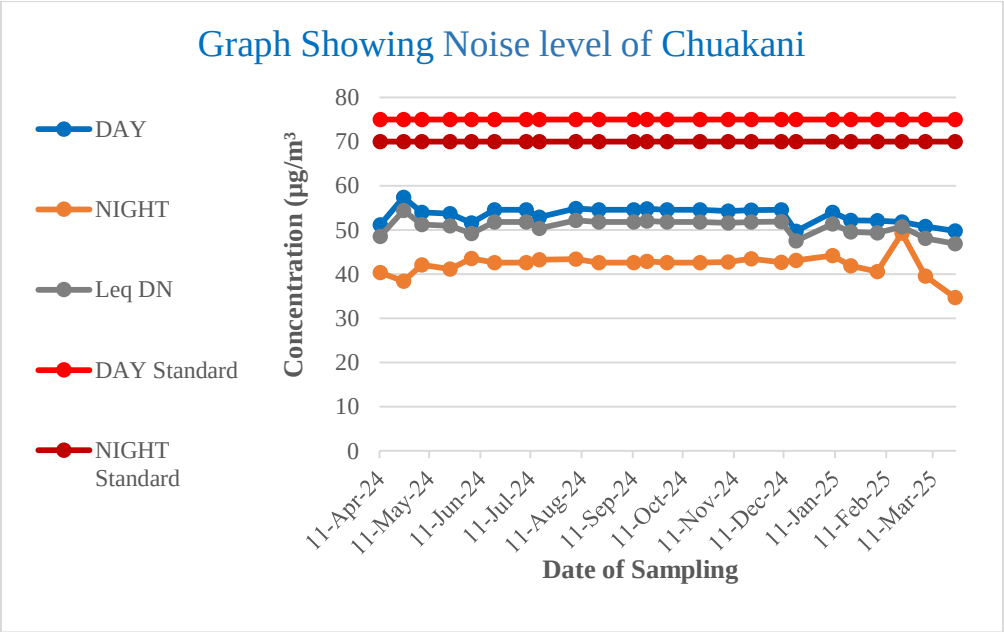

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Table: 9.1.12

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Barihapali Village South West of Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	42.7	38.4	41.1
26-Apr-24	50.1	40.3	47.5
07-May-24	52.9	39.9	50.1
24-May-24	53.6	39.2	50.7
06-Jun-24	54.1	42.9	51.4
20-Jun-24	52.9	43.7	50.4
09-Jul-24	52.9	43.7	50.4
17-Jul-24	54.9	43.8	52.2
08-Aug-24	52.8	42.2	50.2
22-Aug-24	52.9	43.7	50.4
12-Sep-24	52.9	43.7	50.4
20-Sep-24	52.3	43.2	49.8
03-Oct-24	52.9	44.9	50.5
22-Oct-24	52.9	43.6	50.4
08-Nov-24	52.9	43.7	50.4
22-Nov-24	51.7	42.5	49.2
10-Dec-24	52.9	44.9	50.5
19-Dec-24	52.3	43.7	49.9
10-Jan-25	53.4	42.6	50.7
21-Jan-25	52.9	42.7	50.3
06-Feb-25	52.7	40.2	49.9
21-Feb-25	53.1	42.6	50.5
07-Mar-25	52.9	43.9	50.4
25-Mar-25	52.9	43.9	50.4
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	42.70	38.40	41.06
Maximum	54.90	44.90	52.21
Mean	52.44	42.66	49.90

MoEF Standard Notification dated 25th 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)

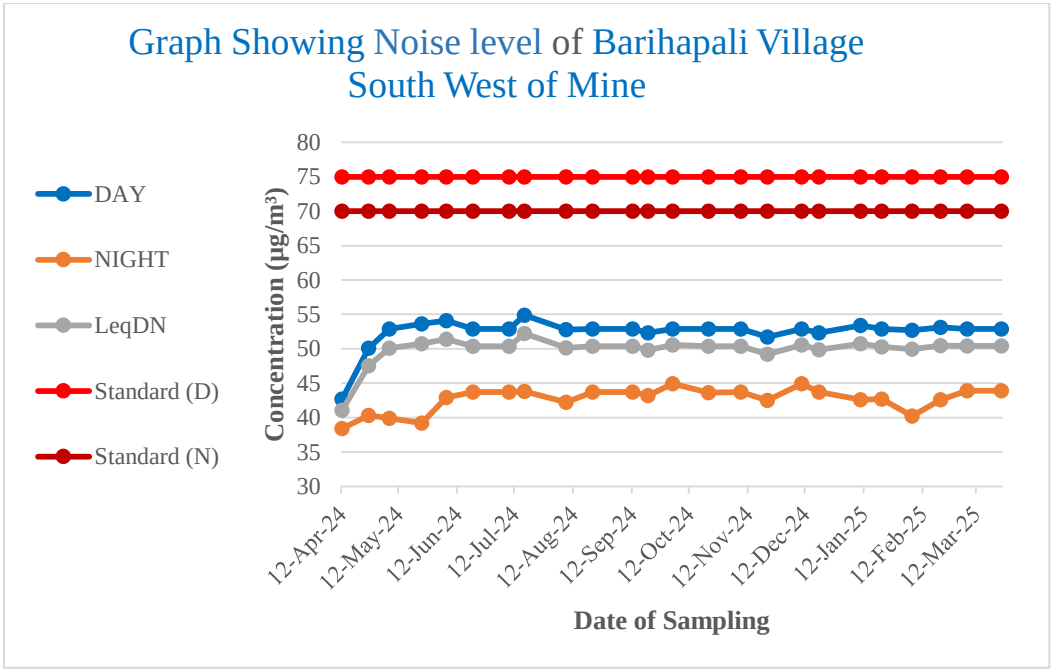

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Table: 9.1.13

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Bartap Village North West of Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	43.6	39.2	41.9
26-Apr-24	50.6	37.9	47.8
07-May-24	53.8	42.9	51.1
24-May-24	54.1	43.7	51.5
06-Jun-24	53.6	42.6	50.9
20-Jun-24	54.2	44.6	51.6
09-Jul-24	54.2	44.6	51.6
17-Jul-24	54.6	43.7	51.9
08-Aug-24	54.2	44.6	51.6
22-Aug-24	54.2	44.6	51.6
12-Sep-24	54.2	44.6	51.6
20-Sep-24	54.6	44.4	52.0
03-Oct-24	54.2	44.5	51.6
22-Oct-24	54.3	44.6	51.7
08-Nov-24	53.6	44.4	51.1
22-Nov-24	53.9	43.7	51.3
10-Dec-24	54.3	44.3	51.7
19-Dec-24	54.2	41.2	51.4
10-Jan-25	52.9	43.4	50.4
21-Jan-25	53.5	44.6	51.0
06-Feb-25	51.4	39.8	48.7
21-Feb-25	51.6	43.8	49.3
07-Mar-25	49.8	38.7	47.1
25-Mar-25	52.1	40.1	49.4
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	43.60	37.90	41.93
Maximum	54.60	44.60	51.99
Mean	52.99	42.94	50.42

MoEF Standard Notification dated 25th 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)

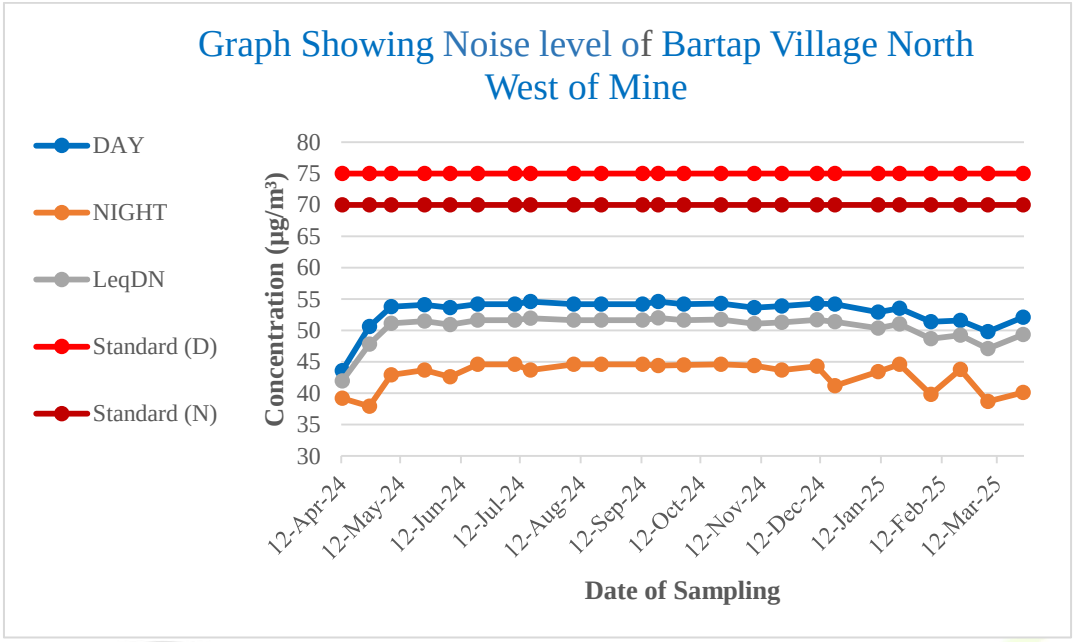

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Table: 9.1.14
Area: Lakhanpur
Project: LBL OCP
Monitoring Station: BOCM Workshop
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	63.8	58.1	61.8
26-Apr-24	64.2	59.8	62.5
07-May-24	65.9	63.7	64.9
24-May-24	66.8	64.7	65.9
06-Jun-24	62.8	57.3	60.9
20-Jun-24	60.5	54.2	58.4
09-Jul-24	60.5	56.3	58.9
17-Jul-24	68.3	64.7	66.9
08-Aug-24	60.5	54.6	58.5
22-Aug-24	66.2	63.8	65.2
12-Sep-24	60.1	56.4	58.6
20-Sep-24	62.8	56.6	60.7
03-Oct-24	65.2	63.8	64.6
22-Oct-24	64.7	60.4	63.1
08-Nov-24	60.4	54.1	58.3
22-Nov-24	60.5	54.3	58.4
10-Dec-24	60.1	54.6	58.2
19-Dec-24	66.7	62.4	65.1
10-Jan-25	60.4	57.8	59.3
21-Jan-25	60.5	54.2	58.4
06-Feb-25	60.5	54.2	58.4
21-Feb-25	61.7	56.3	59.8
07-Mar-25	60.5	54.9	58.5
25-Mar-25	60.3	58.3	59.4
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	60.10	54.10	58.17
Maximum	68.30	64.70	66.86
Mean	62.66	58.15	61.03

MoEF Standard Notification dated 25th 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)

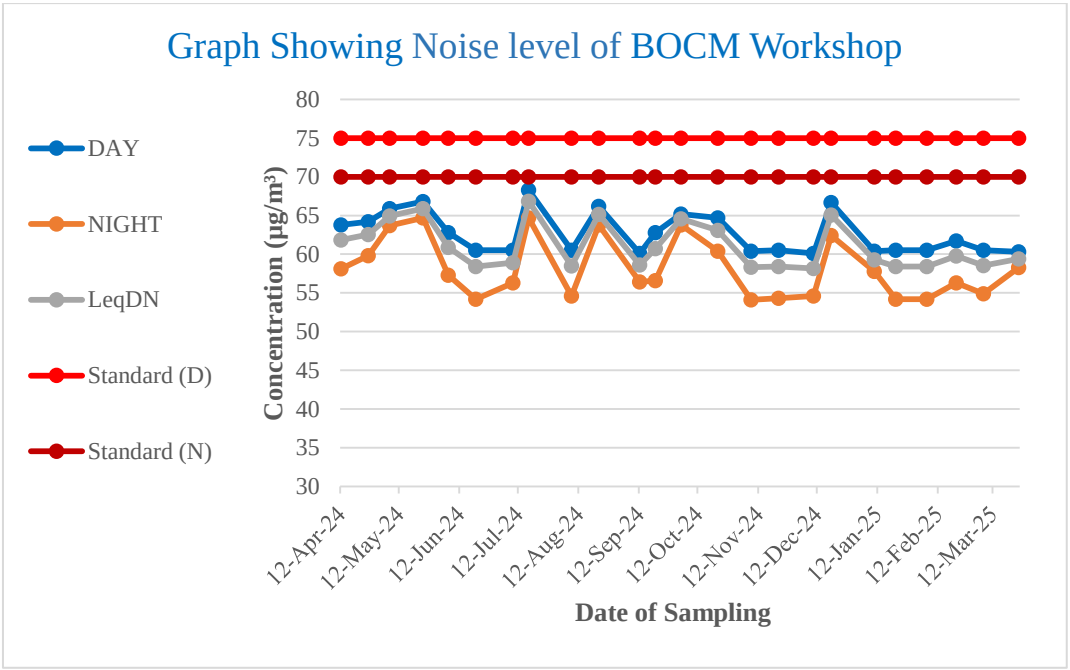

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Table: 9.1.15

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Gumadera Village North of Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	52.7	39.4	49.9
26-Apr-24	52.6	38.4	49.8
07-May-24	54.2	42.8	51.5
24-May-24	54.6	43.2	51.9
06-Jun-24	52.6	44.6	50.2
20-Jun-24	54.6	44.3	52.0
09-Jul-24	54.6	44.3	52.0
17-Jul-24	53.2	43.1	50.6
08-Aug-24	55.4	43.3	52.6
22-Aug-24	54.6	40.3	51.7
12-Sep-24	54.6	44.3	52.0
20-Sep-24	54.2	44.1	51.6
03-Oct-24	54.6	44.8	52.0
22-Oct-24	54.6	44.3	52.0
08-Nov-24	53.6	46.7	51.4
22-Nov-24	54.5	44.7	51.9
10-Dec-24	54.6	44.3	52.0
19-Dec-24	53.7	42.8	51.0
10-Jan-25	53.6	42.8	50.9
21-Jan-25	53.4	44.3	50.9
06-Feb-25	48.6	41.2	46.3
21-Feb-25	51.9	44.3	49.6
07-Mar-25	50.9	39.8	48.2
25-Mar-25	50.1	42.2	47.7
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	48.60	38.40	46.32
Maximum	55.40	46.70	52.65
Mean	53.42	43.10	50.82

MoEF Standard Notification dated 25th 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)

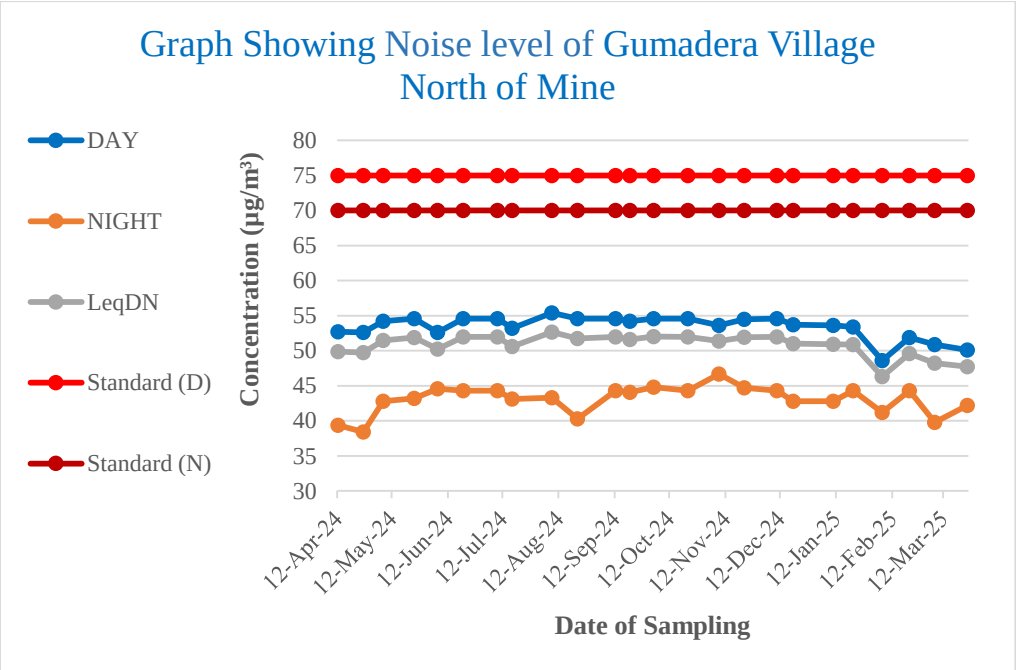

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Table: 9.1.16

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Kadam Rehab Centre East of Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	52.9	38.3	50.0
26-Apr-24	53.9	39.2	51.0
07-May-24	54.2	42	51.4
24-May-24	54.6	42.3	51.8
06-Jun-24	52.3	42.5	49.7
20-Jun-24	54.4	44.8	51.8
09-Jul-24	54.4	44.2	51.8
17-Jul-24	52.1	44.4	49.8
08-Aug-24	54.4	44.8	51.8
22-Aug-24	54.4	44.8	51.8
12-Sep-24	54.4	44.8	51.8
20-Sep-24	54.3	44.2	51.7
03-Oct-24	55.1	44.3	52.4
22-Oct-24	54.4	44.3	51.8
08-Nov-24	54.6	44.8	52.0
22-Nov-24	54.3	44.1	51.7
10-Dec-24	54.4	44.3	51.8
19-Dec-24	54.4	44.8	51.8
10-Jan-25	53.1	42.1	50.4
21-Jan-25	54.1	44.3	51.5
06-Feb-25	51.6	43.2	49.2
21-Feb-25	49.8	41.6	47.4
07-Mar-25	48.9	38.9	46.3
25-Mar-25	50.8	39.8	48.1
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	48.90	38.30	46.30
Maximum	55.10	44.80	52.44
Mean	53.41	43.03	50.80

MoEF Standard Notification dated 25th 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)

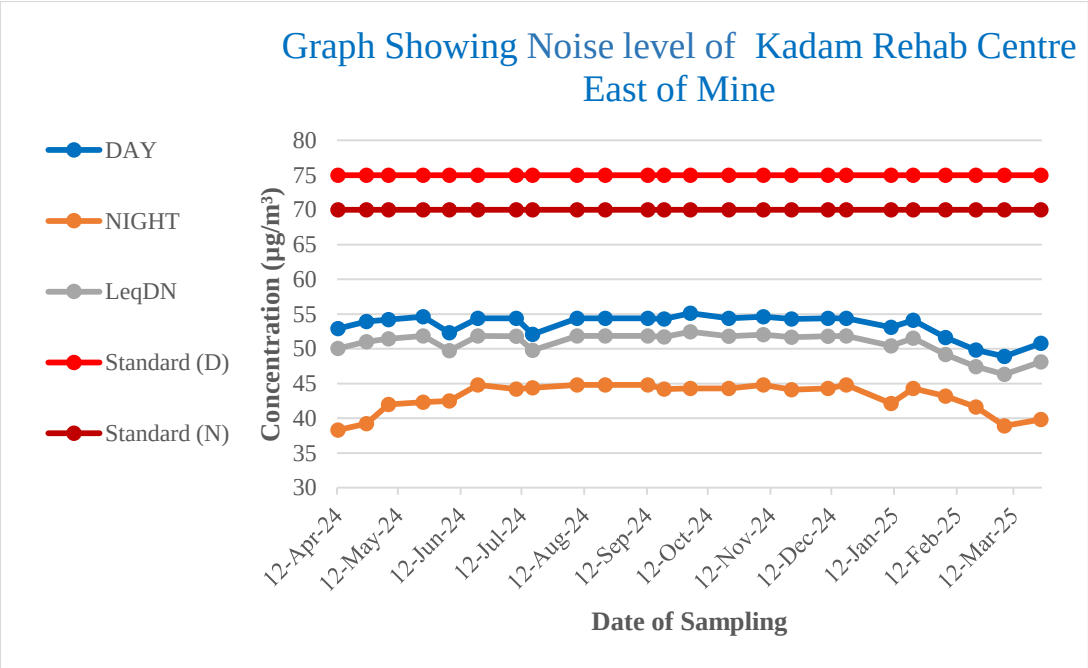

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Table: 9.1.17
Area: Lakhanpur
Project: LBL OCP
Monitoring Station: Kirulbal Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	60.4	53.8	58.2
26-Apr-24	60.3	59.2	59.8
07-May-24	54.7	44.1	52.1
24-May-24	54.1	43.6	51.5
06-Jun-24	61.4	58.7	60.3
20-Jun-24	52.9	48.4	51.2
09-Jul-24	52.9	43.4	50.4
17-Jul-24	54.6	44.1	52.0
08-Aug-24	52.4	45.2	50.1
22-Aug-24	52.9	43.4	50.4
12-Sep-24	52.9	43.4	50.4
19-Sep-24	52.4	43.5	49.9
03-Oct-24	52.9	43.6	50.4
22-Oct-24	52.9	43.4	50.4
08-Nov-24	52.6	44.7	50.2
22-Nov-24	52.8	43.8	50.3
10-Dec-24	52.9	43.5	50.4
19-Dec-24	52.9	43.4	50.4
10-Jan-25	58.5	47.6	55.8
21-Jan-25	52.9	43.7	50.4
06-Feb-25	49.9	39.8	47.3
21-Feb-25	60.3	59.2	59.8
07-Mar-25	52.9	43.3	50.3
25-Mar-25	51.1	41.2	48.5
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	49.90	39.80	47.29
Maximum	61.40	59.20	60.26
Mean	54.35	46.17	52.09

MoEF Standard Notification dated 25th 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)

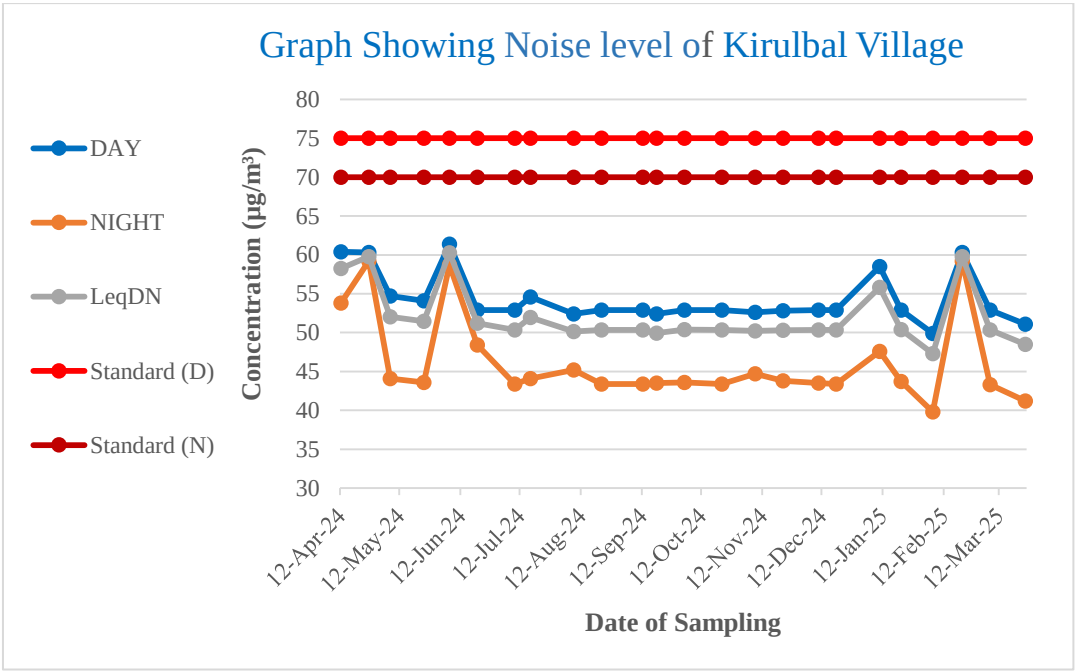

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Table: 9.1.18

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Lakhanpur Police Station West of Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	54.3	39.2	51.4
26-Apr-24	50.8	44.6	48.7
07-May-24	54.8	40.6	52.0
24-May-24	54.1	40.2	51.3
06-Jun-24	54.3	44.1	51.7
20-Jun-24	54.1	44.6	51.6
09-Jul-24	52.7	45.6	50.5
17-Jul-24	53.6	43.9	51.0
08-Aug-24	54.1	44.6	51.6
22-Aug-24	53.1	43.9	50.6
12-Sep-24	55.8	46.3	53.3
20-Sep-24	53.9	43.6	51.3
03-Oct-24	54.9	44.8	52.3
22-Oct-24	55.6	43.8	52.9
08-Nov-24	52.9	42.6	50.3
22-Nov-24	54.9	44.7	52.3
10-Dec-24	53.1	42.6	50.5
19-Dec-24	54.1	43.6	51.5
10-Jan-25	51.6	42.8	49.1
21-Jan-25	54.9	43.2	52.2
06-Feb-25	51.8	41.6	49.2
21-Feb-25	53.8	42.1	51.1
07-Mar-25	48.3	39.1	45.8
25-Mar-25	49.8	38.6	47.1
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	48.30	38.60	45.78
Maximum	55.80	46.30	53.25
Mean	53.39	42.95	50.79

MoEF Standard Notification dated 25th 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)

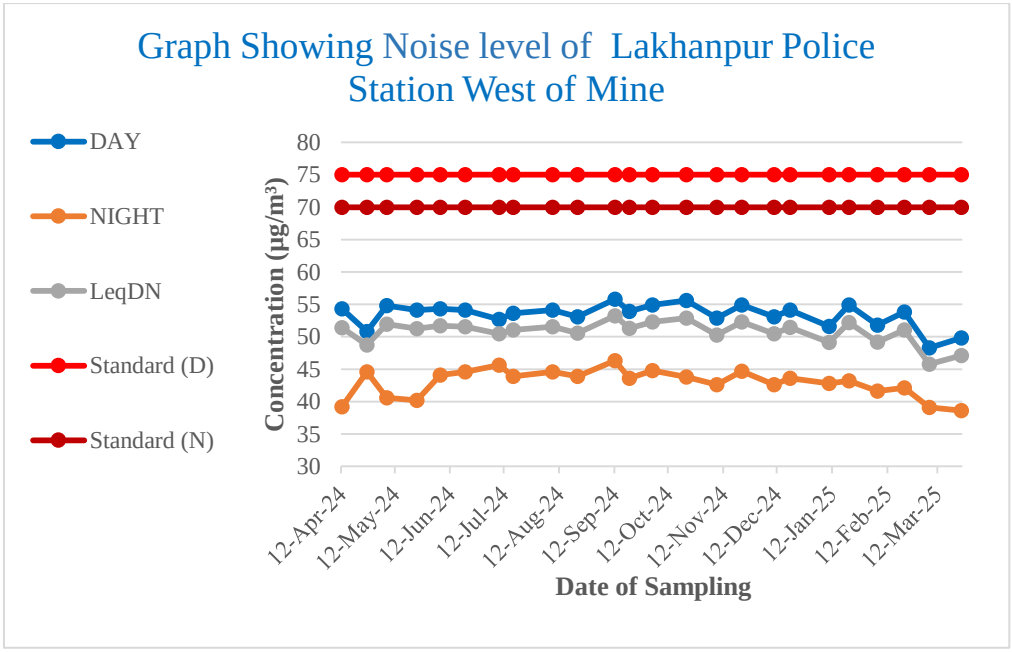

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Table: 9.1.19

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Near Lilari Magazine House

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	56.2	54.6	55.5
26-Apr-24	58.4	53.7	56.7
07-May-24	53.4	49.8	52.0
24-May-24	68.4	65.3	67.1
06-Jun-24	64.3	59.2	62.5
20-Jun-24	61.3	56.9	59.6
09-Jul-24	63.4	59.6	61.9
17-Jul-24	67.4	65.3	66.5
08-Aug-24	62.3	56.9	60.4
22-Aug-24	64.3	60.9	62.9
12-Sep-24	62.4	58.2	60.8
20-Sep-24	60.4	56.9	59.0
03-Oct-24	63.3	56.9	61.2
22-Oct-24	62.3	56.9	60.4
08-Nov-24	62.3	56.9	60.4
22-Nov-24	61.3	56.9	59.6
10-Dec-24	63.3	56.2	61.1
19-Dec-24	64.3	58.7	62.3
10-Jan-25	56.3	44.2	53.5
21-Jan-25	61.4	56.9	59.7
06-Feb-25	62.3	56.8	60.4
21-Feb-25	58.4	53.7	56.7
07-Mar-25	62.4	56.7	60.4
25-Mar-25	61.4	56.7	59.7
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	53.40	44.20	51.96
Maximum	68.40	65.30	67.12
Mean	61.72	56.87	60.01

MoEF Standard Notification dated 25th 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)

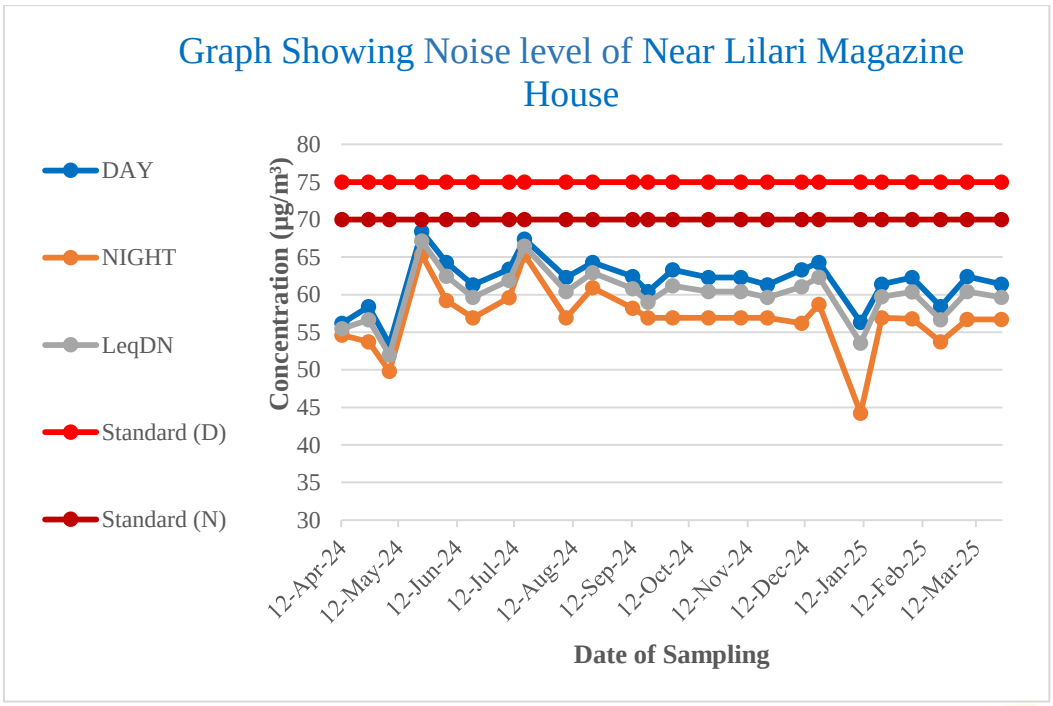

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Table: 9.1.20

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: Ramada Village South of Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	54.9	39.2	52.0
26-Apr-24	54.3	39.2	51.4
07-May-24	52.8	41.2	50.1
24-May-24	52.3	40.9	49.6
06-Jun-24	52.9	43.4	50.4
20-Jun-24	53.8	44.6	51.3
09-Jul-24	53.8	44.6	51.3
17-Jul-24	54.2	42.9	51.5
08-Aug-24	53.6	44.6	51.1
22-Aug-24	53.8	44.2	51.2
12-Sep-24	53.8	45.6	51.4
20-Sep-24	53.6	44.6	51.1
03-Oct-24	53.4	43.6	50.8
22-Oct-24	53.8	43.8	51.2
08-Nov-24	54.4	42.6	51.7
22-Nov-24	53.6	43.6	51.0
10-Dec-24	54.7	42.7	52.0
19-Dec-24	53.9	39.4	51.0
10-Jan-25	52.8	43.4	50.3
21-Jan-25	54.8	43.6	52.1
06-Feb-25	51.3	39.6	48.6
21-Feb-25	52.9	44.6	50.5
07-Mar-25	51.2	40.3	48.5
25-Mar-25	49.8	38.7	47.1
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	49.80	38.70	47.11
Maximum	54.90	45.60	52.11
Mean	53.35	42.54	50.71

MoEF Standard Notification dated 25th 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)

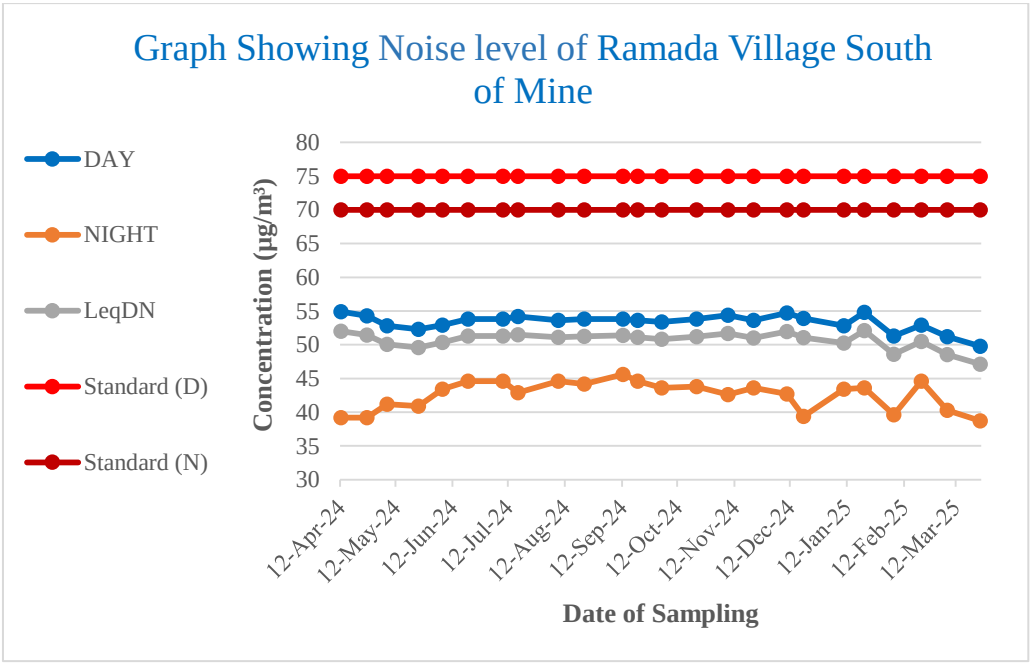

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Table: 9.1.21

Area: Lakhanpur

Project: LBL OCP

Monitoring Station: West of Lakhanpur Quarry Near Solada

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
12-Apr-24	58.4	54.7	56.9
26-Apr-24	61.7	56.3	59.8
07-May-24	61.8	58.6	60.5
24-May-24	62.6	59.2	61.2
06-Jun-24	64.3	58.7	62.3
20-Jun-24	59.8	53.6	57.7
09-Jul-24	59.8	53.6	57.7
17-Jul-24	63.9	60.1	62.4
08-Aug-24	58.8	53.6	56.9
22-Aug-24	59.7	54.6	57.9
12-Sep-24	59.8	54.2	57.8
20-Sep-24	59.9	53.7	57.8
03-Oct-24	59.8	54.6	57.9
22-Oct-24	59.4	53.6	57.4
08-Nov-24	58.6	52.4	56.5
22-Nov-24	59.7	52.8	57.5
10-Dec-24	59.6	53.4	57.5
19-Dec-24	59.8	54.6	57.9
10-Jan-25	58.8	46.3	56.0
21-Jan-25	59.8	53.6	57.7
06-Feb-25	58.4	53.7	56.7
21-Feb-25	63.9	59.2	62.2
07-Mar-25	59.8	53.6	57.7
25-Mar-25	59.6	54.4	57.7
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	58.40	46.30	56.03
Maximum	64.30	60.10	62.40
Mean	60.32	54.71	58.41

MoEF Standard Notification dated 25th 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)

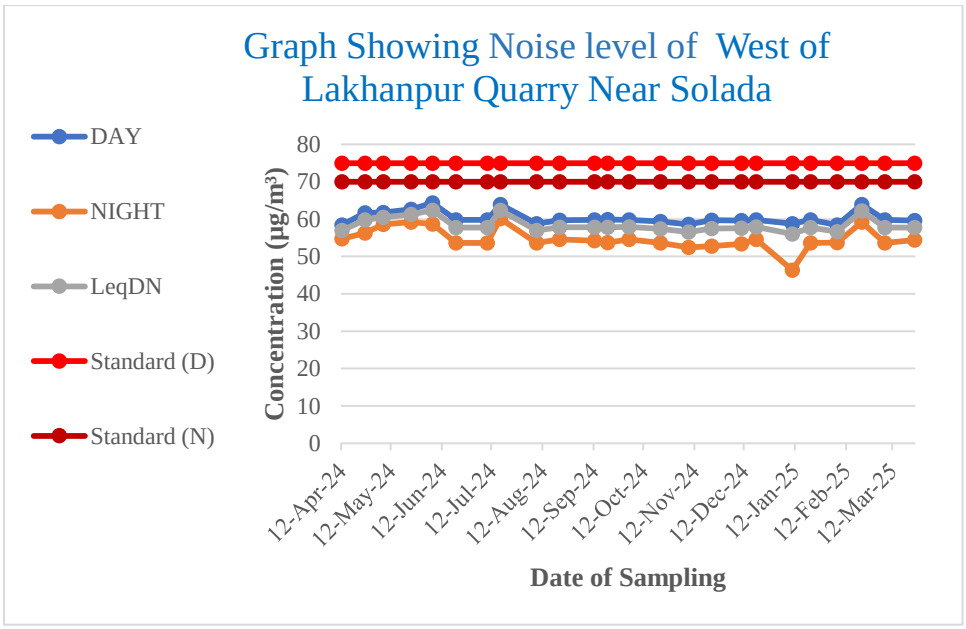

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Table: 9.1.22

Area: Mahalaxmi

Project: Basundhara (W) OCP

Monitoring Station: North of the Sardega Railway Siding, Kulapada

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
13-Apr-24	64.7	56.8	62.3
27-Apr-24	62.7	56.4	60.6
08-May-24	67.6	69.4	68.6
25-May-24	69.3	67.4	68.5
07-Jun-24	62.7	56.8	60.7
21-Jun-24	60.3	52.7	58.0
10-Jul-24	65.4	63.1	64.4
18-Jul-24	70.7	68.3	69.7
09-Aug-24	58.1	55.9	57.1
23-Aug-24	67.4	64.8	66.3
13-Sep-24	60.3	54.7	58.3
21-Sep-24	60.2	52.7	57.9
04-Oct-24	64.9	58.3	62.7
23-Oct-24	64.6	60.9	63.1
09-Nov-24	63.4	60.8	62.3
23-Nov-24	60.1	52.7	57.8
11-Dec-24	60.8	55.6	58.9
20-Dec-24	62.3	56.7	60.3
11-Jan-25	62.6	56.4	60.5
22-Jan-25	61.3	54.7	59.1
07-Feb-25	62.6	58.4	61.0
22-Feb-25	62.7	53.3	60.2
08-Mar-25	60.2	52.7	57.9
26-Mar-25	62.6	58.4	61.0
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	58.1	52.7	57.1
Maximum	70.7	69.4	69.7
Mean	63.2	58.2	61.6

MoEF Standard Notification dated 25th 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)

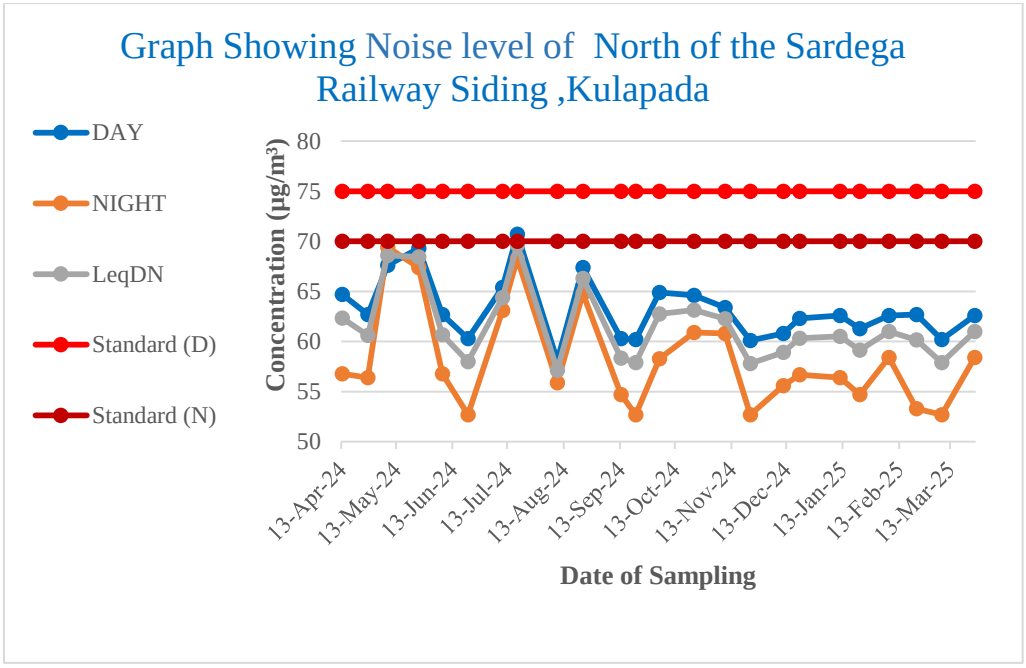

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Table: 9.1.23

Area: Mahalaxmi

Project: Basundhara (W) OCP

Monitoring Station: Ratansara Village

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
13-Apr-24	51.2	39.4	48.5
27-Apr-24	49.2	36.6	46.4
08-May-24	54.9	39.8	52.0
25-May-24	50.6	38.4	47.8
07-Jun-24	53.9	44.1	51.3
21-Jun-24	53.9	43.9	51.3
10-Jul-24	53.9	43.7	51.3
18-Jul-24	55.6	44.8	52.9
09-Aug-24	53.9	43.9	51.3
23-Aug-24	53.9	43.4	51.3
13-Sep-24	53.9	43.7	51.3
21-Sep-24	53.7	43.9	51.1
04-Oct-24	53.8	44.1	51.2
23-Oct-24	53.9	42.7	51.2
09-Nov-24	54.3	43.9	51.7
23-Nov-24	53.9	43.4	51.3
11-Dec-24	53.8	44.4	51.3
20-Dec-24	53.7	43.7	51.1
11-Jan-25	49.9	38.3	47.2
22-Jan-25	53.9	43.8	51.3
07-Feb-25	51.9	41.8	49.3
22-Feb-25	51.6	48.9	50.5
08-Mar-25	53.9	43.9	51.3
26-Mar-25	49.8	38.6	47.1
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	49.2	36.6	46.4
Maximum	55.6	48.9	52.9
Mean	53.0	42.6	50.5

MoEF Standard Notification dated 25th 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)

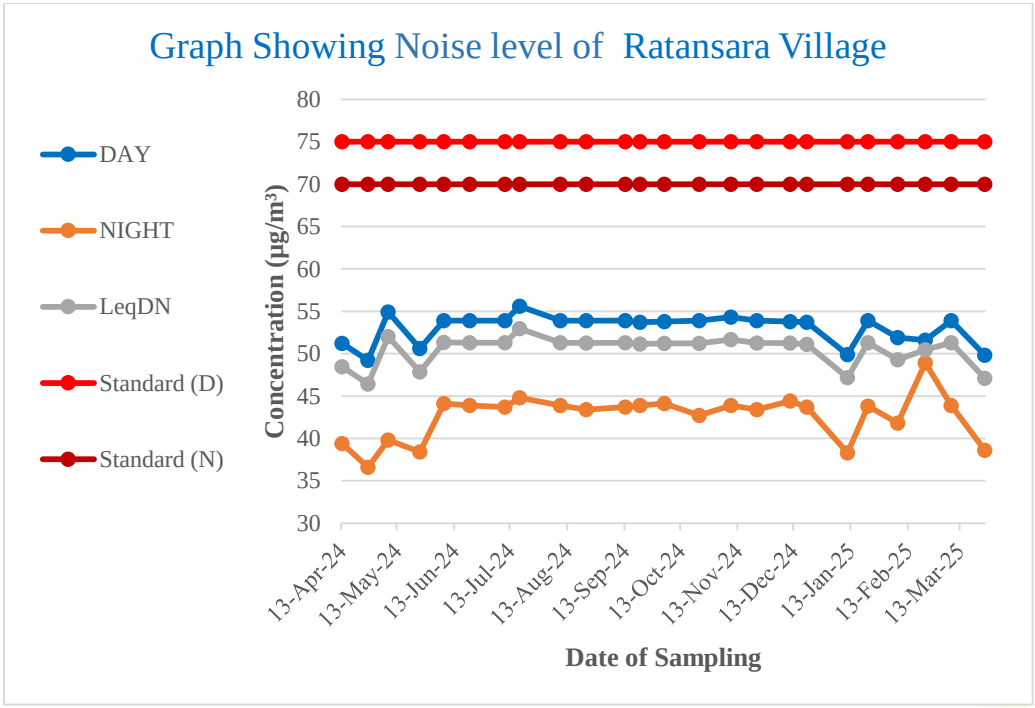

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Table: 9.1.24

Area: Mahalaxmi

Project: Basundhara (W) OCP

Monitoring Station: Sarangijharia Village

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	48.3	34.9	45.5
27-Apr-24	48.4	35.1	45.6
08-May-24	54.1	40.4	51.3
25-May-24	53.1	40.6	50.3
07-Jun-24	53.1	42.9	50.5
21-Jun-24	54.4	44.3	51.8
10-Jul-24	54.4	44.3	51.8
18-Jul-24	53.9	43.6	51.3
09-Aug-24	54.4	44.3	51.8
23-Aug-24	54.4	44.5	51.8
13-Sep-24	54.4	44.5	51.8
21-Sep-24	54.4	44.3	51.8
04-Oct-24	53.1	43.9	50.6
23-Oct-24	54.4	44.5	51.8
09-Nov-24	53.4	44.5	50.9
23-Nov-24	54.8	44.3	52.2
11-Dec-24	54.1	43.9	51.5
20-Dec-24	54.1	44.8	51.6
11-Jan-25	54.2	42.8	51.5
22-Jan-25	54.6	44.1	52.0
07-Feb-25	51.7	41.3	49.1
22-Feb-25	49.8	38.6	47.1
08-Mar-25	51.6	39.8	48.9
26-Mar-25	50.1	39.8	47.5
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	48.3	34.9	45.5
Maximum	54.8	44.8	52.2
Mean	53.1	42.3	50.4

MoEF Standard Notification dated 25th 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)

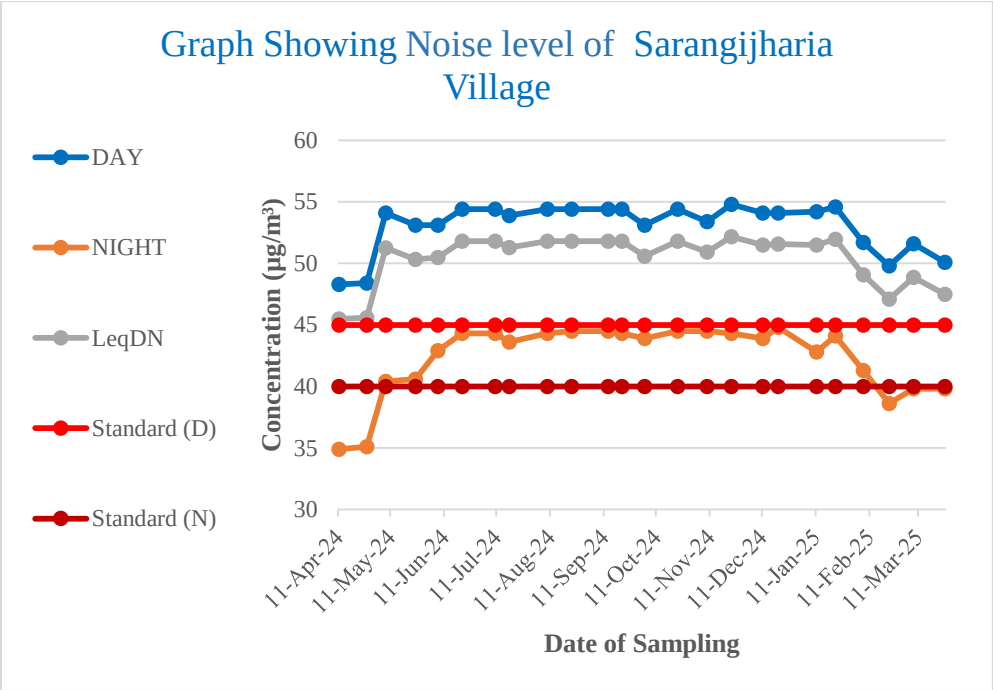

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Table: 9.1.25

Area: Mahalaxmi

Project: Basundhara (W) OCP

Monitoring Station: South West of Working face Gopalpur Village, Near CMPDI Camp

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
13-Apr-24	59.4	52.7	57.2
27-Apr-24	59.2	53.7	57.3
08-May-24	68.4	62.7	66.4
25-May-24	68.4	65.2	67.1
07-Jun-24	59.2	56.4	58.0
21-Jun-24	59.2	52.7	57.1
10-Jul-24	59.8	52.9	57.6
18-Jul-24	69.3	66.4	68.1
09-Aug-24	59.3	52.7	57.1
23-Aug-24	64.7	60.9	63.2
13-Sep-24	59.2	56.4	58.0
21-Sep-24	58.6	52.7	56.6
04-Oct-24	65.4	60.3	63.6
23-Oct-24	59.3	54.4	57.5
09-Nov-24	64.9	59.3	62.9
23-Nov-24	59.2	52.6	57.0
11-Dec-24	59.7	52.7	57.5
20-Dec-24	60.9	54.3	58.7
11-Jan-25	64.5	60.9	63.1
22-Jan-25	62.4	59.6	61.2
07-Feb-25	60.3	57.9	59.3
22-Feb-25	59.2	53.7	57.3
08-Mar-25	58.6	52.7	56.6
26-Mar-25	60.4	52.7	58.1
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	58.6	52.6	56.6
Maximum	69.3	66.4	68.1
Mean	61.6	56.5	59.9

MoEF Standard Notification dated 25th 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)

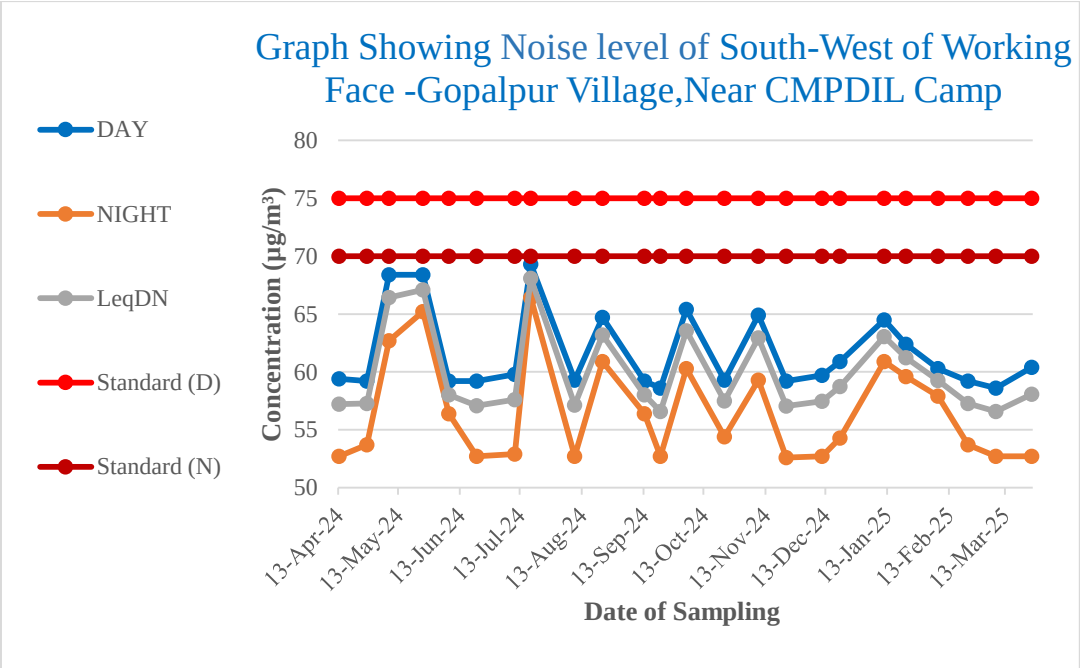

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Table: 9.1.26

Area: Mahalaxmi

Project: Basundhara (W) OCP

Monitoring Station: West of Coal Stock, Near Golf Course

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
13-Apr-24	62.3	54.6	60.0
26-Apr-24	60.3	54.8	58.4
08-May-24	65.6	60.7	63.8
25-May-24	66.8	63.7	65.5
07-Jun-24	60.4	58.9	59.7
21-Jun-24	58.4	53.6	56.6
10-Jul-24	58.2	53.6	56.5
18-Jul-24	65.4	63.1	64.4
09-Aug-24	60.7	53.8	58.5
23-Aug-24	60.3	58.2	59.4
13-Sep-24	58.4	53.6	56.6
21-Sep-24	57.8	53.2	56.1
04-Oct-24	62.3	59.1	61.0
23-Oct-24	60.4	58.3	59.5
09-Nov-24	58.3	53.6	56.6
23-Nov-24	58.4	53.6	56.6
11-Dec-24	58.3	54.3	56.7
20-Dec-24	58.4	53.6	56.6
11-Jan-25	59.3	46.6	56.5
22-Jan-25	58.6	53.4	56.7
07-Feb-25	58.4	53.6	56.6
22-Feb-25	60.3	54.8	58.4
08-Mar-25	59.4	53.6	57.4
26-Mar-25	58.4	53.6	56.6
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	57.8	46.6	56.1
Maximum	66.8	63.7	65.5
Mean	60.2	55.4	58.5

MoEF Standard Notification dated 25th 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)

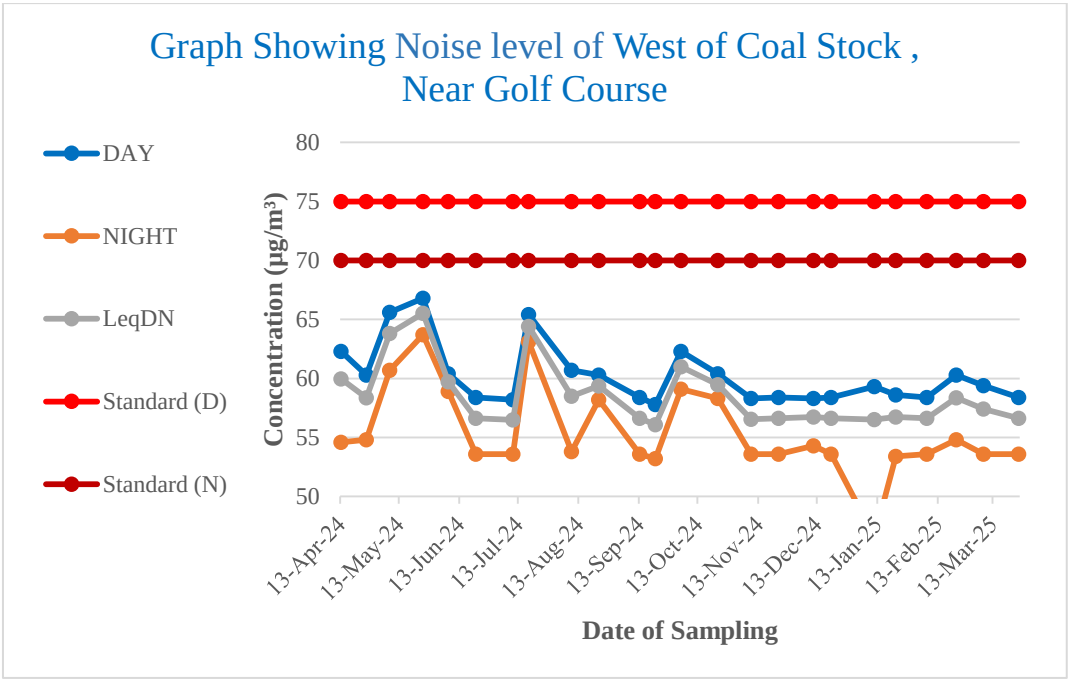

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Table: 9.1.27
Area: Basundhara
Project: Garjanbahal OCP
Monitoring Station: Garjanbahal Village
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
13-Apr-24	50.8	38.4	48.0
27-Apr-24	48.9	38.7	46.3
08-May-24	53.5	39.6	50.7
25-May-24	54.2	43.9	51.6
07-Jun-24	53.7	43.2	51.1
21-Jun-24	55.8	44.9	53.1
10-Jul-24	55.8	44.9	53.1
18-Jul-24	67.3	65.6	66.5
09-Aug-24	55.8	44.9	53.1
23-Aug-24	59.8	44.6	56.9
13-Sep-24	55.8	44.5	53.1
21-Sep-24	55.6	44.2	52.9
04-Oct-24	55.8	44.8	53.1
23-Oct-24	55.8	44.2	53.1
09-Nov-24	55.8	44.3	53.1
23-Nov-24	57.1	42.8	54.2
11-Dec-24	55.8	44.5	53.1
20-Dec-24	55.3	45.8	52.8
11-Jan-25	64.8	59.3	62.9
22-Jan-25	60.8	57.6	59.5
07-Feb-25	58.8	50.6	56.4
22-Feb-25	56.9	52.3	55.2
08-Mar-25	52.9	44.6	50.5
26-Mar-25	60.4	56.3	58.8
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	48.9	38.4	46.3
Maximum	67.3	65.6	66.5
Mean	56.6	46.9	54.1

MoEF Standard Notification dated 25th 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)

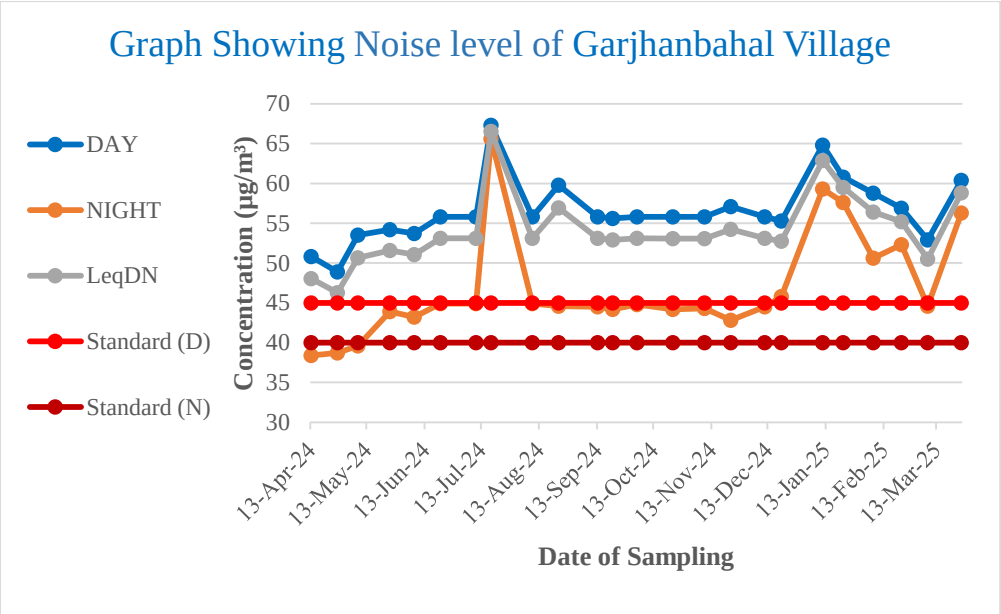

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Table: 9.1.28

Area: Basundhara

Project: Garjanbahal OCP

Monitoring Station: Karlikachar Village

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
13-Apr-24	51.2	37.6	48.4
27-Apr-24	49.2	37.4	46.5
08-May-24	54.4	40.1	51.5
25-May-24	53.1	44.7	50.7
07-Jun-24	54.8	41.2	52.0
21-Jun-24	52.2	43.9	49.8
10-Jul-24	58.7	48.4	56.1
18-Jul-24	65.7	63.8	64.9
09-Aug-24	58.6	54.8	57.1
23-Aug-24	57.2	43.9	54.4
13-Sep-24	52.2	43.9	49.8
21-Sep-24	52.3	43.6	49.8
04-Oct-24	52.3	43.7	49.9
23-Oct-24	53.7	43.9	51.1
09-Nov-24	56.7	43.8	53.9
23-Nov-24	56.2	43.9	53.4
11-Dec-24	58.4	43.8	55.5
20-Dec-24	58.4	43.7	55.5
11-Jan-25	58.2	44.7	55.4
22-Jan-25	58.2	43.4	55.3
07-Feb-25	56.4	46.7	53.8
22-Feb-25	59.2	57.4	58.4
08-Mar-25	58.7	51.2	56.4
26-Mar-25	54.6	43.8	51.9
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	49.2	37.4	46.5
Maximum	65.7	63.8	64.9
Mean	55.9	45.6	53.4

MoEF Standard Notification dated 25th 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)

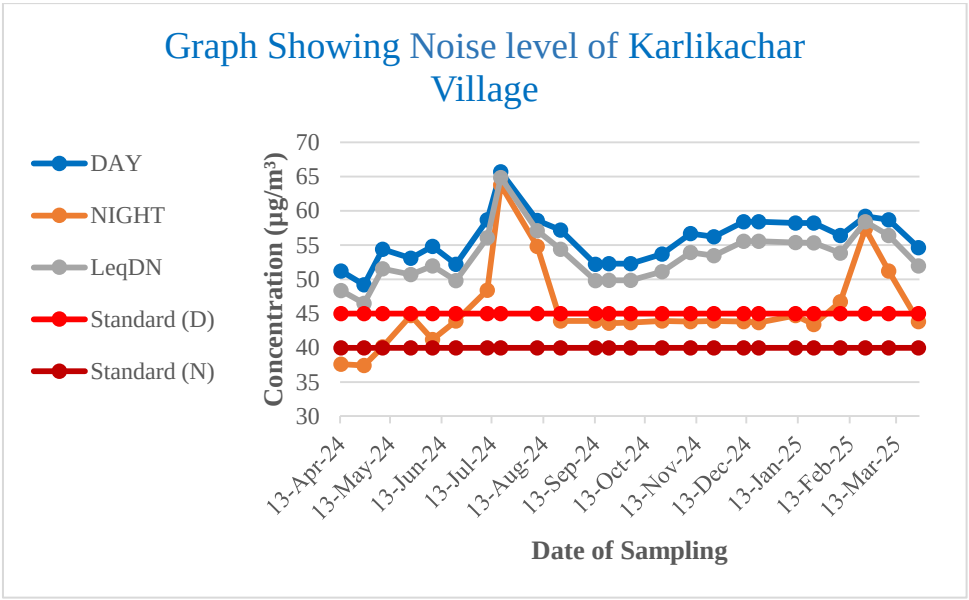
Graph Showing Noise level of Karlikachar Village
DAY
NIGHT
LeqDN
Standard (D)
Standard (N)
Concentration (µg/m³)
70
65
60
55
50
45
40
35
30
13-Apr-24
13-May-24
13-Jun-24
13-Jul-24
13-Aug-24
13-Sep-24
13-Oct-24
13-Nov-24
13-Dec-24
13-Jan-25
13-Feb-25
13-Mar-25
Date of Sampling

Table: 9.1.29
Area: Basundhara
Project: Kulda OCP
Monitoring Station: External CT Road
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
13-Apr-24	59.9	52.6	57.6
27-Apr-24	62.6	58.2	60.9
08-May-24	56.7	50.1	54.5
25-May-24	66.3	64.7	65.6
07-Jun-24	60.8	59.2	60.1
21-Jun-24	58.7	51.2	56.4
10-Jul-24	60.3	58.2	59.4
18-Jul-24	65.9	63.2	64.8
09-Aug-24	58.7	55.4	57.4
23-Aug-24	58.7	51.2	56.4
13-Sep-24	58.7	51.2	56.4
21-Sep-24	57.7	51.1	55.5
04-Oct-24	53.9	43.6	51.3
23-Oct-24	58.7	51.3	56.4
09-Nov-24	55.6	50.6	53.8
23-Nov-24	58.7	51.2	56.4
11-Dec-24	56.7	49.7	54.5
20-Dec-24	58.4	51.6	56.2
11-Jan-25	56.3	44.6	53.6
22-Jan-25	58.7	51.2	56.4
07-Feb-25	52.2	43.2	49.7
22-Feb-25	63.9	60.2	62.4
08-Mar-25	54.6	44.5	52.0
26-Mar-25	58.7	51.2	56.4
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	52.2	43.2	49.7
Maximum	66.3	64.7	65.6
Mean	58.8	52.5	56.8

MoEF Standard Notification dated 25th 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)

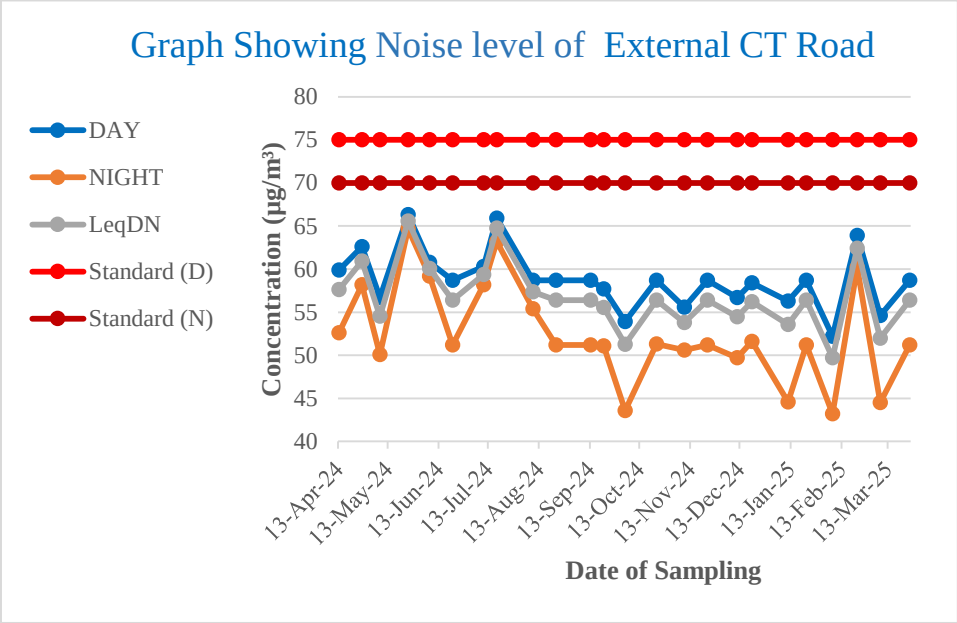

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Table: 9.1.30
Area: Basundhara
Project: Kulda OCP
Monitoring Station: North of CHP
All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
13-Apr-24	47.6	40.3	45.3
27-Apr-24	50.3	40.7	47.7
08-May-24	54.7	40.6	51.9
25-May-24	53.7	39.1	50.8
07-Jun-24	52.9	43.8	50.4
21-Jun-24	52.9	44.6	50.5
10-Jul-24	52.9	44.6	50.5
18-Jul-24	53.8	44.1	51.2
09-Aug-24	52.9	44.6	50.5
23-Aug-24	52.9	44.6	50.5
13-Sep-24	52.9	44.6	50.5
21-Sep-24	52.5	44.3	50.1
04-Oct-24	54.1	43.9	51.5
23-Oct-24	52.9	44.6	50.5
09-Nov-24	52.9	44.4	50.5
23-Nov-24	52.9	44.6	50.5
11-Dec-24	52.9	44.6	50.5
20-Dec-24	53.9	46.6	51.6
11-Jan-25	52.9	43.6	50.4
22-Jan-25	52.9	44.6	50.5
07-Feb-25	50.8	40.9	48.2
22-Feb-25	54.6	57.6	56.4
08-Mar-25	50.8	42.9	48.4
26-Mar-25	51.2	43.1	48.8
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	47.6	39.1	45.3
Maximum	54.7	57.6	56.4
Mean	52.6	44.1	50.3

MoEF Standard Notification dated 25th 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)

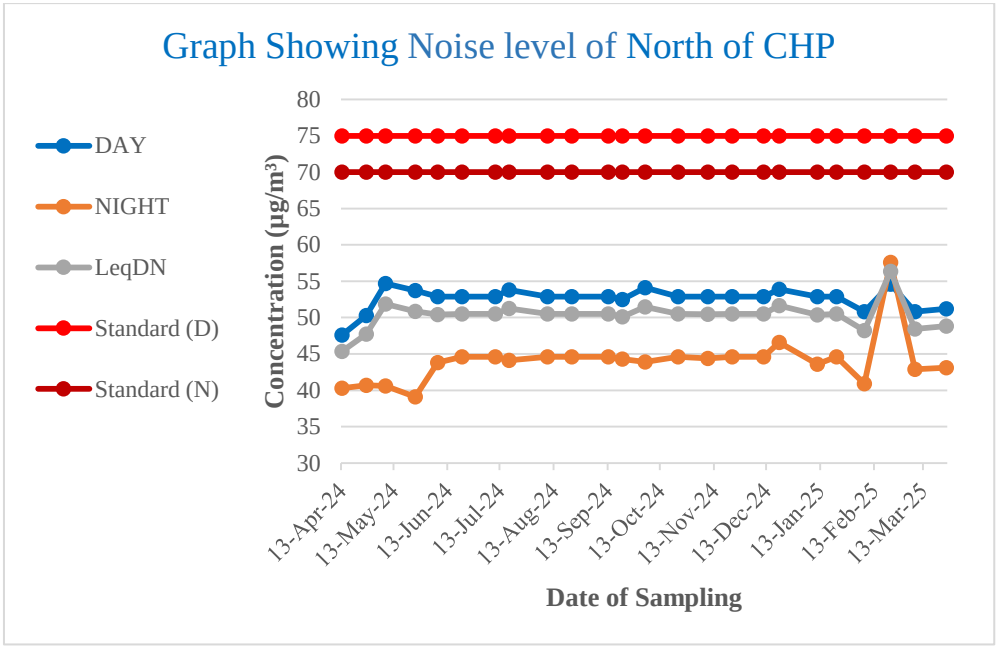

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Table: 9.1.31

Area: Orient

Project: Orient Mine No. 1 & 2

Monitoring Station: Orient Mine No. 1 & 2

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	63.2	56.5	61.0
25-Apr-24	61.2	58.8	60.2
08-May-24	58.4	53.7	56.7
23-May-24	66.9	64.5	65.9
05-Jun-24	59.2	52.8	57.1
21-Jun-24	60.4	56.3	58.8
08-Jul-24	60.4	53.3	58.2
16-Jul-24	69.9	66.3	68.5
10-Aug-24	60.4	56.3	58.8
24-Aug-24	60.2	56.1	58.6
11-Sep-24	60.4	56.3	58.8
19-Sep-24	60.7	56.6	59.1
01-Oct-24	63.7	59.2	62.0
21-Oct-24	60.4	56.1	58.8
07-Nov-24	63.7	60.8	62.5
21-Nov-24	55.7	44.6	53.0
09-Dec-24	60.3	56.7	58.9
18-Dec-24	61.7	58.4	60.4
09-Jan-25	60.4	56.2	58.8
20-Jan-25	63.6	58.4	61.7
08-Feb-25	60.9	56.3	59.2
20-Feb-25	61.2	57.8	59.8
06-Mar-25	60.4	56.3	58.8
24-Mar-25	64.2	60.8	62.8
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	55.7	44.6	53.0
Maximum	69.9	66.3	68.5
Mean	61.6	57.0	59.9

MoEF Standard Notification dated 25th 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)

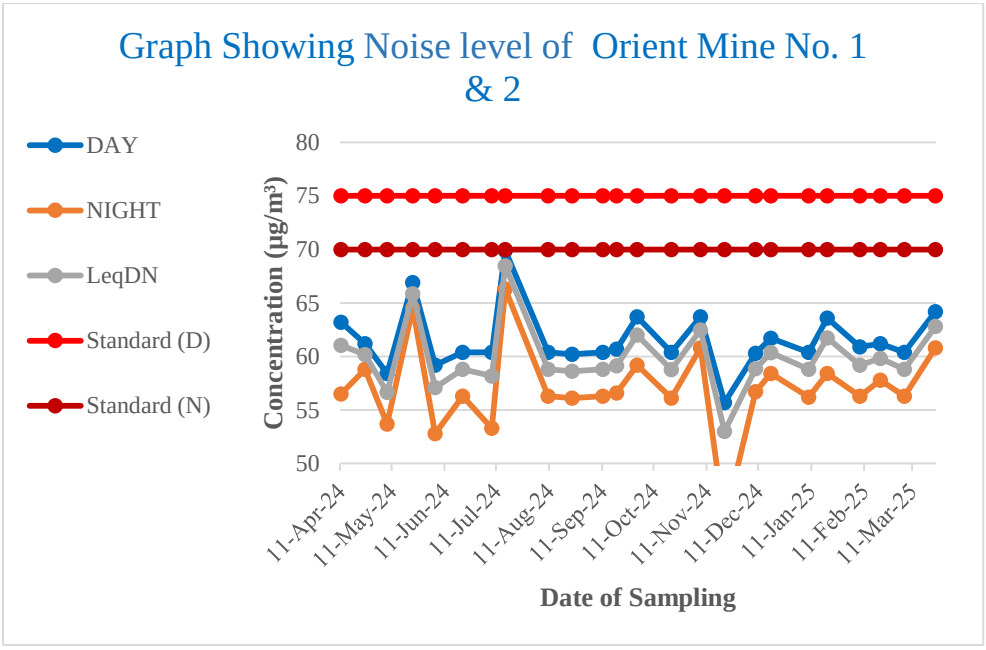

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Table: 9.1.32

Area: Orient

Project: Orient Mine No. 1 & 2

Monitoring Station: VIP Guest House, IB Valley (Reported Only)

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	50.4	43.7	48.2
25-Apr-24	54.5	38.3	51.6
06-May-24	52.4	42.4	49.8
23-May-24	54.1	43.6	51.5
05-Jun-24	52.1	43.2	49.6
19-Jun-24	53.2	46.9	51.1
08-Jul-24	57.2	46.9	54.6
16-Jul-24	54.1	43.2	51.4
07-Aug-24	53.2	43.7	50.7
21-Aug-24	53.2	43.2	50.6
11-Sep-24	53.2	46.9	51.1
19-Sep-24	53.2	43.2	50.6
01-Oct-24	53.2	46.7	51.1
21-Oct-24	53.2	46.9	51.1
07-Nov-24	53.2	46.8	51.1
21-Nov-24	53.4	44.9	51.0
09-Dec-24	53.2	44.8	50.8
18-Dec-24	49.8	46.4	48.4
09-Jan-25	53.8	43.2	51.2
20-Jan-25	54.8	47.3	52.5
05-Feb-25	51.6	43.8	49.3
20-Feb-25	51.4	39.8	48.7
06-Mar-25	49.8	38.6	47.1
24-Mar-25	49.8	37.8	47.1
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	49.8	37.8	47.1
Maximum	57.2	47.3	54.6
Mean	52.8	43.8	50.4

MoEF Standard Notification dated 25th 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)

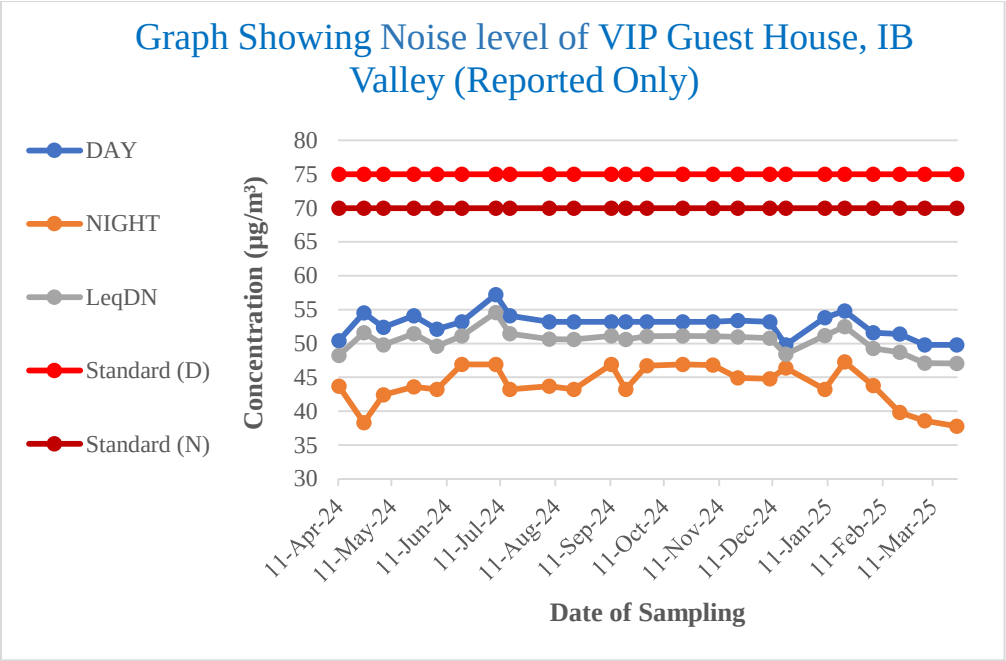

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Table: 9.1.33

Area: Orient

Project: Orient Mine No.3

Monitoring Station: Orient Mine No.3

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	60.3	56.9	58.9
25-Apr-24	63.2	56.8	61.1
06-May-24	57.6	53.4	56.0
23-May-24	66.4	63.6	65.2
05-Jun-24	62.4	57.9	60.7
22-Jun-24	59.2	53.6	57.2
08-Jul-24	59.2	55.1	57.6
16-Jul-24	66.8	64.2	65.7
10-Aug-24	59.2	53.6	57.2
24-Aug-24	59.2	53.6	57.2
11-Sep-24	59.4	53.7	57.4
19-Sep-24	59.2	53.6	57.2
01-Oct-24	59.3	56.8	58.2
21-Oct-24	60.8	56.4	59.1
07-Nov-24	61.7	56.4	59.8
21-Nov-24	59.2	53.6	57.2
09-Dec-24	59.6	53.2	57.5
18-Dec-24	60.4	56.3	58.8
09-Jan-25	59.6	54.3	57.7
20-Jan-25	59.2	53.6	57.2
08-Feb-25	59.2	53.6	57.2
20-Feb-25	62.4	56.8	60.4
06-Mar-25	59.2	53.6	57.2
24-Mar-25	59.6	53.6	57.6
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	57.6	53.2	56.0
Maximum	66.8	64.2	65.7
Mean	60.5	55.6	58.7

MoEF Standard Notification dated 25th 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)

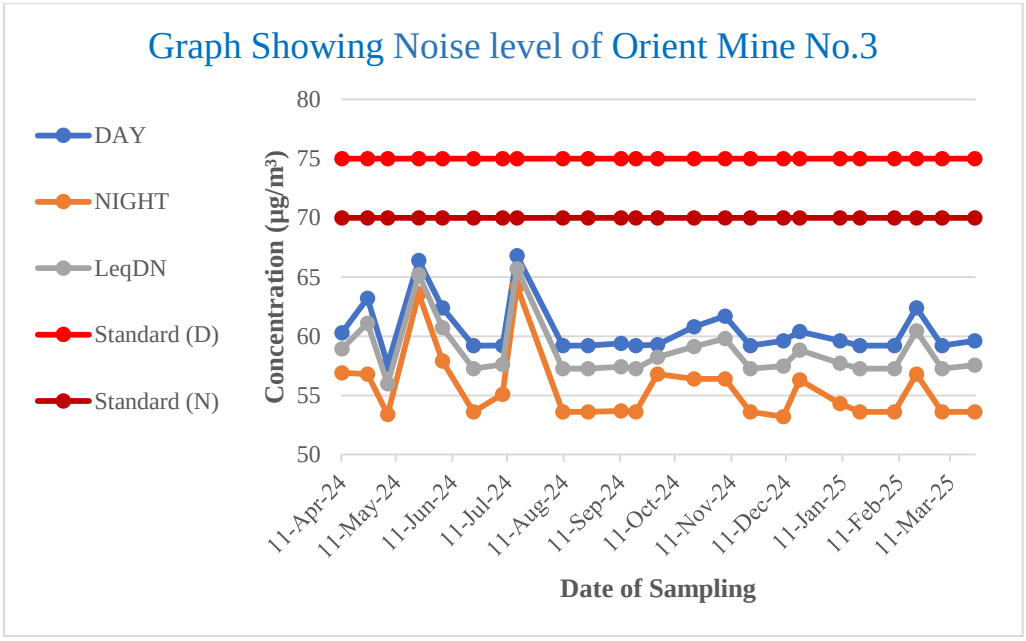

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Table: 9.1.34

Area: Orient

Project: Orient Mine No.4.

Monitoring Station: Orient Mine No.4

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	58.2	55.7	57.1
25-Apr-24	59.4	54.6	57.6
06-May-24	54.8	50.7	53.2
23-May-24	68.8	65.4	67.4
05-Jun-24	60.2	58.8	59.6
22-Jun-24	61.4	52.8	59.0
08-Jul-24	61.4	52.8	59.0
16-Jul-24	65.6	63.9	64.8
10-Aug-24	61.4	54.8	59.2
24-Aug-24	61.4	52.8	59.0
11-Sep-24	61.4	52.8	59.0
19-Sep-24	61.2	52.3	58.7
01-Oct-24	61.8	52.6	59.3
21-Oct-24	63.6	59.5	62.0
07-Nov-24	60.9	54.7	58.8
21-Nov-24	61.4	55.8	59.4
09-Dec-24	62.3	55.9	60.2
18-Dec-24	58.5	52.7	56.5
09-Jan-25	61.8	52.6	59.3
20-Jan-25	61.4	52.8	59.0
08-Feb-25	62.4	58.8	61.0
20-Feb-25	58.4	55.2	57.1
06-Mar-25	61.4	52.8	59.0
24-Mar-25	61.4	52.3	58.9
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	54.8	50.7	53.2
Maximum	68.8	65.4	67.4
Mean	61.3	55.3	59.4

MoEF Standard Notification dated 25th 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)

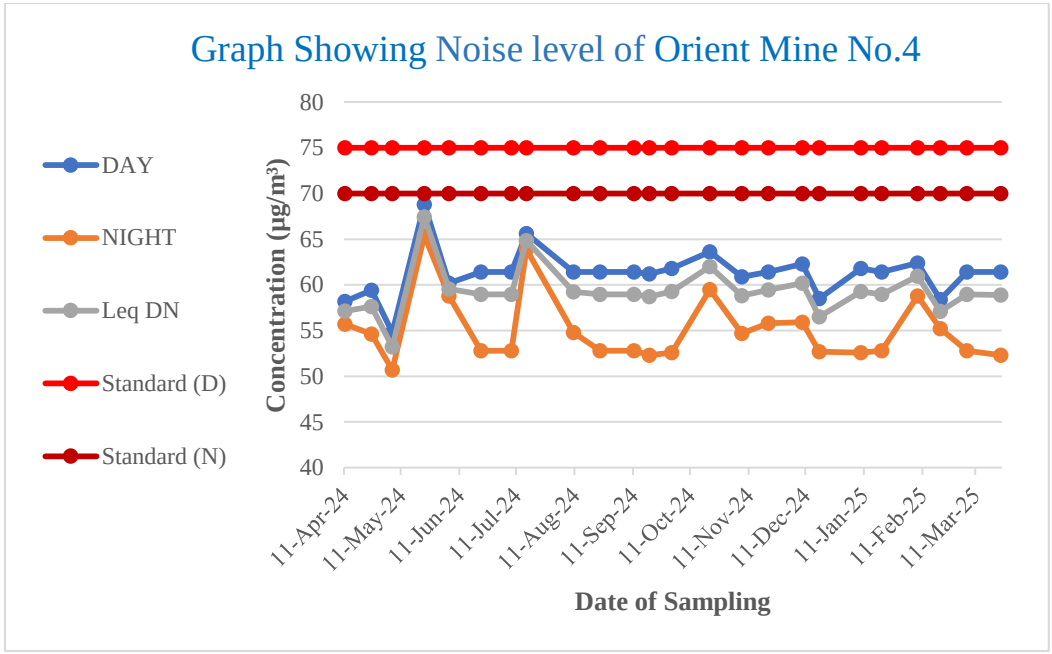

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Table: 9.1.35

Area: Orient

Project: HBI Mine.

Monitoring Station: HBI Mine

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	60.4	59.9	60.2
25-Apr-24	62.3	58.9	60.9
06-May-24	56.4	53.1	55.1
23-May-24	70.2	66.1	68.6
05-Jun-24	58.4	53.7	56.7
22-Jun-24	60.9	54.3	58.7
08-Jul-24	60.9	54.3	58.7
16-Jul-24	70.3	67.4	69.1
10-Aug-24	60.9	56.3	59.2
24-Aug-24	60.9	54.3	58.7
11-Sep-24	60.9	54.3	58.7
19-Sep-24	60.5	54.2	58.4
01-Oct-24	64.3	60.3	62.7
21-Oct-24	60.9	54.3	58.7
07-Nov-24	64.3	61.9	63.3
21-Nov-24	60.9	54.3	58.7
09-Dec-24	60.9	54.3	58.7
18-Dec-24	64.3	58.6	62.3
09-Jan-25	60.9	56.3	59.2
20-Jan-25	60.9	54.3	58.7
08-Feb-25	64.6	56.4	62.2
20-Feb-25	64.3	59.2	62.5
06-Mar-25	60.8	54.6	58.7
24-Mar-25	65.3	60.2	63.5
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	56.4	53.1	55.1
Maximum	70.3	67.4	69.1
Mean	62.3	57.1	60.5

MoEF Standard Notification dated 25th 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)

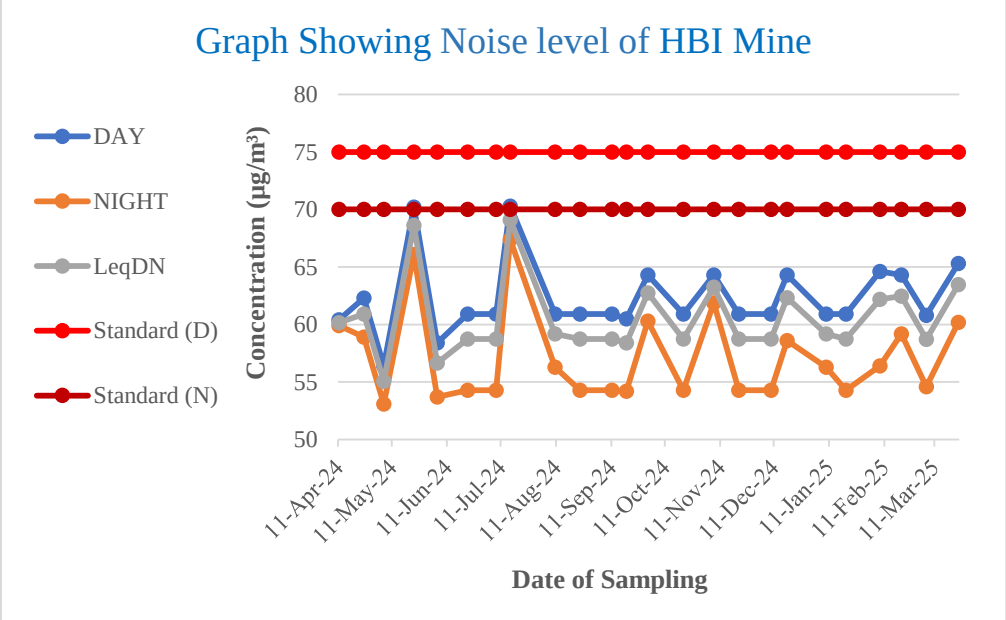

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Table: 9.1.36

Area: Orient

Project: HBI Mine.

Monitoring Station: Bundia Colony Pump House

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	61.8	56.3	59.9
25-Apr-24	60.2	56.7	58.8
06-May-24	60.4	58	59.4
23-May-24	64.7	60.5	63.1
05-Jun-24	60.2	57.6	59.1
22-Jun-24	58.4	52.7	56.4
08-Jul-24	58.4	52.7	56.4
16-Jul-24	64.7	60.8	63.2
10-Aug-24	58.4	53.9	56.7
24-Aug-24	58.4	52.7	56.4
11-Sep-24	58.4	52.7	56.4
19-Sep-24	57.8	52.4	55.9
01-Oct-24	58.4	52.4	56.4
21-Oct-24	58.3	52.2	56.2
07-Nov-24	58.2	53.6	56.5
21-Nov-24	58.4	53.7	56.7
09-Dec-24	58.4	52.6	56.4
18-Dec-24	53.2	46.8	51.1
09-Jan-25	58.1	44.8	55.3
20-Jan-25	54.6	44.9	52.0
08-Feb-25	60.7	54.2	58.6
20-Feb-25	60.4	56.3	58.8
06-Mar-25	54.6	44.9	52.0
24-Mar-25	58.6	52.7	56.6
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	53.2	44.8	51.1
Maximum	64.7	60.8	63.2
Mean	58.9	53.2	57.0

MoEF Standard Notification dated 25th 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)

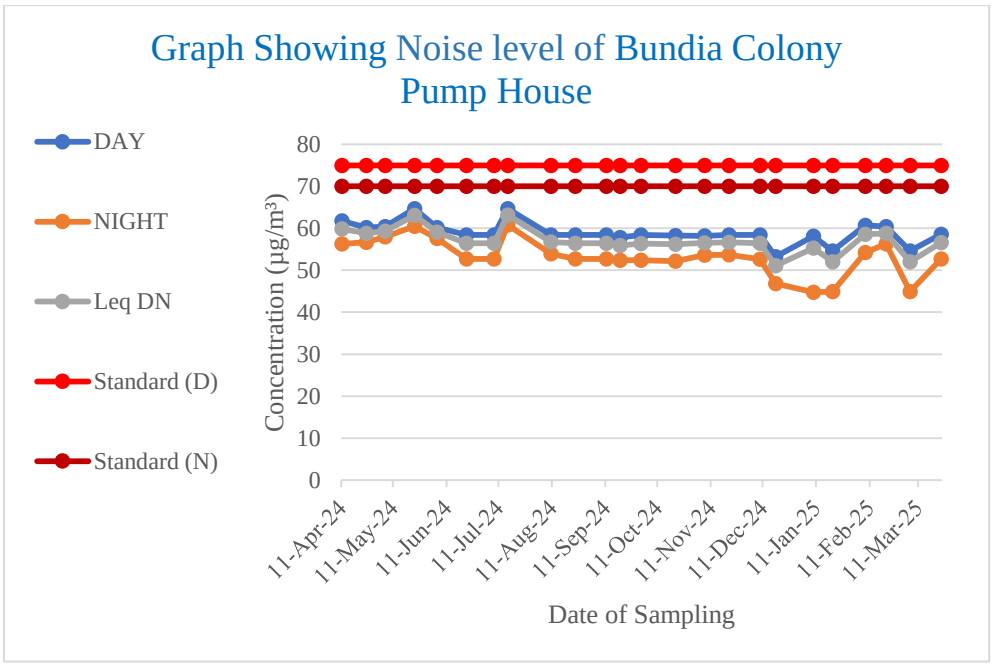

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Table: 9.1.37

Area: Orient

Project: HBI Mine.

Monitoring Station: Rampur Officer's Guest House

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	49.2	32.8	46.3
25-Apr-24	52.6	38.4	49.8
06-May-24	54.6	40.1	51.7
23-May-24	53.9	41.5	51.1
05-Jun-24	52.9	43.3	50.3
22-Jun-24	54.6	44.9	52.0
08-Jul-24	54.6	44.9	52.0
16-Jul-24	53.1	42.9	50.5
10-Aug-24	54.6	44.7	52.0
24-Aug-24	54.6	44.2	52.0
11-Sep-24	54.6	44.9	52.0
19-Sep-24	54.7	44.5	52.1
01-Oct-24	53.9	42.9	51.2
21-Oct-24	54.6	44.9	52.0
07-Nov-24	54.6	44.8	52.0
21-Nov-24	54.4	43.9	51.8
09-Dec-24	54.6	44.9	52.0
18-Dec-24	51.6	42.9	49.1
09-Jan-25	54.6	43.9	51.9
20-Jan-25	54.1	43.2	51.4
08-Feb-25	49.9	39.8	47.3
20-Feb-25	53.8	48.9	52.0
06-Mar-25	62.3	54.8	60.0
24-Mar-25	54.5	44.9	51.9
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	49.2	32.8	46.3
Maximum	62.3	54.8	60.0
Mean	54.0	43.6	51.4

MoEF Standard Notification dated 25th 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)

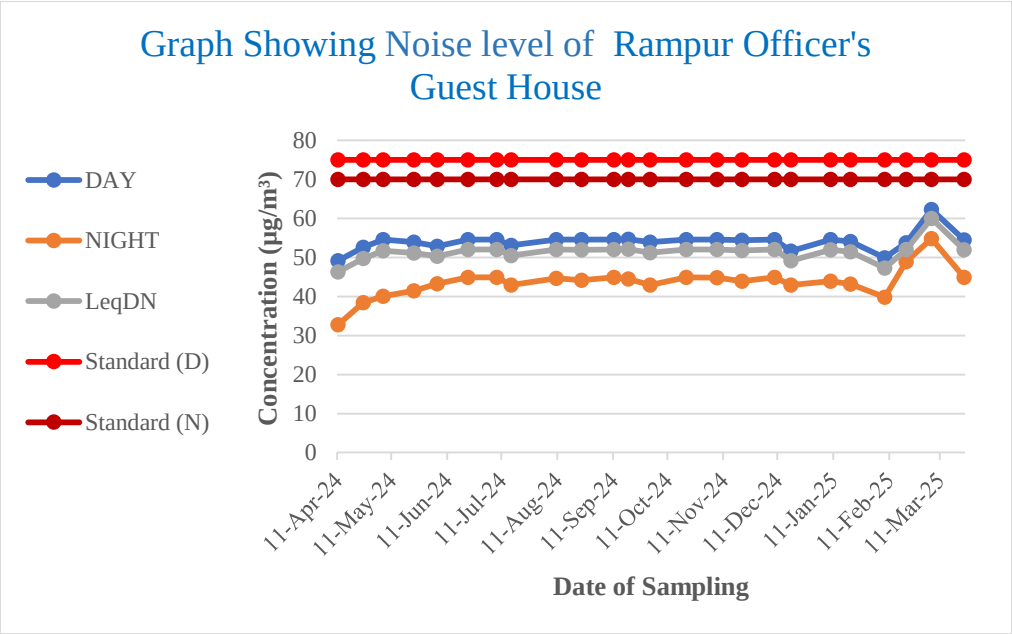

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Table: 9.1.38

Area: Orient

Project: HBI Mine.

Monitoring Station: Rampur Sub Area (Reported)

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	54.6	38.2	51.7
25-Apr-24	51.6	41.4	49.0
06-May-24	54.4	42.1	51.6
23-May-24	54.9	44.5	52.3
05-Jun-24	51.4	44.1	49.1
19-Jun-24	54.1	44.3	51.5
08-Jul-24	57.1	44.3	54.3
16-Jul-24	53.2	44.1	50.7
07-Aug-24	54.1	44.3	51.5
21-Aug-24	51.9	44.3	49.6
11-Sep-24	53.1	42.2	50.4
19-Sep-24	54.1	44.3	51.5
01-Oct-24	57.6	44.3	54.8
21-Oct-24	57.1	44.3	54.3
07-Nov-24	56.1	44.4	53.4
21-Nov-24	53.6	44.3	51.1
09-Dec-24	54.5	44.3	51.9
18-Dec-24	53.1	42.9	50.5
09-Jan-25	54.1	43.9	51.5
20-Jan-25	57.5	49.3	55.1
05-Feb-25	56.1	44.7	53.4
20-Feb-25	51.4	43.2	49.0
06-Mar-25	57.6	44.8	54.8
24-Mar-25	57.5	44.3	54.7
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	51.4	38.2	49.0
Maximum	57.6	49.3	55.1
Mean	54.5	43.8	51.9

MoEF Standard Notification dated 25th 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)

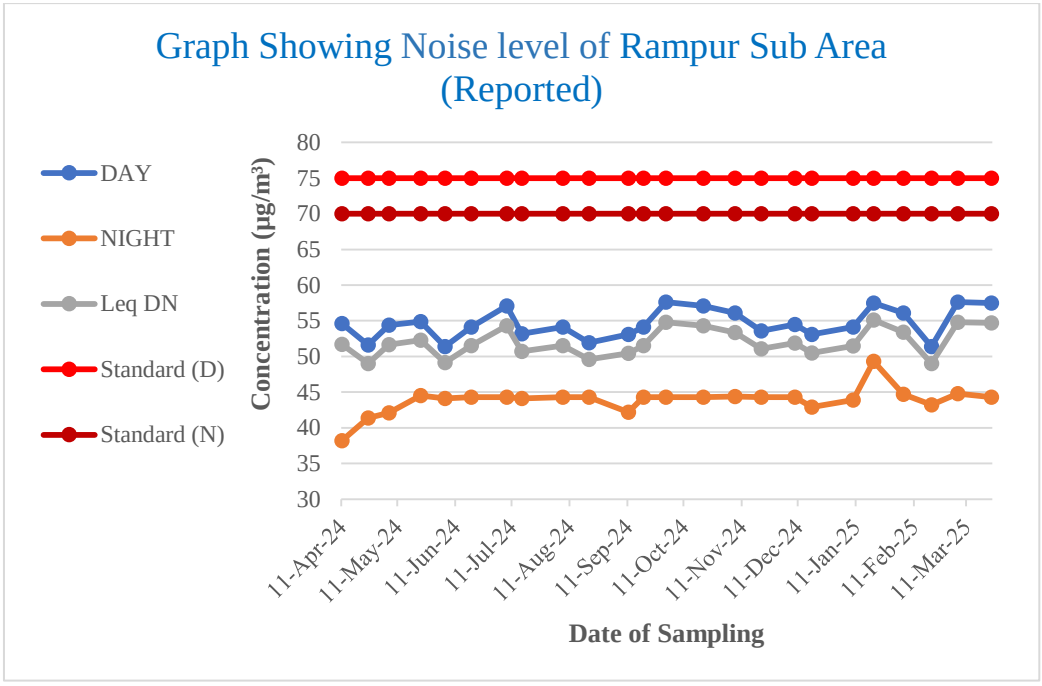

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Table: 9.1.39

Area: Orient

Project: HRC.

Monitoring Station: Near CHP HRC

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	59.6	57.2	58.6
25-Apr-24	63.7		60.7
06-May-24	65.2	62.1	63.9
23-May-24	65.8	62.8	64.6
05-Jun-24	60.2	58.7	59.5
22-Jun-24	60.3	54.1	58.2
08-Jul-24	60.3	58.4	59.5
16-Jul-24	65.4	63.9	64.7
10-Aug-24	60.2	58.2	59.3
24-Aug-24	60.3	54.1	58.2
11-Sep-24	60.3	54.1	58.2
19-Sep-24	60.5	53.1	58.2
01-Oct-24	60.3	55.2	58.5
21-Oct-24	60.4	54.3	58.3
07-Nov-24	60.3	54.1	58.2
21-Nov-24	60.3	54.1	58.2
09-Dec-24	62.8	54.4	60.4
18-Dec-24	60.8	56.3	59.1
09-Jan-25	63.2	56.7	61.1
20-Jan-25	62.4	56.9	60.5
08-Feb-25	60.9	56.1	59.1
20-Feb-25	64.9	58.2	62.7
06-Mar-25	60.4	54.1	58.3
24-Mar-25	60.3	54.1	58.2
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	59.6	53.1	58.2
Maximum	65.8	63.9	64.7
Mean	61.7	56.7	59.9

MoEF Standard Notification dated 25th 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)

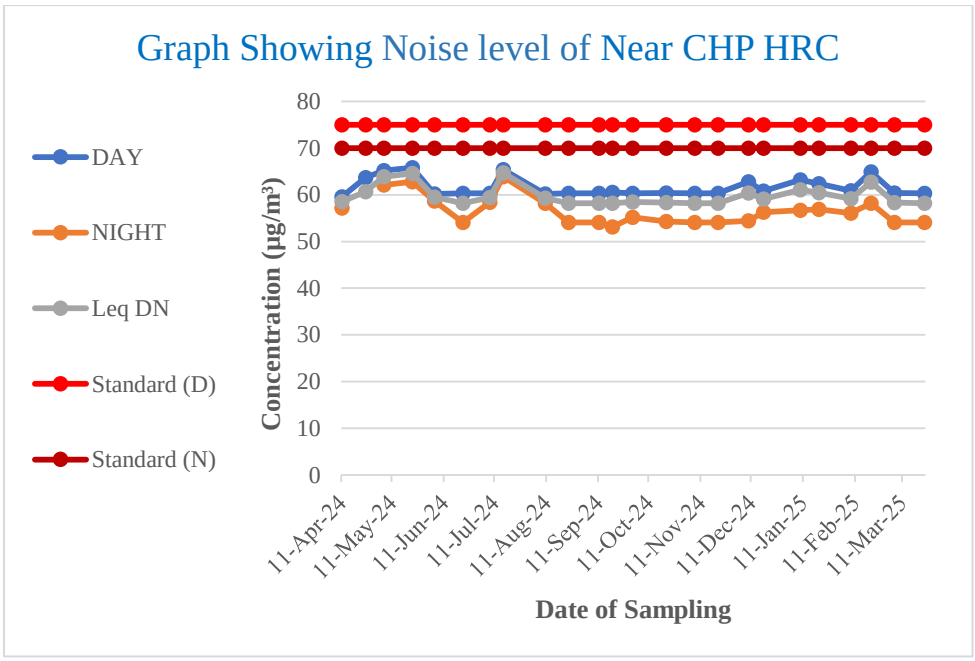

Graph Showing Noise level of Near CHP HRC
DAY
NIGHT
Leq DN
Standard (D)
Standard (N)
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling

Table: 9.1.40

Area: Orient

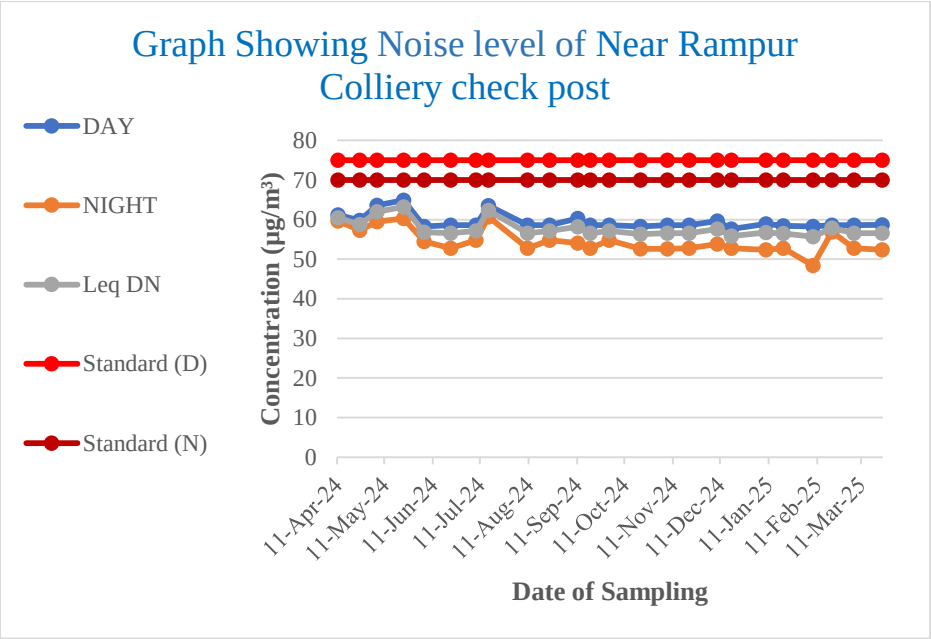
Project: HRC.

Monitoring Station: Near Rampur Colliery check post

All units are in dB(A)

DATE	DAY	NIGHT	Leq DN
11-Apr-24	61.2	59.6	60.5
25-Apr-24	59.8	57.3	58.7
06-May-24	63.6	59.5	62.0
23-May-24	64.9	60.3	63.2
05-Jun-24	58.3	54.5	56.8
22-Jun-24	58.6	52.8	56.6
08-Jul-24	58.6	54.8	57.1
16-Jul-24	63.5	60.7	62.3
10-Aug-24	58.6	52.8	56.6
24-Aug-24	58.6	54.8	57.1
11-Sep-24	60.3	54.1	58.2
19-Sep-24	58.6	52.8	56.6
01-Oct-24	58.6	54.8	57.1
21-Oct-24	58.3	52.6	56.3
07-Nov-24	58.6	52.6	56.6
21-Nov-24	58.6	52.8	56.6
09-Dec-24	59.6	53.8	57.6
18-Dec-24	57.6	52.8	55.8
09-Jan-25	58.9	52.4	56.8
20-Jan-25	58.4	52.8	56.4
08-Feb-25	58.3	48.4	55.7
20-Feb-25	58.6	56.9	57.8
06-Mar-25	58.6	52.8	56.6
24-Mar-25	58.7	52.4	56.6
Brief Statistic	**Day**	**Night**	**Leq DN**
Minimum	57.6	48.4	55.7
Maximum	64.9	60.7	63.2
Mean	59.5	54.6	57.8

MoEF Standard Notification dated 25th 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)


Graph Showing Noise level of Near Rampur Colliery check post
DAY
NIGHT
Leq DN
Standard (D)
Standard (N)
Concentration (µg/m³)
80
70
60
50
40
30
20
10
0
11-Apr-24
11-May-24
11-Jun-24
11-Jul-24
11-Aug-24
11-Sep-24
11-Oct-24
11-Nov-24
11-Dec-24
11-Jan-25
11-Feb-25
11-Mar-25
Date of Sampling

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.

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EFFLUENT QUALITY (STP)

TABLE NO 10 FOR EFFLUENT QUALITY DATA

Table:10.2.1.1

Area: Ib valley

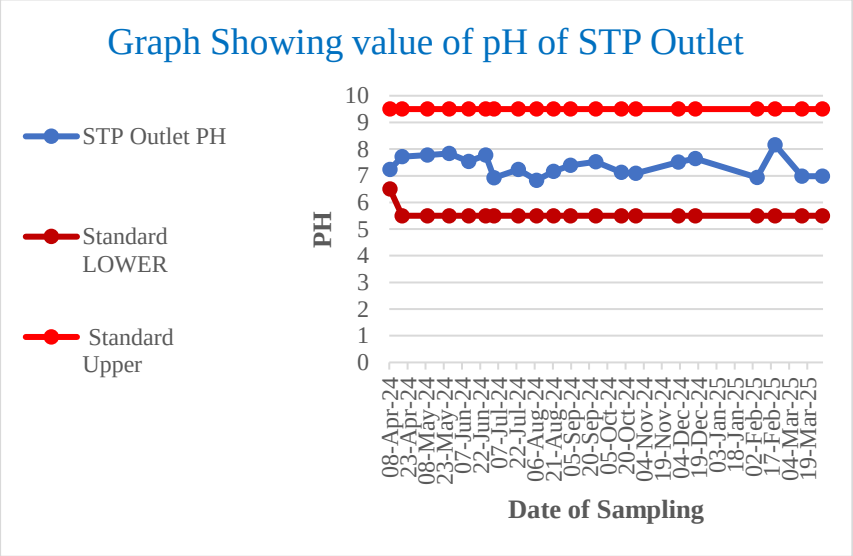
Project: Samleswari OCP

Monitoring station: STP Outlet

Date of Sampling	pH	TSS	BOD	MPN/100mL
08-Apr-24	7.23	34	<2	43
18-Apr-24	7.72	36	<2	46
09-May-24	7.78	30	<2	63
27-May-24	7.84	36	<2	70
12-Jun-24	7.53	32	<2	31
26-Jun-24	7.77	36	<2	23
03-Jul-24	6.92	34	<2	46
23-Jul-24	7.24	30	<2	33
07-Aug-24	6.83	34	<2	52
21-Aug-24	7.16	30	<2	56
04-Sep-24	7.39	34	<2	86
25-Sep-24	7.52	38	<2	96
16-Oct-24	7.13	30	<2	46
28-Oct-24	7.09	26	<2	33
02-Dec-24	7.51	23	<2	58
16-Dec-24	7.64	34	<2	70
13-Jan-25	-	-	-	Under Maintenance
28-Jan-25	-	-	-	Under Maintenance
05-Feb-25	6.93	28	<2	58
20-Feb-25	8.16	30	<2	70
14-Mar-25	6.98	30	<2	48
31-Mar-25	6.98	28	<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 value of pH of STP Outlet
STP Outlet PH
Standard LOWER
Standard Upper
PH
10
9
8
7
6
5
4
3
2
1
0
08-Apr-24
23-Apr-24
08-May-24
23-May-24
07-Jun-24
22-Jun-24
07-Jul-24
22-Jul-24
06-Aug-24
21-Aug-24
05-Sep-24
20-Sep-24
05-Oct-24
20-Oct-24
04-Nov-24
19-Nov-24
04-Dec-24
19-Dec-24
03-Jan-25
18-Jan-25
02-Feb-25
17-Feb-25
04-Mar-25
19-Mar-25
Date of Sampling

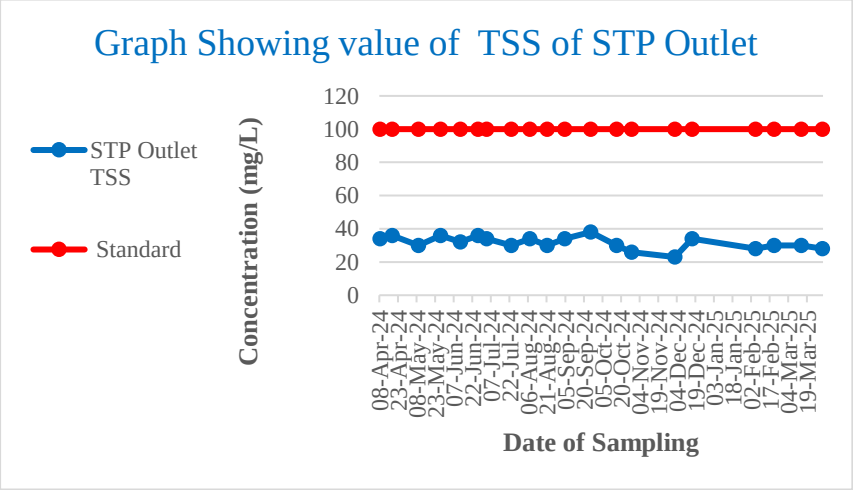

Graph Showing value of TSS of STP Outlet
STP Outlet TSS
Standard
Concentration (mg/L)
120
100
80
60
40
20
0
08-Apr-24
23-Apr-24
08-May-24
23-May-24
07-Jun-24
22-Jun-24
07-Jul-24
22-Jul-24
06-Aug-24
21-Aug-24
05-Sep-24
20-Sep-24
05-Oct-24
20-Oct-24
04-Nov-24
19-Nov-24
04-Dec-24
19-Dec-24
03-Jan-25
18-Jan-25
02-Feb-25
17-Feb-25
04-Mar-25
19-Mar-25
Date of Sampling

Table: 10.2.1.2

Area: Ib valley

Project: Samleswari OCP

Monitoring station: STP Inlet

Date of Sampling	pH	TSS	BOD	MPN/100mL
08-Apr-24	6.91	48	<2.0	94
03-Jul-24	6.67	48	<2.0	148
16-Oct-24	6.83	44	<2	120
13-Jan-25	-	-	-	Under Maintenance

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

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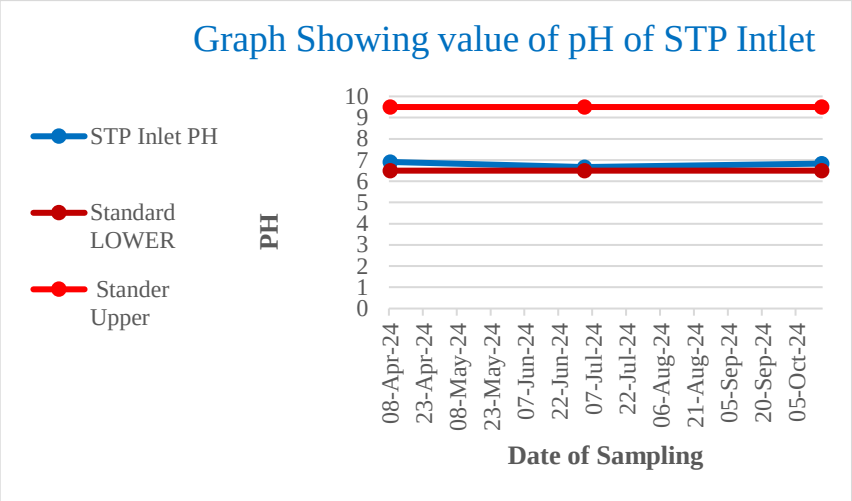
Graph Showing value of pH of STP Intlet
STP Inlet PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
08-Apr-24
23-Apr-24
08-May-24
23-May-24
07-Jun-24
22-Jun-24
07-Jul-24
22-Jul-24
06-Aug-24
21-Aug-24
05-Sep-24
20-Sep-24
05-Oct-24
Date of Sampling

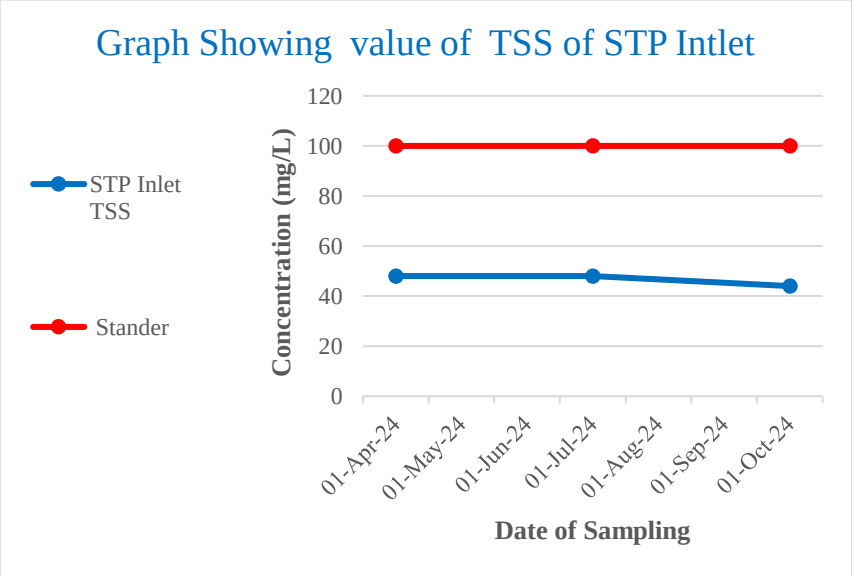
Graph Showing value of TSS of STP Intlet
STP Inlet TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
Date of Sampling

Table: 10.2.1.3

Area: Ib valley

Project: Lajkura OCP

Monitoring station: STP Inlet

Date of Sampling	pH	TSS	BOD	MPN/100mL
08-Apr-24	7.34	44	<2.0	120
03-Jul-24	6.83	42	<2.0	136
16-Oct-24	4.03	46	<2.0	58
13-Jan-25	7.46	64	<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

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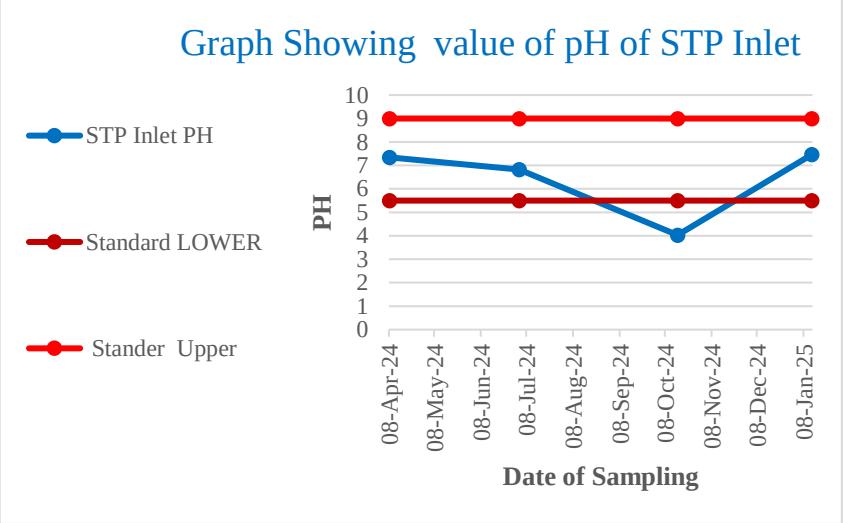

Graph Showing value of pH of STP Inlet
STP Inlet PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
Date of Sampling

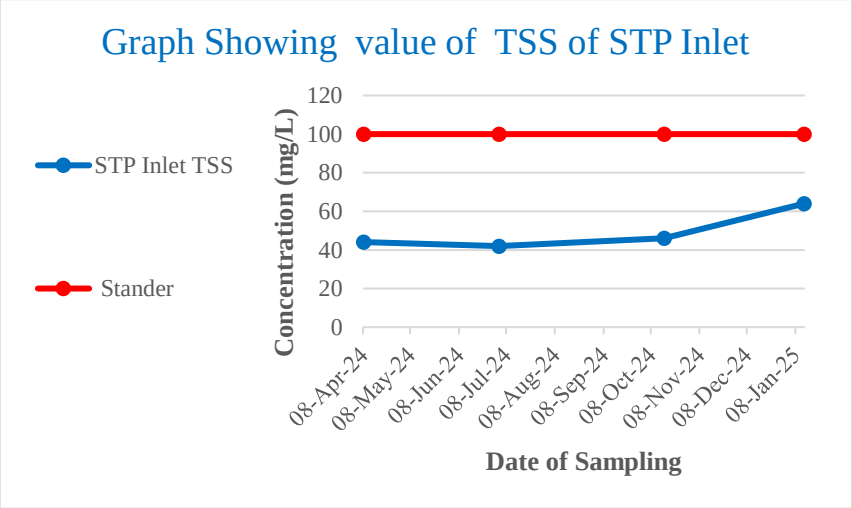

Graph Showing value of TSS of STP Inlet
STP Inlet TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
Date of Sampling

Table: 10.2.1.4

Area: Ib valley

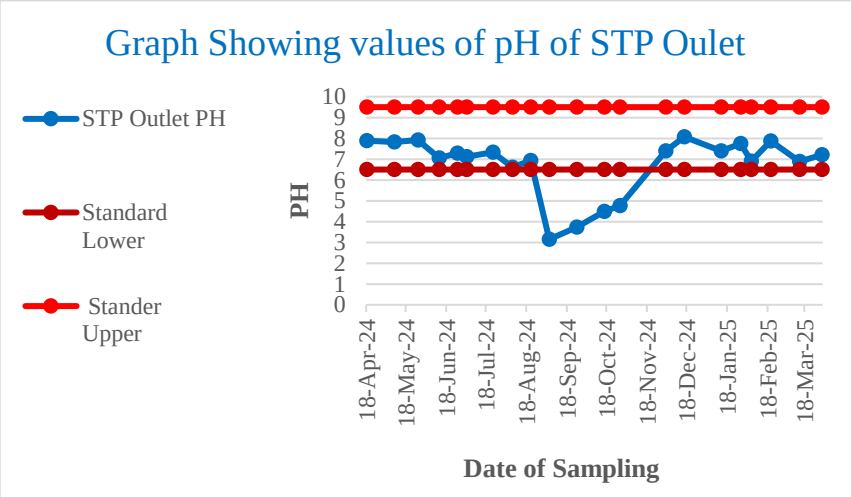
Project: Lajkura OCP

Monitoring station: STP Outlet

Date of Sampling	pH	TSS	BOD	MPN/100mL
18-Apr-24	7.89	32	<2.0	40
09-May-24	7.83	38	<2	58
27-May-24	7.92	42	<2	70
12-Jun-24	7.05	38	<2	32
26-Jun-24	7.29	30	<2	26
03-Jul-24	7.12	30	<2	48
23-Jul-24	7.33	36	<2	34
07-Aug-24	6.61	26	<2	46
21-Aug-24	6.93	32	<2	52
04-Sep-24	3.15	34	<2	92
25-Sep-24	3.74	38	<2	88
16-Oct-24	4.48	34	<2	34
28-Oct-24	4.76	28	<2	32
02-Dec-24	7.39	28	<2	70
16-Dec-24	8.07	32	<2	63
13-Jan-25	7.39	28	<2	70
28-Jan-25	7.74	49	<2	40
05-Feb-25	6.9	26	<2	63
20-Feb-25	7.87	33	<2	58
14-Mar-25	6.89	37	<2	58
31-Mar-25	7.21	41	<2	49

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 values of pH of STP Oulet
STP Outlet PH
Standard Lower
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
18-Apr-24
18-May-24
18-Jun-24
18-Jul-24
18-Aug-24
18-Sep-24
18-Oct-24
18-Nov-24
18-Dec-24
18-Jan-25
18-Feb-25
18-Mar-25
Date of Sampling

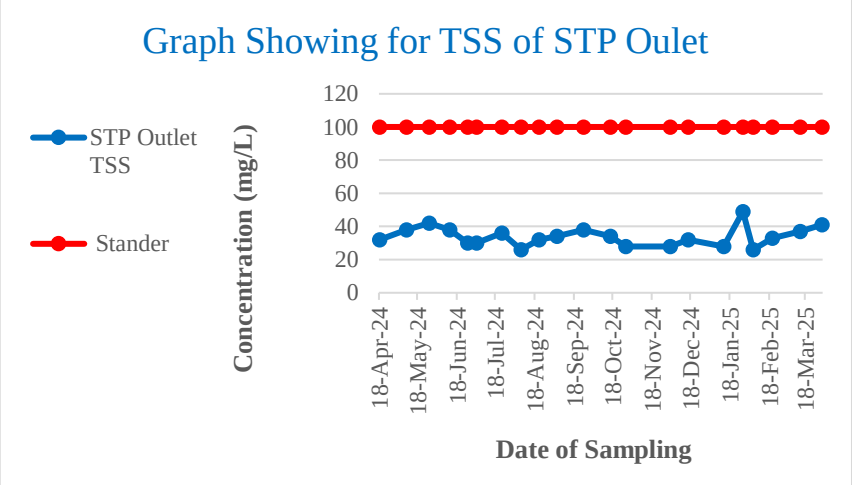

Graph Showing for TSS of STP Oulet
STP Outlet TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
18-Apr-24
18-May-24
18-Jun-24
18-Jul-24
18-Aug-24
18-Sep-24
18-Oct-24
18-Nov-24
18-Dec-24
18-Jan-25
18-Feb-25
18-Mar-25
Date of Sampling

Table: 10.2.1.5

Area: Lakhanpur

Project: LBL OCP

Monitoring station: STP Inlet

Date of Sampling	pH	TSS	BOD	MPN/100mL
09-Apr-24	7.67	46	<2.0	110
04-Jul-24	7.46	68	<2.0	96
17-Oct-24	7.26	40	<2.0	94
14-Jan-25	7.25	68	<2.0	94

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

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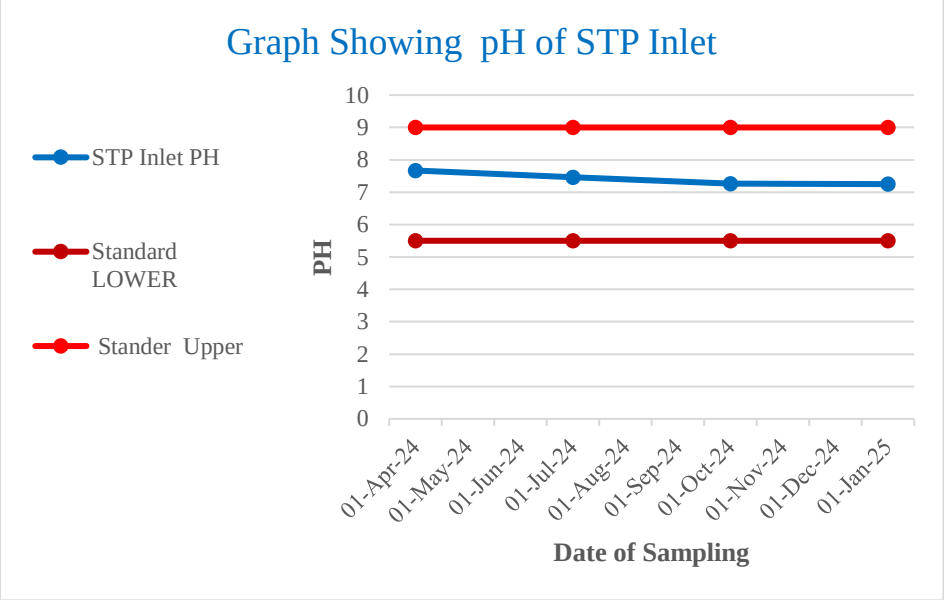

Graph Showing pH of STP Inlet
STP Inlet PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

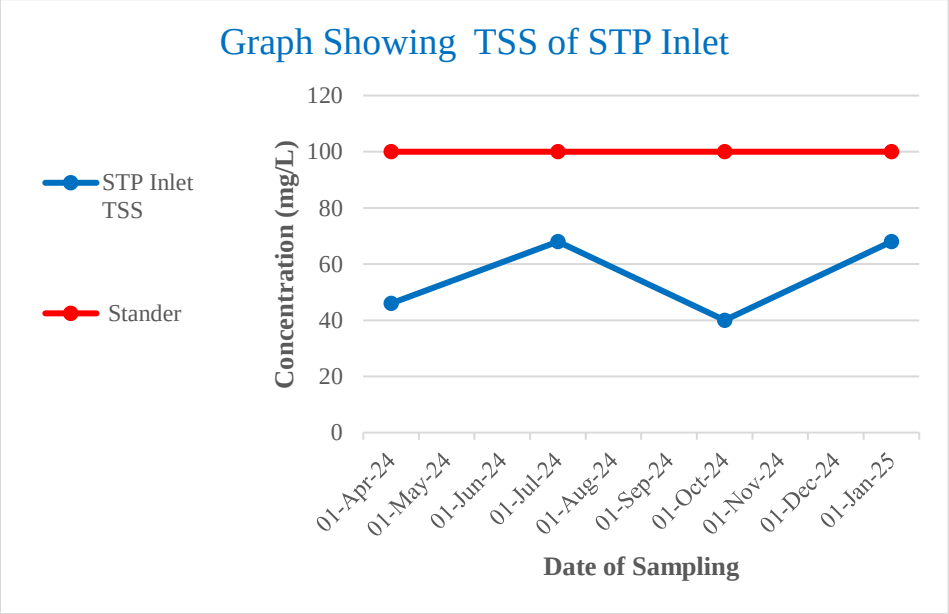

Graph Showing TSS of STP Inlet
STP Inlet TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.6

Area: Lakhanpur

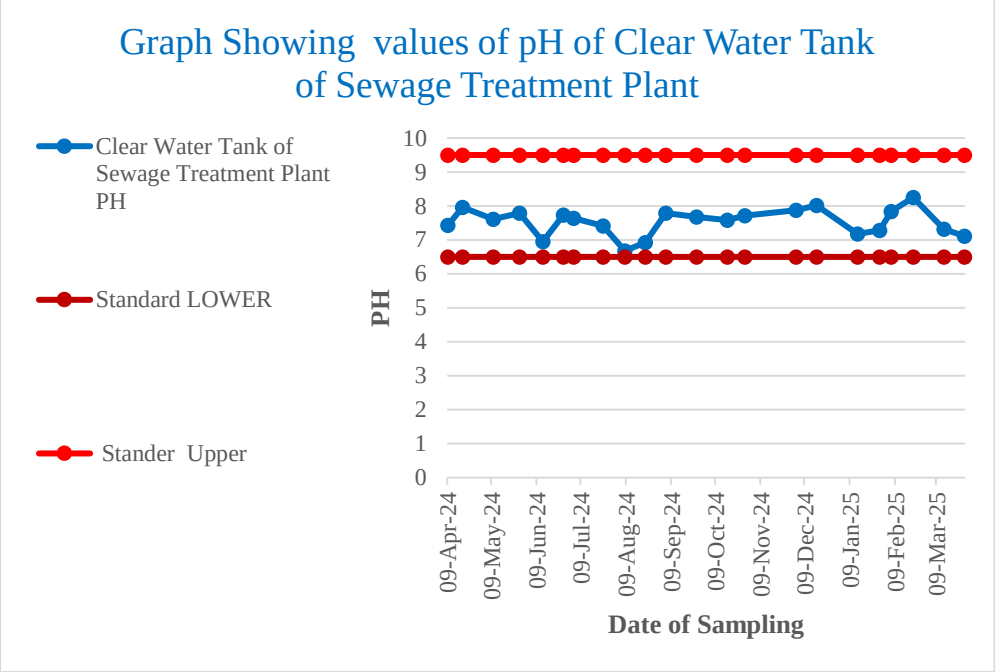
Project: LBL OCP

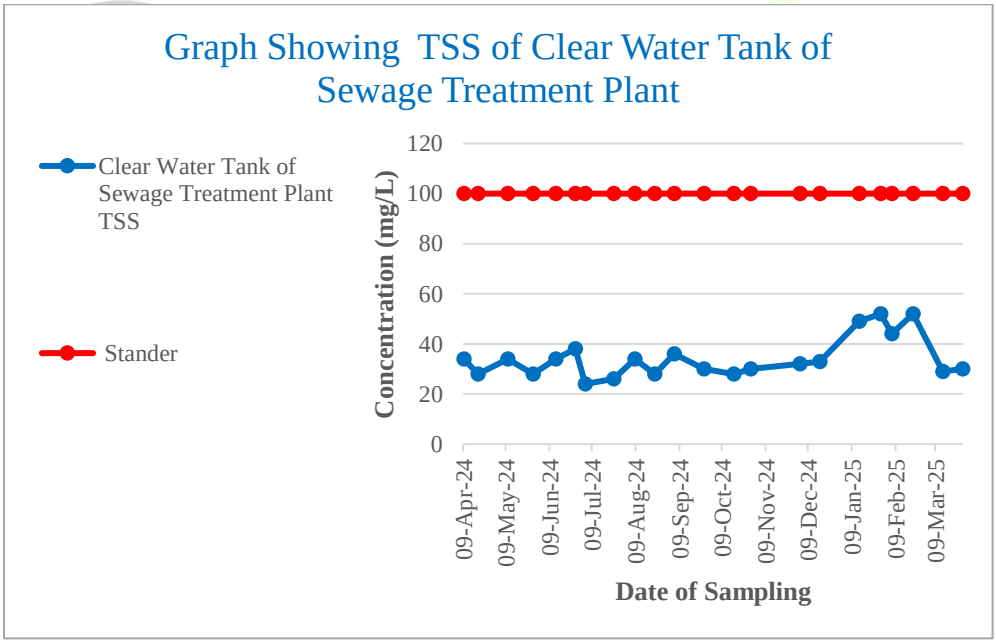
Monitoring station: Clear Water Tank of Sewage Treatment Plant

Date of Sampling	pH	TSS	BOD	MPN/100mL
09-Apr-24	7.43	34	<2.0	41
19-Apr-24	7.96	28	<2.0	48
10-May-24	7.61	34	<2	79
28-May-24	7.79	28	<2	94
13-Jun-24	6.95	34	<2	33
27-Jun-24	7.73	38	<2	32
04-Jul-24	7.64	24	<2	34
24-Jul-24	7.41	26	<2	32
08-Aug-24	6.68	34	<2	48
22-Aug-24	6.92	28	<2	46
05-Sep-24	7.79	36	<2	82
26-Sep-24	7.68	30	<2	74
17-Oct-24	7.58	28	<2	47
29-Oct-24	7.71	30	<2	43
03-Dec-24	7.87	32	<2	63
17-Dec-24	8.02	33	<2	94
14-Jan-25	7.18	49	<2	34
29-Jan-25	7.28	52	<2	33
06-Feb-25	7.84	44	<2	48
21-Feb-25	8.25	52	<2	48
14-Mar-25	7.32	29	<2	46
28-Mar-25	7.11	30	<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 values of pH of Clear Water Tank of Sewage Treatment Plant
Clear Water Tank of Sewage Treatment Plant PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing TSS of Clear Water Tank of Sewage Treatment Plant
Clear Water Tank of Sewage Treatment Plant TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

EFFLUENT QUALITY (ETP)

EFFLUENT QUALITY DATA

Table: 10.1.2.7

Area: Ib valley

Project: Samleswari OCP

Monitoring station: Inlet of ETP

Date of Sampling	pH	Oil & Grease	TSS	COD
09-May-24	7.07	<4.0	54	40
07-Aug-24	6.72	<4.0	48	40
11-Nov-24	6.6	<4.0	46	52
05-Feb-25	7.03	5.2	40	42

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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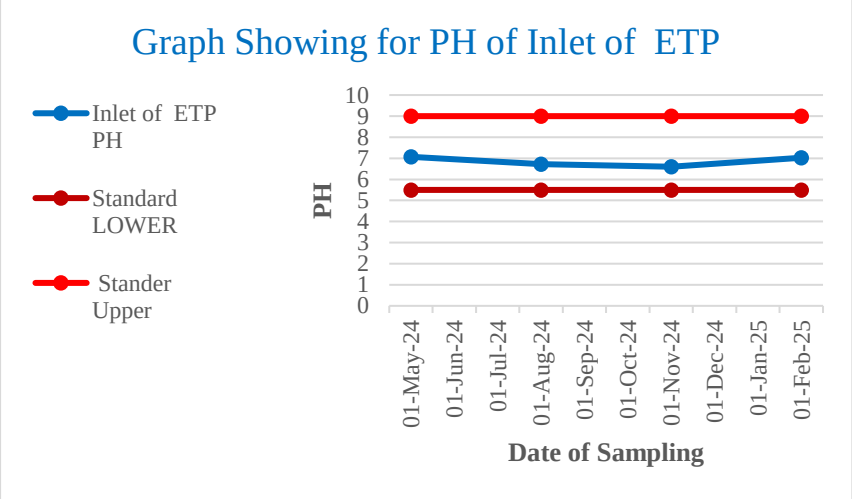
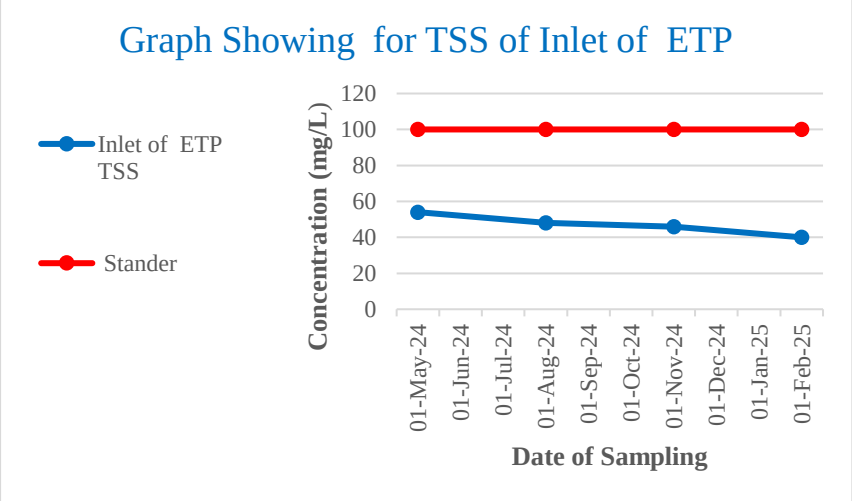

Graph Showing for PH of Inlet of ETP
Inlet of ETP PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling


Graph Showing for TSS of Inlet of ETP
Inlet of ETP TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

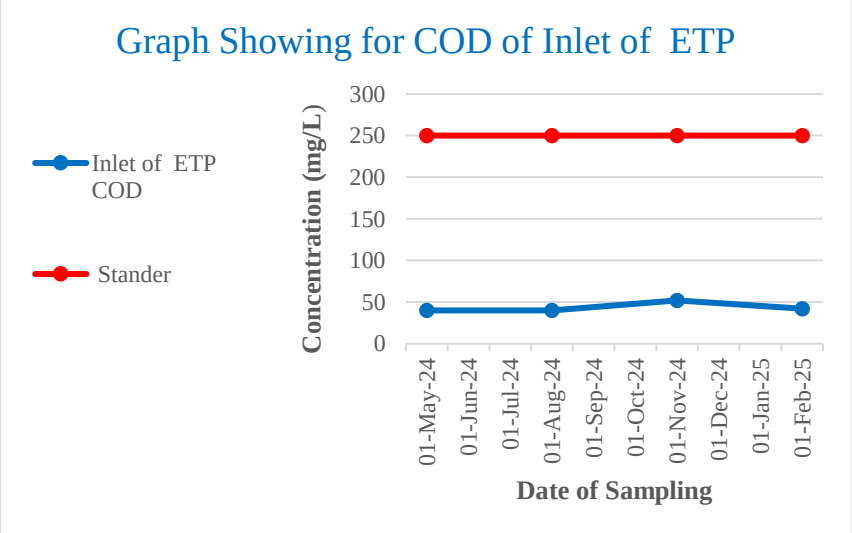

Graph Showing for COD of Inlet of ETP
Inlet of ETP COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

Table: 10.2.1.8

Area: Ib valley

Project: Samleswari OCP

Monitoring station: Outlet of ETP

Date of Sampling	pH	Oil & Grease	TSS	COD
09-May-24	7.25	<4.0	36	24
07-Aug-24	7.34	<4.0	36	32
11-Nov-24	6.91	<4.0	32	36
05-Feb-25	7.95	<4.0	24	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

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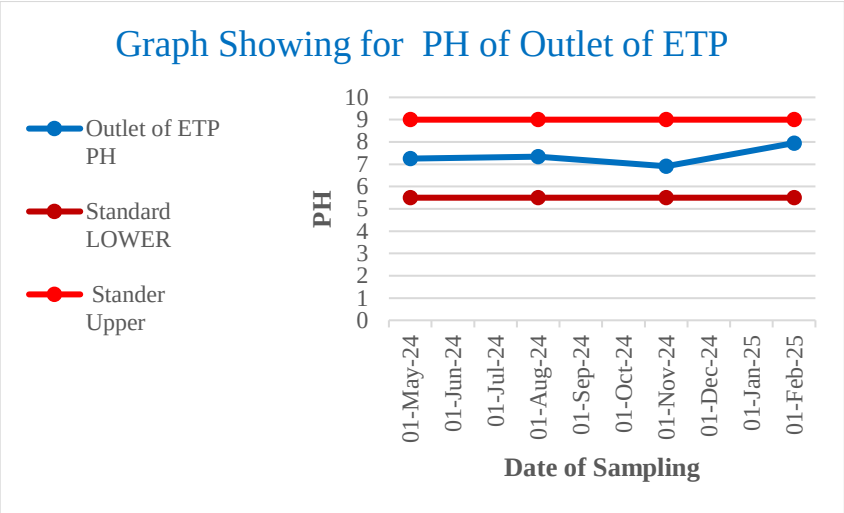
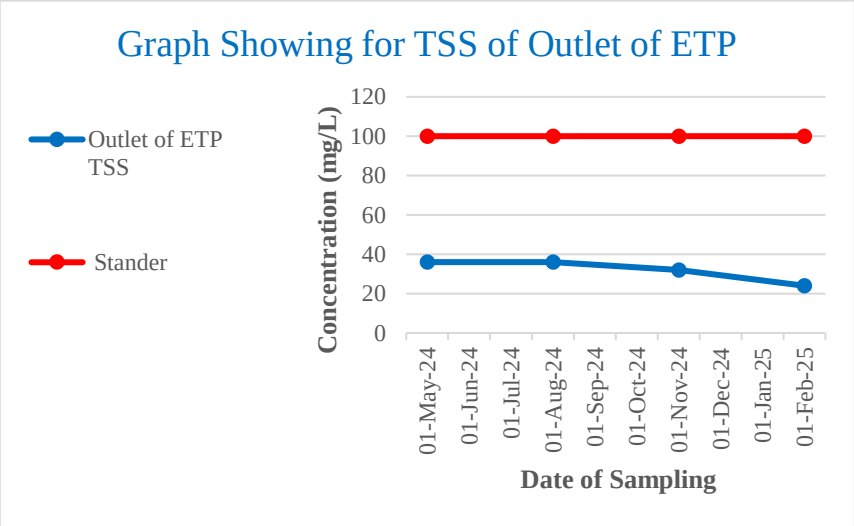

Graph Showing for PH of Outlet of ETP
Outlet of ETP PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling


Graph Showing for TSS of Outlet of ETP
Outlet of ETP TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

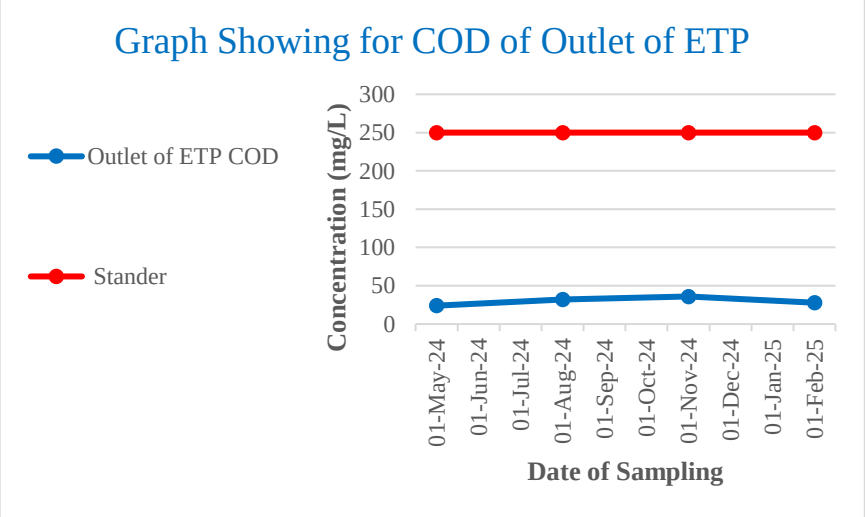

Graph Showing for COD of Outlet of ETP
Outlet of ETP COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

Table: 10.2.1.9

Area: Ib valley

Project: Samleswari OCP

Monitoring station: Mine Sump Water

Date of Sampling	pH	Oil & Grease	TSS	COD
09-May-24	6.92	<4.0	34	36
07-Aug-24	6.79	<4.0	32	28
11-Nov-24	6.85	<4.0	26	32
05-Feb-25	6.01	<4.0	16	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

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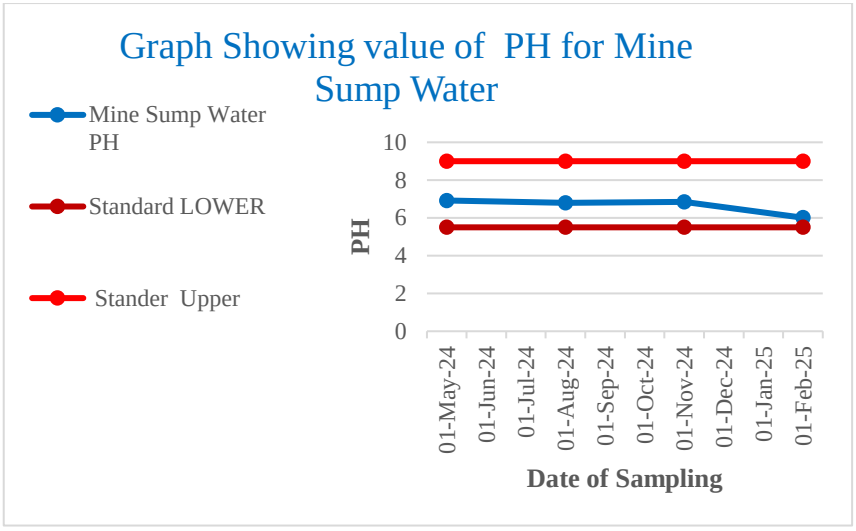
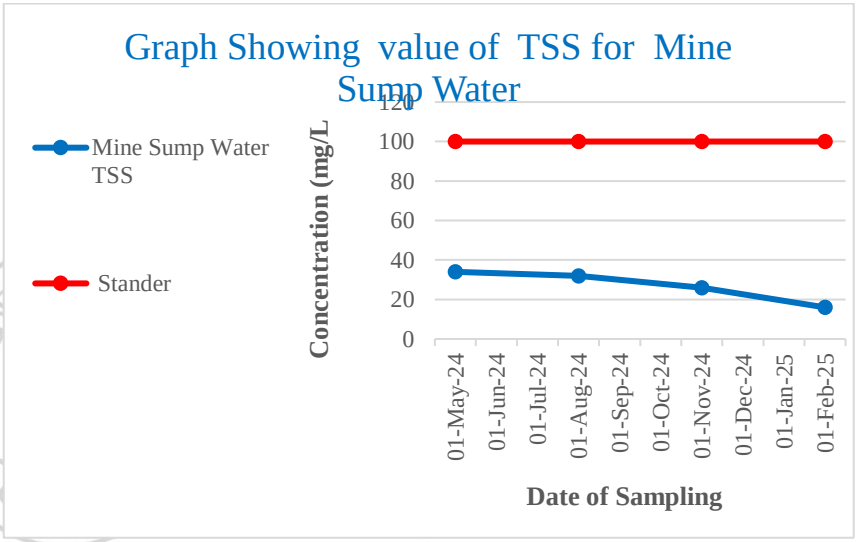
रत्नमीडिया मिनी रत्न
cmpdi Mini Ratna


Graph Showing value of PH for Mine Sump Water
Mine Sump Water PH
Standard LOWER
Stander Upper
PH
10
8
6
4
2
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling


Graph Showing value of TSS for Mine Sump Water
Mine Sump Water TSS
Stander
Concentration (mg/L
120
100
80
60
40
20
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

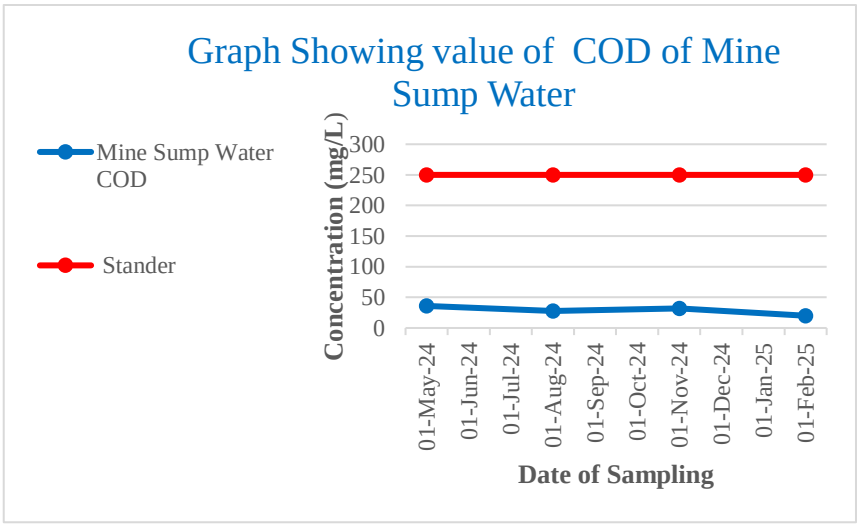

Graph Showing value of COD of Mine Sump Water
Mine Sump Water COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

Table: 10.2.1.10

Area: Ib valley

Project: Lajkura OCP

Monitoring station: Inlet of ETP

Date of Sampling	pH	Oil & Grease	TSS	COD
09-May-24	7.31	<4.0	64	40
07-Aug-24	6.41	5.4	124	96
11-Nov-24	6.27	4.8	88	76
05-Feb-25	7.39	4.8	60	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

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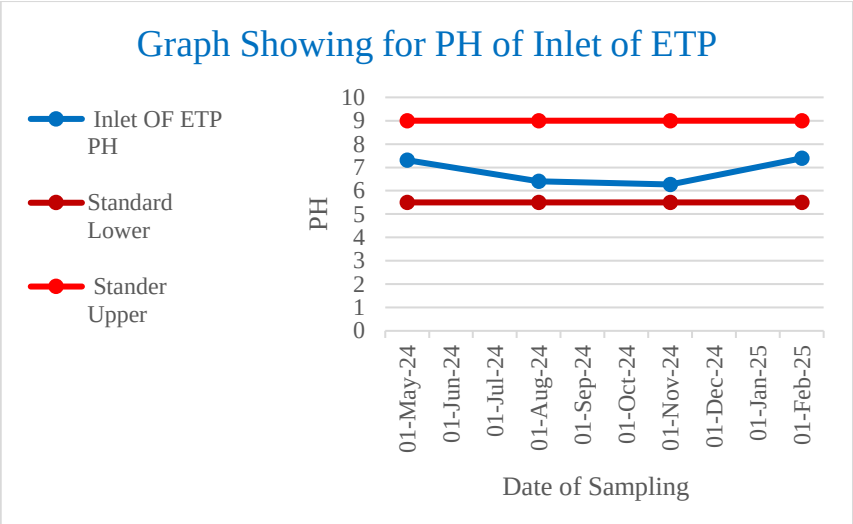
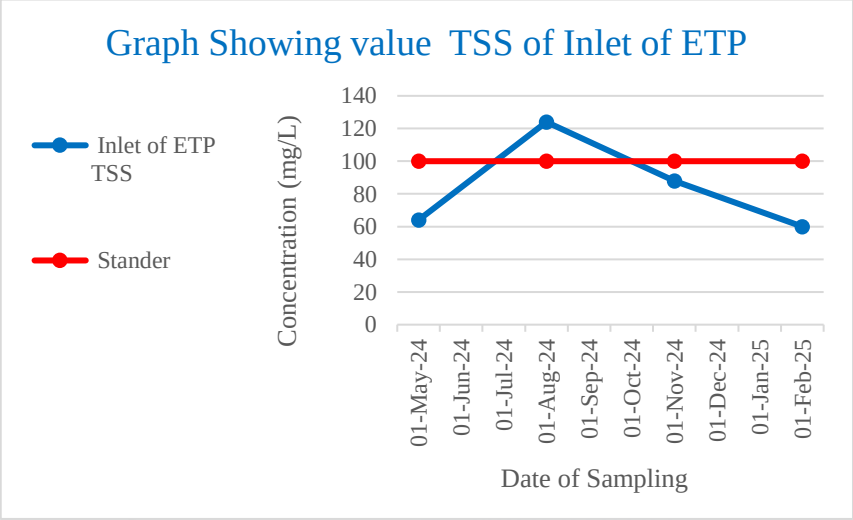

Graph Showing for PH of Inlet of ETP
Inlet OF ETP PH
Standard Lower
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling


Graph Showing value TSS of Inlet of ETP
Inlet of ETP TSS
Stander
Concentration (mg/L)
140
120
100
80
60
40
20
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

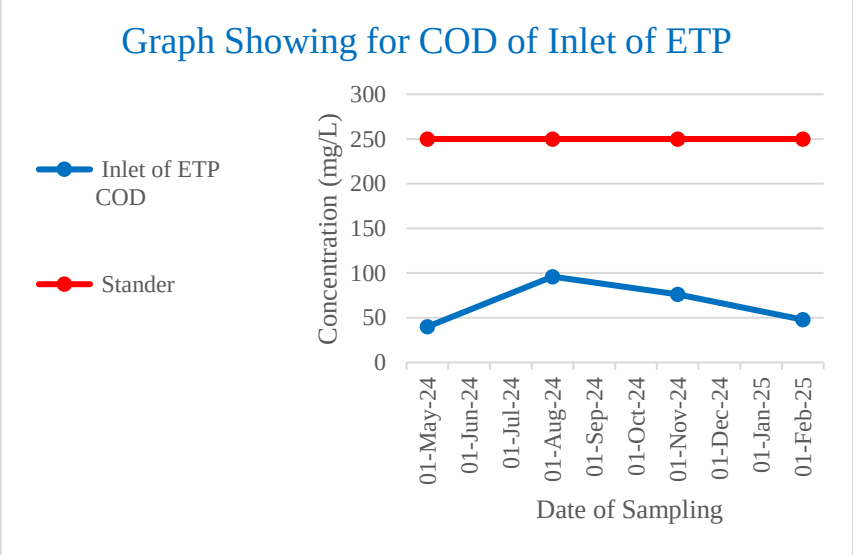

Graph Showing for COD of Inlet of ETP
Inlet of ETP COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

Table: 10.2.1.11

Area: Ib valley

Project: Lajkura OCP

Monitoring station: Outlet of ETP

Date of Sampling	pH	Oil & Grease	TSS	COD
09-May-24	7.56	<4.0	40	32
07-Aug-24	6.62	4.2	92	72
11-Nov-24	6.73	4	68	56
05-Feb-25	7.78	4	41	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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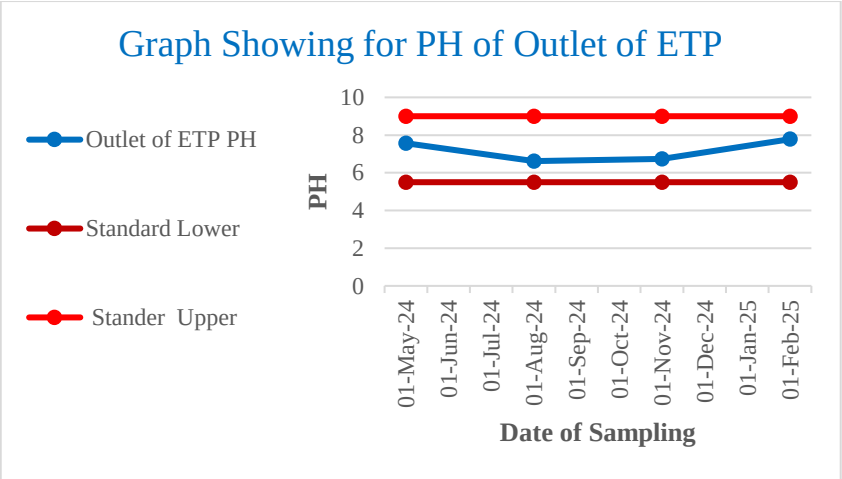
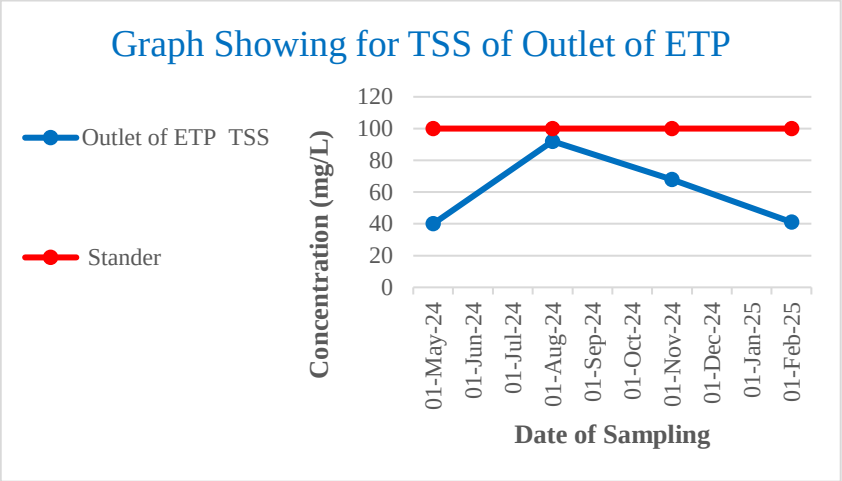

Graph Showing for PH of Outlet of ETP
Outlet of ETP PH
Standard Lower
Stander Upper
PH
10
8
6
4
2
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling


Graph Showing for TSS of Outlet of ETP
Outlet of ETP TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

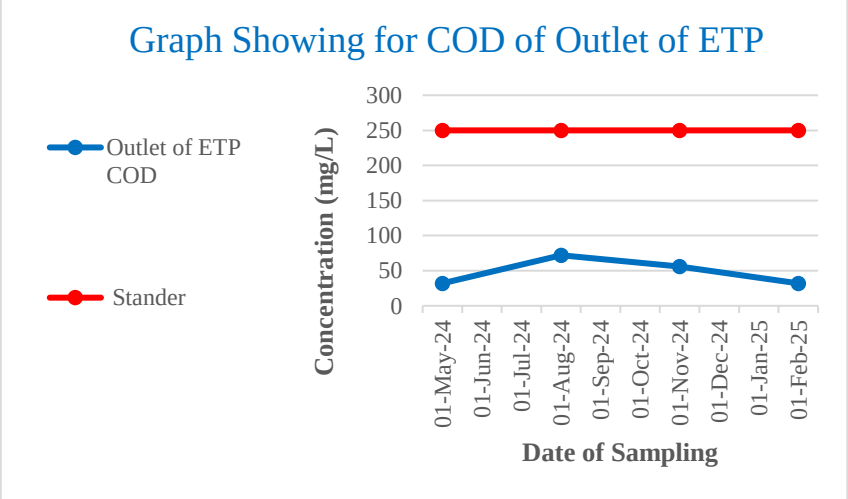

Graph Showing for COD of Outlet of ETP
Outlet of ETP COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

Table: 10.2.1.12

Area: Ib valley

Project: Lajkura OCP

Monitoring station: Inlet of MDTP

Date of Sampling	pH	Oil & Grease	TSS	COD
09-May-24	7.48	<4.0	58	48
07-Aug-24	3.52	<4.0	44	52
11-Nov-24	3.41	<4.0	48	60
05-Feb-25	3.64	4.4	63	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

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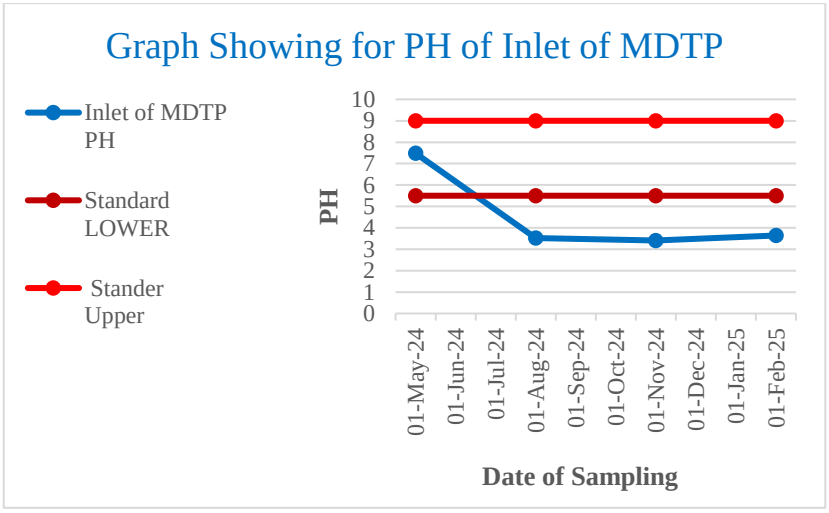
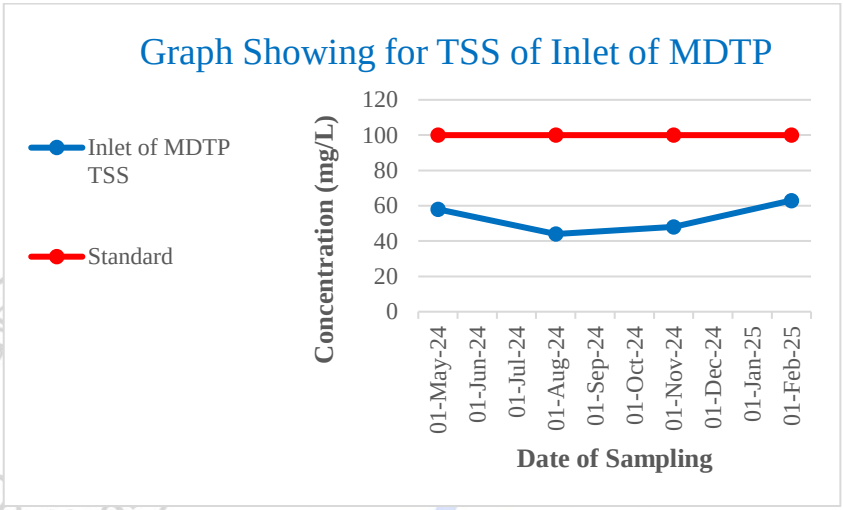

Graph Showing for PH of Inlet of MDTP
Inlet of MDTP PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling


Graph Showing for TSS of Inlet of MDTP
Inlet of MDTP TSS
Standard
Concentration (mg/L)
120
100
80
60
40
20
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

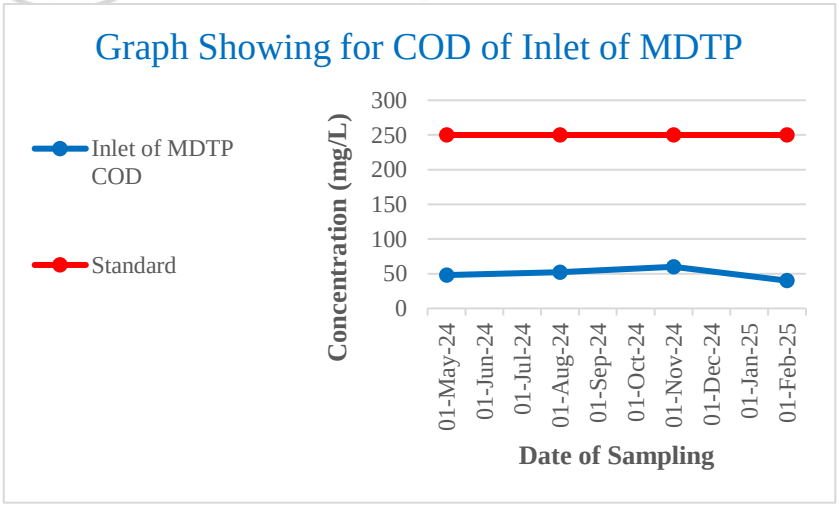

Graph Showing for COD of Inlet of MDTP
Inlet of MDTP COD
Standard
Concentration (mg/L)
300
250
200
150
100
50
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

Table: 10.2.1.13

Area: Ib valley

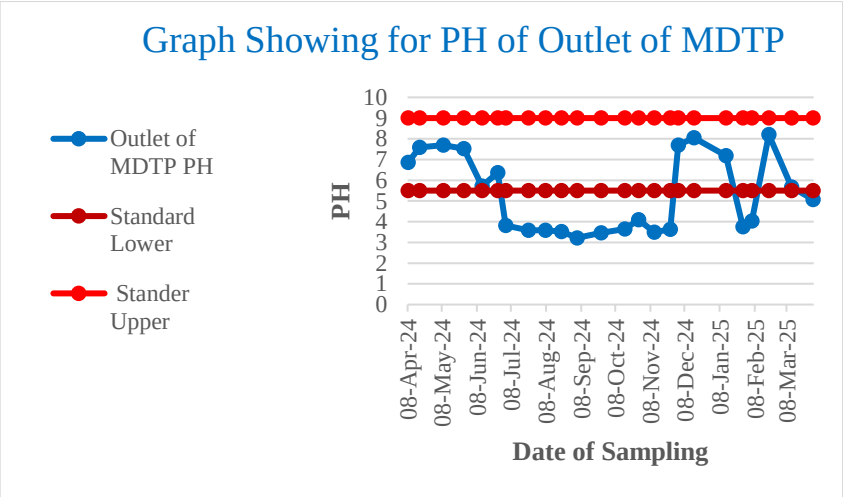
Project: Lajkura OCP

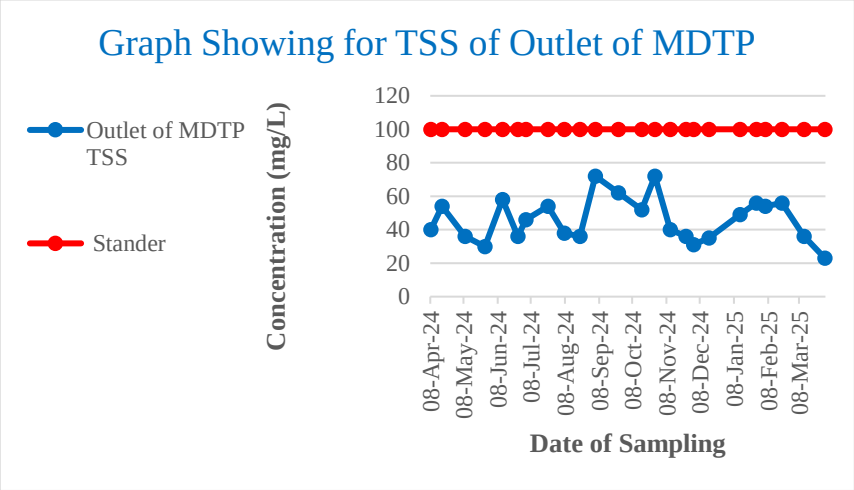
Monitoring station: Outlet of MDTP

Date of Sampling	pH	Oil & Grease	TSS	COD
08-Apr-24	6.86	<4.0	40	28
18-Apr-24	7.59	<4.0	54	40
09-May-24	7.69	<4.0	36	40
27-May-24	7.53	<4.0	30	20
12-Jun-24	5.71	<4.0	58	92
26-Jun-24	6.37	<4.0	36	58
03-Jul-24	3.81	<4.0	46	52
23-Jul-24	3.58	<4.0	54	64
07-Aug-24	3.58	<4.0	38	40
21-Aug-24	3.52	<4.0	36	40
04-Sep-24	3.22	<4.0	72	92
25-Sep-24	3.46	<4.0	62	80
16-Oct-24	3.65	<4.0	52	72
28-Oct-24	4.1	<4.0	72	112
11-Nov-24	3.49	<4.0	40	40
25-Nov-24	3.63	<4.0	36	40
02-Dec-24	7.69	<4.0	31	32
16-Dec-24	8.05	<4.0	35	32
13-Jan-25	7.18	<4.0	49	36
28-Jan-25	3.75	<4.0	56	28
05-Feb-25	4.03	<4.0	54	28
20-Feb-25	8.2	<4.0	56	24
12-Mar-25	5.67	<4.0	36	24
31-Mar-25	5.06	<4.0	23	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 of Outlet of MDTP
Outlet of MDTP PH
Standard Lower
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling


Graph Showing for TSS of Outlet of MDTP
Outlet of MDTP TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

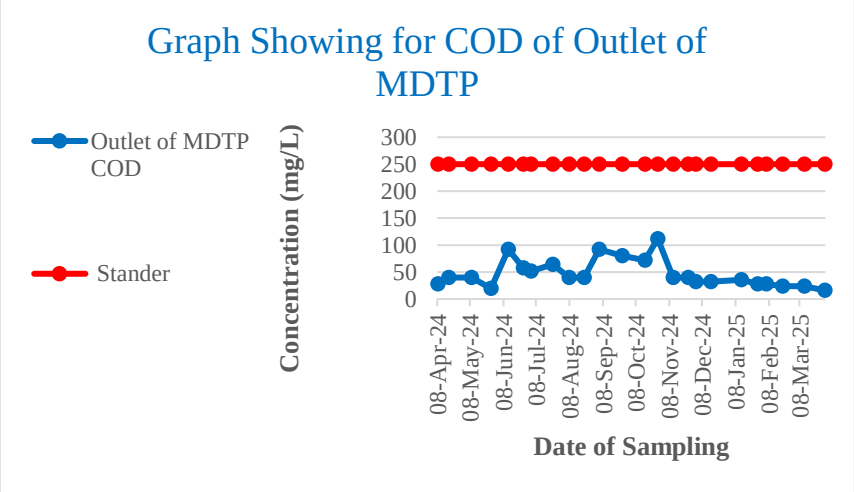

Graph Showing for COD of Outlet of MDTP
Outlet of MDTP COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

Table: 10.2.1.14

Area: Ib valley

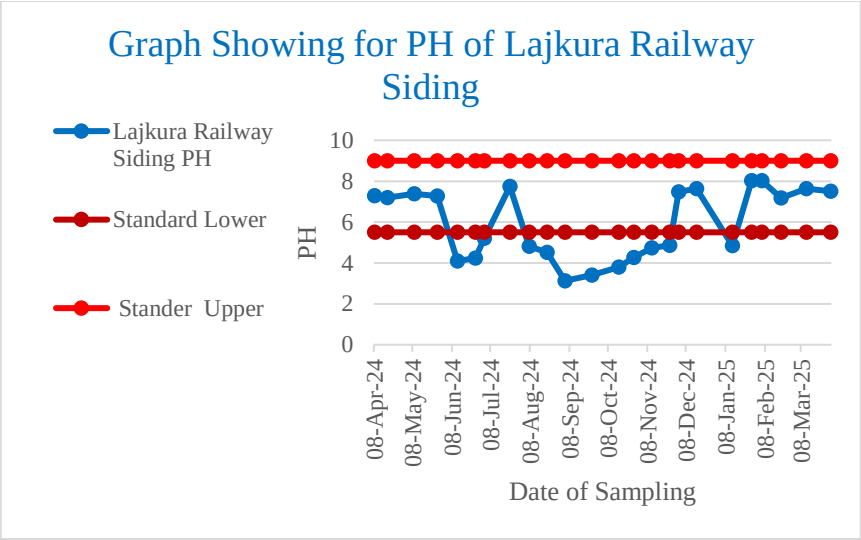
Project: Lajkura OCP

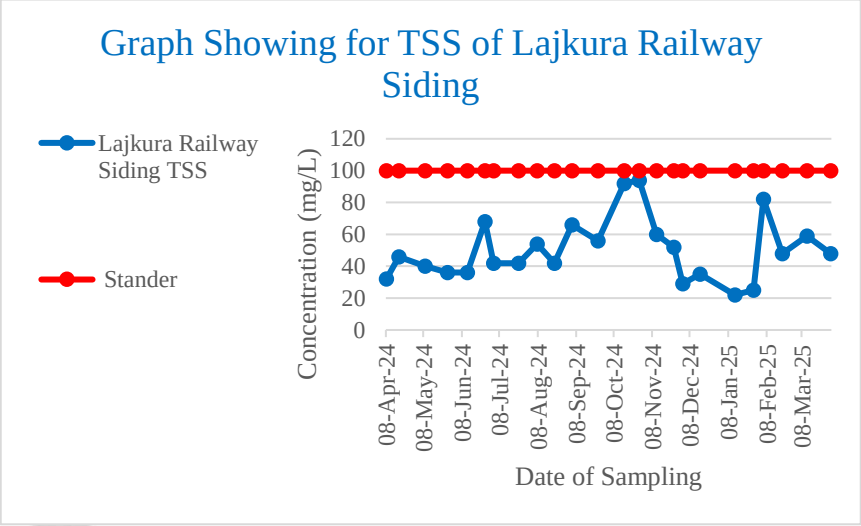
Monitoring station: Lajkura Railway Siding

Date of Sampling	pH	Oil & Grease	TSS	COD
08-Apr-24	7.29	<4.0	32	20
18-Apr-24	7.2	<4.0	46	44
09-May-24	7.39	<4.0	40	28
27-May-24	7.27	<4.0	36	32
12-Jun-24	4.1	<4.0	36	32
26-Jun-24	4.24	4.6	68	96
03-Jul-24	5.2	<4.0	42	48
23-Jul-24	7.74	<4.0	42	36
07-Aug-24	4.82	<4.0	54	96
21-Aug-24	4.51	<4.0	42	64
04-Sep-24	3.13	<4.0	66	84
25-Sep-24	3.41	<4.0	56	72
16-Oct-24	3.79	6.2	92	148
28-Oct-24	4.27	<4.0	94	132
11-Nov-24	4.73	<4.0	60	88
25-Nov-24	4.86	<4.0	52	48
02-Dec-24	7.47	<4.0	29	56
16-Dec-24	7.63	<4.0	35	28
13-Jan-25	4.85	<4.0	22	24
28-Jan-25	8.03	<4.0	25	36
05-Feb-25	8.02	5.4	82	92
20-Feb-25	7.18	<4.0	48	28
12-Mar-25	7.64	4.8	59	96
31-Mar-25	7.51	4.8	48	92

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 of Lajkura Railway Siding
Lajkura Railway Siding PH
Standard Lower
Stander Upper
PH
10
8
6
4
2
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling


Graph Showing for TSS of Lajkura Railway Siding
Lajkura Railway Siding TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

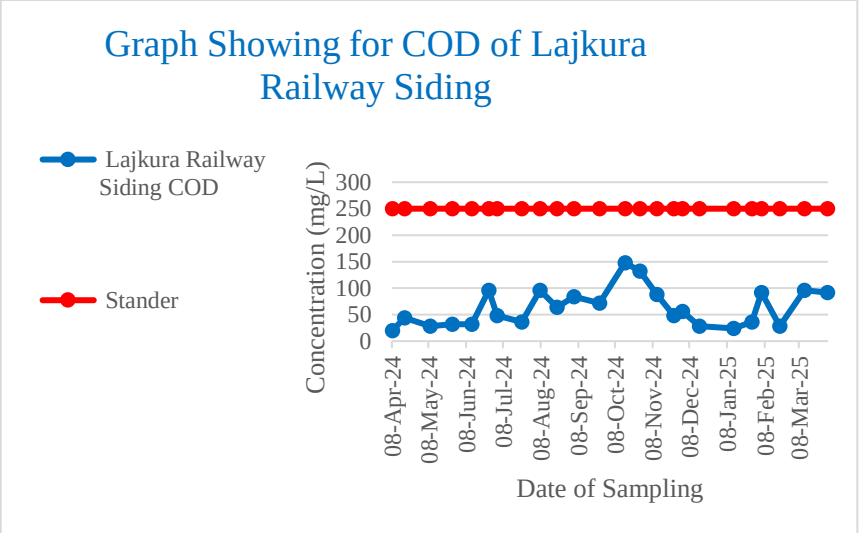

Graph Showing for COD of Lajkura Railway Siding
Lajkura Railway Siding COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

Table: 10.2.1.15

Area: Ib valley

Project: Lajkura OCP

Monitoring station: Mine Sump Water

Date of Sampling	pH	Oil & Grease	TSS	COD
09-May-24	7.23	<4.0	28	24
11-Nov-24	3.68	<4.0	30	32
05-Feb-25	3.56	4.2	40	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

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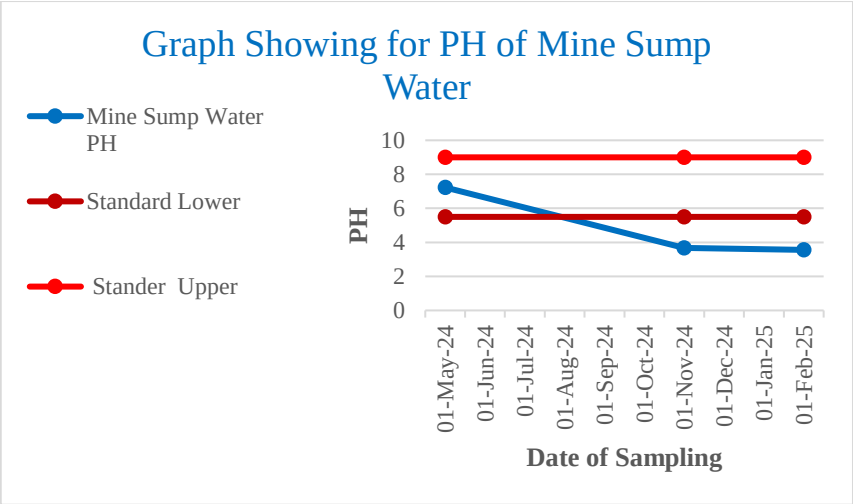
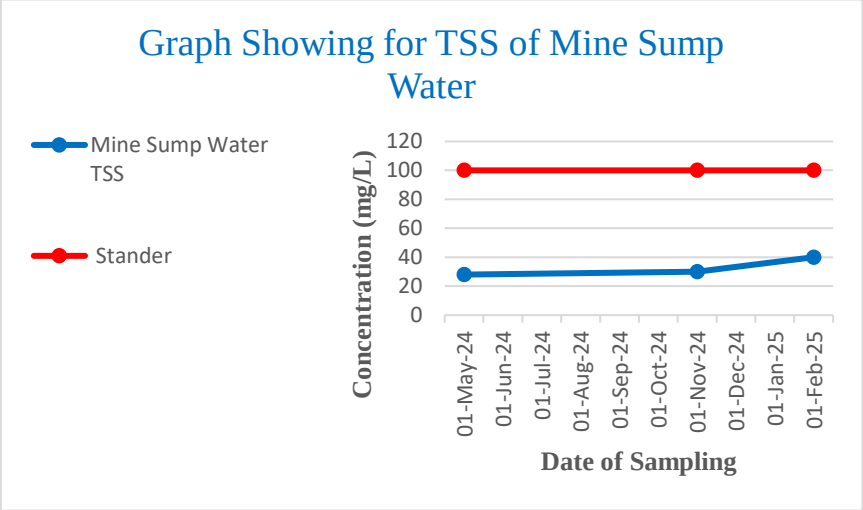

Graph Showing for PH of Mine Sump Water
Mine Sump Water PH
Standard Lower
Stander Upper
PH
10
8
6
4
2
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling


Graph Showing for TSS of Mine Sump Water
Mine Sump Water TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

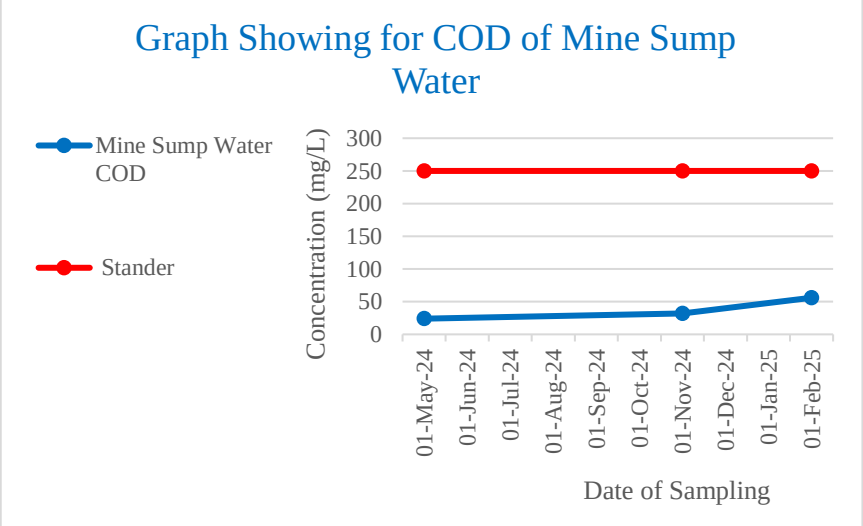

Graph Showing for COD of Mine Sump Water
Mine Sump Water COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
Date of Sampling

Table: 10.2.1.16

Area: Ib valley

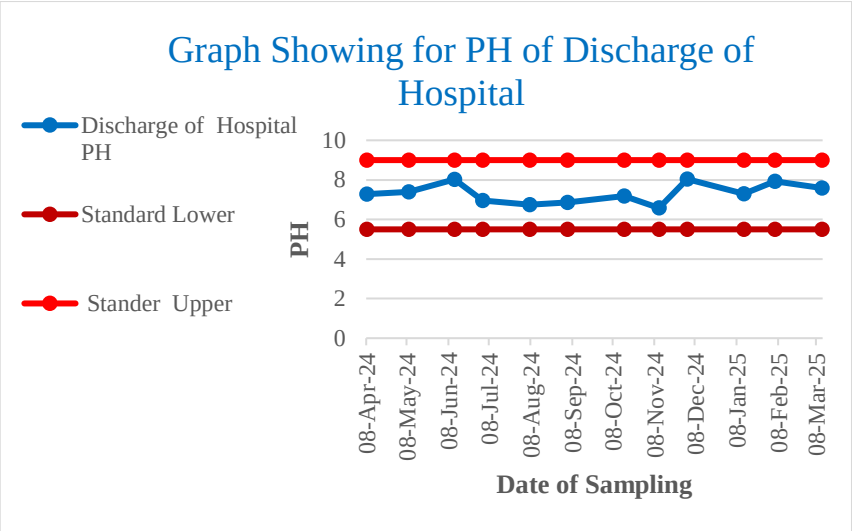
Project: Lajkura OCP

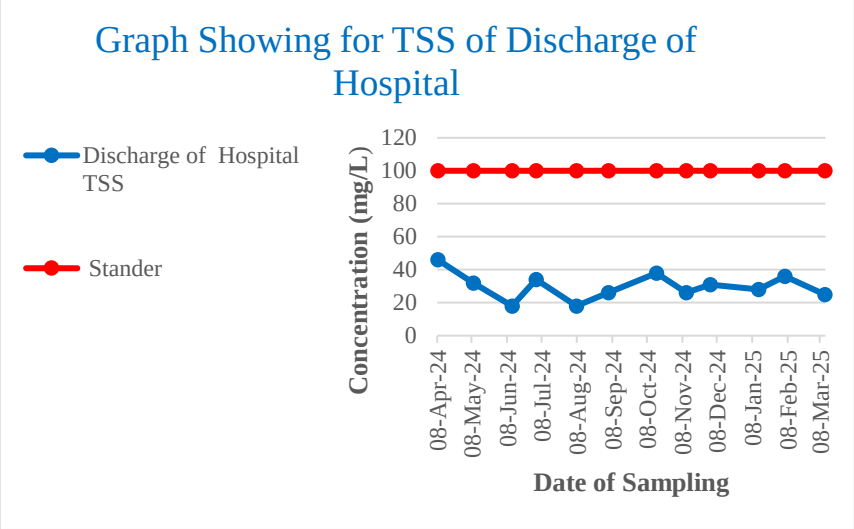
Monitoring station: Central Hospital

Date of Sampling	pH	Oil & Grease	TSS	COD	BOD
08-Apr-24	7.28	<4.0	46	44	<2.0
09-May-24	7.39	<4.0	32	24	
12-Jun-24	8.02	<4.0	18	12	<2
03-Jul-24	6.95	<4.0	34	28	<2
07-Aug-24	6.74	<4.0	18	16	<2
04-Sep-24	6.86	<4.0	26	20	<2
16-Oct-24	7.19	<4.0	38	32	<2
11-Nov-24	6.58	<4.0	26	20	<2
02-Dec-24	8.04	<4.0	31	16	<2
13-Jan-25	7.3	<4.0	28	28	<2
05-Feb-25	7.92	<4.0	36	20	<2
12-Mar-25	7.59	<4.0	25	24	<2

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 of Discharge of Hospital
Discharge of Hospital PH
Standard Lower
Stander Upper
PH
10
8
6
4
2
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling


Graph Showing for TSS of Discharge of Hospital
Discharge of Hospital TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

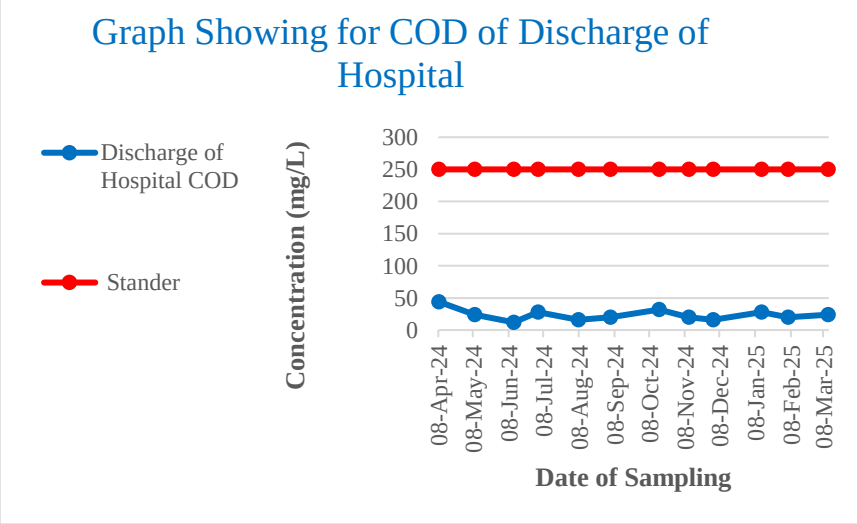

Graph Showing for COD of Discharge of Hospital
Discharge of Hospital COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

Table: 10.2.1.17

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Intlet of Secondary Sedimentation Tank, Lakhanpur

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.21	<4.0	52	48
04-Jul-24	7.13	<4.0	40	44
16-Oct-24	7.31	<4.0	48	56
14-Jan-25	7.19	<4.0	64	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

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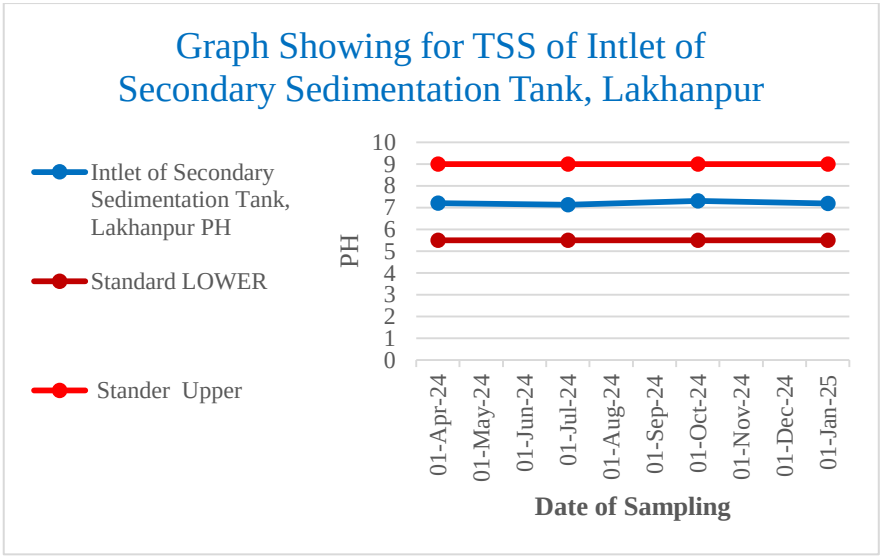
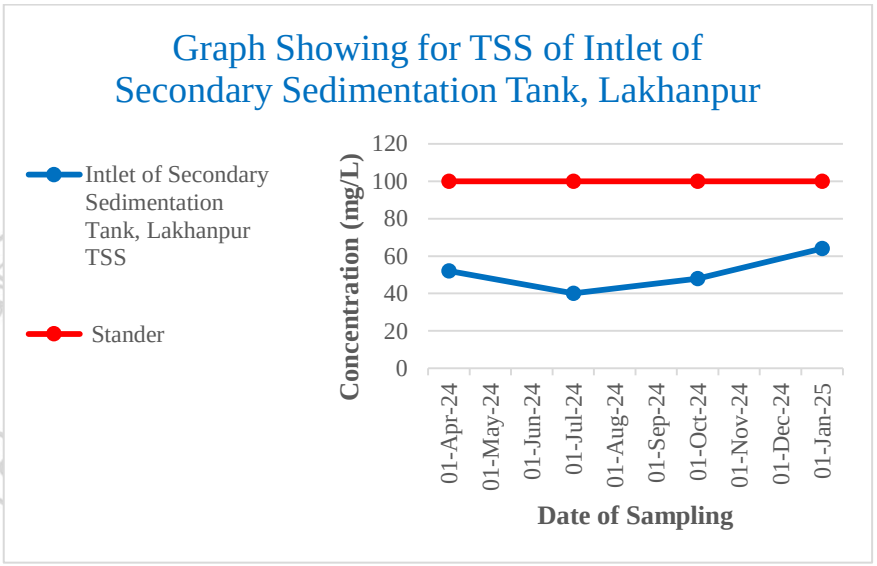
Mini Ratna
कोल इंडिया
Coal India


Graph Showing for TSS of Intlet of Secondary Sedimentation Tank, Lakhanpur
Intlet of Secondary Sedimentation Tank, Lakhanpur PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Intlet of Secondary Sedimentation Tank, Lakhanpur
Intlet of Secondary Sedimentation Tank, Lakhanpur TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

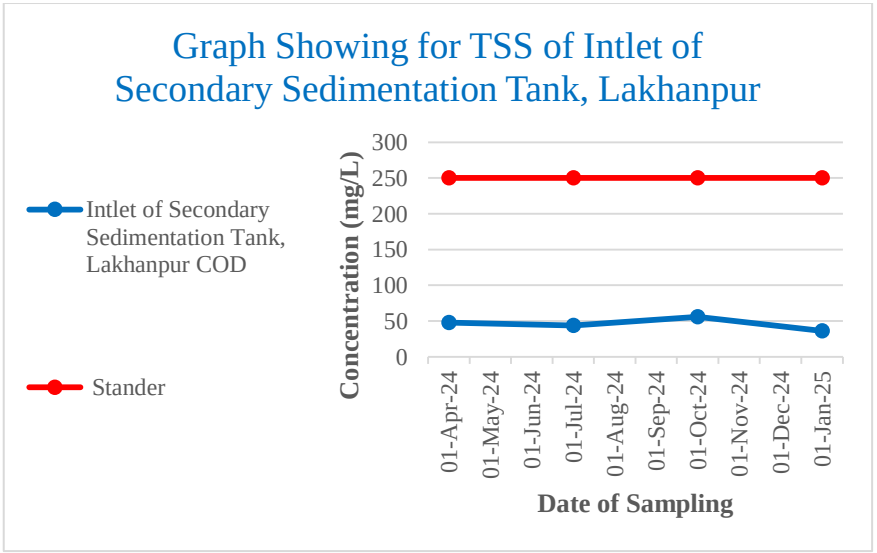

Graph Showing for TSS of Intlet of Secondary Sedimentation Tank, Lakhanpur
Intlet of Secondary Sedimentation Tank, Lakhanpur COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.18

Area: Lakhanpur

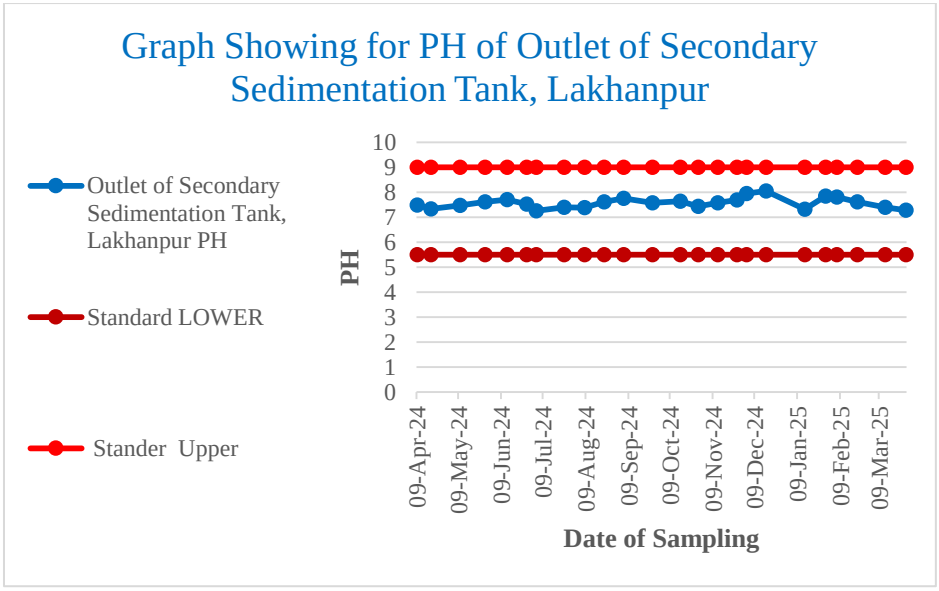
Project: LBL OCP

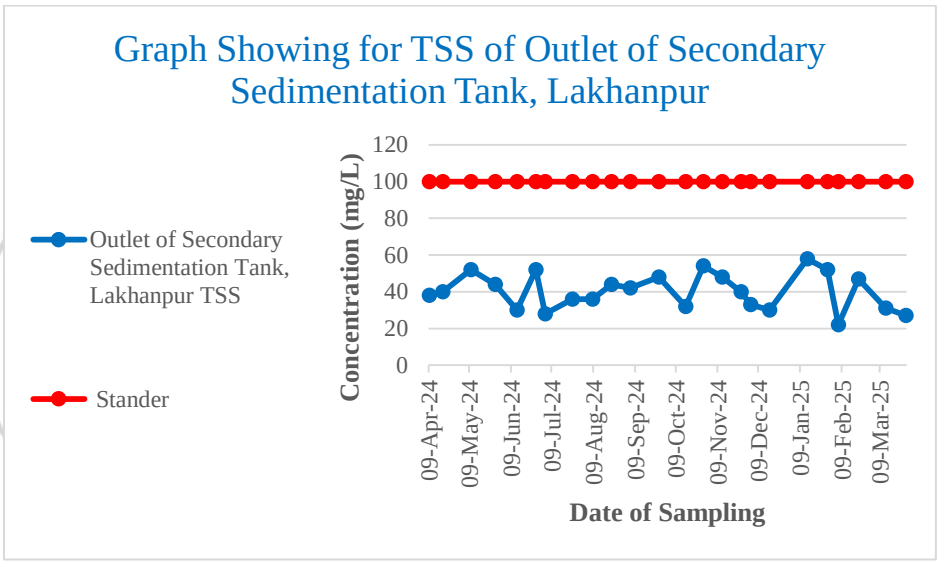
Monitoring station: Outlet of Secondary Sedimentation Tank, Lakhanpur

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.49	<4.0	38	40
19-Apr-24	7.33	<4.0	40	24
10-May-24	7.47	<4.0	52	36
28-May-24	7.61	<4.0	44	36
13-Jun-24	7.7	<4.0	30	20
27-Jun-24	7.53	<4.0	52	36
04-Jul-24	7.25	<4.0	28	32
24-Jul-24	7.39	<4.0	36	32
08-Aug-24	7.38	<4.0	36	28
22-Aug-24	7.61	<4.0	44	36
05-Sep-24	7.75	<4.0	42	28
26-Sep-24	7.58	<4.0	48	36
16-Oct-24	7.64	<4.0	32	36
29-Oct-24	7.44	<4.0	54	68
12-Nov-24	7.57	<4.0	48	56
26-Nov-24	7.69	<4.0	40	44
03-Dec-24	7.95	<4.0	33	16
17-Dec-24	8.05	<4.0	30	20
14-Jan-25	7.32	<4.0	58	28
29-Jan-25	7.84	<4.0	52	24
06-Feb-25	7.8	<4.0	22	16
21-Feb-25	7.61	<4.0	47	20
13-Mar-25	7.39	<4.0	31	28
28-Mar-25	7.28	<4.0	27	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 of Outlet of Secondary Sedimentation Tank, Lakhanpur
Outlet of Secondary Sedimentation Tank, Lakhanpur PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing for TSS of Outlet of Secondary Sedimentation Tank, Lakhanpur
Outlet of Secondary Sedimentation Tank, Lakhanpur TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

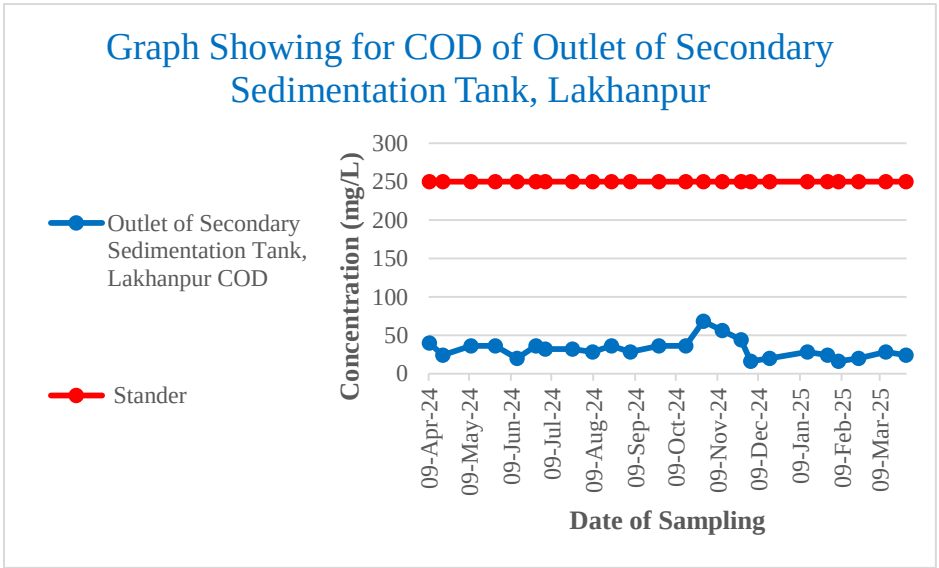

Graph Showing for COD of Outlet of Secondary Sedimentation Tank, Lakhanpur
Outlet of Secondary Sedimentation Tank, Lakhanpur COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

Table: 10.2.1.19

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Inlet of ETP, Lakhanpur

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.37	<4.0	58	64
04-Jul-24	7.19	<4.0	36	40
17-Oct-24	7.33	<4.0	52	64
14-Jan-25	7.19	5.6	48	124

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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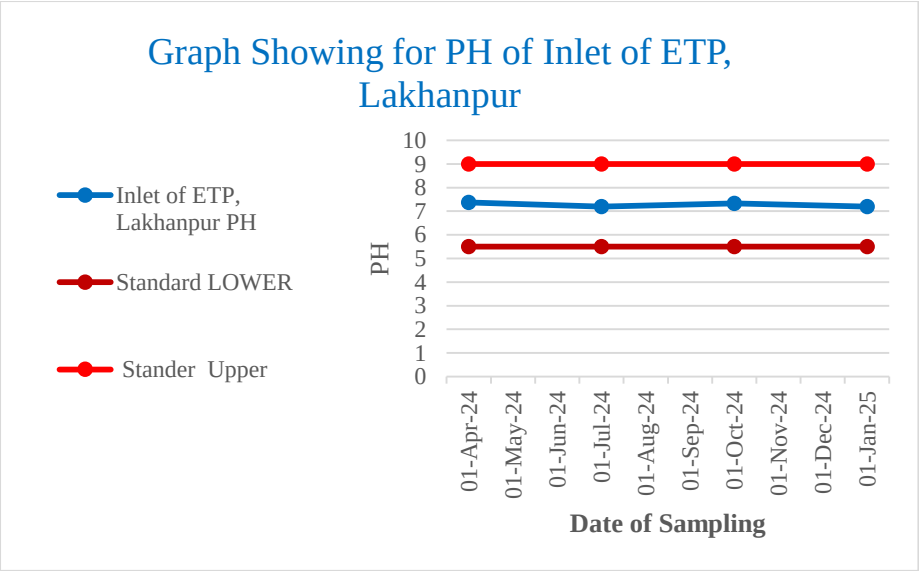
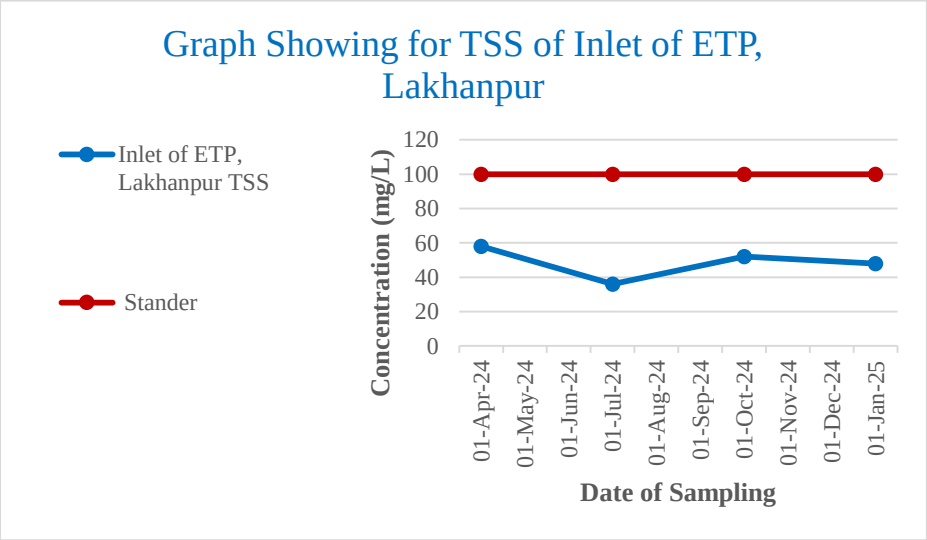

Graph Showing for PH of Inlet of ETP, Lakhanpur
Inlet of ETP, Lakhanpur PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Inlet of ETP, Lakhanpur
Inlet of ETP, Lakhanpur TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

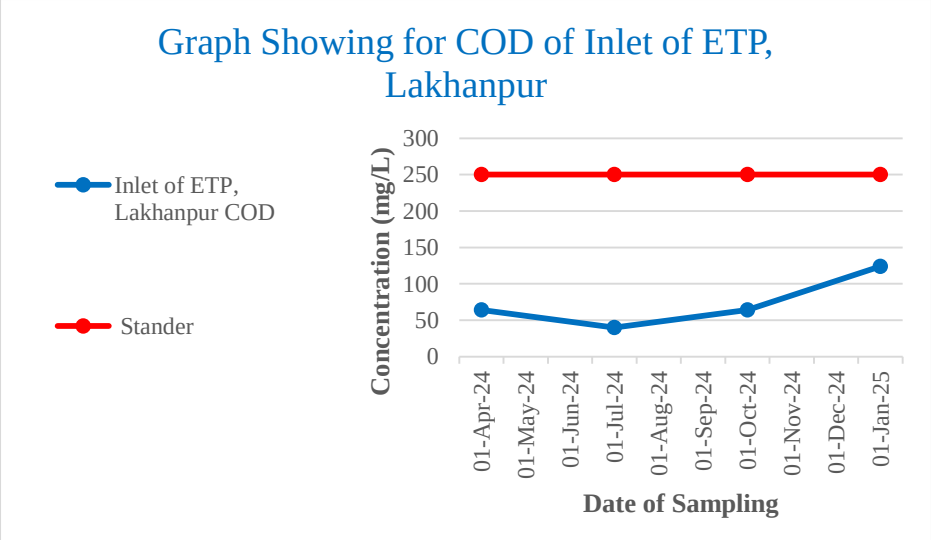

Graph Showing for COD of Inlet of ETP, Lakhanpur
Inlet of ETP, Lakhanpur COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.20

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Outlet of ETP, Lakhanpur

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.63	<4.0	44	40
04-Jul-24	7.33	<4.0	30	28
17-Oct-24	7.59	<4.0	40	48
14-Jan-25	7.3	4.2	40	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

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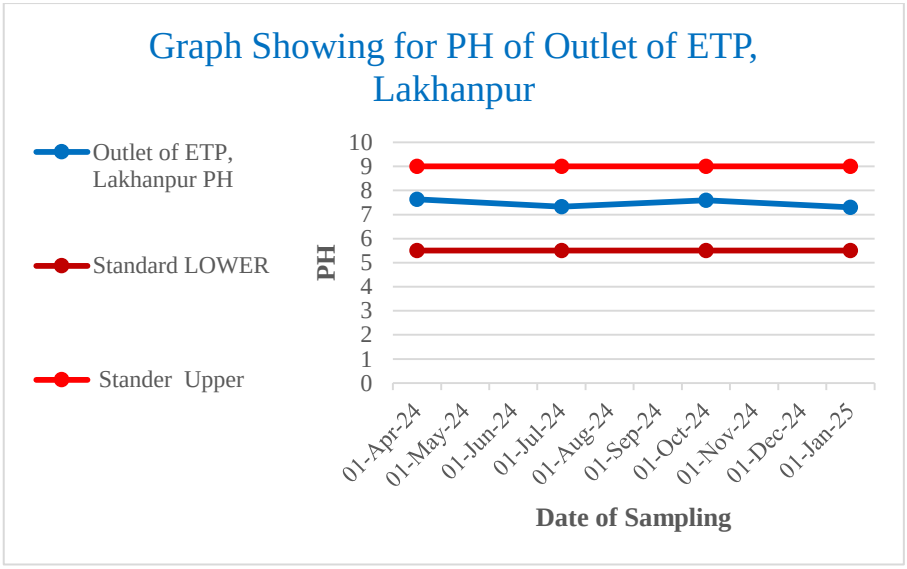
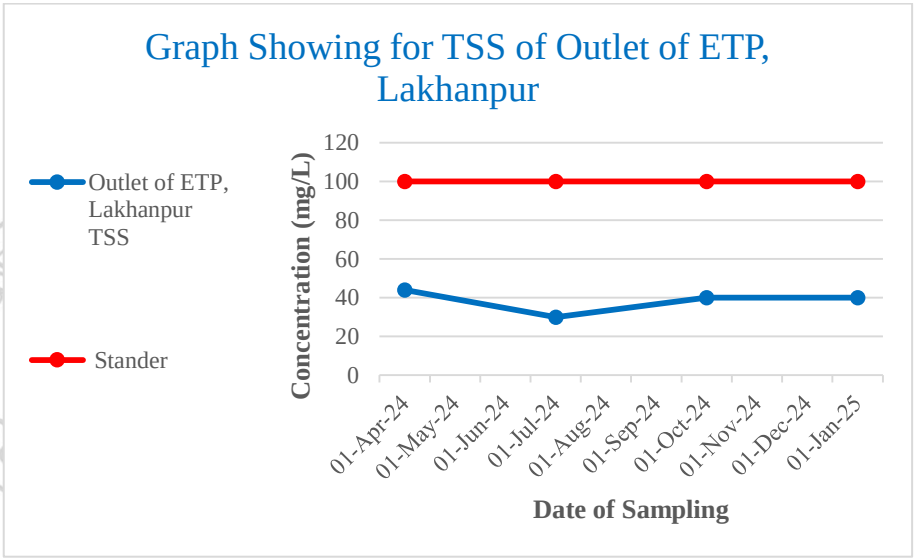

Graph Showing for PH of Outlet of ETP, Lakhanpur
Outlet of ETP, Lakhanpur PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Outlet of ETP, Lakhanpur
Outlet of ETP, Lakhanpur TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

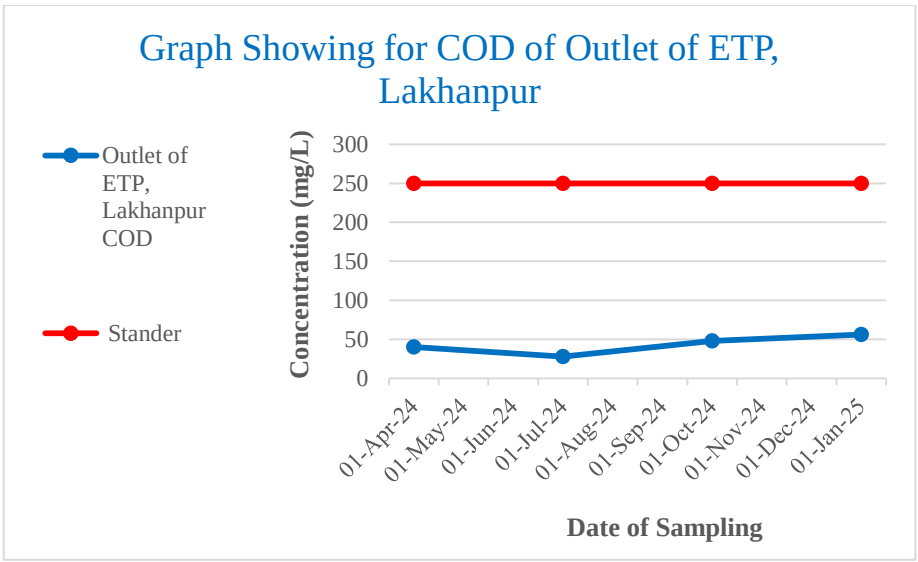

Graph Showing for COD of Outlet of ETP, Lakhanpur
Outlet of ETP, Lakhanpur COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.21

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Mine Sump Water, Lakhanpur

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.29	<4.0	30	36
04-Jul-24	6.28	<4.0	18	16
17-Oct-24	6.61	<4.0	28	32
14-Jan-25	5.9	<4.0	28	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

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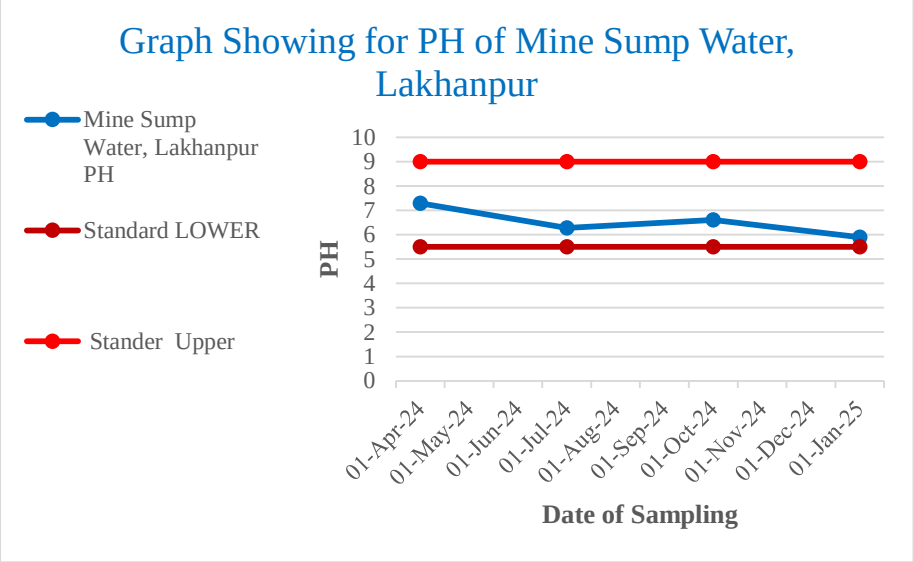
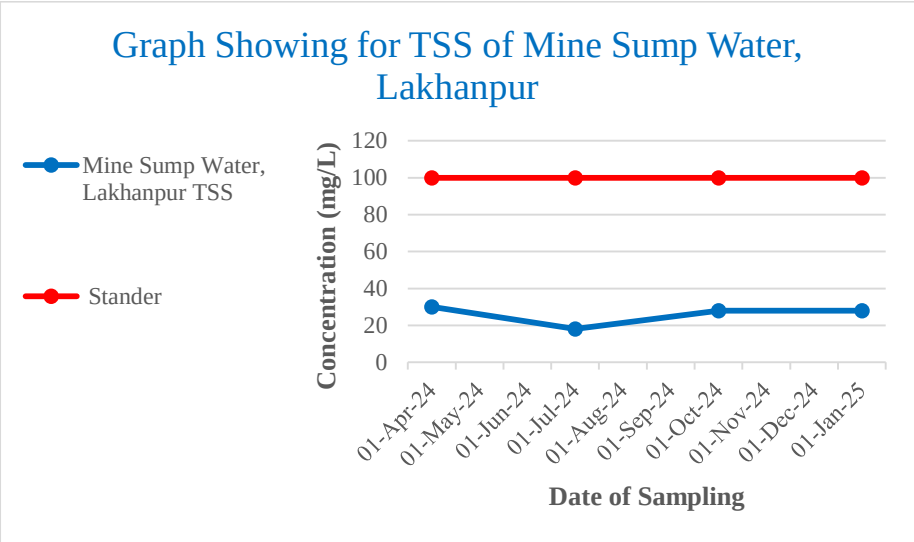

Graph Showing for PH of Mine Sump Water, Lakhanpur
Mine Sump Water, Lakhanpur PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Mine Sump Water, Lakhanpur
Mine Sump Water, Lakhanpur TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

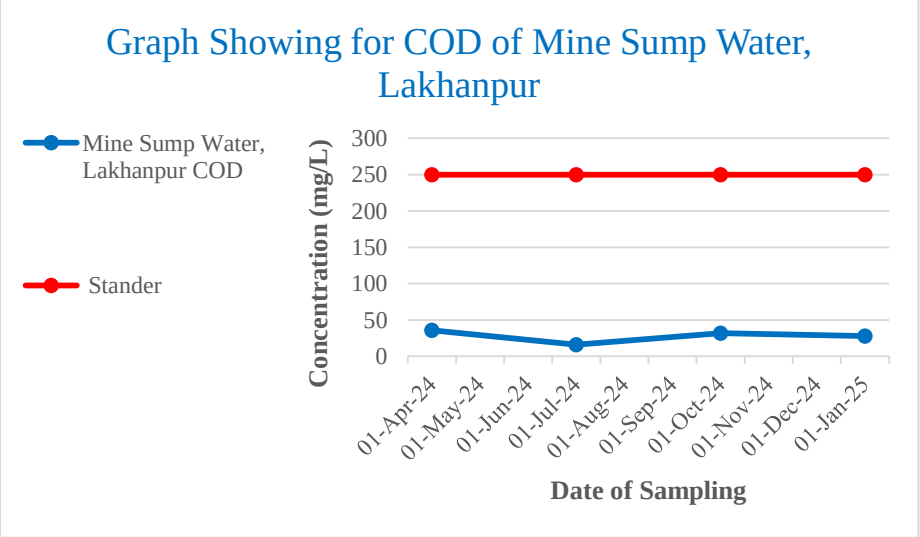

Graph Showing for COD of Mine Sump Water, Lakhanpur
Mine Sump Water, Lakhanpur COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.22

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Washery Sedimentation Tank

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.74	<4.0	64	52
04-Jul-24	7.19	<4.0	42	48
17-Oct-24	7.51	<4.0	36	40
14-Jan-25	6.75	<4.0	31	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

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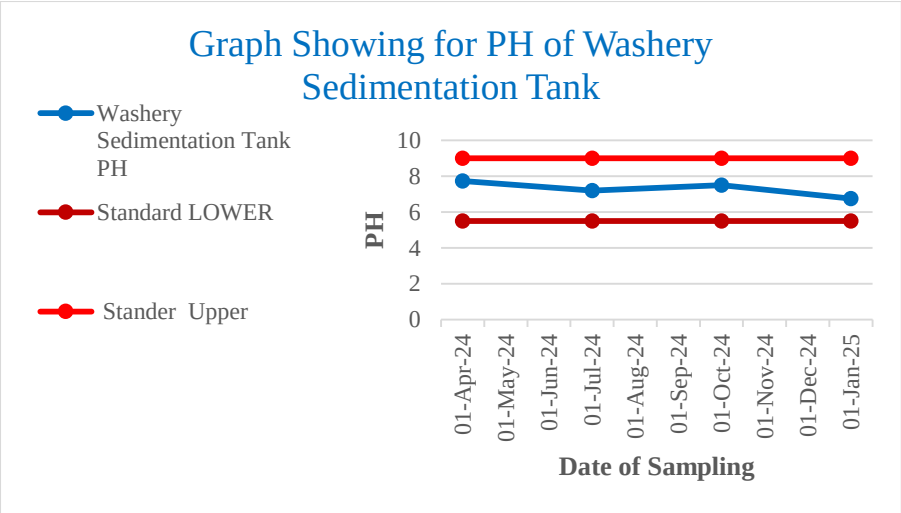
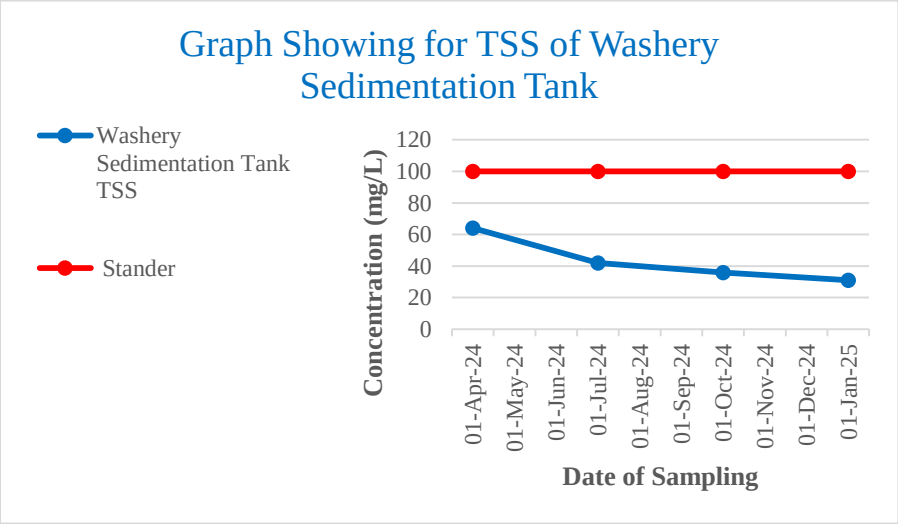

Graph Showing for PH of Washery Sedimentation Tank
Washery Sedimentation Tank PH
Standard LOWER
Stander Upper
PH
10
8
6
4
2
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Washery Sedimentation Tank
Washery Sedimentation Tank TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

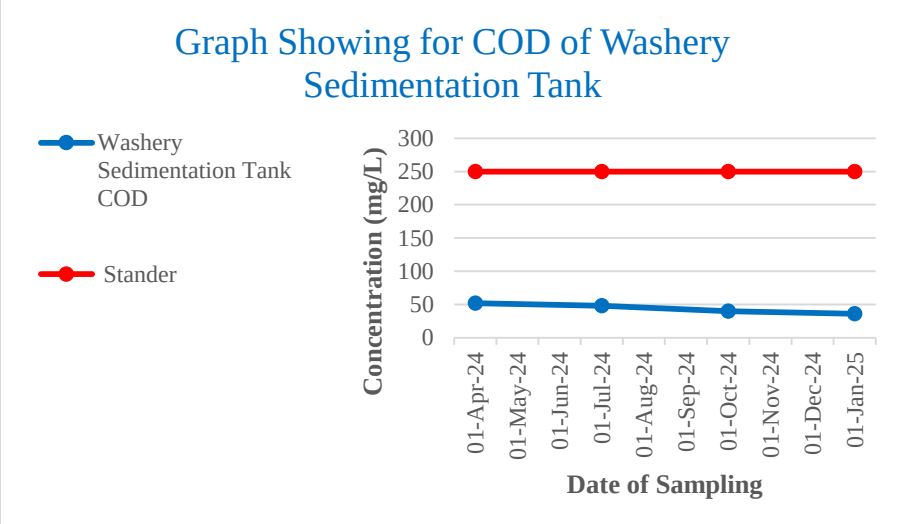

Graph Showing for COD of Washery Sedimentation Tank
Washery Sedimentation Tank COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.23

Area: Lakhanpur

Project: LBL OCP

Monitoring station: ECO Tank, Belpahar

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.33	<4.0	36	40
04-Jul-24	7.85	<4.0	54	36
17-Oct-24	7.73	<4.0	44	32
14-Jan-25	6.77	<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

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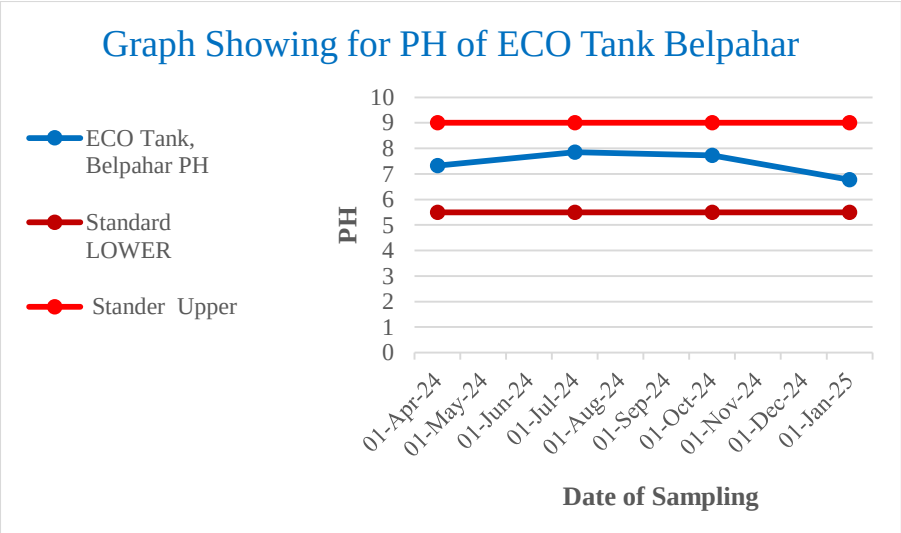
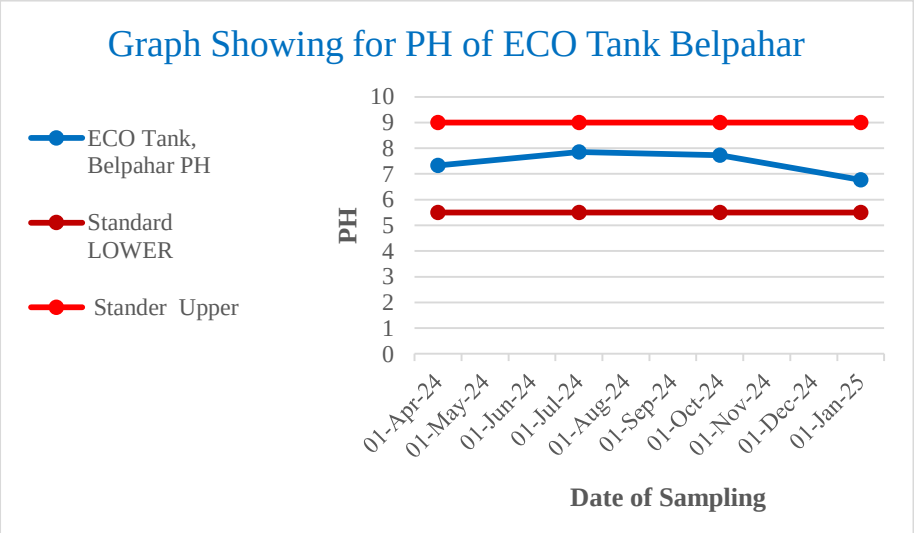

Graph Showing for PH of ECO Tank Belpahar
ECO Tank, Belpahar PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for PH of ECO Tank Belpahar
ECO Tank, Belpahar PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

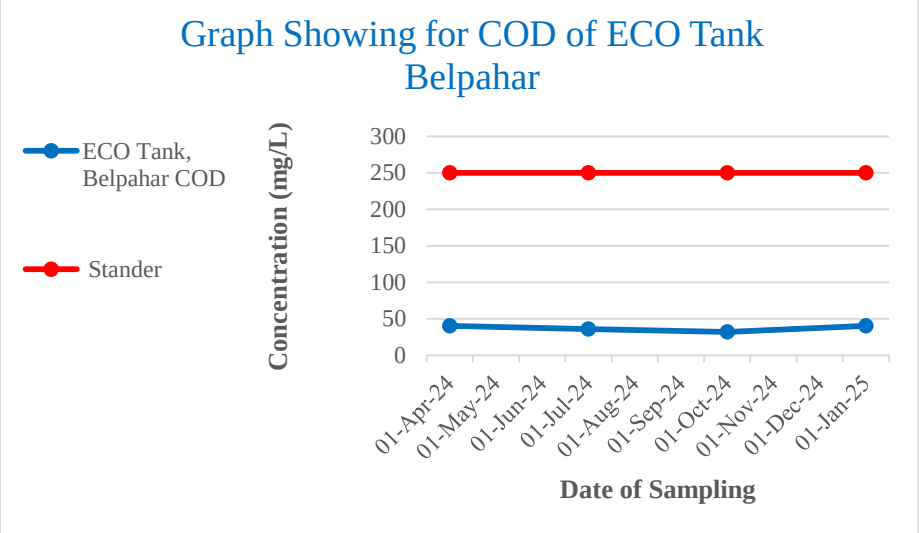

Graph Showing for COD of ECO Tank Belpahar
ECO Tank, Belpahar COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.24

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Inlet of ETP, Belpahar

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.44	<4.0	54	60
04-Jul-24	4.64	<4.0	46	52
17-Oct-24	5.28	<4.0	48	56
14-Jan-25	7.34	4.3	54	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

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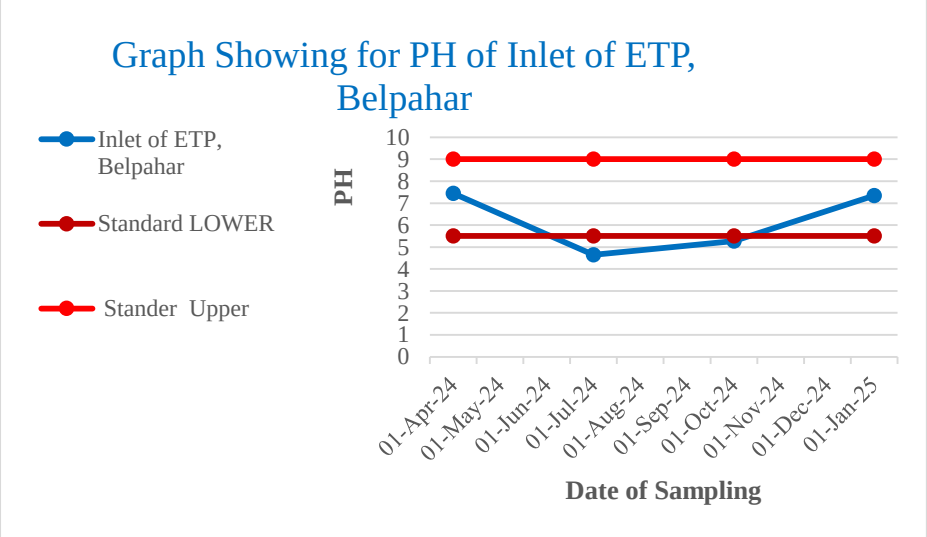
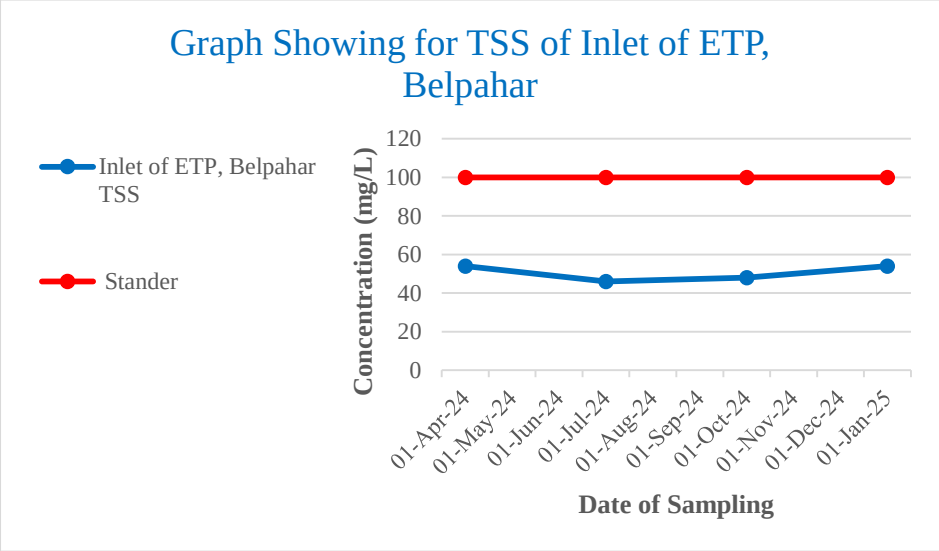

Graph Showing for PH of Inlet of ETP, Belpahar
Inlet of ETP, Belpahar
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Inlet of ETP, Belpahar
Inlet of ETP, Belpahar TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

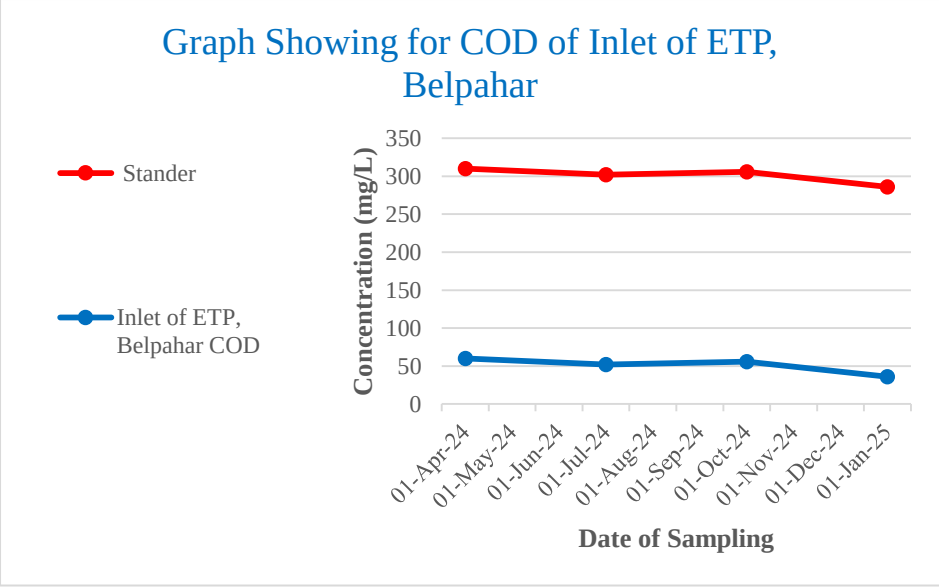

Graph Showing for COD of Inlet of ETP, Belpahar
Stander
Inlet of ETP, Belpahar COD
Concentration (mg/L)
350
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.25

Area: Lakhanpur

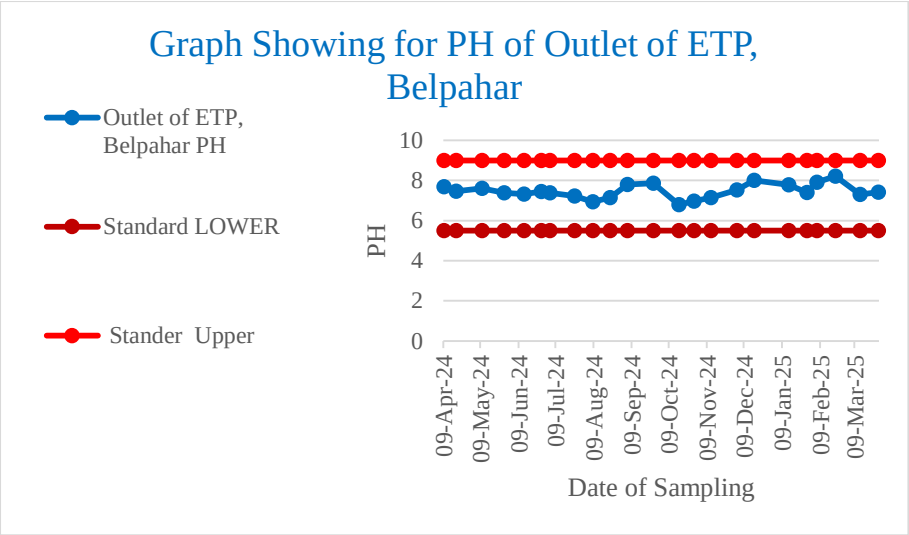
Project: LBL OCP

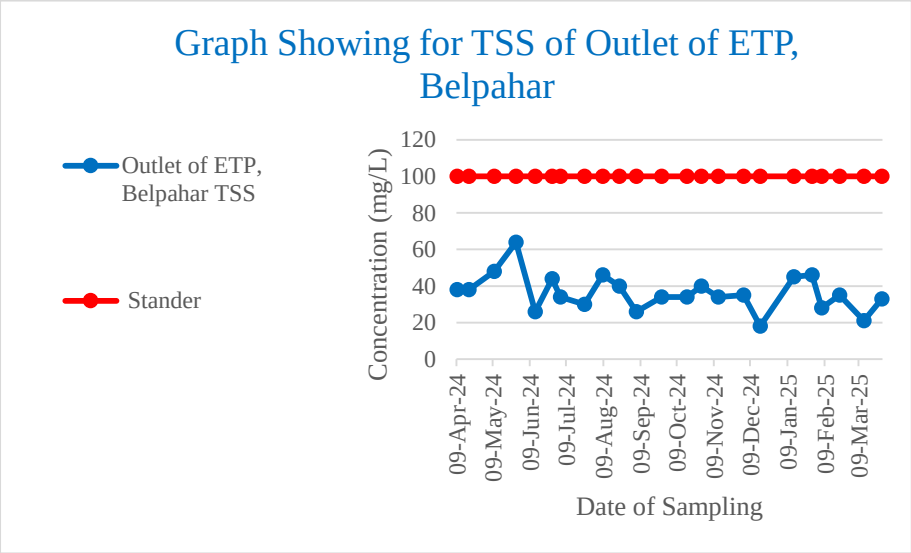
Monitoring station: Outlet of ETP, Belpahar

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.69	<4.0	38	32
19-Apr-24	7.47	<4.0	38	32
10-May-24	7.61	<4.0	48	40
28-May-24	7.39	<4.0	64	40
13-Jun-24	7.32	<4.0	26	28
27-Jun-24	7.44	<4.0	44	32
04-Jul-24	7.38	<4.0	34	36
24-Jul-24	7.22	<4.0	30	28
08-Aug-24	6.93	<4.0	46	40
22-Aug-24	7.14	<4.0	40	32
05-Sep-24	7.79	<4.0	26	20
26-Sep-24	7.86	<4.0	34	28
17-Oct-24	6.79	<4.0	34	40
29-Oct-24	6.96	<4.0	40	48
12-Nov-24	7.14	<4.0	34	36
03-Dec-24	7.53	<4.0	35	28
17-Dec-24	8	<4.0	18	12
14-Jan-25	7.78	<4.0	45	20
29-Jan-25	7.4	<4.0	46	28
06-Feb-25	7.91	<4.0	28	24
21-Feb-25	8.22	<4.0	35	20
13-Mar-25	7.3	<4.0	21	16
28-Mar-25	7.41	<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 of Outlet of ETP, Belpahar
Outlet of ETP, Belpahar PH
Standard LOWER
Stander Upper
PH
10
8
6
4
2
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling


Graph Showing for TSS of Outlet of ETP, Belpahar
Outlet of ETP, Belpahar TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

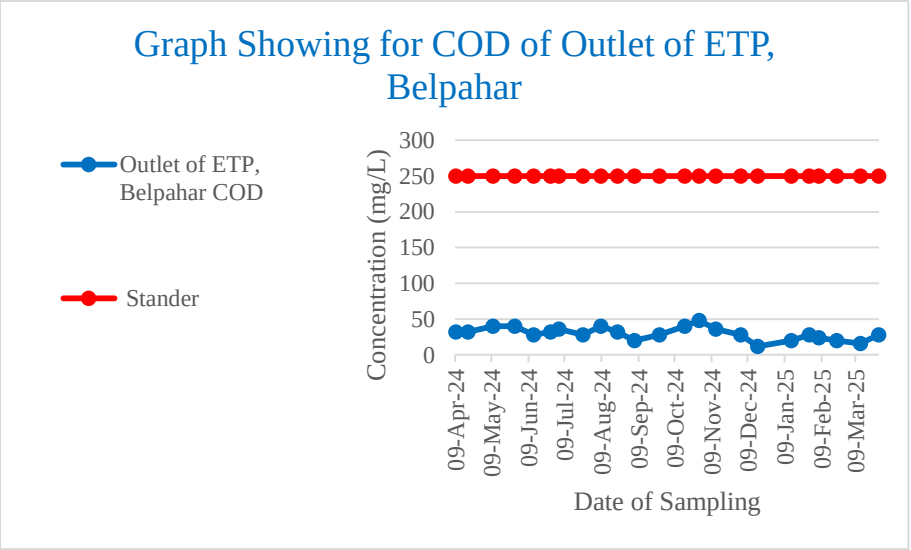

Graph Showing for COD of Outlet of ETP, Belpahar
Outlet of ETP, Belpahar COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
09-Apr-24
09-May-24
09-Jun-24
09-Jul-24
09-Aug-24
09-Sep-24
09-Oct-24
09-Nov-24
09-Dec-24
09-Jan-25
09-Feb-25
09-Mar-25
Date of Sampling

Table: 10.2.1.26

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Mine Sump Water, Belpahar

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.33	<4.0	28	24
04-Jul-24	7.35	<4.0	26	20
17-Oct-24	7.13	<4.0	28	24
14-Jan-25	5.35	<4.0	46	12

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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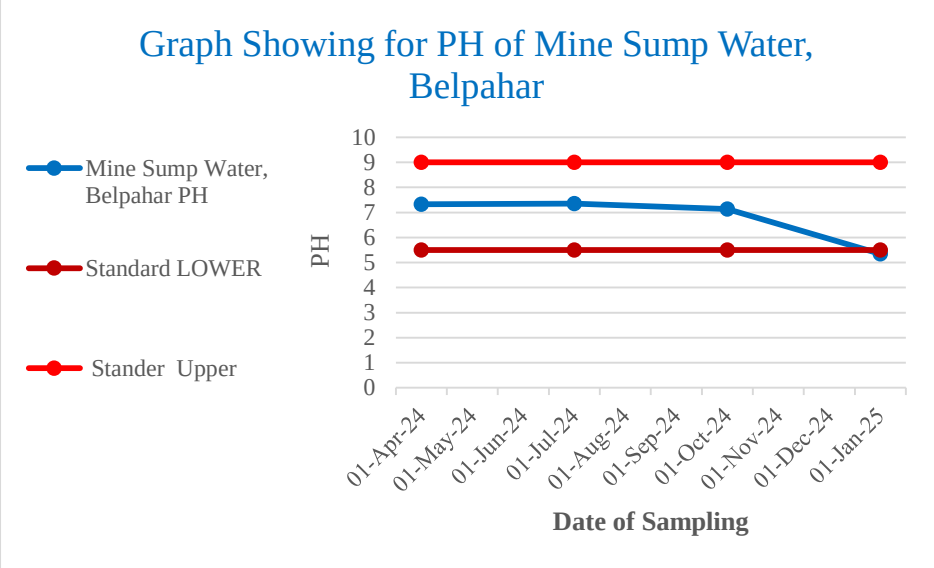
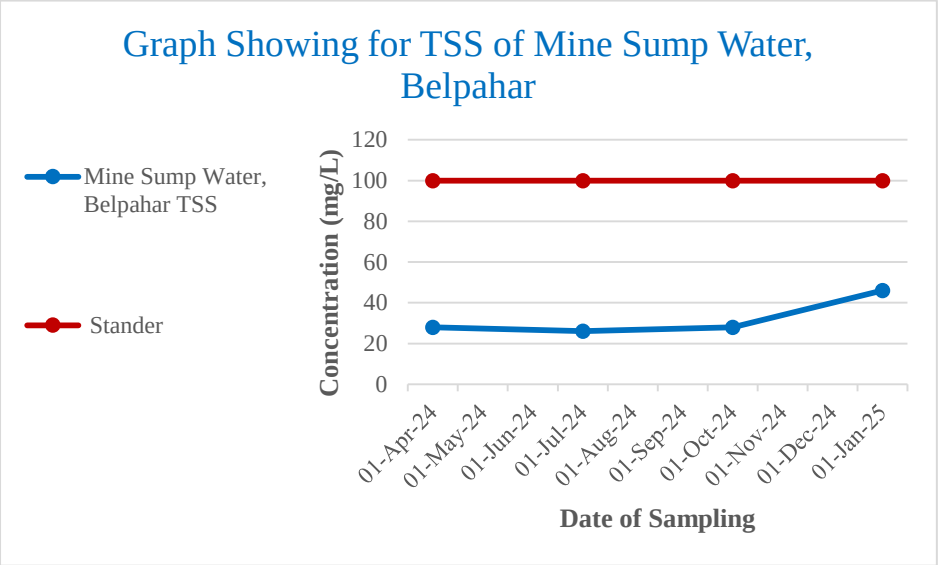
Mini Ratna
Coal India


Graph Showing for PH of Mine Sump Water, Belpahar
Mine Sump Water, Belpahar PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Mine Sump Water, Belpahar
Mine Sump Water, Belpahar TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

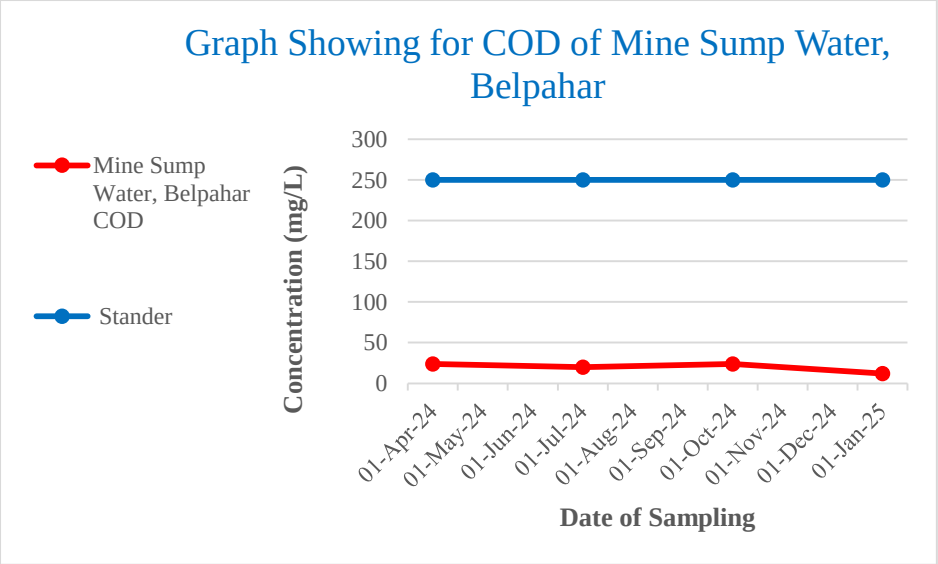

Graph Showing for COD of Mine Sump Water, Belpahar
Mine Sump Water, Belpahar COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.27

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Inlet of MDTP, Belpahar

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.51	<4.0	60	48
04-Jul-24	7.13	<4.0	44	40
17-Oct-24	7.29	<4.0	40	44
14-Jan-25	6.99	4.5	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

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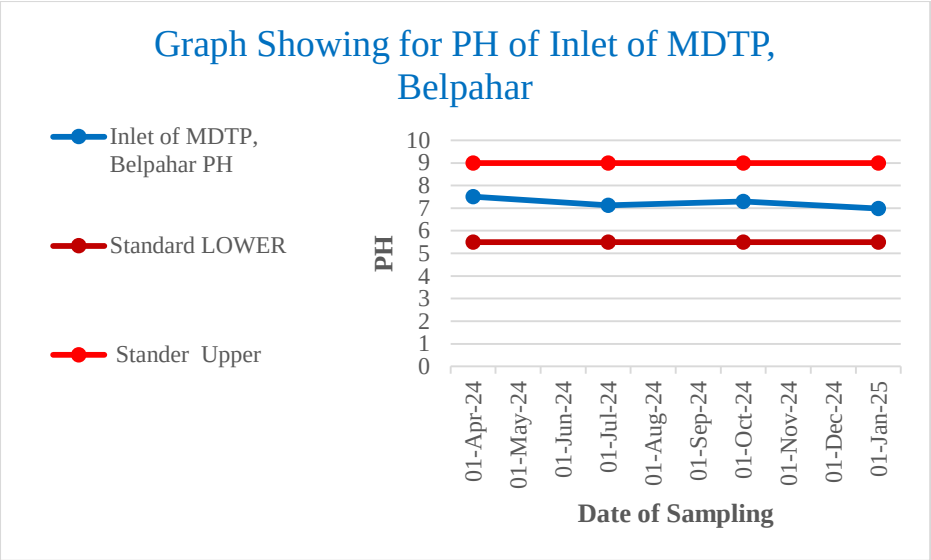
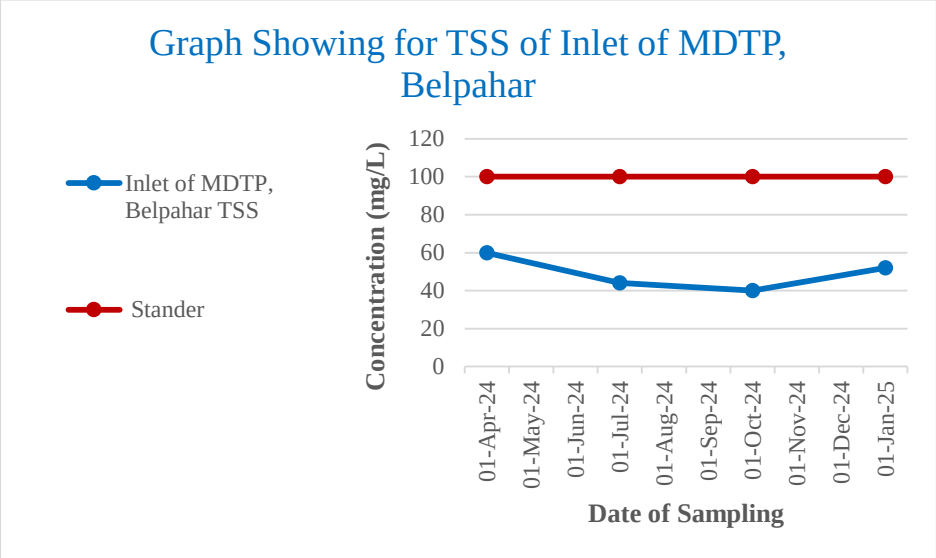

Graph Showing for PH of Inlet of MDTP, Belpahar
Inlet of MDTP, Belpahar PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Inlet of MDTP, Belpahar
Inlet of MDTP, Belpahar TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

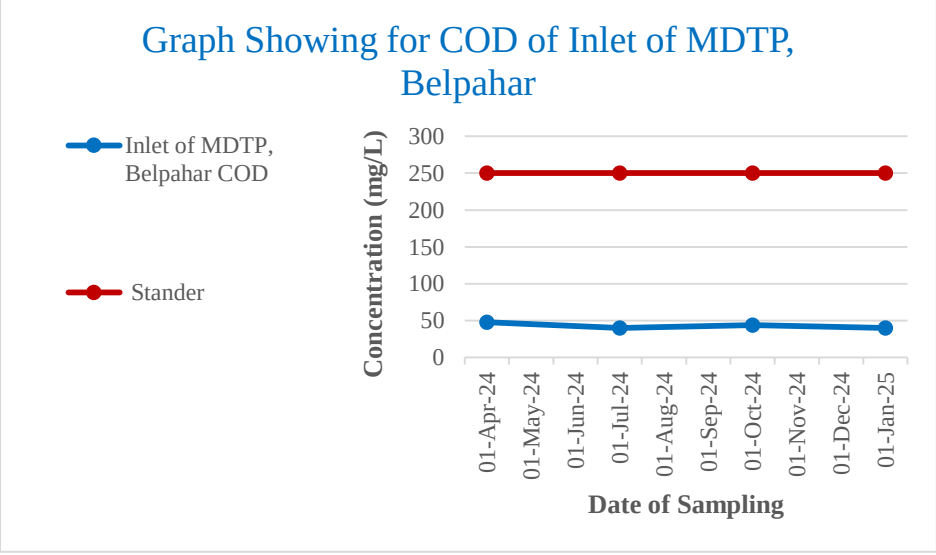

Graph Showing for COD of Inlet of MDTP, Belpahar
Inlet of MDTP, Belpahar COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.28

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Clear Water Tank of MDTP, Belpahar

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.3	<4.0	32	28
04-Jul-24	7.19	<4.0	34	28
17-Oct-24	7.37	<4.0	32	36
14-Jan-25	7.29	<4.0	41	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

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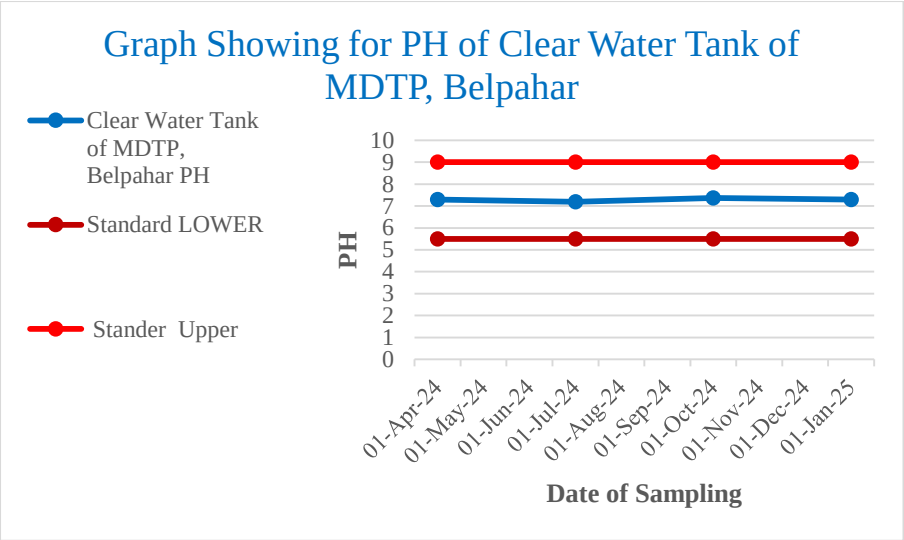
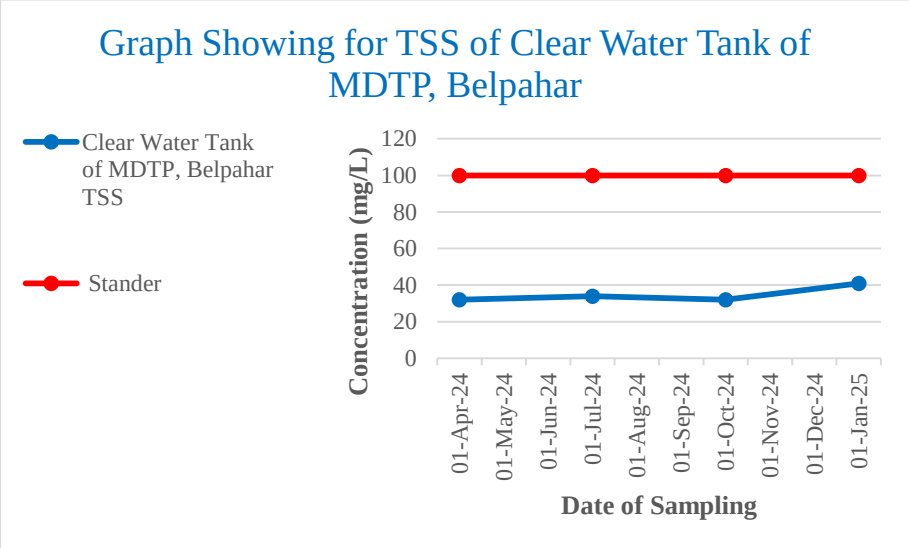

Graph Showing for PH of Clear Water Tank of MDTP, Belpahar
Clear Water Tank of MDTP, Belpahar PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Clear Water Tank of MDTP, Belpahar
Clear Water Tank of MDTP, Belpahar TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

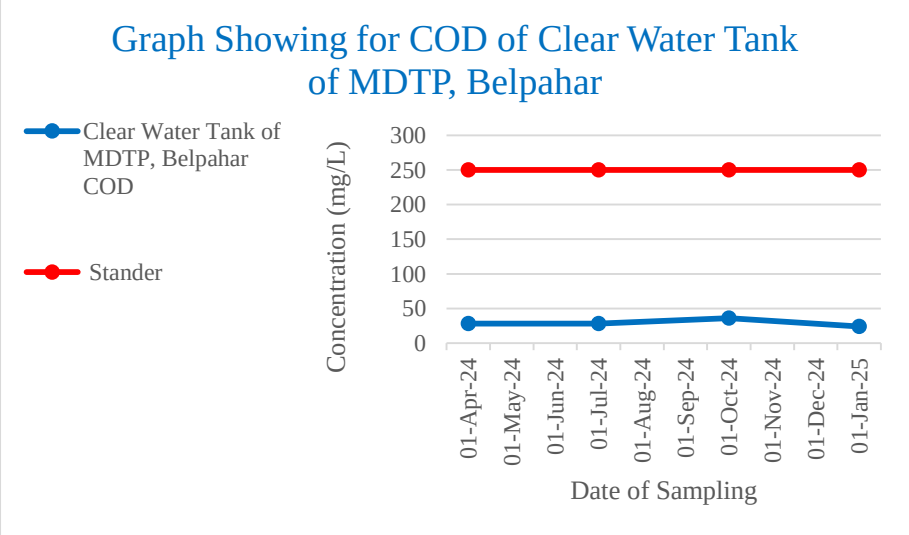

Graph Showing for COD of Clear Water Tank of MDTP, Belpahar
Clear Water Tank of MDTP, Belpahar COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.29

Area: Lakhanpur

Project: LBL OCP

Monitoring station: Mine Sump Water, Lilari

Date of Sampling	pH	Oil & Grease	TSS	COD
09-Apr-24	7.19	<4.0	26	12
04-Jul-24	6.65	<4.0	28	24
17-Oct-24	7.89	<4.0	26	28
14-Jan-25	5.93	<4.0	55	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

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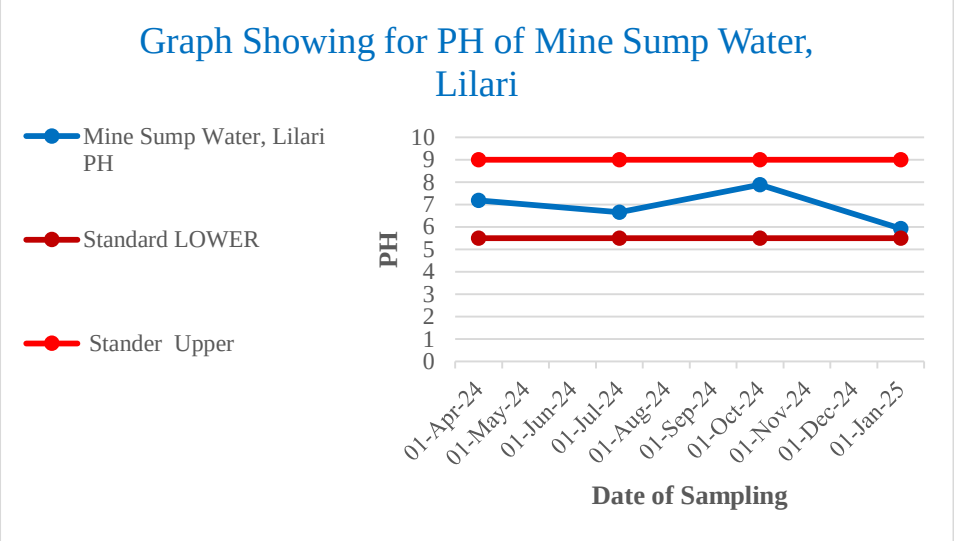
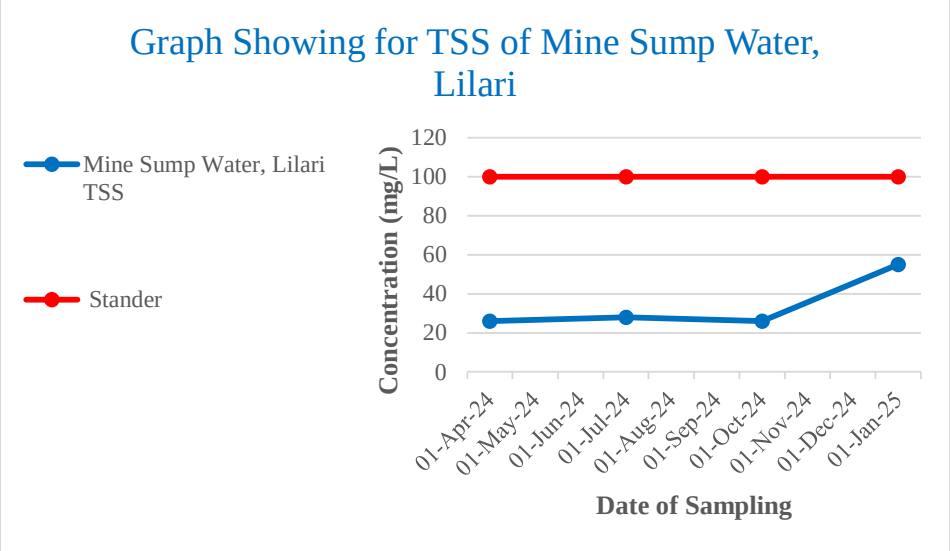
Coal India


Graph Showing for PH of Mine Sump Water, Lilari
Mine Sump Water, Lilari PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling


Graph Showing for TSS of Mine Sump Water, Lilari
Mine Sump Water, Lilari TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

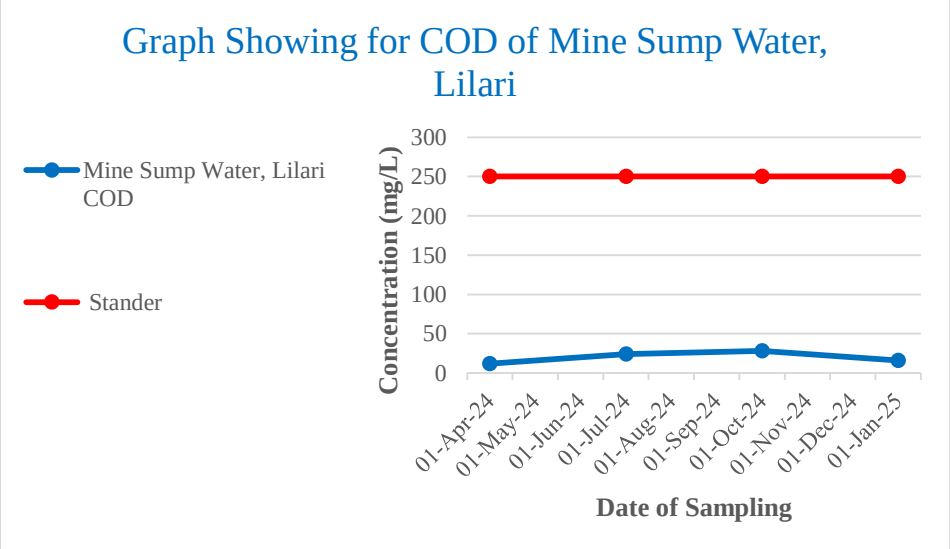

Graph Showing for COD of Mine Sump Water, Lilari
Mine Sump Water, Lilari COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
Date of Sampling

Table: 10.2.1.30

Area: Mahalaxmi

Project: Basundhara (W) OCP

Monitoring station: Inlet of Excavation Workshop, B(W) OCP

Date of Sampling	pH	Oil & Grease	TSS	COD
14-Jun-24	7.75	<4.0	52	72
06-Sep-24	8.01	5.2	76	116
04-Dec-24	8.12	<4.0	33	48
23-Dec-24	7.31	<4.0	47	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

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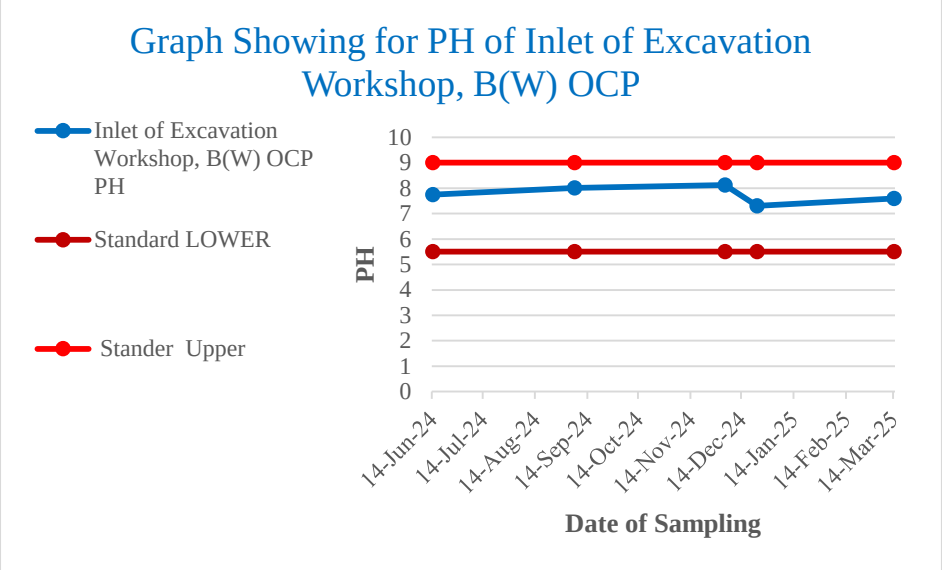
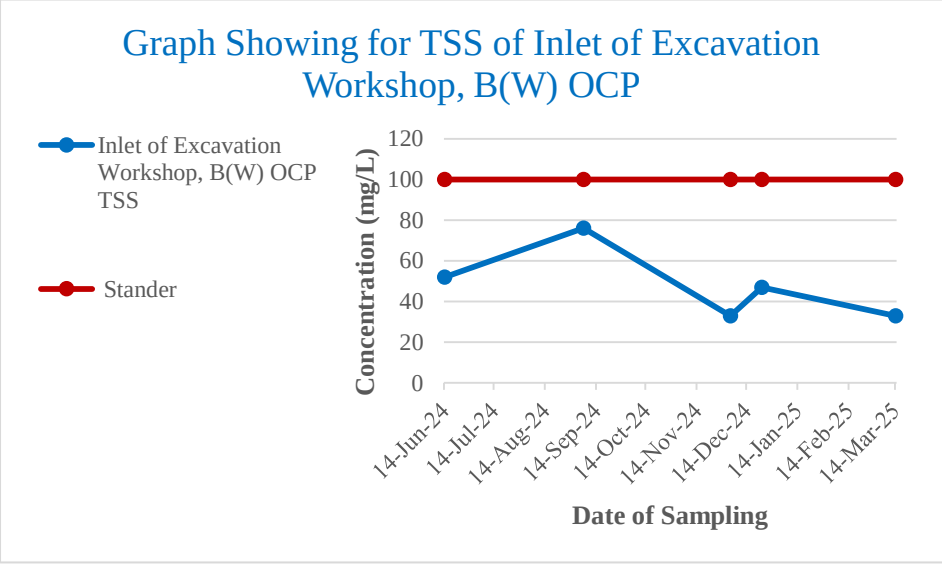

Graph Showing for PH of Inlet of Excavation Workshop, B(W) OCP
Inlet of Excavation Workshop, B(W) OCP PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
14-Jun-24
14-Jul-24
14-Aug-24
14-Sep-24
14-Oct-24
14-Nov-24
14-Dec-24
14-Jan-25
14-Feb-25
14-Mar-25
Date of Sampling


Graph Showing for TSS of Inlet of Excavation Workshop, B(W) OCP
Inlet of Excavation Workshop, B(W) OCP TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
14-Jun-24
14-Jul-24
14-Aug-24
14-Sep-24
14-Oct-24
14-Nov-24
14-Dec-24
14-Jan-25
14-Feb-25
14-Mar-25
Date of Sampling

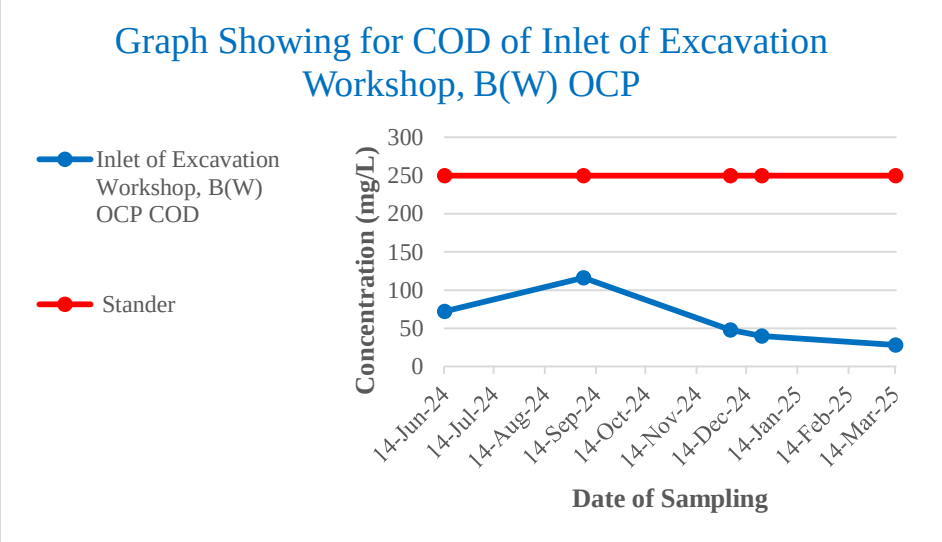

Graph Showing for COD of Inlet of Excavation Workshop, B(W) OCP
Inlet of Excavation Workshop, B(W) OCP COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
14-Jun-24
14-Jul-24
14-Aug-24
14-Sep-24
14-Oct-24
14-Nov-24
14-Dec-24
14-Jan-25
14-Feb-25
14-Mar-25
Date of Sampling

Table: 10.2.1.31

Area: Mahalaxmi

Project: Basundhara (W) OCP

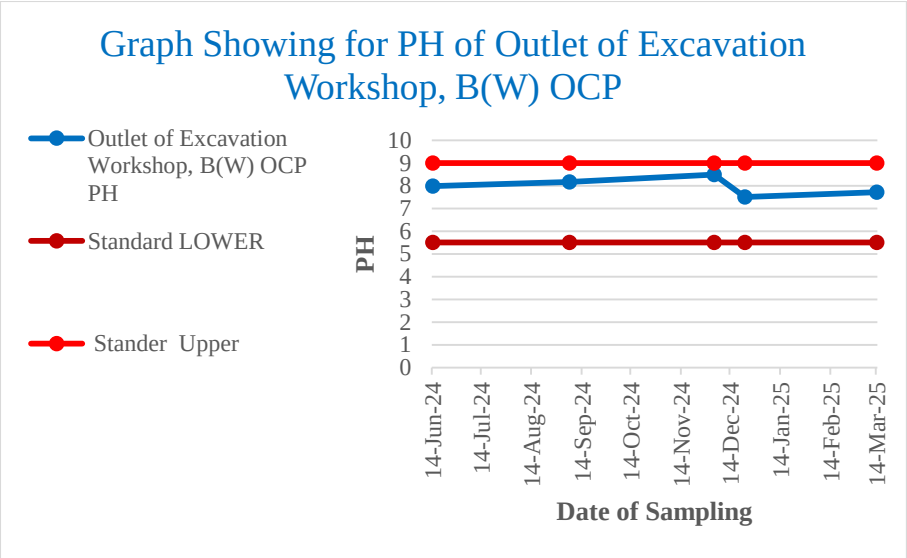
Monitoring station: Outlet of Excavation Workshop, B(W) OCP

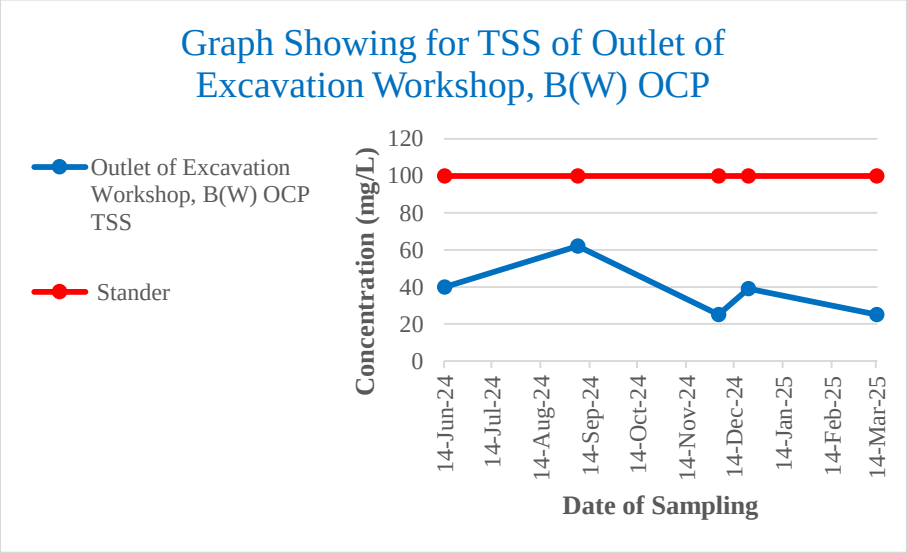
Date of Sampling	pH	Oil & Grease	TSS	COD
14-Jun-24	7.98	<4.0	40	56
06-Sep-24	8.17	4.4	62	96
04-Dec-24	8.49	<4.0	25	36
23-Dec-24	7.51	<4.0	39	36

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

कोल इण्डिया Coal India
सीएमपीडीआई मिनी रत्न
cmpdi Mini Ratna


Graph Showing for PH of Outlet of Excavation Workshop, B(W) OCP
Outlet of Excavation Workshop, B(W) OCP PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
14-Jun-24
14-Jul-24
14-Aug-24
14-Sep-24
14-Oct-24
14-Nov-24
14-Dec-24
14-Jan-25
14-Feb-25
14-Mar-25
Date of Sampling


Graph Showing for TSS of Outlet of Excavation Workshop, B(W) OCP
Outlet of Excavation Workshop, B(W) OCP TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
14-Jun-24
14-Jul-24
14-Aug-24
14-Sep-24
14-Oct-24
14-Nov-24
14-Dec-24
14-Jan-25
14-Feb-25
14-Mar-25
Date of Sampling

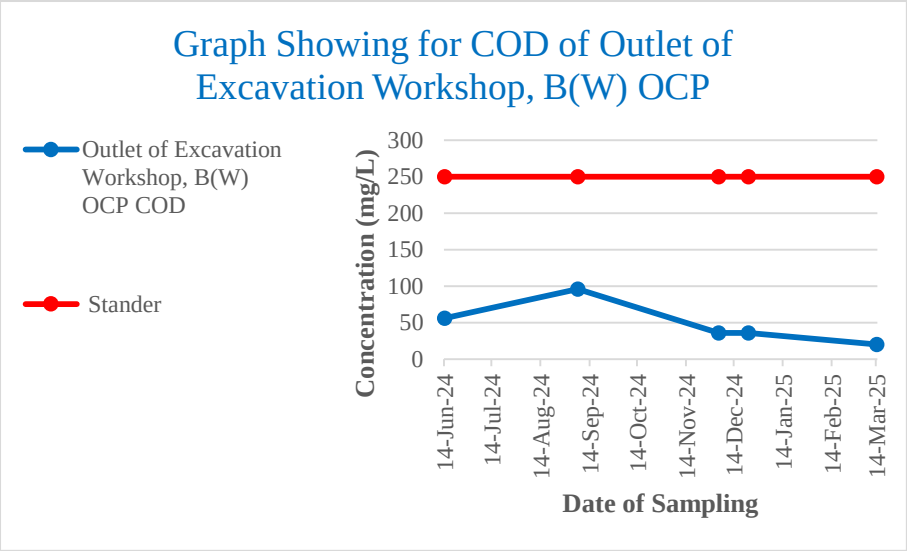

Graph Showing for COD of Outlet of Excavation Workshop, B(W) OCP
Outlet of Excavation Workshop, B(W) OCP COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
14-Jun-24
14-Jul-24
14-Aug-24
14-Sep-24
14-Oct-24
14-Nov-24
14-Dec-24
14-Jan-25
14-Feb-25
14-Mar-25
Date of Sampling

Table: 10.2.1.32

Area: Mahalaxmi

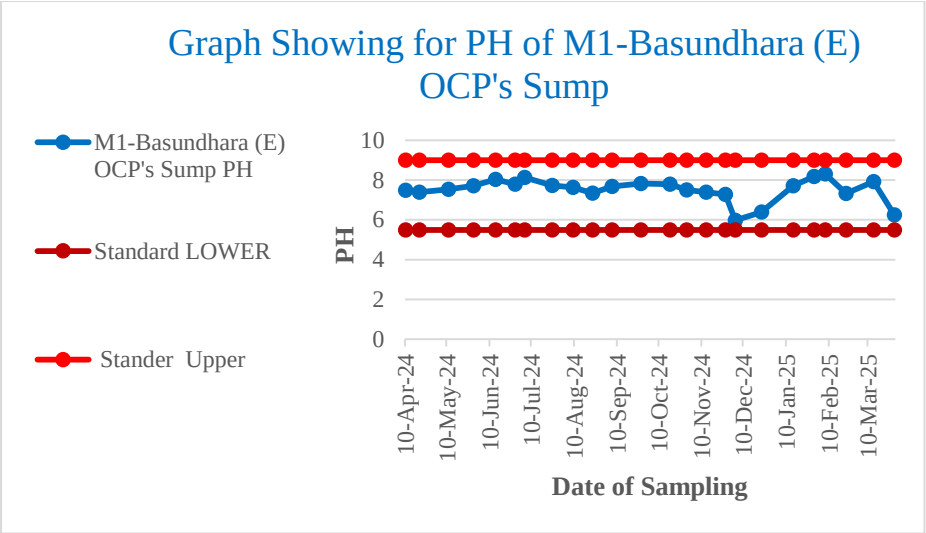
Project: Basundhara (W) OCP

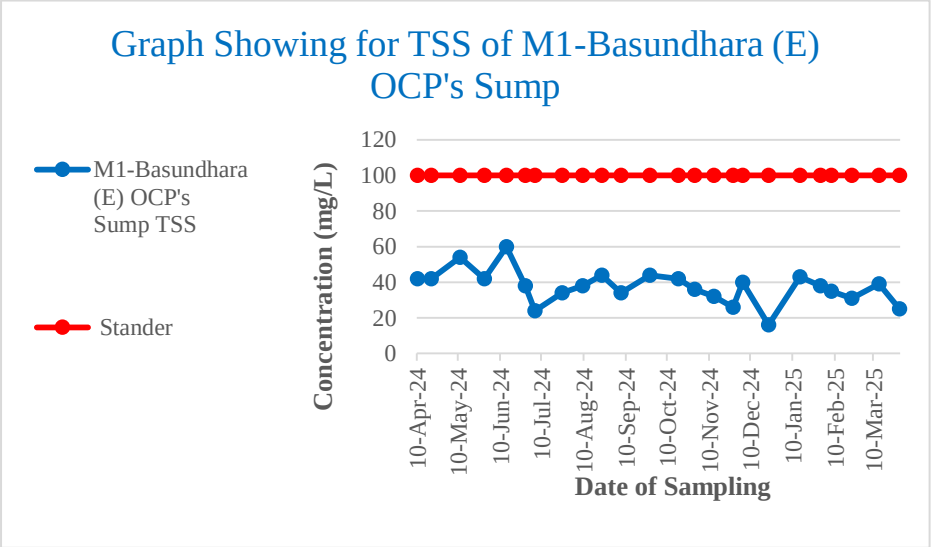
Monitoring station: M1-Basundhara (E) OCP's Sump

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.49	<4.0	42	36
20-Apr-24	7.39	<4.0	42	40
11-May-24	7.53	<4.0	54	52
29-May-24	7.71	<4.0	42	32
14-Jun-24	8.03	<4.0	60	88
28-Jun-24	7.8	<4.0	38	32
05-Jul-24	8.13	<4.0	24	20
25-Jul-24	7.73	<4.0	34	28
09-Aug-24	7.64	<4.0	38	40
23-Aug-24	7.34	<4.0	44	48
06-Sep-24	7.68	<4.0	34	24
27-Sep-24	7.83	<4.0	44	36
18-Oct-24	7.79	<4.0	42	36
30-Oct-24	7.51	<4.0	36	40
13-Nov-24	7.39	<4.0	32	32
27-Nov-24	7.28	<4.0	26	28
04-Dec-24	5.98	<4.0	40	28
23-Dec-24	6.39	<4.0	16	12
15-Jan-25	7.71	<4.0	43	28
30-Jan-25	8.18	<4.0	38	40
07-Feb-25	8.31	<4.0	35	48
22-Feb-25	7.33	<4.0	31	24
14-Mar-25	7.93	<4.0	39	32
29-Mar-25	6.25	<4.0	25	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 of M1-Basundhara (E) OCP's Sump
M1-Basundhara (E) OCP's Sump PH
Standard LOWER
Stander Upper
PH
10
8
6
4
2
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing for TSS of M1-Basundhara (E) OCP's Sump
M1-Basundhara (E) OCP's Sump TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

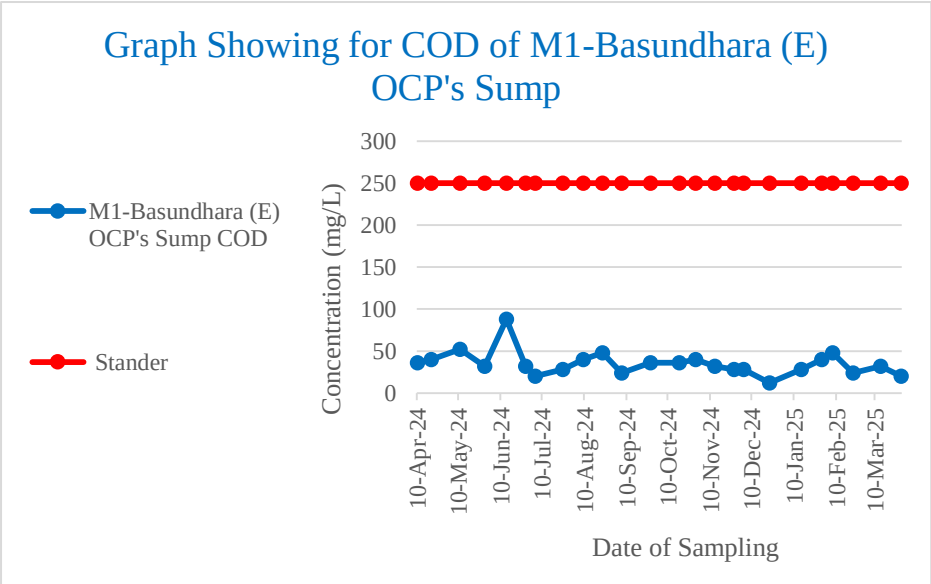

Graph Showing for COD of M1-Basundhara (E) OCP's Sump
M1-Basundhara (E) OCP's Sump COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 10.2.1.33

Area: Mahalaxmi

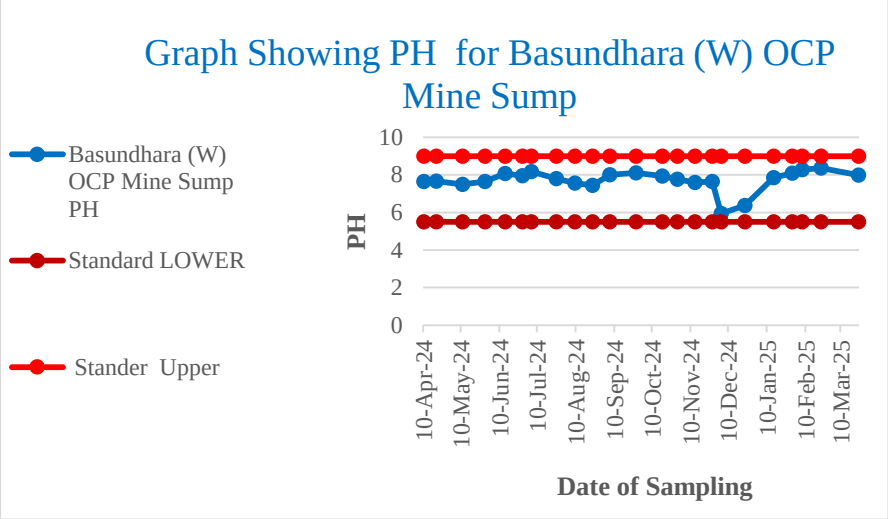
Project: Basundhara (W) OCP

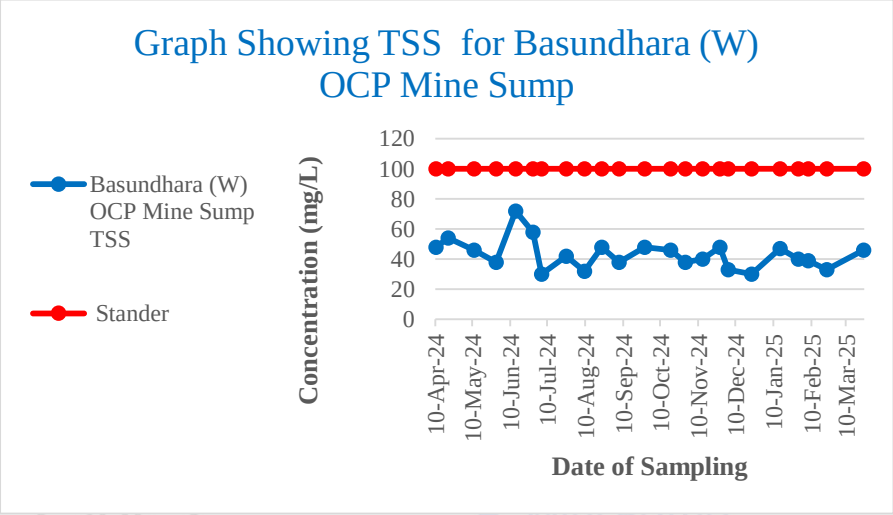
Monitoring station: Basundhara (W) OCP Mine Sump

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.64	<4.0	48	44
20-Apr-24	7.67	<4.0	54	40
11-May-24	7.49	<4.0	46	40
29-May-24	7.64	<4.0	38	40
14-Jun-24	8.07	<4.0	72	96
28-Jun-24	7.95	<4.0	58	36
05-Jul-24	8.18	<4.0	30	32
25-Jul-24	7.8	<4.0	42	32
09-Aug-24	7.56	<4.0	32	36
23-Aug-24	7.45	<4.0	48	52
06-Sep-24	8.01	<4.0	38	32
27-Sep-24	8.11	<4.0	48	40
18-Oct-24	7.93	<4.0	46	48
30-Oct-24	7.76	<4.0	38	44
13-Nov-24	7.6	<4.0	40	36
27-Nov-24	7.65	<4.0	48	52
04-Dec-24	5.95	<4.0	33	12
23-Dec-24	6.37	<4.0	30	16
15-Jan-25	7.86	<4.0	47	24
30-Jan-25	8.09	<4.0	40	32
07-Feb-25	8.27	<4.0	39	32
22-Feb-25	8.36	<4.0	33	20
24-Mar-25	7.99	<4.0	46	36
29-Mar-25	5.41	<4.0	34	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 PH for Basundhara (W) OCP Mine Sump
Basundhara (W) OCP Mine Sump PH
Standard LOWER
Stander Upper
PH
10
8
6
4
2
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing TSS for Basundhara (W) OCP Mine Sump
Basundhara (W) OCP Mine Sump TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

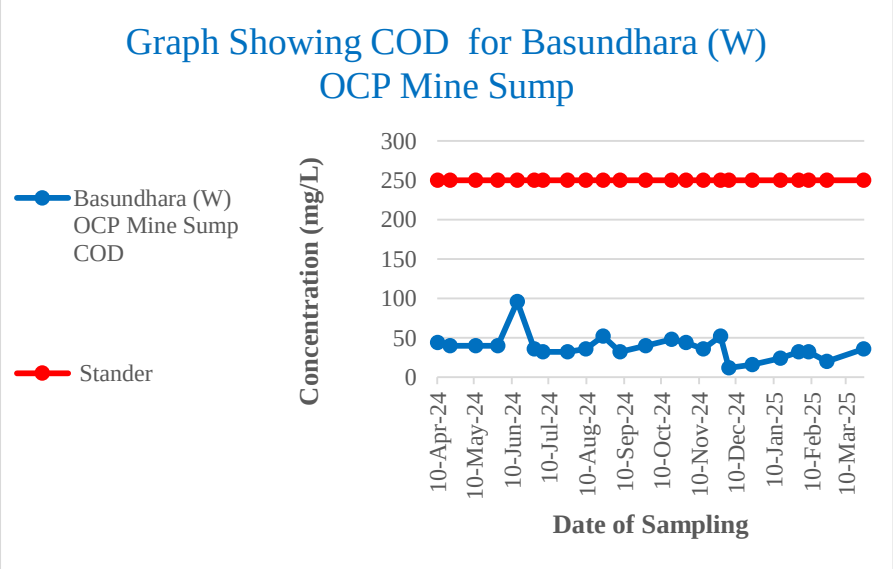

Graph Showing COD for Basundhara (W) OCP Mine Sump
Basundhara (W) OCP Mine Sump COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 10.2.1.34

Area: Mahalaxmi

Project: Basundhara (W) OCP

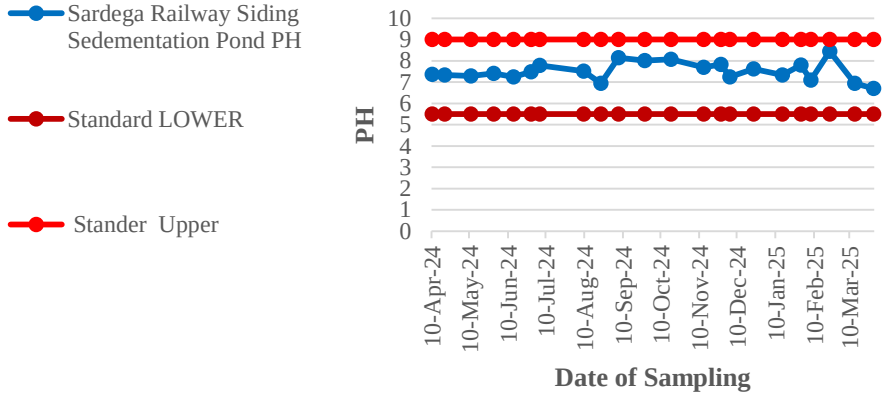
Monitoring station: Sardega Railway Siding Sedimentation Pond

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.36	<4.0	34	28
20-Apr-24	7.33	<4.0	48	28
11-May-24	7.29	<4.0	42	32
29-May-24	7.41	<4.0	30	32
14-Jun-24	7.25	<4.0	44	32
28-Jun-24	7.48	<4.0	46	32
05-Jul-24	7.79	<4.0	34	28
09-Aug-24	7.52	<4.0	44	40
23-Aug-24	6.94	<4.0	46	60
06-Sep-24	8.15	<4.0	58	84
27-Sep-24	8.02	<4.0	64	96
18-Oct-24	8.07	<4.0	58	76
13-Nov-24	7.7	<4.0	42	48
27-Nov-24	7.84	<4.0	38	44
04-Dec-24	7.24	<4.0	33	48
23-Dec-24	7.62	<4.0	39	32
15-Jan-25	7.33	<4.0	53	56
30-Jan-25	7.81	<4.0	59	44
07-Feb-25	7.09	<4.0	37	36
22-Feb-25	8.45	<4.0	42	36
14-Mar-25	6.94	<4.0	48	44
29-Mar-25	6.71	<4.0	42	36

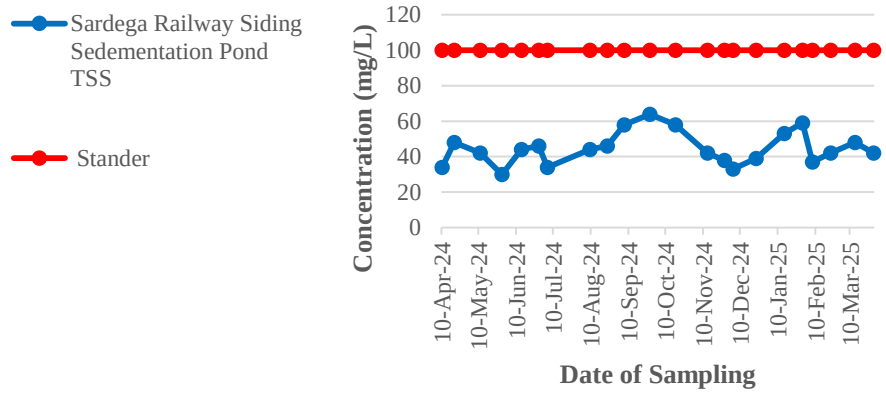
All dimensions are in mg/l unless otherwise stated except pH

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 of Sardega Railway Siding Sedementation Pond



Graph Showing for TSS of Sardega Railway Siding Sedementation Pond



Graph Showing for COD of Sardega Railway Siding Sedementation Pond

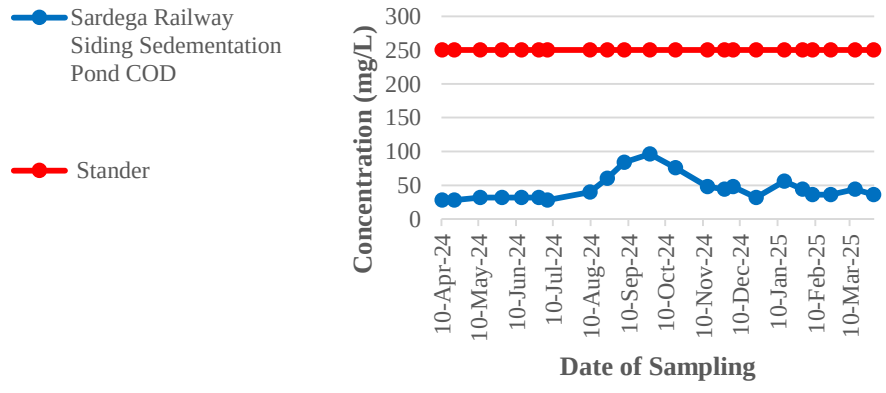


Table: 10.2.1.35

Area: Basundhara

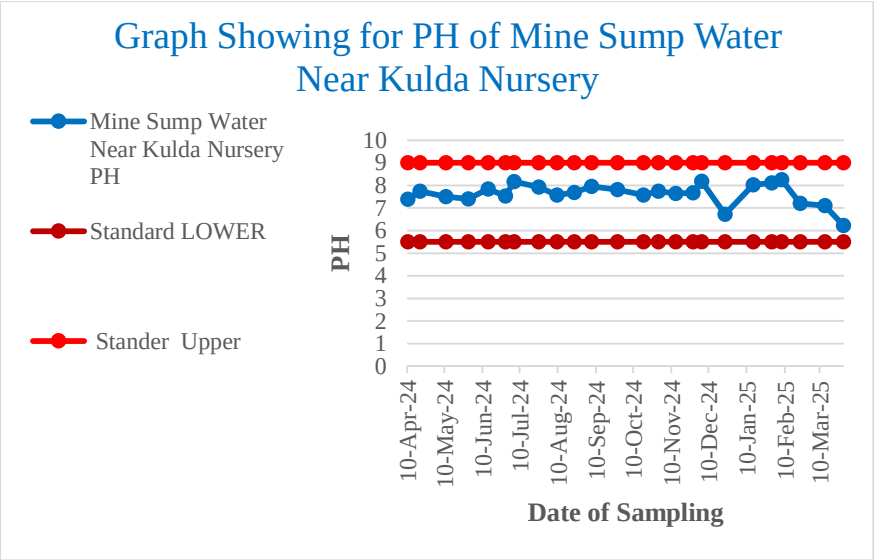
Project: Kulda OCP

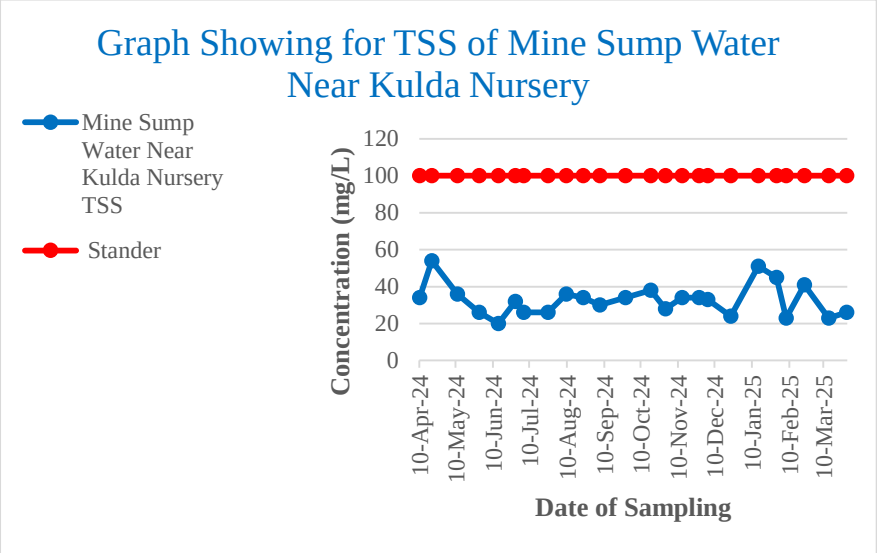
Monitoring station: Mine Sump Water near Kulda Nursery

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.39	<4.0	34	24
20-Apr-24	7.74	<4.0	54	40
11-May-24	7.51	<4.0	36	24
29-May-24	7.4	<4.0	26	24
14-Jun-24	7.85	<4.0	20	12
28-Jun-24	7.53	<4.0	32	28
05-Jul-24	8.17	<4.0	26	28
25-Jul-24	7.93	<4.0	26	32
09-Aug-24	7.58	<4.0	36	32
23-Aug-24	7.69	<4.0	34	32
06-Sep-24	7.96	<4.0	30	32
27-Sep-24	7.82	<4.0	34	36
18-Oct-24	7.57	<4.0	38	40
30-Oct-24	7.74	<4.0	28	36
13-Nov-24	7.65	<4.0	34	36
27-Nov-24	7.68	<4.0	34	32
04-Dec-24	8.18	<4.0	33	24
23-Dec-24	6.73	<4.0	24	16
15-Jan-25	8.03	<4.0	51	16
30-Jan-25	8.11	<4.0	45	16
07-Feb-25	8.26	<4.0	23	20
22-Feb-25	7.2	<4.0	41	16
14-Mar-25	7.1	<4.0	23	16
29-Mar-25	6.22	<4.0	26	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 of Mine Sump Water Near Kulda Nursery
Mine Sump Water Near Kulda Nursery PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing for TSS of Mine Sump Water Near Kulda Nursery
Mine Sump Water Near Kulda Nursery TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

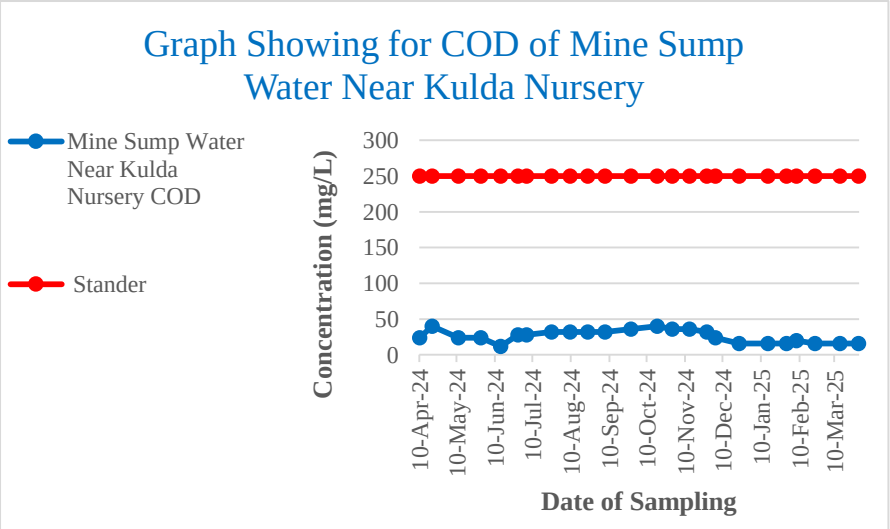

Graph Showing for COD of Mine Sump Water Near Kulda Nursery
Mine Sump Water Near Kulda Nursery COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 10.2.1.36

Area: Basundhara

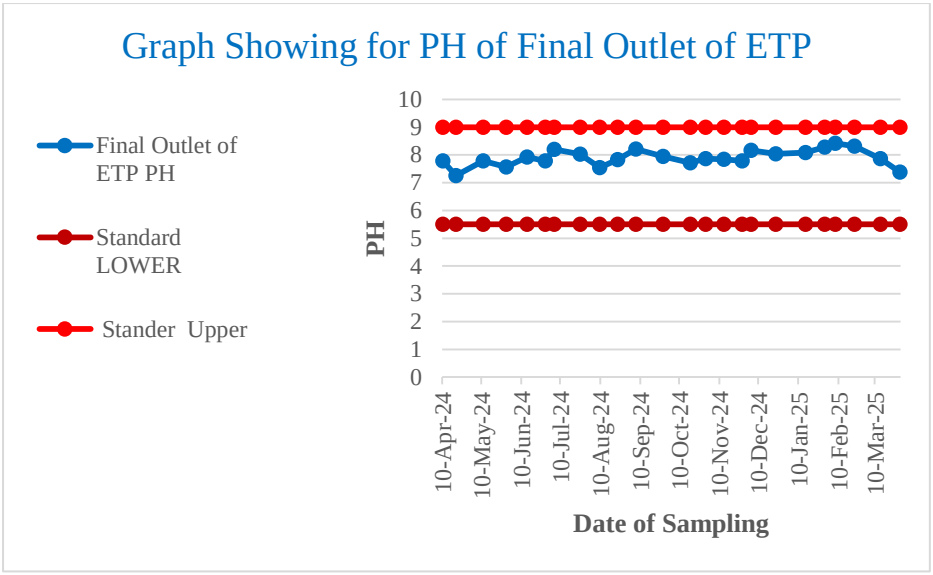
Project: Kulda OCP

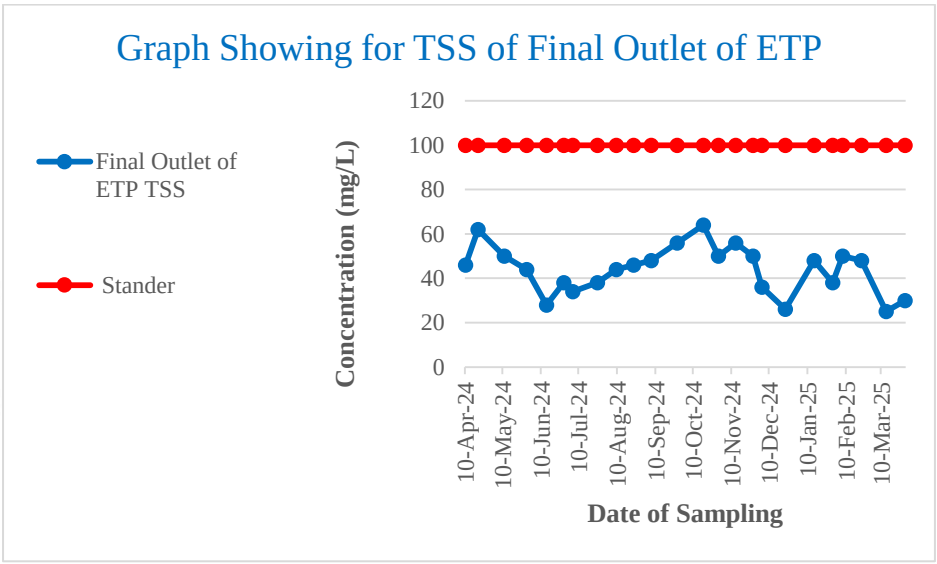
Monitoring station: Final Outlet of ETP

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.79	<4.0	46	32
20-Apr-24	7.25	<4.0	62	44
11-May-24	7.79	<4.0	50	40
29-May-24	7.57	<4.0	44	32
14-Jun-24	7.92	<4.0	28	20
28-Jun-24	7.78	<4.0	38	32
05-Jul-24	8.2	4.2	34	44
25-Jul-24	8.03	<4.0	38	40
09-Aug-24	7.54	<4.0	44	40
23-Aug-24	7.83	<4.0	46	56
06-Sep-24	8.21	<4.0	48	72
27-Sep-24	7.95	<4.0	56	80
18-Oct-24	7.71	4.2	64	92
30-Oct-24	7.87	<4.0	50	68
13-Nov-24	7.84	4.2	56	88
27-Nov-24	7.79	<4.0	50	68
04-Dec-24	8.16	<4.0	36	36
23-Dec-24	8.04	<4.0	26	24
15-Jan-25	8.08	<4.0	48	28
30-Jan-25	8.28	<4.0	38	28
07-Feb-25	8.42	<4.0	50	32
22-Feb-25	8.32	<4.0	48	28
14-Mar-25	7.87	<4.0	25	24
29-Mar-25	7.38	<4.0	30	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 of Final Outlet of ETP
Final Outlet of ETP PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing for TSS of Final Outlet of ETP
Final Outlet of ETP TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

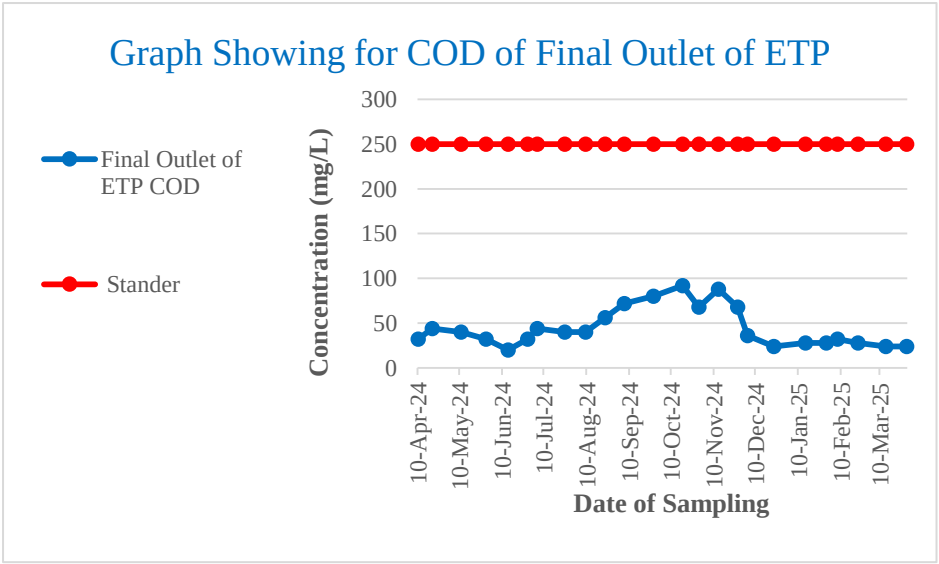

Graph Showing for COD of Final Outlet of ETP
Final Outlet of ETP COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 10.2.1.37

Area: Basundhara

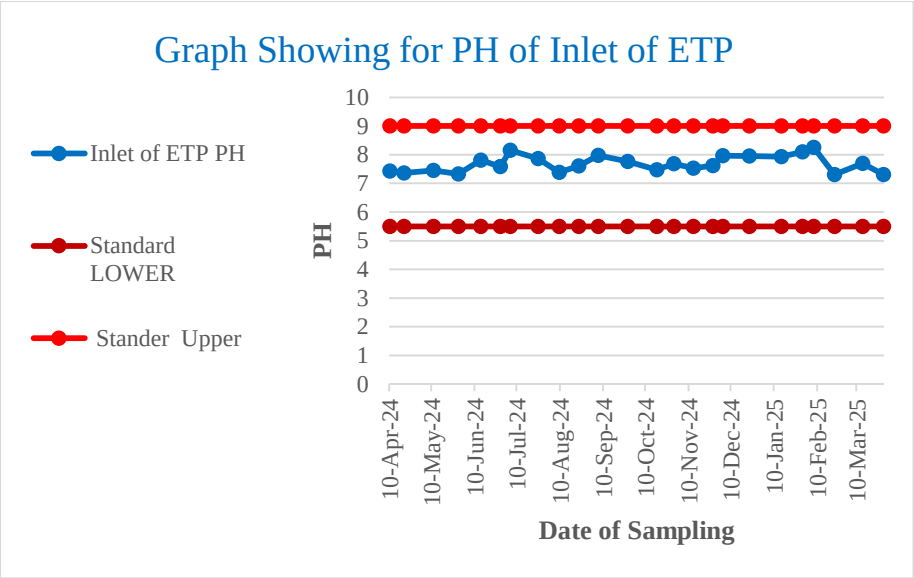
Project: Kulda OCP

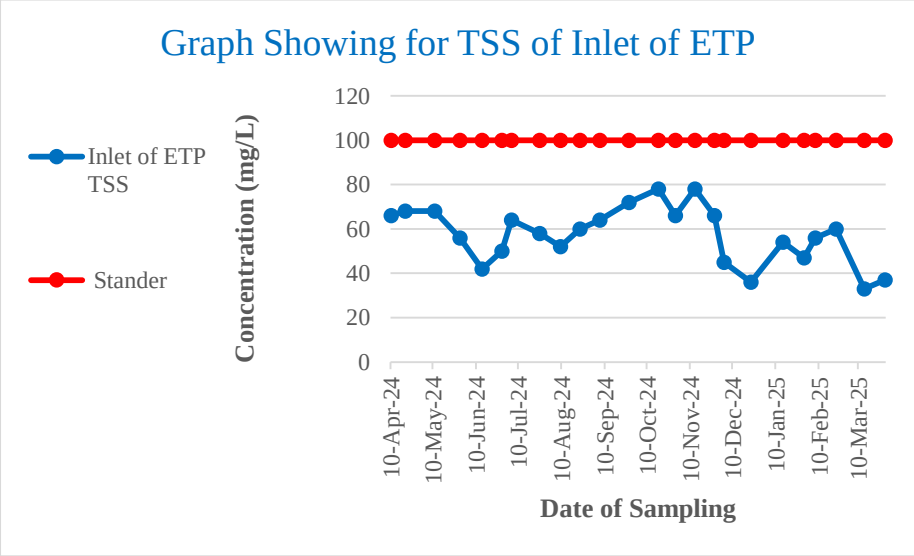
Monitoring station: Inlet of ETP

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.43	<4.0	66	48
20-Apr-24	7.36	<4.0	68	56
11-May-24	7.45	<4.0	68	48
29-May-24	7.33	<4.0	56	40
14-Jun-24	7.81	<4.0	42	36
28-Jun-24	7.59	<4.0	50	44
05-Jul-24	8.15	5.4	64	96
25-Jul-24	7.86	4.2	58	64
09-Aug-24	7.38	<4.0	52	56
23-Aug-24	7.61	<4.0	60	72
06-Sep-24	7.98	4.8	64	88
27-Sep-24	7.76	<4.0	72	96
18-Oct-24	7.47	5.4	78	116
30-Oct-24	7.69	4.4	66	96
13-Nov-24	7.53	5.0	78	112
27-Nov-24	7.62	<4.0	66	96
04-Dec-24	7.96	<4.0	45	80
23-Dec-24	7.95	<4.0	36	32
15-Jan-25	7.93	4.7	54	44
30-Jan-25	8.1	<4.0	47	40
07-Feb-25	8.25	5.0	56	48
22-Feb-25	7.31	4.6	60	52
14-Mar-25	7.7	4.4	33	44
29-Mar-25	7.31	4.4	37	42

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 of Inlet of ETP
Inlet of ETP PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing for TSS of Inlet of ETP
Inlet of ETP TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

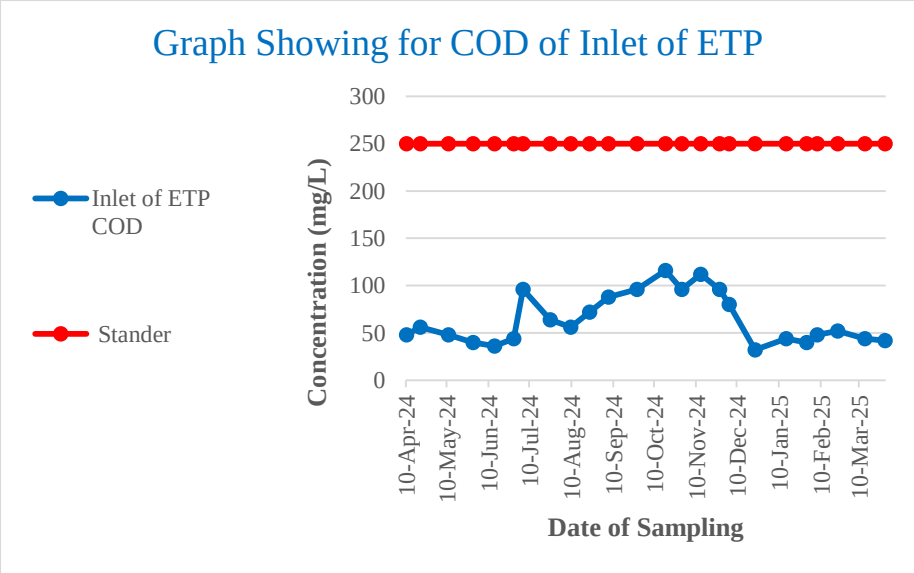

Graph Showing for COD of Inlet of ETP
Inlet of ETP COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 10.2.1.38

Area: Basundhara

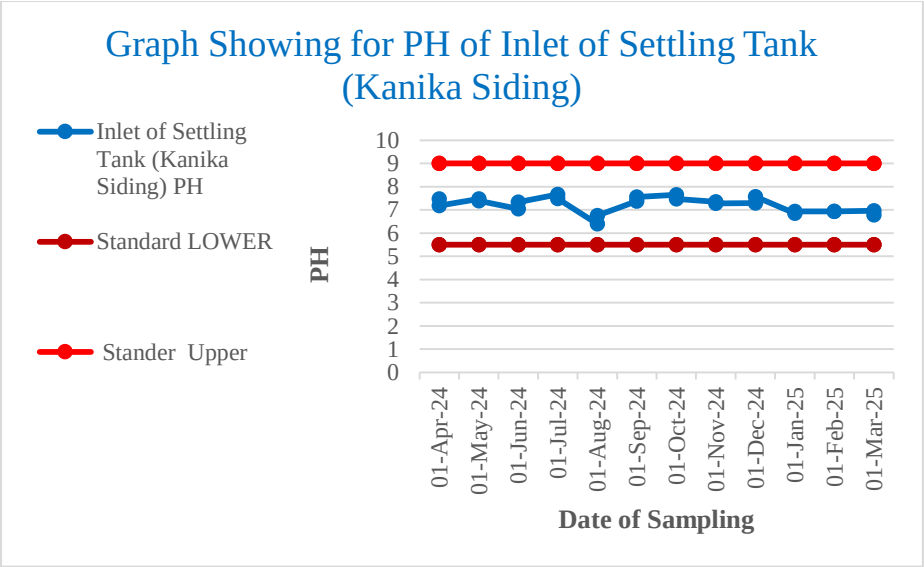
Project: Garjanbahal OCP

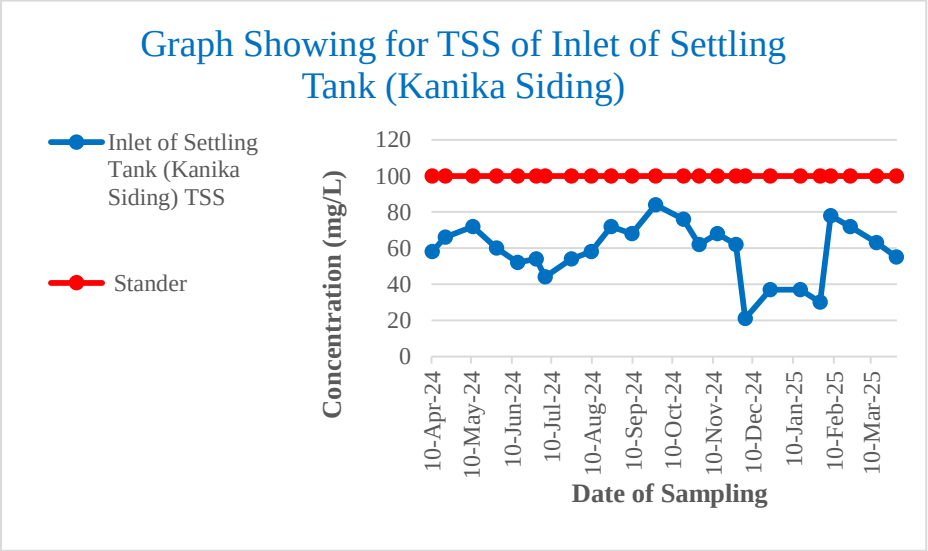
Monitoring station: Inlet of Settling Tank (Kanika Siding)

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.48	<4.0	58	36
20-Apr-24	7.19	<4.0	66	52
11-May-24	7.47	4.8	72	48
29-May-24	7.39	<4.0	60	44
14-Jun-24	7.04	<4.0	52	56
28-Jun-24	7.33	<4.0	54	48
05-Jul-24	7.67	<4.0	44	40
25-Jul-24	7.49	<4.0	54	52
09-Aug-24	6.4	<4.0	58	64
24-Aug-24	6.76	<4.0	72	88
09-Sep-24	7.38	<4.0	68	116
27-Sep-24	7.56	5.6	84	132
18-Oct-24	7.66	5.0	76	168
30-Oct-24	7.47	<4.0	62	88
13-Nov-24	7.35	<4.0	68	92
27-Nov-24	7.28	<4.0	62	88
04-Dec-24	7.3	<4.0	21	36
23-Dec-24	7.57	<4.0	37	40
15-Jan-25	6.85	5.1	37	96
30-Jan-25	6.93	<4.0	30	48
07-Feb-25	6.93	5.8	78	60
22-Feb-25	6.94	4.4	72	40
14-Mar-25	6.96	5.8	63	108
29-Mar-25	6.79	4.8	55	54

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 of Inlet of Settling Tank (Kanika Siding)
Inlet of Settling Tank (Kanika Siding) PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
01-Apr-24
01-May-24
01-Jun-24
01-Jul-24
01-Aug-24
01-Sep-24
01-Oct-24
01-Nov-24
01-Dec-24
01-Jan-25
01-Feb-25
01-Mar-25
Date of Sampling


Graph Showing for TSS of Inlet of Settling Tank (Kanika Siding)
Inlet of Settling Tank (Kanika Siding) TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

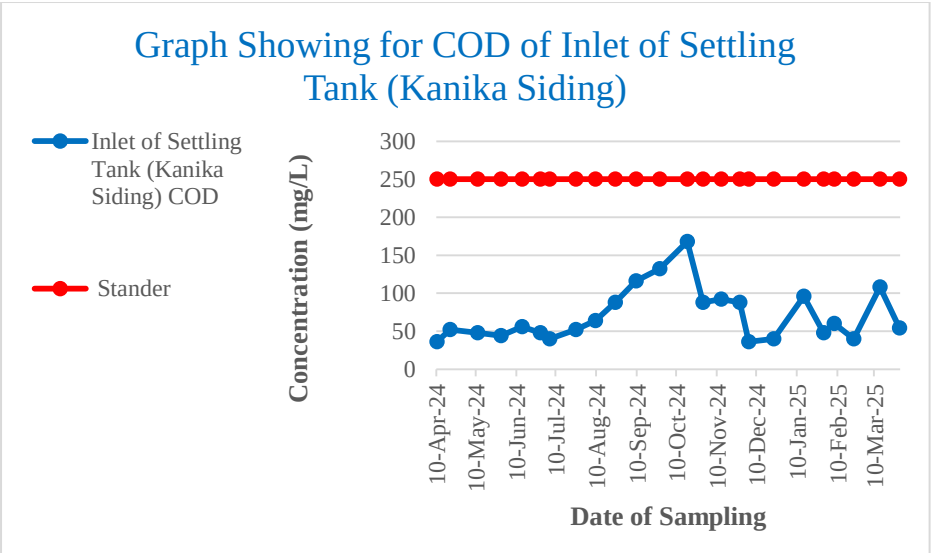

Graph Showing for COD of Inlet of Settling Tank (Kanika Siding)
Inlet of Settling Tank (Kanika Siding) COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 10.2.1.39

Area: Basundhara

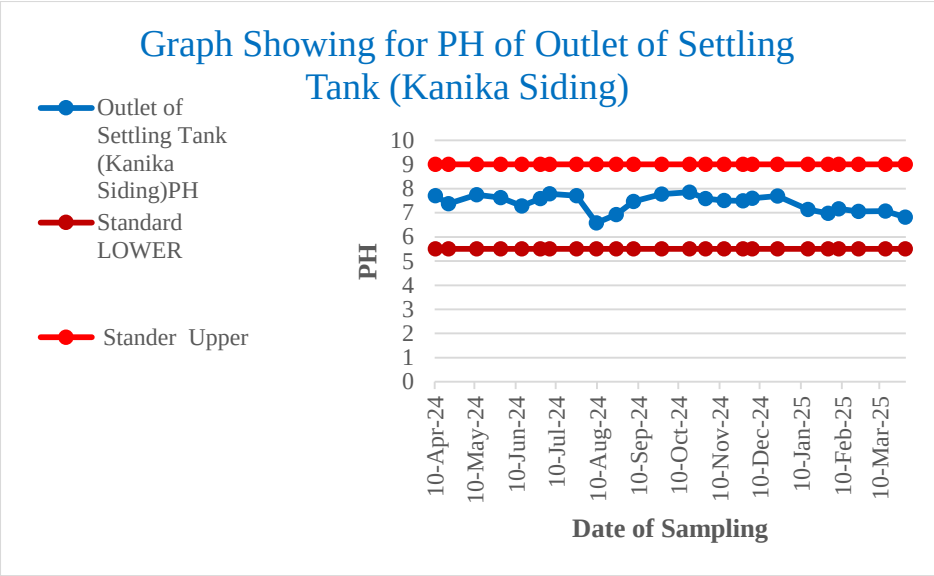
Project: Garjanbahal OCP

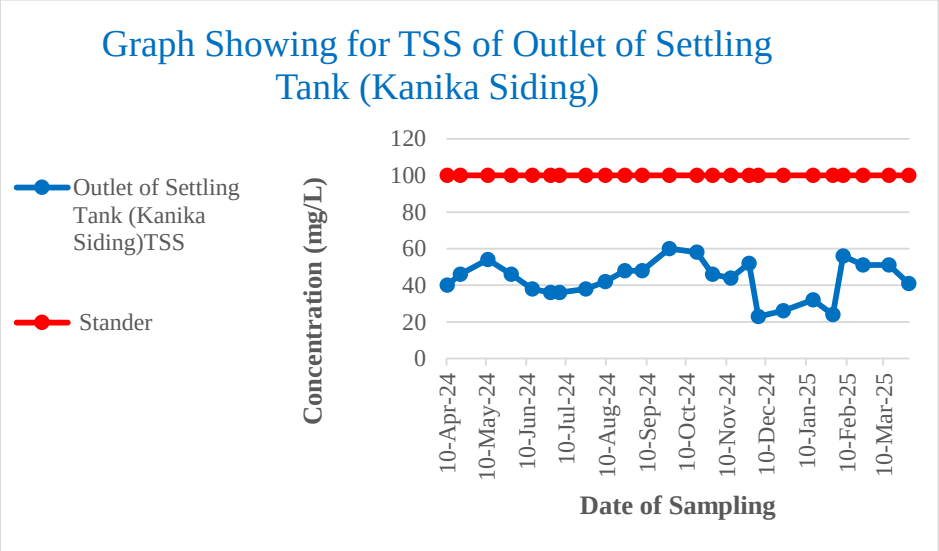
Monitoring station: Outlet of Settling Tank (Kanika Siding)

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.7	<4.0	40	28
20-Apr-24	7.38	<4.0	46	36
11-May-24	7.75	<4.0	54	32
29-May-24	7.62	<4.0	46	40
14-Jun-24	7.28	<4.0	38	36
28-Jun-24	7.59	<4.0	36	32
05-Jul-24	7.79	<4.0	36	32
25-Jul-24	7.71	<4.0	38	40
09-Aug-24	6.58	<4.0	42	40
24-Aug-24	6.93	<4.0	48	56
06-Sep-24	7.47	<4.0	48	64
27-Sep-24	7.77	<4.0	60	96
18-Oct-24	7.85	4.2	58	88
30-Oct-24	7.59	<4.0	46	60
13-Nov-24	7.51	<4.0	44	64
27-Nov-24	7.49	<4.0	52	64
04-Dec-24	7.6	<4.0	23	16
23-Dec-24	7.69	<4.0	26	20
15-Jan-25	7.13	<4.0	32	52
30-Jan-25	6.97	<4.0	24	32
07-Feb-25	7.16	4.4	56	36
22-Feb-25	7.06	<4.0	51	28
14-Mar-25	7.07	4.2	51	56
29-Mar-25	6.82	<4.0	41	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 of Outlet of Settling Tank (Kanika Siding)
Outlet of Settling Tank (Kanika Siding)PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing for TSS of Outlet of Settling Tank (Kanika Siding)
Outlet of Settling Tank (Kanika Siding)TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

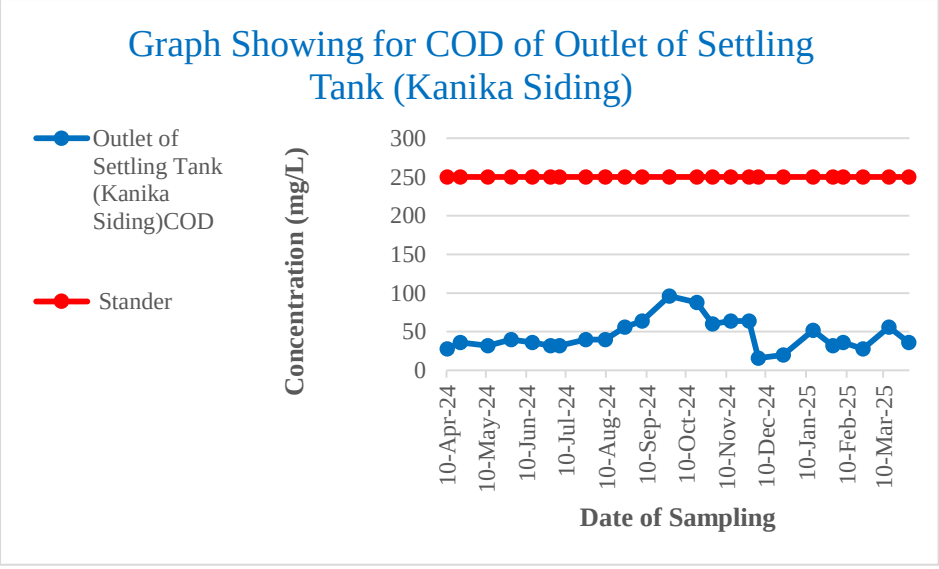

Graph Showing for COD of Outlet of Settling Tank (Kanika Siding)
Outlet of Settling Tank (Kanika Siding)COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 10.2.1.40

Area: Basundhara

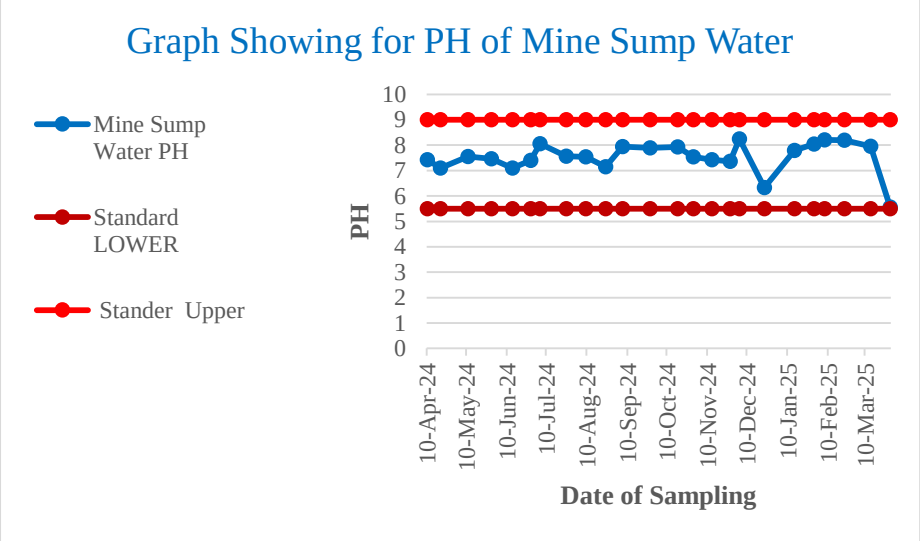
Project: Garjanbahal OCP

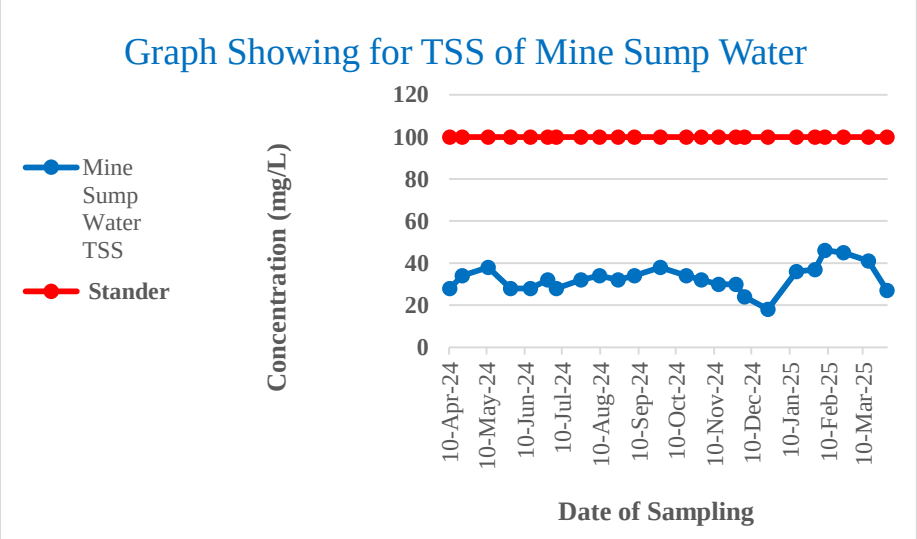
Monitoring station: Mine Sump Water

Date of Sampling	pH	Oil & Grease	TSS	COD
10-Apr-24	7.43	<4.0	28	20
20-Apr-24	7.1	<4.0	34	32
11-May-24	7.55	<4.0	38	28
29-May-24	7.46	<4.0	28	32
14-Jun-24	7.1	<4.0	28	32
28-Jun-24	7.4	<4.0	32	28
05-Jul-24	8.05	<4.0	28	24
25-Jul-24	7.57	<4.0	32	28
09-Aug-24	7.54	<4.0	34	28
24-Aug-24	7.15	<4.0	32	36
06-Sep-24	7.94	<4.0	34	32
27-Sep-24	7.89	<4.0	38	40
18-Oct-24	7.93	<4.0	34	32
30-Oct-24	7.54	<4.0	32	32
13-Nov-24	7.42	<4.0	30	28
27-Nov-24	7.36	<4.0	30	28
04-Dec-24	8.24	<4.0	24	12
23-Dec-24	6.33	<4.0	18	16
15-Jan-25	7.79	<4.0	36	28
30-Jan-25	8.04	<4.0	37	24
07-Feb-25	8.21	<4.0	46	28
22-Feb-25	8.19	<4.0	45	16
14-Mar-25	7.95	<4.0	41	28
29-Mar-25	5.56	<4.0	27	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 of Mine Sump Water
Mine Sump Water PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling


Graph Showing for TSS of Mine Sump Water
Mine Sump Water TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

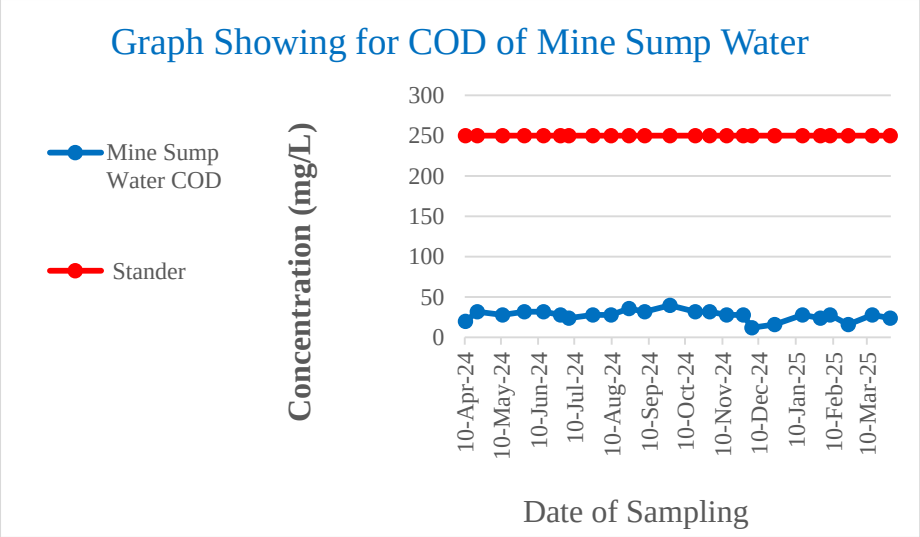

Graph Showing for COD of Mine Sump Water
Mine Sump Water COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
10-Apr-24
10-May-24
10-Jun-24
10-Jul-24
10-Aug-24
10-Sep-24
10-Oct-24
10-Nov-24
10-Dec-24
10-Jan-25
10-Feb-25
10-Mar-25
Date of Sampling

Table: 10.2.1.41

Area: Orient

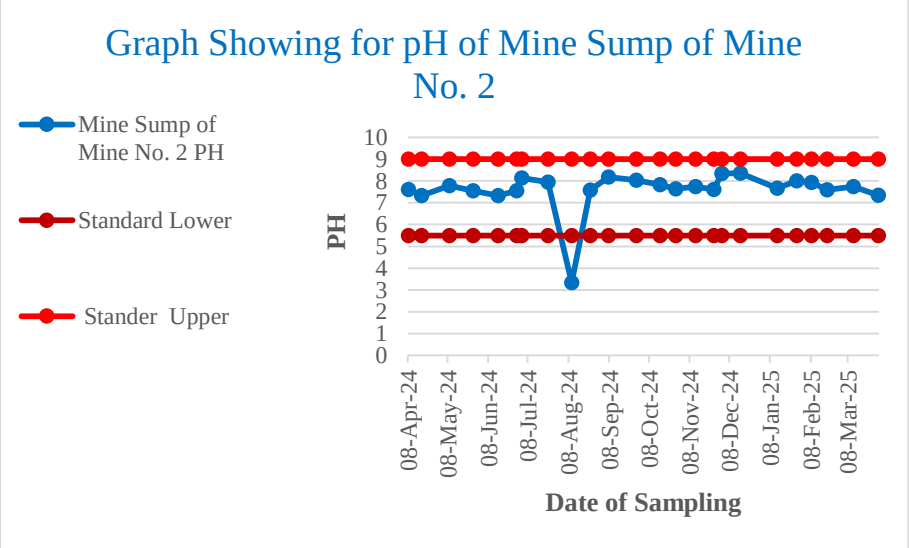
Project: Orient Mine No. 1 & 2

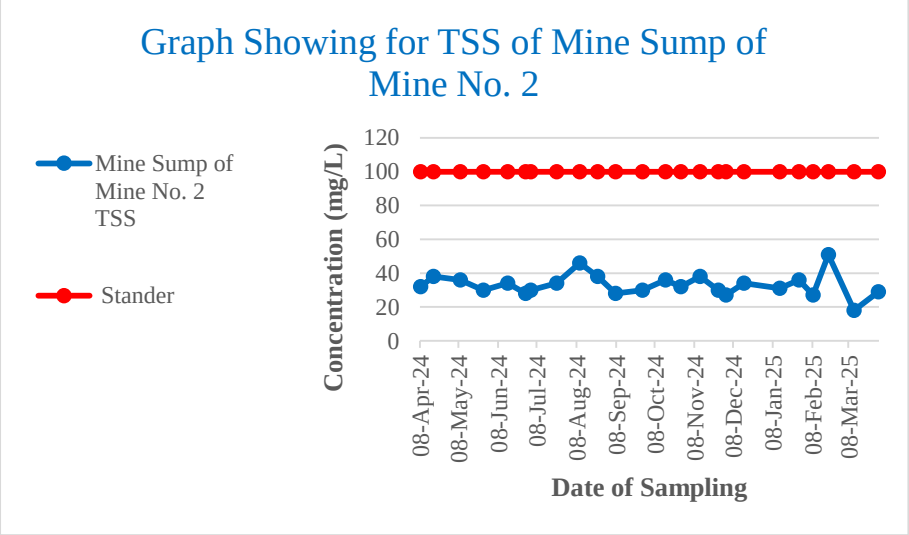
Monitoring station: Mine Sump of Mine No. 2

Date of Sampling	pH	Oil & Grease	TSS	COD
08-Apr-24	7.61	<4.0	32	16
18-Apr-24	7.33	<4.0	38	28
09-May-24	7.79	<4.0	36	32
27-May-24	7.55	<4.0	30	24
15-Jun-24	7.33	<4.0	34	28
29-Jun-24	7.55	<4.0	28	20
03-Jul-24	8.14	<4.0	30	20
23-Jul-24	7.95	<4.0	34	24
10-Aug-24	3.34	<4.0	46	40
24-Aug-24	7.58	<4.0	38	28
07-Sep-24	8.18	<4.0	28	24
28-Sep-24	8.03	<4.0	30	28
16-Oct-24	7.82	<4.0	36	32
28-Oct-24	7.63	<4.0	32	28
12-Nov-24	7.74	<4.0	38	36
26-Nov-24	7.6	<4.0	30	32
02-Dec-24	8.34	<4.0	27	16
16-Dec-24	8.35	<4.0	34	28
13-Jan-25	7.66	<4.0	31	24
28-Jan-25	8.01	<4.0	36	16
08-Feb-25	7.93	<4.0	27	24
20-Feb-25	7.59	<4.0	51	20
12-Mar-25	7.74	<4.0	18	12
31-Mar-25	7.34	<4.0	29	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 of Mine Sump of Mine No. 2
Mine Sump of Mine No. 2 PH
Standard Lower
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling


Graph Showing for TSS of Mine Sump of Mine No. 2
Mine Sump of Mine No. 2 TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

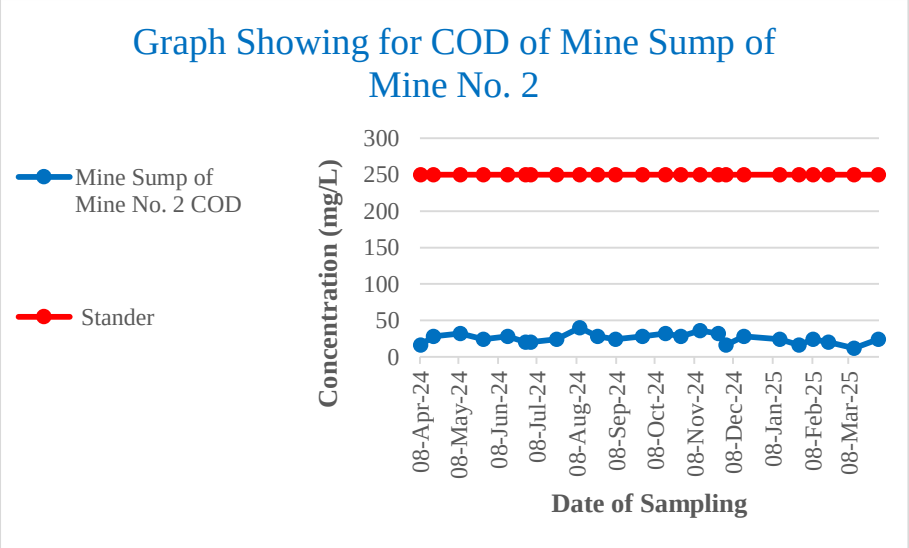

Graph Showing for COD of Mine Sump of Mine No. 2
Mine Sump of Mine No. 2 COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

Table: 10.2.1.42

Area: Orient

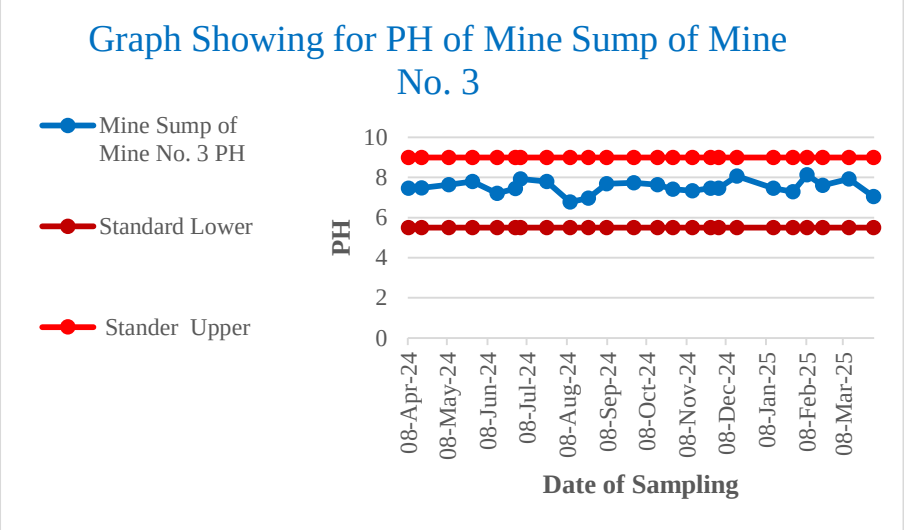
Project: Orient Mine No. 3

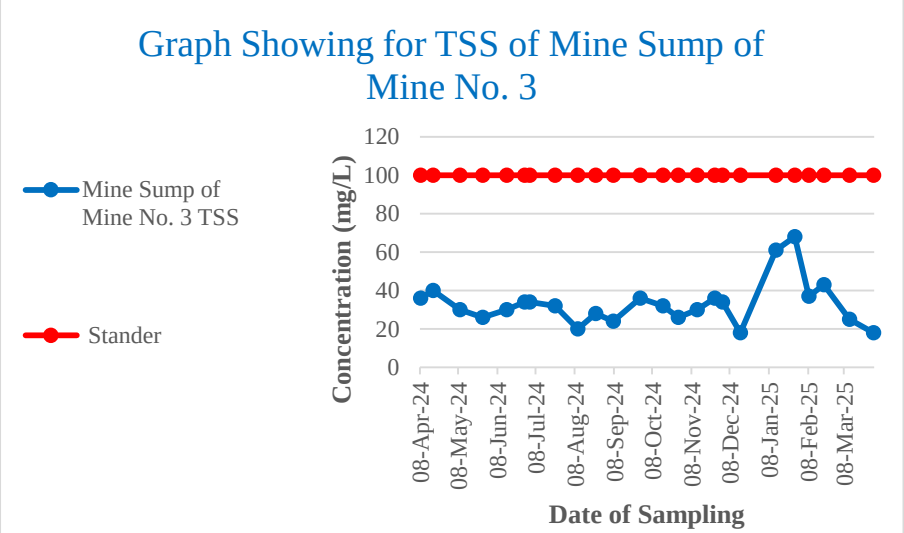
Monitoring station: Mine Sump of Mine No. 3

Date of Sampling	pH	Oil & Grease	TSS	COD
08-Apr-24	7.46	<4.0	36	32
18-Apr-24	7.48	<4.0	40	24
09-May-24	7.63	<4.0	30	36
27-May-24	7.79	<4.0	26	16
15-Jun-24	7.2	<4.0	30	24
29-Jun-24	7.44	<4.0	34	28
03-Jul-24	7.92	<4.0	34	28
23-Jul-24	7.79	<4.0	32	24
10-Aug-24	6.78	<4.0	20	16
24-Aug-24	6.96	<4.0	28	24
07-Sep-24	7.69	<4.0	24	36
28-Sep-24	7.74	<4.0	36	40
16-Oct-24	7.63	<4.0	32	36
28-Oct-24	7.41	<4.0	26	44
12-Nov-24	7.33	<4.0	30	40
26-Nov-24	7.46	<4.0	36	40
02-Dec-24	7.47	<4.0	34	20
16-Dec-24	8.07	<4.0	18	16
13-Jan-25	7.47	<4.0	61	16
28-Jan-25	7.29	<4.0	68	28
08-Feb-25	8.13	<4.0	37	32
20-Feb-25	7.61	<4.0	43	28
12-Mar-25	7.92	<4.0	25	16
31-Mar-25	7.05	<4.0	18	12

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 of Mine Sump of Mine No. 3
Mine Sump of Mine No. 3 PH
Standard Lower
Stander Upper
PH
10
8
6
4
2
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling


Graph Showing for TSS of Mine Sump of Mine No. 3
Mine Sump of Mine No. 3 TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

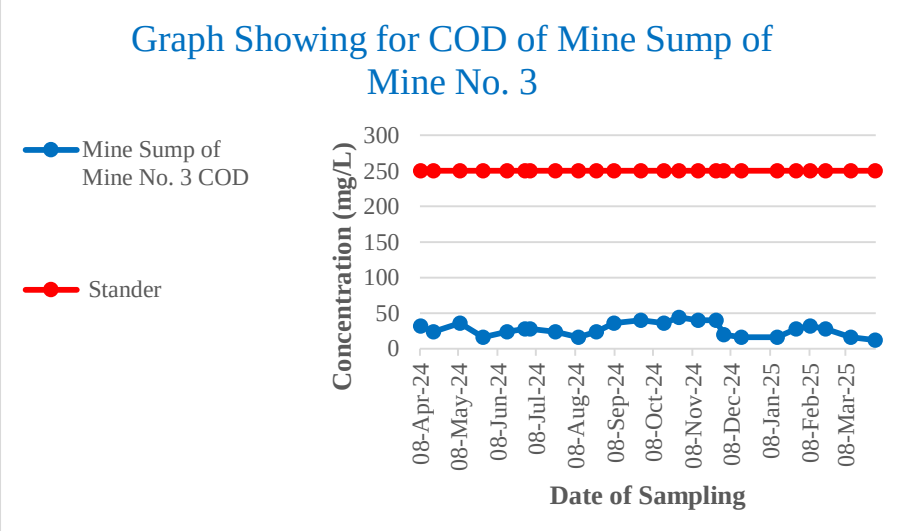

Graph Showing for COD of Mine Sump of Mine No. 3
Mine Sump of Mine No. 3 COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

Table: 10.2.1.43

Area: Orient

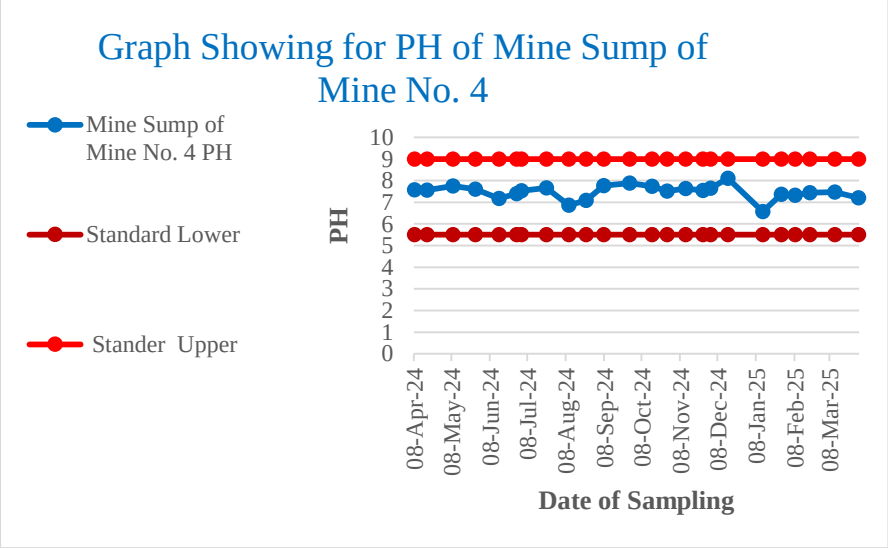
Project: Orient Mine No. 4

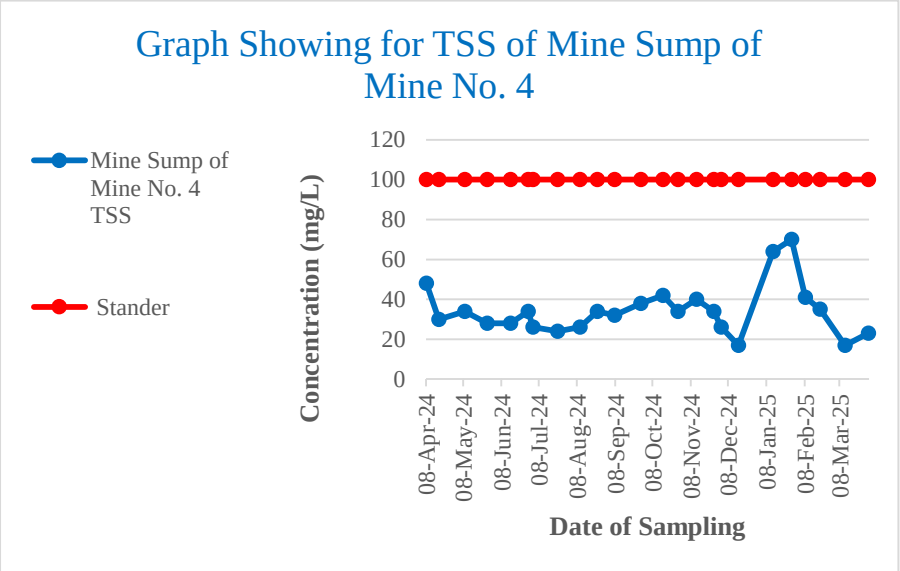
Monitoring station: Mine Sump of Mine No. 4

Date of Sampling	pH	Oil & Grease	TSS	COD
08-Apr-24	7.58	<4.0	48	32
18-Apr-24	7.56	<4.0	30	16
09-May-24	7.75	<4.0	34	28
27-May-24	7.6	<4.0	28	32
15-Jun-24	7.17	<4.0	28	20
29-Jun-24	7.39	<4.0	34	28
03-Jul-24	7.53	<4.0	26	16
23-Jul-24	7.66	<4.0	24	16
10-Aug-24	6.86	<4.0	26	20
24-Aug-24	7.09	<4.0	34	32
07-Sep-24	7.76	<4.0	32	24
28-Sep-24	7.89	<4.0	38	28
16-Oct-24	7.73	<4.0	42	36
28-Oct-24	7.51	<4.0	34	32
12-Nov-24	7.63	<4.0	40	36
26-Nov-24	7.55	<4.0	34	36
02-Dec-24	7.65	<4.0	26	13
16-Dec-24	8.11	<4.0	17	12
13-Jan-25	6.57	<4.0	64	20
28-Jan-25	7.37	<4.0	70	28
08-Feb-25	7.33	<4.0	41	20
20-Feb-25	7.44	<4.0	35	32
12-Mar-25	7.47	<4.0	17	12
31-Mar-25	7.2	<4.0	23	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 of Mine Sump of Mine No. 4
Mine Sump of Mine No. 4 PH
Standard Lower
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling


Graph Showing for TSS of Mine Sump of Mine No. 4
Mine Sump of Mine No. 4 TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

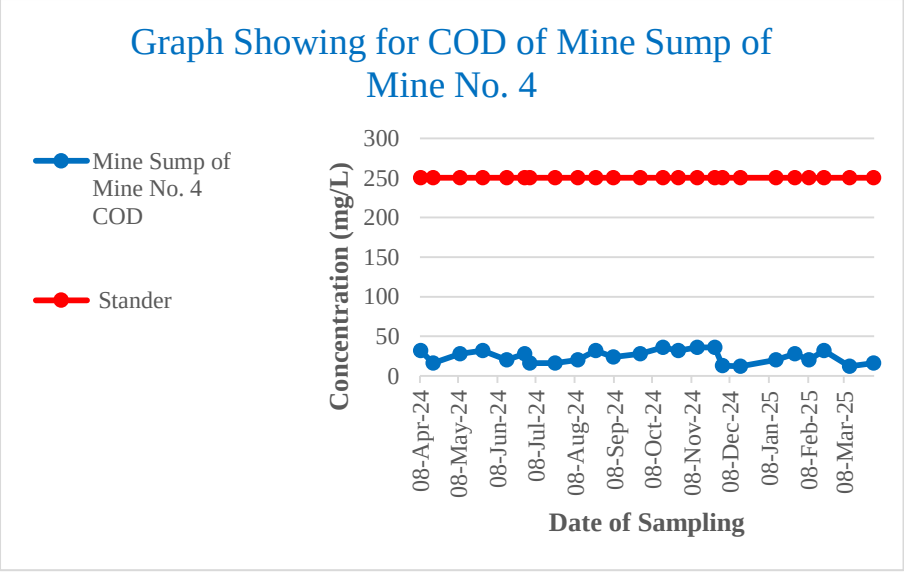

Graph Showing for COD of Mine Sump of Mine No. 4
Mine Sump of Mine No. 4 COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

Table: 10.2.1.44

Area: Orient

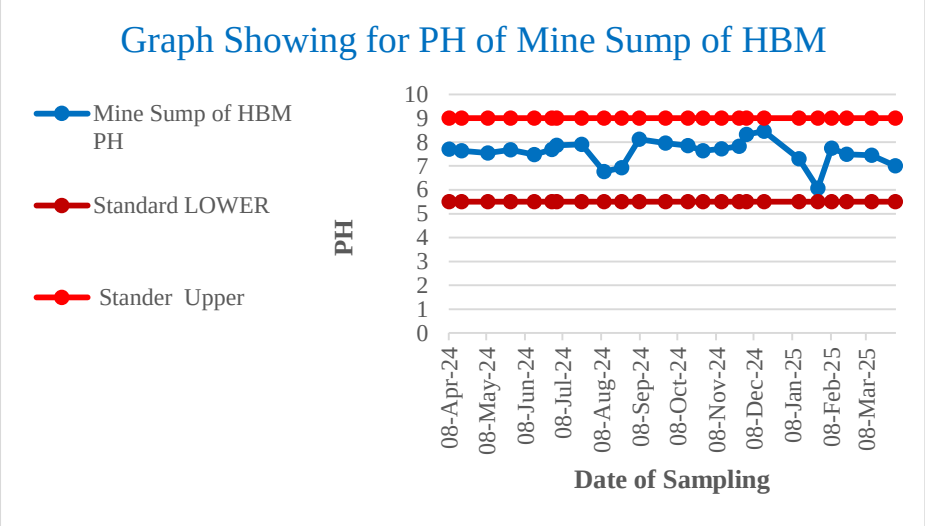
Project: HBI Mine

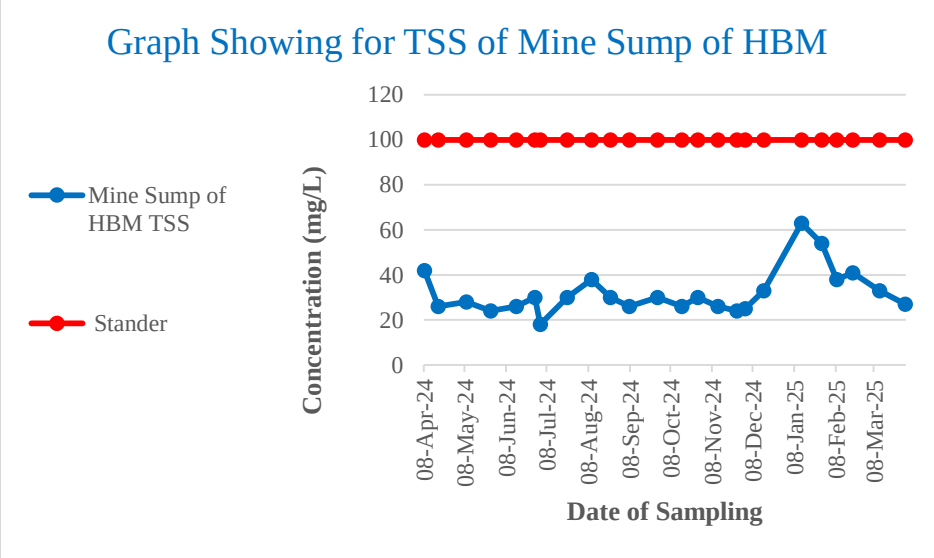
Monitoring station: Mine Sump of HBM

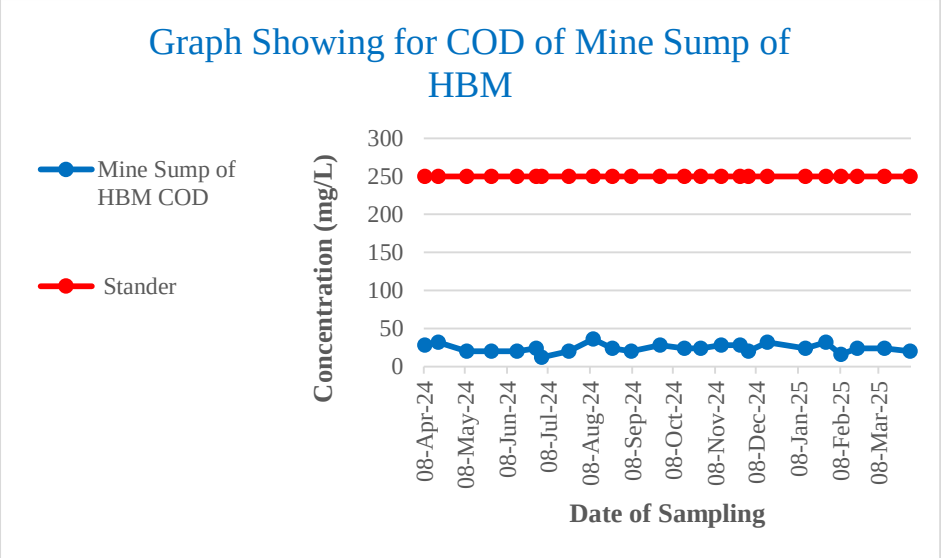
Date of Sampling	pH	Oil & Grease	TSS	COD
08-Apr-24	7.7	<4.0	42	28
18-Apr-24	7.63	<4.0	26	32
09-May-24	7.54	<4.0	28	20
27-May-24	7.68	<4.0	24	20
15-Jun-24	7.47	<4.0	26	20
29-Jun-24	7.69	<4.0	30	24
03-Jul-24	7.86	<4.0	18	12
23-Jul-24	7.91	<4.0	30	20
10-Aug-24	6.76	<4.0	38	36
24-Aug-24	6.92	<4.0	30	24
07-Sep-24	8.12	<4.0	26	20
28-Sep-24	7.96	<4.0	30	28
16-Oct-24	7.85	<4.0	26	24
28-Oct-24	7.64	<4.0	30	24
12-Nov-24	7.71	<4.0	26	28
26-Nov-24	7.83	<4.0	24	28
02-Dec-24	8.32	<4.0	25	20
16-Dec-24	8.45	<4.0	33	32
13-Jan-25	7.3	<4.0	63	24
28-Jan-25	6.07	<4.0	54	32
08-Feb-25	7.74	<4.0	38	16
20-Feb-25	7.49	<4.0	41	24
12-Mar-25	7.45	<4.0	33	24
31-Mar-25	7.01	<4.0	27	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 of Mine Sump of HBM
Mine Sump of HBM PH
Standard LOWER
Stander Upper
PH
10
9
8
7
6
5
4
3
2
1
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling


Graph Showing for TSS of Mine Sump of HBM
Mine Sump of HBM TSS
Stander
Concentration (mg/L)
120
100
80
60
40
20
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling


Graph Showing for COD of Mine Sump of HBM
Mine Sump of HBM COD
Stander
Concentration (mg/L)
300
250
200
150
100
50
0
08-Apr-24
08-May-24
08-Jun-24
08-Jul-24
08-Aug-24
08-Sep-24
08-Oct-24
08-Nov-24
08-Dec-24
08-Jan-25
08-Feb-25
08-Mar-25
Date of Sampling

EFFLUENT QUALITY
(ALL PARAMETERS)

EFFLUENT QUALITY DATA ALL PARAMETERS

Table: 10.2.1.45

Area: Ib valley

Project: Samleswari OCP

Project (OCP / UG)	Samleswari OCP		MoEF-Sch-VI Standards
NAME OF THE STATION	Discharge point of Mine sump water		
Date of Sampling	9-May-2024	25-Nov-2024	
Odour	Unobjectionable	Unobjectionable	_
Colour(Hazen)	3.0	4	_
Temperature(^{oC})	32.8	24.6	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)(As N)	<0.5	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.46	0.49	50
Total Kjeldhal Nitrogen, mg/l (As N)	2.25	4.44	100
Sulphide (mg/L)	<0.1	<0.1	2
BOD [3 days at 27°C] (mg/L)	<2	<2	30
Fluoride(mg/L)	0.57	0.78	2
Copper(mg/L)	<0.03	<0.03	3
Manganese(mg/L)	0.22	1.43	2
Iron(mg/L)	<0.1	<0.1	3
Zinc(mg/L)	0.12	0.26	5
Lead, mg/l	<0.005	<0.005	0.1
Cadmium, mg/l	<0.001	<0.001	2
Total Chromium(mg/L)	<0.01	<0.01	2
Hexavalent Chromium(mg/L)	<0.05	<0.05	0.1
Nickel(mg/L)	<0.02	<0.02	3
Arsenic, mg/l	<0.005	<0.005	0.2
Selenium (mg/L)	<0.005	<0.005	0.05
Dissolved Phosphate(mg/L)	<4	<4	5
Phenolics (mg/L)	<0.001	<0.001	1

Table: 10.2.1.46

Area: Ib valley

Project: Samleswari OCP

Project (OCP / UG)	Samleswari OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Mine Sump Water	
Date of Sampling	25-Nov-2024	
Odour	Unobjectionable	_
Colour(Hazen)	2	_
Temperature(^{oC})	25.2	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.63	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	100
Sulphide (mg/L)	<0.1	2
BOD [3 days at 27ºC] (mg/L)	<2	30
Fluoride(mg/L)	0.78	2
Copper(mg/L)	<0.03	3
Manganese(mg/L)	1.45	2
Iron(mg/L)	<0.1	3
Zinc(mg/L)	0.17	5
Lead, mg/l	<0.005	0.1
Cadmium, mg/l	<0.001	2
Total Chromium(mg/L)	<0.01	2
Hexavalent Chromium(mg/L)	<0.05	0.1
Nickel(mg/L)	<0.02	3
Arsenic, mg/l	<0.005	0.2
Selenium (mg/L)	<0.005	0.05
Dissolved Phosphate(mg/L)	<4	5
Phenolics (mg/L)	<0.001	1

Table: 10.2.1.47

Area: Ib valley

Project: Lajkura OCP

Project (OCP / UG)	**Lajkura OCP**		**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Lajkura Railway Siding**		
Date of Sampling	**9-May-2024**	**25-Nov-2024**	
Odour	Unobjectionable	Unobjectionable	_
Colour(Hazen)	4.0	1	_
Temperature(^{oC})	31.8	24.3	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	0.68	<0.5	**10**
Ammonical Nitrogen , mg/l (As N)	0.71	0.76	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	5.63	3.33	**100**
Sulphide (mg/L)	<0.1	<0.1	**2**
BOD [3 days at 27ºC] (mg/L)	<2	<2	**30**
Fluoride(mg/L)	0.76	0.76	**2**
Copper(mg/L)	<0.03	<0.03	**3**
Manganese(mg/L)	0.12	0.12	**2**
Iron(mg/L)	<0.1	<0.1	**3**
Zinc(mg/L)	<0.04	0.04	**5**
Lead, mg/l	<0.005	<0.005	**0.1**
Cadmium, mg/l	<0.001	<0.001	**2**
Total Chromium(mg/L)	<0.01	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	<0.05	**0.1**
Nickel(mg/L)	<0.02	<0.02	**3**
Arsenic, mg/l	<0.005	<0.005	**0.2**
Selenium (mg/L)	<0.005	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	<4	**5**
Phenolics (mg/L)	<0.001	<0.001	**1**

सीएमपीडीआई मिनी रत्न cmpdi Mini Ratna

Table: 10.2.1.48

Area: Ib valley

Project: Lajkura OCP

Project (OCP / UG)	Lajkura OCP		MoEF-Sch-VI Standards
NAME OF THE STATION	Outlet of MDTP		
Date of Sampling	9-May-2024	25-Nov-2024	
Odour	Unobjectionable	Unobjectionable	_
Colour(Hazen)	3.0	1	_
Temperature(^{oC})	33.5	24.6	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)(As N)	<0.5	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.64	0.42	50
Total Kjeldhal Nitrogen, mg/l (As N)	3.38	3.33	100
Sulphide (mg/L)	<0.1	<0.1	2
BOD [3 days at 27^{o}C] (mg/L)	<2	<2	30
Fluoride(mg/L)	0.66	0.91	2
Copper(mg/L)	<0.03	<0.03	3
Manganese(mg/L)	0.2	1.26	2
Iron(mg/L)	<0.1	<0.1	3
Zinc(mg/L)	0.12	0.61	5
Lead, mg/l	<0.005	<0.005	0.1
Cadmium, mg/l	<0.001	<0.001	2
Total Chromium(mg/L)	<0.01	<0.01	2
Hexavelent Chromium(mg/L)	<0.05	<0.05	0.1
Nickel(mg/L)	<0.02	<0.02	3
Arsenic, mg/l	<0.005	<0.005	0.2
Selenium (mg/L)	<0.005	<0.005	0.05
Disolved Phosphate(mg/L)	<4	<4	5
Phenolics (mg/L)	<0.001	<0.001	1

Table: 10.2.1.49

Area: Ib valley

Project: Lajkura OCP

Project (OCP / UG)	Lajkura OCP		MoEF-Sch-VI Standards
NAME OF THE STATION	Mine Sump Water		
Date of Sampling	9-May-2024	25-Nov-2024	
Odour	Unobjectionable	Unobjectionable	_
Colour(Hazen)	2.0	2.0	_
Temperature(^{oC})	33.1	25.1	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)(As N)	<0.5	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.31	0.50	50
Total Kjeldhal Nitrogen, mg/l (As N)	2.25	4.44	100
Sulphide (mg/L)	<0.1	<0.1	2
BOD [3 days at 27^{o}C] (mg/L)	<2	<2	30
Fluoride(mg/L)	0.83	0.78	2
Copper(mg/L)	<0.03	<0.03	3
Manganese(mg/L)	0.11	1.43.	2
Iron(mg/L)	<0.1	0.25	3
Zinc(mg/L)	0.08	1.12	5
Lead, mg/l	<0.005	<0.005	0.1
Cadmium, mg/l	<0.001	<0.001	2
Total Chromium(mg/L)	<0.01	<0.01	2
Hexavelent Chromium(mg/L)	<0.05	<0.05	0.1
Nickel(mg/L)	<0.02	<0.02	3
Arsenic, mg/l	<0.005	<0.005	0.2
Selenium (mg/L)	<0.005	<0.005	0.05
Disolved Phosphate(mg/L)	<4	<4	5
Phenolics (mg/L)	<0.001	<0.001	1

Table: 10.2.1.50

Area: Lakhanpur

Project: LBL

Project (OCP / UG)	**LBL**		**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Mine Sump Water, Belpahar**		
Date of Sampling	**10-May-2024**	**26-Nov-2024**	
Odour	Unobjectionable	Unobjectionable	**_**
Colour(Hazen)	2.0	1	**_**
Temperature(^{oC})	34.1	25.3	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	<0.5	0.81	**10**
Ammonical Nitrogen , mg/l (As N)	0.46	1.04	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	3.38	4.44	**100**
Sulphide (mg/L)	<0.1	<0.1	**2**
BOD [3 days at 27ºC] (mg/L)	<2	<2	**30**
Fluoride(mg/L)	0.47	0.69	**2**
Copper(mg/L)	<0.03	<0.03	**3**
Manganese(mg/L)	0.06	1.59	**2**
Iron(mg/L)	<0.1	<0.1	**3**
Zinc(mg/L)	0.05	0.84	**5**
Lead, mg/l	<0.005	<0.005	**0.1**
Cadmium, mg/l	<0.001	<0.001	**2**
Total Chromium(mg/L)	<0.01	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	<0.05	**0.1**
Nickel(mg/L)	<0.02	<0.02	**3**
Arsenic, mg/l	<0.005	<0.005	**0.2**
Selenium (mg/L)	<0.005	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	<4	**5**
Phenolics (mg/L)	<0.001	<0.001	**1**

Table: 10.2.1.51

Area: Lakhanpur OCP

Project: LBL OCP

Project (OCP / UG)	**LBL**		**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Mine Sump Water, Lakhanpur**		
Date of Sampling	**10-May-2024**	**26-Nov-2024**	
Odour	Unobjectionable	Unobjectionable	**_**
Colour(Hazen)	3.0	2	**_**
Temperature(^{oC})	33.2	25.1	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	0.54	0.62	**10**
Ammonical Nitrogen , mg/l (As N)	0.42	0.44	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	3.38	4.44	**100**
Sulphide (mg/L)	<0.1	<0.1	**2**
BOD [3 days at 27°C] (mg/L)	<2	<2	**30**
Fluoride(mg/L)	0.58	0.75	**2**
Copper(mg/L)	<0.03	<0.03	**3**
Manganese(mg/L)	0.06	0.80	**2**
Iron(mg/L)	<0.1	<0.1	**3**
Zinc(mg/L)	<0.04	0.11	**5**
Lead, mg/l	<0.005	<0.005	**0.1**
Cadmium, mg/l	<0.001	<0.001	**2**
Total Chromium(mg/L)	<0.01	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	<0.05	**0.1**
Nickel(mg/L)	<0.02	<0.02	**3**
Arsenic, mg/l	<0.005	<0.005	**0.2**
Selenium (mg/L)	<0.005	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	<4	**5**
Phenolics (mg/L)	<0.001	<0.001	**1**

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Table: 10.2.1.52

Area: Lakhanpur

Project: LBL OCP

Project (OCP / UG)	**LBL**		**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Mine Sump Water, Lilari**		
Date of Sampling	**10-May-2024**	**26-Nov-2024**	
Odour	Unobjectionable	Unobjectionable	**_**
Colour(Hazen)	1.0	1	**_**
Temperature(^{oC})	33.7	25.2	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	<0.5	<0.5	**10**
Ammonical Nitrogen , mg/l (As N)	0.50	0.36	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	3.38	4.44	**100**
Sulphide (mg/L)	<0.1	<0.1	**2**
BOD [3 days at 27°C] (mg/L)	<2	<2	**30**
Fluoride(mg/L)	0.38	0.68	**2**
Copper(mg/L)	<0.03	<0.03	**3**
Manganese(mg/L)	0.11	1.57	**2**
Iron(mg/L)	<0.1	<0.1	**3**
Zinc(mg/L)	0.04	0.33	**5**
Lead, mg/l	<0.005	<0.005	**0.1**
Cadmium, mg/l	<0.001	<0.001	**2**
Total Chromium(mg/L)	<0.01	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	<0.05	**0.1**
Nickel(mg/L)	<0.02	<0.02	**3**
Arsenic, mg/l	<0.005	<0.005	**0.2**
Selenium (mg/L)	<0.005	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	<4	**5**
Phenolics (mg/L)	<0.001	<0.001	**1**

Table: 10.2.1.53

Area: Mahalaxmi OCP

Project: Basundhara OCP

Project (OCP / UG)	**Basundhara OCP**	**MoEF-Sch-VI Standards**
NAME OF THE STATION	**M1- Basundhara (E) OCP Sump**	
Date of Sampling	**27-Nov-2024**	
Odour	Unobjectionable	_
Colour(Hazen)	2	_
Temperature(^{oC})	25.1	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	<0.5	**10**
Ammonical Nitrogen , mg/l (As N)	0.85	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	5.56	**100**
Sulphide (mg/L)	<0.1	**2**
BOD [3 days at 27^{o}C] (mg/L)	<2	**30**
Fluoride(mg/L)	1.11	**2**
Copper(mg/L)	<0.03	**3**
Manganese(mg/L)	0.13	**2**
Iron(mg/L)	<0.1	**3**
Zinc(mg/L)	0.14	**5**
Lead, mg/l	<0.005	**0.1**
Cadmium, mg/l	<0.001	**2**
Total Chromium(mg/L)	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	**0.1**
Nickel(mg/L)	<0.02	**3**
Arsenic, mg/l	<0.005	**0.2**
Selenium (mg/L)	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	**5**
Phenolics (mg/L)	<0.001	**1**

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Table: 10.2.1.54

Area: Mahalaxmi OCP

Project: Basundhara OCP

Project (OCP / UG)	Basundhara OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Basundhara (W) OCP Mine Sump	
Date of Sampling	27-Nov-2024	
Odour	Unobjectionable	_
Colour(Hazen)	3	_
Temperature(^{oC})	25.1	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)(As N)	<0.5	10
Ammonical Nitrogen , mg/l (As N)	0.58	50
Total Kjeldhal Nitrogen, mg/l (As N)	4.44	100
Sulphide (mg/L)	<0.1	2
BOD [3 days at 27°C] (mg/L)	<2	30
Fluoride(mg/L)	1.42	2
Copper(mg/L)	<0.03	3
Manganese(mg/L)	0.05	2
Iron(mg/L)	<0.1	3
Zinc(mg/L)	<0.04	5
Lead, mg/l	<0.005	0.1
Cadmium, mg/l	<0.001	2
Total Chromium(mg/L)	<0.01	2
Hexavelent Chromium(mg/L)	<0.05	0.1
Nickel(mg/L)	<0.02	3
Arsenic, mg/l	<0.005	0.2
Selenium (mg/L)	<0.001	0.05
Disolved Phosphate(mg/L)	<4	5
Phenolics (mg/L)	<0.001	1

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Table: 10.2.1.55

Area: Mahalaxmi OCP

Project: Basundhara OCP

Project (OCP / UG)	Basundhara OCP	MoEF-Sch-VI Standards
NAME OF THE STATION	Sardega Railway Siding Sedimentation Pond	
Date of Sampling	27-Nov-2024	
Odour	Unobjectionable	_
Colour(Hazen)	2	_
Temperature(^{oC})	24.8	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)(As N)	0.74	10
Ammonical Nitrogen , mg/l (As N)	0.90	50
Total Kjeldhal Nitrogen, mg/l (As N)	4.44	100
Sulphide (mg/L)	<0.1	2
BOD [3 days at 27ºC] (mg/L)	<2	30
Fluoride(mg/L)	0.54	2
Copper(mg/L)	<0.03	3
Manganese(mg/L)	0.29	2
Iron(mg/L)	<0.1	3
Zinc(mg/L)	<0.04	5
Lead, mg/l	<0.005	0.1
Cadmium, mg/l	<0.001	2
Total Chromium(mg/L)	0.02	2
Hexavelent Chromium(mg/L)	<0.05	0.1
Nickel(mg/L)	<0.02	3
Arsenic, mg/l	<0.005	0.2
Selenium (mg/L)	<0.005	0.05
Disolved Phosphate(mg/L)	<4	5
Phenolics (mg/L)	<0.001	1

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Table: 10.2.1.56

Area: Basundhara

Project: Kulda OCP

Project (OCP / UG)	**Kulda OCP**			**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Inlet of ETP**			
Date of Sampling	**11-May-2024**	**27-Nov-2024**	**7-Feb-2025**	
Odour	Unobjectionable	Unobjectionable	Unobjectionable	_
Colour(Hazen)	4.0	3	2	_
Temperature(^{oC})	31.8	25.6	24.3	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	0.58	<0.5	2.19	**10**
Ammonical Nitrogen , mg/l (As N)	0.52	0.69	0.85	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	3.38	5.56	2.23	**100**
Sulphide (mg/L)	<0.1	<0.1	<0.1	**2**
BOD [3 days at 27^{o}C] (mg/L)	<2	<2	<2	**30**
Fluoride(mg/L)	0.31	0.96	1.57	**2**
Copper(mg/L)	<0.03	<0.03	<0.03	**3**
Manganese(mg/L)	<0.04	0.31	<0.04	**2**
Iron(mg/L)	<0.1	<0.1	<0.1	**3**
Zinc(mg/L)	<0.04	0.12	<0.04	**5**
Lead, mg/l	<0.005	<0.005	<0.005	**0.1**
Cadmium, mg/l	<0.001	<0.001	<0.001	**2**
Total Chromium(mg/L)	<0.01	<0.01	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	<0.05	<0.05	**0.1**
Nickel(mg/L)	<0.02	<0.02	<0.02	**3**
Arsenic, mg/l	<0.005	<0.005	<0.005	**0.2**
Selenium (mg/L)	<0.005	<0.005	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	<4	<4	**5**
Phenolics (mg/L)	<0.001	<0.001	<0.001	**1**

Table: 10.2.1.57

Area: Basundhara

Project: Kulda OCP

Project (OCP / UG)	**Kulda OCP**			**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Final Outlet of ETP**			
Date of Sampling	**11-May-2024**	**27-11-2024**	**7-Feb-2025**	
Odour	Unobjectionable	Unobjectionable	Unobjectionable	_
Colour(Hazen)	3.0	3	3	_
Temperature(^{oC})	32.4	25.8	24.7	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	<0.5	0.63	2.49	**10**
Ammonical Nitrogen , mg/l (As N)	0.33	0.96	1.75	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	2.25	3.33	4.45	**100**
Sulphide (mg/L)	<0.1	<0.1	<0.1	**2**
BOD [3 days at 27ºC] (mg/L)	<2	<2	<2	**30**
Fluoride(mg/L)	0.37	1.16	1.83	**2**
Copper(mg/L)	<0.03	<0.03	<0.03	**3**
Manganese(mg/L)	0.16	0.1	<0.04	**2**
Iron(mg/L)	<0.1	<0.1	<0.1	**3**
Zinc(mg/L)	0.13	<0.04	<0.04	**5**
Lead, mg/l	<0.005	<0.005	<0.005	**0.1**
Cadmium, mg/l	<0.001	<0.001	<0.001	**2**
Total Chromium(mg/L)	<0.01	<0.01	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	<0.05	<0.05	**0.1**
Nickel(mg/L)	<0.02	<0.02	<0.02	**3**
Arsenic, mg/l	<0.005	<0.005	<0.005	**0.2**
Selenium (mg/L)	<0.005	<0.005	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	<4	<4	**5**
Phenolics (mg/L)	<0.001	<0.001	<0.001	**1**

Table: 10.2.1.58

Area: Basundhara

Project: Kulda OCP

Project (OCP / UG)	**Kulda OCP**			**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Mine Sump Water near Kulda Nursery**			
Date of Sampling	**11-May-2024**	**27-Nov-2024**	**7-Feb-2025**	
Odour	Unobjectionable	Unobjectionable	Unobjectionable	_
Colour(Hazen)	1.0	3	4	_
Temperature(^{oC})	33.8	25.9	25.4	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	<0.5	0.72	2.76	**10**
Ammonical Nitrogen , mg/l (As N)	0.33	1.15	1.29	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	2.25	4.44	3.34	**100**
Sulphide (mg/L)	<0.1	<0.1	<0.1	**2**
BOD [3 days at 27ºC] (mg/L)	<2	<2	<2	**30**
Fluoride(mg/L)	0.56	1.15	2.3	**2**
Copper(mg/L)	<0.03	<0.03	<0.03	**3**
Manganese(mg/L)	0.16	0.1	<0.04	**2**
Iron(mg/L)	<0.1	<0.1	<0.1	**3**
Zinc(mg/L)	0.13	<0.04	<0.04	**5**
Lead, mg/l	<0.005	<0.005	<0.005	**0.1**
Cadmium, mg/l	<0.001	<0.001	<0.001	**2**
Total Chromium(mg/L)	<0.01	<0.01	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	<0.05	<0.05	**0.1**
Nickel(mg/L)	<0.02	<0.02	<0.02	**3**
Arsenic, mg/l	<0.005	<0.005	<0.005	**0.2**
Selenium (mg/L)	<0.005	<0.005	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	<4	<4	**5**
Phenolics (mg/L)	<0.001	<0.001	<0.001	**1**

Table: 10.2.1.59

Area: Basundhara

Project: Garjhanbahal OCP

Project (OCP / UG)	**Garjhanbahal OCP**	**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Outlet of Settling tank (Kanika Siding)**	
Date of Sampling	**27-Nov-2024**	
Odour	Unobjectionable	_
Colour(Hazen)	3	_
Temperature(^{oC})	25.7	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	0.59	**10**
Ammonical Nitrogen , mg/l (As N)	1.00	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	4.44	**100**
Sulphide (mg/L)	<0.1	**2**
BOD [3 days at 27ºC] (mg/L)	<2	**30**
Fluoride(mg/L)	<0.3	**2**
Copper(mg/L)	<0.03	**3**
Manganese(mg/L)	0.05	**2**
Iron(mg/L)	<0.1	**3**
Zinc(mg/L)	<0.04	**5**
Lead, mg/l	<0.005	**0.1**
Cadmium, mg/l	<0.001	**2**
Total Chromium(mg/L)	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	**0.1**
Nickel(mg/L)	<0.02	**3**
Arsenic, mg/l	<0.005	**0.2**
Selenium (mg/L)	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	**5**
Phenolics (mg/L)	<0.001	**1**

Table: 10.2.1.60

Area: Basundhara

Project: Garjhanbahal OCP

Project (OCP / UG)	**Garjhanbahal OCP**	**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Inlet of Settling tank (Kanika Siding)**	
Date of Sampling	**27-Nov-2024**	
Odour	Unobjectionable	**_**
Colour(Hazen)	2	**_**
Temperature(^{oC})	25.8	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	<0.5	**10**
Ammonical Nitrogen , mg/l (As N)	0.66	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	**100**
Sulphide (mg/L)	<0.1	**2**
BOD [3 days at 27^{o}C] (mg/L)	<2	**30**
Fluoride(mg/L)	0.35	**2**
Copper(mg/L)	<0.03	**3**
Manganese(mg/L)	0.07	**2**
Iron(mg/L)	<0.1	**3**
Zinc(mg/L)	0.11	**5**
Lead, mg/l	0.008	**0.1**
Cadmium, mg/l	<0.001	**2**
Total Chromium(mg/L)	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	**0.1**
Nickel(mg/L)	<0.02	**3**
Arsenic, mg/l	<0.005	**0.2**
Selenium (mg/L)	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	**5**
Phenolics (mg/L)	<0.001	**1**

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Table: 10.2.1.61

Area: Orient

Project: Orient Mine No.2

Project (OCP / UG)	**Orient Mine No.2**	**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Mine Sump. of Mine No.2**	
Date of Sampling	**26-Nov-2024**	
Odour	Unobjectionable	_
Colour(Hazen)	4	_
Temperature(^{oC})	25.4	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	<0.5	**10**
Ammonical Nitrogen , mg/l (As N)	1.02	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	**100**
Sulphide (mg/L)	<0.1	**2**
BOD [3 days at 27°C] (mg/L)	<2	**30**
Fluoride(mg/L)	<0.3	**2**
Copper(mg/L)	<0.03	**3**
Manganese(mg/L)	0.04	**2**
Iron(mg/L)	<0.1	**3**
Zinc(mg/L)	<0.04	**5**
Lead, mg/l	<0.005	**0.1**
Cadmium, mg/l	<0.001	**2**
Total Chromium(mg/L)	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	**0.1**
Nickel(mg/L)	<0.02	**3**
Arsenic, mg/l	<0.005	**0.2**
Selenium (mg/L)	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	**5**
Phenolics (mg/L)	<0.001	**1**

Table: 10.2.1.62

Area: Orient

Project: Orient Mine No.3

Project (OCP / UG)	**Orient Mine No.3**	**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Mine Sump. of Mine No.3**	
Date of Sampling	**26-Nov-2024**	
Odour	Unobjectionable	_
Colour(Hazen)	3	_
Temperature(^{oC})	25.1	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	<0.5	**10**
Ammonical Nitrogen , mg/l (As N)	0.82	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	3.33	**100**
Sulphide (mg/L)	<0.1	**2**
BOD [3 days at 27°C] (mg/L)	<2	**30**
Fluoride(mg/L)	<0.3	**2**
Copper(mg/L)	<0.03	**3**
Manganese(mg/L)	0.06	**2**
Iron(mg/L)	<0.1	**3**
Zinc(mg/L)	<0.04	**5**
Lead, mg/l	<0.005	**0.1**
Cadmium, mg/l	<0.001	**2**
Total Chromium(mg/L)	<0.01	**2**
Hexavelent Chromium(mg/L)	<0.05	**0.1**
Nickel(mg/L)	<0.1	**3**
Arsenic, mg/l	<0.005	**0.2**
Selenium (mg/L)	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	**5**
Phenolics (mg/L)	<0.001	**1**

Table: 10.2.1.63

Area: Orient

Project: HBI Mine

Project (OCP / UG)	**HBI Mine**	**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Mine Sump. of HBM**	
Date of Sampling	**26-Nov-2024**	
Odour	Unobjectionable	_
Colour(Hazen)	3	_
Temperature(^{oC})	25.6	**Shall not exceed 5 ^{oC} above the receiving temperature**
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)	4.44	**100**
Sulphide (mg/L)	<0.1	**2**
BOD [3 days at 27ºC] (mg/L)	<2	**30**
Fluoride(mg/L)	<0.3	**2**
Copper(mg/L)	<0.03	**3**
Manganese(mg/L)	<0.04	**2**
Iron(mg/L)	<0.1	**3**
Zinc(mg/L)	<0.04	**5**
Lead, mg/l	<0.005	**0.1**
Cadmium, mg/l	<0.001	**2**
Total Chromium(mg/L)	0.04	**2**
Hexavelent Chromium(mg/L)	<0.05	**0.1**
Nickel(mg/L)	<0.02	**3**
Arsenic, mg/l	<0.005	**0.2**
Selenium (mg/L)	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	**5**
Phenolics (mg/L)	<0.001	**1**

Table: 10.2.1.64

Area: Orient

Project: Orient Mine No.4

Project (OCP / UG)	**Orient Mine No.4**	**MoEF-Sch-VI Standards**
NAME OF THE STATION	**Mine Sump. of Mine No.4**	
Date of Sampling	**26-Nov-2024**	
Odour	Unobjectionable	_
Colour(Hazen)	2	_
Temperature(^{oC})	25.7	**Shall not exceed 5 ^{oC} above the receiving temperature**
Nitrate Nitrogen(mg/L)(As N)	<0.5	**10**
Ammonical Nitrogen , mg/l (As N)	0.45	**50**
Total Kjeldhal Nitrogen, mg/l (As N)	4.44	**100**
Sulphide (mg/L)	<0.1	**2**
BOD [3 days at 27ºC] (mg/L)	<2	**30**
Fluoride(mg/L)	0.44	**2**
Copper(mg/L)	<0.03	**3**
Manganese(mg/L)	<0.04	**2**
Iron(mg/L)	<0.1	**3**
Zinc(mg/L)	<0.04	**5**
Lead, mg/l	<0.005	**0.1**
Cadmium, mg/l	<0.001	**2**
Total Chromium(mg/L)	0.02	**2**
Hexavelent Chromium(mg/L)	<0.05	**0.1**
Nickel(mg/L)	<0.02	**3**
Arsenic, mg/l	<0.005	**0.2**
Selenium (mg/L)	<0.005	**0.05**
Disolved Phosphate(mg/L)	<4	**5**
Phenolics (mg/L)	<0.001	**1**

WATER QUALITY REPORT
(DRINKING)

Table: 10.2.2.1

Area: Ib valley

Project: Samaleswari OCP

Project / OCP	Samaleswari OCP												Indian Drinking Standard (IS-10500):2012	
Monitoring Station	Well Water from Kudopali													
Date of Sampling	08-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	4-Sep-2024	7-Oct-2024	7-Nov-2024	2-Dec-2024	13-Jan-2025	6-Feb-2025	17-Mar-2025	Acceptable	Permissible
Colour(Hazen)	1	4.0	3	2	2	1	3	3	2	2	1	3	5	15
Turbidity(NTU)	1	1	2	1	1	2	2	1	1	1	2	1	1	5
pH	8.01	8.23	8.04	7.78	7.15	7.24	7.36	7.46	7.58	6.38	7.62	7.60	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	84.84	92.92	120.6	120.6	128.64	132	140	120.6	120.6	130.26	67.23	79.84	200	600
Total Hardness (Ca CO3)(mg/L)	83.34	99.60	91.39	75.60	83.34	95.24	107.15	99.34	83.34	100.54	76.41	75.40	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)	15.74	17.74	21.68	21.68	23.65	33.51	29.56	23.65	25.62	23.16	11.58	13.61	250	1000
Total Dissolve Solid(mg/L)	192	278	214	184	198	224	240	178	184	208	258	138	500	2000
Calcium(mg/L)	23.86	23.95	20.68	23.95	22.27	25.45	33.40	34.99	25.45	24.14	20.93	19.09	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	0.04	<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)	17.32	13.55	1.85	13.49	1.26	12.28	16.28	1.32	1.89	2.33	119.18	10.82	200	400
Nitrate(mg/L)	<0.5	<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)	0.52	0.62	0.51	0.42	0.49	0.40	0.60	<0.3	0.42	0.37	<0.30	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)	0.1	0.15	<0.04	0.11	0.11	0.18	0.14	0.14	0.14	0.10	<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	0.026	0.026	<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: 10.2.2.2

Area: Ib valley

Project: Samleswari OCP

Project / OCP	**Samleswari OCP**												**Indian Drinking Standards (IS-10500):2012**	
Monitoring Station	**Tap Water From Samaleswari OCP Colony**													
Date of Sampling	**10-Apr-2023**	**9-May-2024**	**5-Jun-2024**	**3-Jul-2024**	**1-Aug-2024**	**4-Sep-2024**	**7-Oct-2024**	**10-Nov-2024**	**2-Dec-2024**	**13-Jan-2025**	**6-Feb-2025**	**12-Mar-2025**	**Acceptable**	**Permissible**
Colour(Hazen)	2	1.0	2	1	2	1	2	4	2	3	2	3	**5**	**15**
Turbidity(NTU)	1	1	2	1	1	2	2	1	1	1	1	1	**1**	**5**
Ph	7.04	8.13	7.98	7.85	7.04	7.17	7.29	7.38	7.29	7.36	7.78	7.48	**6.5-8.5**	**No relaxation**
Total Alkalinity(mg/L)	84.84	88.88	120.6	116.58	120.60	136	124	124.62	128.64	134.46	63.03	79.84	**200**	**600**
Total Hardness (Ca CO3)(mg/L)	59.53	71.71	91.39	71.62	91.27	103.18	91.27	99.34	95.24	100.54	72.39	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	<0.1	<0.1	<0.1	**1.0**	**No relaxation**
Chloride(mg/L)	11.8	15.77	21.68	23.65	23.65	35.48	31.54	23.65	23.65	25.09	11.58	15.56	**250**	**1000**
Total Dissolve Solid(mg/L)	220	256	208	172	190	220	198	184	192	212	128	130	**500**	**2000**
Calcium(mg/L)	19.08	22.36	23.86	22.36	25.45	31.81	30.22	23.86	25.45	32.19	24.14	20.68	**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	0.05	<0.04	<0.04	<0.04	**0.1**	**0.3**
Sulphate(mg/L)	11.56	14.29	2.46	14.38	1.64	11.76	13.2	1.54	1.67	2.22	13.70	10.82	**200**	**400**
Nitrate(mg/L)	<0.5	<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)	0.36	0.71	0.59	0.64	0.53	0.46	0.71	<0.30	0.48	0.47	0.40	0.38	**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	0.16	<0.04	0.09	0.10	0.08	0.25	0.07	0.09	0.17	<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: 10.2.2.3

Area: Ib valley

Project: Samaleswari OCP

Project / OCP	Samaleswari OCP												Indian Drinking Standards (IS-10500):2012
Monitoring Station	Water from IWSS, IB Valley Area												
Date of Sampling	08-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	4-Sep-2024	7-Oct-2024	7-Nov-2024	2-Dec-2024	13-Jan-2025	6-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	1	3.0	2	1	2	1	4	3	1	3	3	2	5	15
Turbidity(NTU)	1	1	2	1	1	2	2	2	1	1	1	1	1	5
pH	8.1	8.20	8.10	7.71	6.78	6.95	7.10	7.23	7.43	7.33	7.81	7.50	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	92.9	92.92	124.62	120.6	128.64	120	112	160.8	124.62	134.46	67.23	84.04	200	600
Total Hardness (Ca CO3)(mg/L)	83.34	91.63	91.39	59.68	79.37	95.24	91.27	147.02	87.30	88.48	68.37	75.40	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)	17.71	19.71	21.68	21.68	21.68	31.54	27.59	25.62	23.65	23.16	11.58	11.67	250	1000
Total Dissolve Solid(mg/L)	234	268	216	178	184	228	192	242	186	204	132	146	500	2000
Calcium(mg/L)	27.04	31.94	27.04	19.16	22.27	28.63	25.45	44.53	28.63	25.75	19.32	15.90	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	0.04	<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	0.05	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	14.87	12.68	1.72	5.55	4.16	12.46	10.26	13.37	1.44	2.56	22.33	12.06	200	400
Nitrate(mg/L)	<0.5	<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)	0.53	0.78	0.79	0.49	0.77	0.39	0.47	0.40	0.43	0.50	0.42	0.51	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	0.15	<0.04	0.08	0.11	0.07	0.27	<0.04	0.27	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: 10.2.2.4

Area: Ib valley

Project: Samaleswari OCP

Project / OCP	Samaleswari OCP												Indian Drinking Standards (IS-10500):2012
Monitoring Station	Well Water From Lajkura												
Date of Sampling	08-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	4-Sep-2024	7-Oct-2024	7-Nov-2024	2-Dec-2024	13-Jan-2025	6-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2	3.0	3	3	1	2	3	2	2	2	3	1	5	15
Turbidity(NTU)	1	1	2	1	1	1	1	1	1	2	1	1	1	5
pH	8.11	8.09	8.18	7.83	7.41	7.33	7.45	7.62	7.46	7.58	7.79	7.52	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	88.88	88.88	120.6	120.6	120.6	124	136	124.62	128.64	130.26	63.03	84.04	200	600
Total Hardness (Ca CO3)(mg/L)	87.3	83.66	91.39	51.72	91.27	87.30	99.21	95.37	95.24	100.54	64.35	87.30	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)	13.77	17.74	21.68	23.65	23.65	31.54	35.48	23.65	23.65	25.09	11.58	13.61	250	1000
Total Dissolve Solid(mg/L)	242	262	212	170	182	166	216	172	188	202	124	158	500	2000
Calcium(mg/L)	20.68	23.95	25.45	17.56	19.09	22.27	28.63	23.86	22.27	27.36	20.93	17.50	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	<0.03	0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	10.87	14.29	1.85	6.05	7.31	11.24	14.46	1.65	1.78	2.22	22.56	11.23	200	400
Nitrate(mg/L)	<0.5	<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)	0.38	0.94	0.63	0.39	0.96	0.46	0.53	0.37	0.45	0.52	0.34	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	0.006	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.12	0.16	<0.04	0.50	0.05	0.05	0.28	0.1	<0.04	0.18	<0.04	0.88	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.013	<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: 10.2.2.5

Area: Ib valley

Project: Lajkura OCP

Project / OCP	Lajkura OCP													Indian Drinking Standards (IS-10500):2012
Monitoring Station	Madhuban Nagar Well Water													
Date of Sampling	08-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	4-Sep-2024	7-Oct-2024	7-Nov-2024	2-Dec-2024	13-Jan-2025	6-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	3	2.0	3	2	2	2	2	1	3	3	2	2	5	15
Turbidity(NTU)	2	2	2	1	2	2	1	2	1	1	1	1	1	5
pH	7.69	7.83	7.87	7.28	5.79	6.24	6.56	6.74	5.79	6.12	5.71	5.48	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	105.04	117.16	64.32	100.5	16.08	12	24	104.52	8.04	8.40	8.40	8.40	200	600
Total Hardness (Ca CO3)(mg/L)	115.08	123.50	91.39	103.45	119.05	134.93	146.83	147.02	19.84	28.15	52.28	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)	35.48	31.54	19.71	47.30	112.35	15.77	13.8	43.36	15.77	19.30	19.30	19.45	250	1000
Total Dissolve Solid(mg/L)	282	314	180	282	246	208	192	258	68	74	98	76	500	2000
Calcium(mg/L)	38.17	43.11	25.45	36.73	41.35	46.12	50.90	39.76	6.36	4.83	12.88	7.95	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	0.04	<0.03	0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	0.12	<0.04	<0.04	0.04	0.1	0.3
Sulphate(mg/L)	24.85	29.19	23.15	30.64	5.30	14.4	11.72	30.68	2.56	3.89	20.55	6.48	200	400
Nitrate(mg/L)	12.2	12.78	<0.5	19.73	22.62	21.8	20.4	20.2	13.56	11.76	10.96	9.14	45	No relaxation
Fluoride(mg/L)	0.46	0.72	0.62	0.37	<0.3	0.38	0.88	0.44	<0.3	<0.3	<0.30	<0.30	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)	0.12	0.16	<0.04	0.17	0.17	0.4	0.12	0.08	0.32	0.30	0.47	0.05	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: 10.2.2.6

Area: Ib valley

Project: Lajkura OCP

Project / OCP	Lajkura OCP													Indian Drinking Standards (IS-10500):2012
Monitoring Station	Adarsh Nagar Colony Well Water													
Date of Sampling	08-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	4-Sep-2024	7-Oct-2024	7-Nov-2024	2-Dec-2024	13-Jan-2025	6-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	1	4.0	4	1	4	3	2	1	4	2	3	2	5	15
Turbidity(NTU)	2	1	3	1	1	1	1	1	2	2	2	2	1	5
pH	7.6	7.88	7.13	7.13	6.59	6.70	6.91	7.20	6.86	7.12	7.58	6.76	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	76.76	88.88	128.64	136.68	12.06	96	108	8.04	112.56	177.66	117.66	117.66	200	600
Total Hardness (Ca CO3)(mg/L)	95.24	107.57	127.16	107.43	59.53	67.46	79.37	59.60	115.08	116.63	124.67	123.02	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)	33.51	37.45	61.10	72.93	9.85	49.27	41.39	15.77	47.30	44.39	44.39	44.73	250	1000
Total Dissolve Solid(mg/L)	268	306	292	310	102	168	236	76	264	282	280	290	500	2000
Calcium(mg/L)	33.4	31.94	46.12	38.32	14.31	19.09	23.86	11.13	38.17	35.41	38.63	38.17	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	0.05	0.05	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	29.64	34.48	24.01	28.88	38.84	46.16	52.76	2.87	11.83	26.46	22.47	31.10	200	400
Nitrate(mg/L)	11.8	12.08	9.81	12.86	<0.5	<0.5	<0.5	<0.5	11.71	9.1	9.56	8.49	45	No relaxation
Fluoride(mg/L)	0.37	0.75	0.89	0.45	0.38	0.46	0.47	<0.30	<0.3	<0.3	0.38	0.47	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	0.15	<0.04	0.37	<0.04	0.07	0.34	0.32	0.07	<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

सीएमपीडीआई
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Table: 10.2.2.7

Area: Ib valley

Project: Lajkura OCP

Project / OCP	Lajkura OCP												Indian Drinking Standards (IS-10500):2012
Monitoring Station	Chhualiberna Village Well Water												
Date of Sampling	08-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	4-Sep-2024	7-Oct-2024	7-Nov-2024	2-Dec-2024	13-Jan-2025	6-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	4	1.0	3	4	3	3	3	2	1	1	4	2	5	15
Turbidity(NTU)	2	2	3	1	2	2	2	1	1	1	1	1	1	5
pH	7.72	7.91	7.21	7.54	5.78	5.86	6.51	6.66	5.86	6.01	6.35	5.50	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	105.04	113.12	76.38	92.46	20.1	8	16	68.34	8.04	50.42	12.61	8.40	200	600
Total Hardness (Ca CO3)(mg/L)	154.77	167.33	147.02	107.43	119.05	107.15	119.05	87.42	35.72	36.19	32.17	35.72	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)	31.54	35.48	70.96	47.30	112.35	15.77	13.8	17.74	15.77	17.37	19.30	19.45	250	1000
Total Dissolve Solid(mg/L)	296	334	314	266	240	172	186	166	74	106	78	70	500	2000
Calcium(mg/L)	49.3	55.89	50.90	38.32	39.76	38.17	44.53	22.27	12.72	11.27	11.27	7.95	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	<0.04	0.05	<0.04	0.11	<0.04	<0.04	0.17	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	32.24	37.19	33.13	26.23	5.17	16.4	20.12	32.15	2.44	4.22	5.56	5.62	200	400
Nitrate(mg/L)	11.4	11.85	16.57	20.25	21.82	22.6	20.8	19.4	13.64	12.12	10.92	8.92	45	No relaxation
Fluoride(mg/L)	0.51	0.78	0.33	0.41	<0.3	0.58	0.61	<0.30	<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)	0.15	0.13	<0.04	0.33	0.14	0.29	0.47	0.08	0.33	0.34	0.23	0.10	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: 10.2.2.8

Area: Ib valley

Project: Lajkura OCP

Project / OCP	Lajkura OCP													Indian Drinking Standards (IS-10500):2012
Monitoring Station	VIP Guest House Tap Water													
Date of Sampling	08-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	4-Sep-2024	7-Oct-2024	7-Nov-2024	2-Dec-2024	13-Jan-2025	6-Feb-2025	12-Mar-2025	Acceptable	Permissible
Colour(Hazen)	3	3.0	1	3	4	3	2	3	2	4	1	3	5	15
Turbidity(NTU)	1	1	1	1	1	1	2	1	1	1	1	1	1	5
pH	7.63	7.51	7.92	7.47	7.10	7.14	7.29	7.47	7.93	7.63	8.08	7.76	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	80.8	92.92	72.36	68.34	60.30	60	52	68.34	8.04	84.04	88.24	79.84	200	600
Total Hardness (Ca CO3)(mg/L)	83.34	99.60	91.39	71.62	79.37	91.27	83.34	99.34	99.21	84.45	104.56	111.12	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	15.77	15.77	15.77	17.74	19.71	15.77	17.74	19.30	19.30	19.45	250	1000
Total Dissolve Solid(mg/L)	194	226	172	158	178	206	158	142	154	170	176	180	500	2000
Calcium(mg/L)	28.63	33.53	28.63	25.55	19.09	22.27	25.45	19.09	27.04	27.36	22.53	20.68	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	0.12	<0.04	0.04	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	29.78	34.73	20.44	19.55	30.64	28.38	23.40	26.87	10.85	23.78	34.52	26.17	200	400
Nitrate(mg/L)	<0.5	<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)	0.72	0.33	0.53	0.34	0.89	0.48	0.70	<0.30	0.63	0.57	0.52	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)	0.08	0.10	<0.04	0.31	0.13	<0.04	0.37	0.44	0.14	<0.04	<0.04	0.31	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: 10.2.2.9

Area: Lakhanpur OCP

Project: LBL OCP

Project / OCP	Lakhanpur OCP												Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Tap water at LKP project office													
Date of Sampling	09-Apr-2024	10-May-2024	6-Jun-2024	3-Jul-2024	2-Aug-2024	5-Sep-2024	8-Oct-2024	8-Nov-2024	3-Dec-2024	14-Jan-2025	7-Feb-2025	13-Mar-2025	Acceptable	Permissible
Colour(Hazen)	1	2.0	2	2	5	3	3	3	2	3	2	2	5	15
Turbidity(NTU)	2	1	2	1	1	2	1	1	1	1	1	1	1	5
pH	7.8	7.62	8.10	7.53	7.38	7.49	7.61	7.92	7.92	8.06	7.43	6.57	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	76.76	80.8	68.34	68.34	64.32	52	60	60.3	76.38	79.84	63.03	58.83	200	600
Total Hardness (Ca CO3)(mg/L)	95.24	87.65	95.37	79.58	115.08	107.15	111.12	87.42	87.30	80.43	80.43	91.27	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)	15.74	15.77	13.8	21.68	19.71	11.82	15.77	9.85	9.85	13.51	15.44	13.46	250	1000
Total Dissolve Solid(mg/L)	176	194	184	194	218	196	182	122	130	158	148	162	500	2000
Calcium(mg/L)	23.86	22.36	34.99	28.74	41.35	38.17	33.40	28.63	28.63	25.75	27.36	22.27	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	0.05	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	19.82	18.23	22.78	29.13	59.39	48.36	46.12	21.23	4.67	20.37	39.32	34.38	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.16	<0.5	45	No relaxation
Fluoride(mg/L)	0.66	0.36	0.75	0.46	0.94	0.70	0.78	0.36	0.67	0.50	<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)	<0.04	0.07	<0.04	0.06	<0.04	<0.04	0.06	0.63	<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: 10.2.2.10

Area: Lakhanpur

Project: LBL OCP

Project / OCP	Belpahar OCP												Indian Drinking Standards (IS-10500):2012
Monitoring Station	IWSS Outlet												
Date of Sampling	11-Apr-2023	10-May-2024	6-Jun-2024	3-Jul-2024	5-Sep-2024	8-Oct-2024	8-Nov-2024	3-Dec-2024	14-Jan-2025	7-Feb-2025	13-Mar-2025		Acceptable	Permissible
Colour(Hazen)	2	1.0	2	1	4	2	3	1	2	3	1		5	15
Turbidity(NTU)	1	1	2	1	2	1	1	1	1	2	2		1	5
pH	7.56	7.48	8.05	7.20	7.37	7.49	7.09	7.87	8.18	7.83	7.28		6.5-8.5	No relaxation
Total Alkalinity(mg/L)	50.9	88.88	72.36	20.1	40	52	100.5	72.36	79.84	42.02	37.83		200	600
Total Hardness (Ca CO3)(mg/L)	73	83.66	115.23	115.39	130.96	119.05	67.55	75.40	96.52	197.06	214.29		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		1.0	No relaxation
Chloride(mg/L)	21.73	13.8	19.71	9.85	7.88	13.8	13.8	11.83	11.58	13.51	15.56		250	1000
Total Dissolve Solid(mg/L)	128	276	206	218	256	234	160	124	176	284	304		500	2000
Calcium(mg/L)	24.24	27.15	36.58	38.32	42.94	39.76	22.27	25.45	25.75	43.46	49.30		75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	<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	0.12	0.06	<0.04	<0.04	<0.04		0.1	0.3
Sulphate(mg/L)	25.44	24.38	28.69	89.78	94.8	86.4	18.28	5.33	21.22	131.51	132.88		200	400
Nitrate(mg/L)	4.28	0.94	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5		45	No relaxation
Fluoride(mg/L)	<0.3	0.62	0.68	0.52	0.88	0.58	<0.30	0.63	0.74	0.83	0.80		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)	0.15	0.07	<0.04	0.26	<0.04	0.08	0.05	<0.04	<0.04	0.04	0.11		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: 10.2.2.11

Area: Mahalaxmi

Project: Basundhara OCP

Project / OCP	Basundhara OCP													Indian Drinking Standards (IS-10500):2012
Monitoring Station	Water Treatment Plant Clear Water Reservoir													
Date of Sampling	11-Apr-2024	10-May-2024	7-Jun-2024	5-Jul-2024	3-Aug-2024	6-Sep-2024	8-Oct-2024	9-Nov-2024	4-Dec-2024	15-Jan-2025	8-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	1	2.0	2	2	2	5	3	2	3	1	4	2	5	15
Turbidity(NTU)	1	1	2	1	1	2	2	1	2	2	3	1	1	5
pH	7.48	7.39	7.65	7.74	7.03	7.21	7.37	7.54	7.60	7.80	7.50	7.64	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	28.28	36.36	24.12	72.36	16.08	28	36	28.14	32.16	71.43	109.25	84.04	200	600
Total Hardness (Ca CO3)(mg/L)	71.43	87.65	170.86	83.55	162.70	174.61	182.55	111.26	126.99	132.71	261.40	99.21	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)	11.83	15.77	9.85	15.77	11.82	11.82	15.77	9.85	11.83	9.65	86.85	19.45	250	1000
Total Dissolve Solid(mg/L)	146	170	234	160	224	262	284	174	190	228	454	174	500	2000
Calcium(mg/L)	23.86	28.74	54.08	27.15	36.58	41.35	49.3	34.99	34.99	28.97	64.39	22.27	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	0.05	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	41.85	36.82	97.04	22.82	105.67	114.6	104.8	83.80	46.71	87.93	64.80	27.40	200	400
Nitrate(mg/L)	2.2	2.81	<0.5	<0.5	0.60	0.72	0.8	<0.5	<0.5	<0.5	21.64	<0.5	45	No relaxation
Fluoride(mg/L)	0.64	0.57	0.59	0.67	0.89	0.55	0.75	0.42	0.56	0.48	<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	0.05	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.04	0.07	<0.04	0.18	<0.04	0.1	0.17	0.28	0.07	0.05	0.08	<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
Phenolic (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: 10.2.2.12
Area: Basundhara
Project: Kulda OCP

Project / OCP	Kulda OCP					Indian Drinking Standards (IS-10500):2012
Monitoring Station	Well at Sahaspur					
Date of Sampling	11-May-2024	3-Aug-2024	9-Nov-2024	8-Feb-2025	Acceptable	Permissible
Colour(Hazen)	4.0	5	3	4	5	15
Turbidity(NTU)	2	2	2	3	1	5
pH	8.14	7.09	7.28	7.79	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	137.36	104.52	108.54	210.1	200	600
Total Hardness (Ca CO3)(mg/L)	203.18	186.51	218.55	293.58	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	49.28	76.87	72.93	44.39	250	1000
Total Dissolve Solid(mg/L)	348	348	348	470	500	2000
Calcium(mg/L)	60.68	46.12	57.26	85.31	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)	52.46	56.37	45.89	69.45	200	400
Nitrate(mg/L)	0.58	16.62	16.8	19.82	45	No relaxation
Fluoride(mg/L)	0.40	0.37	0.56	<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)	0.06	0.06	0.14	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
Phenolic (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: 10.2.2.13

Area: Basundhara

Project: Kulda OCP

Project / OCP	Kulda OCP				Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Well at Teleimal					
Date of Sampling	11-May-2024	3-Aug-2024	9-Nov-2024	8-Feb-2025	Acceptable	Permissible
Colour(Hazen)	3.0	2	4	3	5	15
Turbidity(NTU)	2	2	2	1	1	5
pH	8.19	6.98	7.14	7.56	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	169.68	213.06	180.9	12.61	200	600
Total Hardness (Ca CO3)(mg/L)	239.04	273.82	250.34	40.22	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	43.36	45.33	45.33	19.30	250	1000
Total Dissolve Solid(mg/L)	432	394	404	70	500	2000
Calcium(mg/L)	86.23	82.70	73.52	8.05	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)	48.65	57.88	58.04	3.11	200	400
Nitrate(mg/L)	0.94	20.86	20.4	4.22	45	No relaxation
Fluoride(mg/L)	0.44	0.58	0.74	<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)	0.06	<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
Phenolic (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: 10.2.2.14

Area: Basundhara OCP

Project: Garjanbahal OCP

Project / OCP	Garjanbahal OCP				Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Well at Garjanbahal Village					
Date of Sampling	11-May-2024	3-Aug-2024	9-Nov-2024	8-Feb-2025	Acceptable	Permissible
Colour(Hazen)	4.0	5	3	2	5	15
Turbidity(NTU)	1	1	1	2	1	5
pH	8.03	6.19	6.42	7.93	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36.36	48.24	48.24	180.69	200	600
Total Hardness (Ca CO3)(mg/L)	135.46	103.18	99.34	180.97	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	31.54	74.9	76.87	25.09	250	1000
Total Dissolve Solid(mg/L)	244	274	286	294	500	2000
Calcium(mg/L)	49.50	33.4	34.99	32.19	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.10	<0.04	0.1	0.3
Sulphate(mg/L)	32.39	51.7	45.89	30.69	200	400
Nitrate(mg/L)	1.24	19.26	18.8	<0.5	45	No relaxation
Fluoride(mg/L)	0.37	<0.3	<0.30	1.01	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)	0.05	0.08	0.18	<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: 10.2.2.15

Area: Basundhara OCP

Project: Garjanbahal OCP

Project / OCP	Garjanbahal OCP				Indian Drinking Standards (IS-10500):2012	
Monitoring Station	South West of Coal face, Bihaimunda					
Date of Sampling	11-May-2024	3-Aug-2024	9-Nov-2024	8-Feb-2025	Acceptable	Permissible
Colour(Hazen)	3.0	4	4	4	5	15
Turbidity(NTU)	3	2	1	2	1	5
pH	8.35	7.02	7.17	7.94	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	226.24	132.66	48.24	126.06	200	600
Total Hardness (Ca CO3)(mg/L)	306.77	174.61	119.21	128.69	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	128.12	51.24	81.47	28.95	250	1000
Total Dissolve Solid(mg/L)	518	310	282	230	500	2000
Calcium(mg/L)	108.58	46.12	36.58	24.14	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.07	<0.04	0.1	0.3
Sulphate(mg/L)	29.19	52.33	44.29	18.63	200	400
Nitrate(mg/L)	1.41	14.06	13.5	<0.5	45	No relaxation
Fluoride(mg/L)	0.71	0.63	0.41	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)	0.06	<0.04	0.23	<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: 10.2.2.16

Area: Orient

Project: Orient Mine No. 1 & 2

Project / OCP	Orient Mine No. 1 & 2												Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Tap Water at Budhijaam Colony													
Date of Sampling	09-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	5-Sep-2024	7-Oct-2024	8-Nov-2024	2-Dec-2024	13-Jan-2025	7-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	4	2.0	1	2	5	3	3	3	2	1	2	2	5	15
Turbidity(NTU)	1	1	1	1	1	2	1	1	1	1	2	1	1	5
pH	7.39	7.49	7.84	7.83	7.15	7.28	7.53	7.33	7.89	8.11	7.56	7.24	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	68.68	76.76	76.38	124.62	60.30	44	68	72.36	84.42	79.84	138.67	75.64	200	600
Total Hardness (Ca CO3)(mg/L)	103.18	91.63	95.37	51.72	95.24	103.18	111.12	87.42	99.21	104.56	104.56	103.18	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)	19.71	23.65	13.8	27.59	15.77	23.65	29.56	15.77	15.77	19.30	27.02	21.39	250	1000
Total Dissolve Solid(mg/L)	168	194	178	196	148	176	202	146	156	180	216	176	500	2000
Calcium(mg/L)	20.68	25.55	33.40	15.97	27.04	25.45	34.99	27.04	34.99	24.14	24.14	20.68	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	0.06	<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	0.12	<0.04	0.05	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	42.68	16.38	21.67	9.46	29.63	32.68	38.34	22.09	7.11	24.63	7.89	31.78	200	400
Nitrate(mg/L)	<0.5	<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)	0.61	0.87	0.45	0.49	0.37	0.47	0.46	0.38	0.65	0.65	0.96	0.82	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)	0.15	0.05	<0.04	0.20	0.08	0.14	0.71	0.27	<0.04	<0.04	0.08	0.07	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: 10.2.2.17

Area: Orient

Project: Orient Mine No. 1 & 2

Project / OCP	Orient Mine No. 1 & 2												Indian Drinking Standards (IS-10500):2012
Monitoring Station	Mine no 1 & 2 Filter Plant												
Date of Sampling	09-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	5-Sep-2024	7-Oct-2024	8-Nov-2024	2-Dec-2024	13-Jan-2025	7-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	2	1.0	2	1	3	2	3	2	4	2	2	3	5	15
Turbidity(NTU)	1	1	2	1	1	2	1	1	2	2	1	2	1	5
pH	7.56	7.67	7.71	7.55	7.37	7.53	7.29	6.61	7.73	8.19	7.75	7.72	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	109.08	121.2	124.62	72.36	124.62	60	52	8.04	124.62	130.26	71.42	138.67	200	600
Total Hardness (Ca CO3)(mg/L)	107.15	123.50	111.26	59.68	111.12	130.96	119.05	31.79	111.12	112.60	100.54	170.64	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)	23.65	27.59	27.59	15.77	29.56	15.77	11.82	15.77	29.56	30.88	21.23	31.12	250	1000
Total Dissolve Solid(mg/L)	218	258	214	158	198	238	164	64	212	228	172	264	500	2000
Calcium(mg/L)	27.04	30.34	23.86	20.76	20.68	25.45	34.99	7.95	28.63	24.14	20.93	30.22	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	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	15.65	20.57	8.74	19.72	11.60	16.28	12.34	3.42	5.22	11.34	37.26	16.85	200	400
Nitrate(mg/L)	<0.5	<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)	0.81	0.75	0.37	0.61	0.42	0.36	0.67	0.47	<0.3	<0.3	0.73	0.92	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)	0.11	0.04	<0.04	0.22	<0.04	0.27	0.07	0.13	<0.04	<0.04	0.18	<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: 10.2.2.18

Area: Orient

Project: Orient Mine No. 3

Project / OCP	Orient Mine No. 3													Indian Drinking Standards (IS-10500):2012
Monitoring Station	Mine no 3 Filter Plant													
Date of Sampling	09-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	5-Sep-2024	7-Oct-2024	8-Nov-2024	2-Dec-2024	13-Jan-2025	7-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	3	3.0	1	2	1	3	1	1	1	3	3	3	5	15
Turbidity(NTU)	1	1	2	1	1	2	1	2	1	1	1	1	1	5
pH	7.63	7.58	7.42	7.91	6.78	6.93	7.17	7.30	6.98	8.37	8.20	7.16	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	76.76	48.48	64.32	124.62	64.32	128	108	128.64	76.38	67.23	84.04	138.67	200	600
Total Hardness (Ca CO3)(mg/L)	95.24	111.55	91.39	75.60	91.27	107.15	95.24	131.13	95.24	80.43	92.50	99.21	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	15.77	15.77	21.68	19.71	31.54	29.56	29.56	11.83	21.23	19.30	29.17	250	1000
Total Dissolve Solid(mg/L)	186	214	170	190	162	210	196	206	138	168	178	234	500	2000
Calcium(mg/L)	33.4	38.32	20.68	25.55	20.68	23.86	33.40	23.95	22.27	16.10	27.36	22.27	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	0.06	<0.04	<0.04	<0.04	0.1	0.3
Sulphate(mg/L)	39.75	37.81	24.75	6.05	28.37	36.14	30.2	15.09	14.63	28.54	31.51	8.45	200	400
Nitrate(mg/L)	<0.5	<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)	0.48	0.94	0.81	0.39	0.55	0.70	0.42	0.40	<0.3	<0.3	0.83	0.75	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)	0.18	0.04	<0.04	0.14	<0.04	<0.04	0.13	<0.04	<0.04	<0.04	<0.04	0.18	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: 10.2.2.19

Area: Orient

Project: HBI Mine

Project / OCP	HBI Mine													Indian Drinking Standards (IS-10500):2012
Monitoring Station	Tap Water at Rampur Colony													
Date of Sampling	09-Apr-2024	9-May-2024	5-Jun-2024	3-Jul-2024	1-Aug-2024	5-Sep-2024	7-Oct-2024	8-Nov-2024	2-Dec-2024	13-Jan-2025	7-Feb-2025	14-Mar-2025	Acceptable	Permissible
Colour(Hazen)	3	4.0	3	3	1	2	1	2	2	2	2	4	5	15
Turbidity(NTU)	2	1	2	1	1	2	1	1	1	2	2	2	1	5
pH	7.76	7.65	7.62	7.98	7.06	7.24	7.12	7.20	7.71	6.59	7.71	7.96	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	92.92	101	124.62	124.62	124.62	120	96	120.6	68.34	130.26	130.26	138.67	200	600
Total Hardness (Ca CO3)(mg/L)	130.96	131.47	87.42	59.68	87.30	111.12	91.27	119.21	107.75	108.58	104.56	115.08	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)	13.8	17.74	23.65	19.71	23.65	31.54	27.59	29.56	17.74	27.02	27.02	27.23	250	1000
Total Dissolve Solid(mg/L)	178	208	196	178	174	216	184	186	166	218	224	246	500	2000
Calcium(mg/L)	34.99	39.92	23.86	19.16	25.45	34.99	28.63	23.86	25.45	25.75	24.14	23.86	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	0.045	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)	12.58	31.53	7.51	6.56	2.65	11.48	14.12	11.04	5.33	6.78	9.32	8.31	200	400
Nitrate(mg/L)	<0.5	<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)	0.33	0.86	0.43	0.46	0.16	0.64	0.34	0.49	0.55	0.58	0.57	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	0.20	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.04	0.04	<0.04	0.13	0.04	0.06	0.06	0.41	<0.04	<0.04	<0.04	<0.04	5	15
Total Chromium (mg/L)	<0.01	<0.01	<0.001	<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: 10.2.2.20

Area: Orient

Project: HBI Mine

Project / OCP	HBI Mine												Indian Drinking Standards (IS-10500):2012
Monitoring Station	HBI Water Filter Plant												
Date of Sampling	09-Apr-2024	9-May-2024	5-Jun-2024	1-Aug-2024	5-Sep-2024	7-Oct-2024	8-Nov-2024	2-Dec-2024	13-Jan-2025	7-Feb-2025	14-Mar-2025		Acceptable	Permissible
Colour (Hazen)	2	2	3	1	3	1	3	2	3	1	1		5	15
Turbidity (NTU)	1	1	2	1	2	2	1	2	2	1	1		1	5
pH	7.82	7.89	7.56	7.14	7.26	7.20	7.33	7.31	7.45	8.33	6.57		6.5-8.5	No relaxation
Total Alkalinity(mg/L)	113.12	121.2	124.62	124.62	168	148	116.58	108.54	134.46	88.24	58.83		200	600
Total Hardness (Ca CO3)(mg/L)	91.27	107.57	91.39	87.30	107.15	99.21	131.13	99.21	108.58	104.56	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		1.0	No relaxation
Chloride(mg/L)	13.8	19.71	23.65	23.65	31.54	25.62	27.59	27.59	28.95	9.65	15.56		250	1000
Total Dissolve Solid(mg/L)	228	262	210	186	236	218	194	204	214	168	154		500	2000
Calcium(mg/L)	30.22	35.13	28.63	31.81	33.40	31.81	25.45	27.04	30.58	24.14	27.04		75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	0.05	<0.03	<0.03	<0.03		0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.045	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04		0.1	0.3
Sulphate(mg/L)	14.39	18.47	6.65	2.27	18.32	20.4	10.43	5.11	5.44	12.89	34.38		200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.56		45	No relaxation
Fluoride(mg/L)	0.43	0.82	0.33	0.22	0.59	0.59	0.47	<0.3	<0.3	0.54	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		0.01	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)	0.1	0.04	<0.04	0.07	0.08	0.26	0.26	<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		0.05	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: 10.2.2.21

Area: MCL

Project: MCL (HQ)

Project / OCP	MCL(HQ)												Indian Drinking Standards (IS-10500):2012
Monitoring Station	Tap water at DAV School (Anand vihar)												
Date of Sampling	13-Apr-2023	14-May-2024	8-Jun-2024	6-Jul-2024	2-Aug-2024	5-Sep-2024	25-Oct-2024	8-Dec-2024	14-Jan-2025	27-Feb-2025	14-Mar-2025		Acceptable	Permissible
Colour (Hazen)	2	2.0	2	3	5	1	1	1	2	2	2		5	15
Turbidity (NTU)	1	1	1	1	1	1	2	2	1	1	1		1	5
pH	8.10	7.71	8.12	7.41	7.10	7.19	7.36	7.79	6.57	8.38	7.67		6.5-8.5	No relaxation
Total Alkalinity(mg/L)	97.5	96.96	88.44	68.34	20.1	40	56	124.62	58.83	84.04	79.84		200	600
Total Hardness (Ca CO3) (mg/L)	93	119.52	95.37	79.58	75.40	111.12	119.05	83.34	80.43	107.15	115.08		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		1.0	No relaxation
Chloride(mg/L)	13.83	13.80	11.83	17.74	9.85	9.85	13.8	25.62	15.44	9.65	13.61		250	1000
Total Dissolve Solid(mg/L)	140	218	174	194	120	174	208	208	148	156	170		500	2000
Calcium(mg/L)	32.32	41.52	34.99	27.15	19.09	30.22	41.35	28.63	25.75	25.75	28.63		75	200
Copper(mg/L)	<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	0.05	<0.04	<0.04	<0.04		0.1	0.3
Sulphate(mg/L)	14.94	32.02	15.15	31.53	55.74	64.2	58.6	8.89	29.39	14.25	23.01		200	400
Nitrate(mg/L)	<2.0	<0.5	<0.5	<0.5	1.14	1.8	2.2	<0.5	1.8	<0.5	<0.5		45	No relaxation
Fluoride(mg/L)	<0.3	0.71	0.35	0.55	0.3	0.48	0.74	0.78	0.57	0.53	0.57		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)	0.06	0.04	<0.04	0.08	<0.04	<0.04	<0.04	0.07	0.11	<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		0.05	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: 10.2.2.22

Area: MCL

Project: MCL (HQ)

Project / OCP	MCL(HQ)												Indian Drinking Standards (IS-10500):2012
Monitoring Station	Tap Water at Corporate Office (Jagriti Vihar)												
Date of Sampling	13-Apr-2023	14-May-2024	8-Jun-2024	6-Jul-2024	2-Aug-2024	5-Sep-2024	25-Oct-2024	8-Dec-2024	14-Jan-2025	27-Feb-2025	14-Mar-2025		Acceptable	Permissible
Colour (Hazen)	2	4.0	1	2	2	3	4	4	3	2	1		5	15
Turbidity (NTU)	1	1	1	1	1	1	1	1	1	1	3		1	5
pH	7.73	7.79	8.16	7.35	7.14	7.30	7.41	7.78	6.76	8.21	8.02		6.5-8.5	No relaxation
Total Alkalinity(mg/L)	97.5	88.88	84.42	64.32	20.1	48	60	72.36	75.64	88.24	151.27		200	600
Total Hardness (Ca CO3) (mg/L)	101	95.62	87.42	63.66	95.24	107.15	107.15	91.27	100.54	91.27	214.29		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		1.0	No relaxation
Chloride(mg/L)	15.8	15.77	7.88	17.74	11.82	13.8	17.74	11.83	13.51	9.65	23.34		250	1000
Total Dissolve Solid(mg/L)	148	204	160	164	132	186	198	138	162	148	418		500	2000
Calcium(mg/L)	33.94	27.15	30.22	20.76	23.86	30.22	38.17	30.22	27.36	30.58	28.63		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	0.05	<0.04	<0.04	<0.04		0.1	0.3
Sulphate(mg/L)	14.68	28.45	15.02	30.39	44.39	56.2	51.8	6.37	20.49	12.88	106.58		200	400
Nitrate(mg/L)	<2.0	<0.5	<0.5	<0.5	1.32	1.94	2.4	<0.5	<0.5	<0.5	<0.5		45	No relaxation
Fluoride(mg/L)	<0.3	0.74	0.37	0.48	<0.3	0.40	0.38	0.74	0.68	0.40	0.51		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	0.006	0.006	0.006	<0.005		0.01	No relaxation
Zinc(mg/L)	0.06	0.05	<0.04	0.10	<0.04	<0.04	0.09	<0.04	<0.04	<0.04	0.12		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

सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna

Table: 10.2.2.23

Area: MCL

Project: MCL (HQ)

Project / OCP	MCL(HQ)				Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Inlet to Water Treatment Plant (Anand Vihar)					
Date of Sampling	14-May-2024	2-Aug-2024	15-Nov-2024	28-Feb-2025	Acceptable	Permissible
Colour (Hazen)	4.0	2	2	2	5	15
Turbidity (NTU)	1	1	1	2	1	5
pH	8.10	7.42	7.68	8.39	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	84.04	60.3	72.36	180.69	200	600
Total Hardness (Ca CO3) (mg/L)	107.57	75.40	95.37	99.21	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	11.83	11.82	7.88	25.09	250	1000
Total Dissolve Solid(mg/L)	208	126	148	230	500	2000
Calcium(mg/L)	31.94	23.86	30.22	32.19	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)	10.34	26.61	16.81	17.12	200	400
Nitrate(mg/L)	<0.5	<0.5	12.4	<0.5	45	No relaxation
Fluoride(mg/L)	0.62	<0.30	<0.30	0.50	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)	<0.04	<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: 10.2.2.24

Area: MCL

Project: MCL (HQ)

Project / OCP	MCL(HQ)				Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Outlet to Water Treatment Plant (Anand Vihar)					
Date of Sampling	14-May-2024	2-Aug-2024	15-Nov-2024	28-Feb-2025	Acceptable	Permissible
Colour (Hazen)	2.0	2	3	1	5	15
Turbidity (NTU)	1	1	1	1	1	5
pH	8.04	7.19	7.35	8.31	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	76.76	24.12	76.38	42.02	200	600
Total Hardness (Ca CO3) (mg/L)	119.52	67.46	83.45	83.34	200	600
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Chloride(mg/L)	13.80	9.85	7.88	11.58	250	1000
Total Dissolve Solid(mg/L)	194	116	134	114	500	2000
Calcium(mg/L)	35.13	22.27	28.63	27.36	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)	11.21	45.40	14.23	16.16	200	400
Nitrate(mg/L)	<0.5	1.20	1.44	<0.5	45	No relaxation
Fluoride(mg/L)	0.57	<0.3	<0.3	0.59	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)	<0.04	<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

WATER QUALITY
(SURFACE WATER)

10.2.3 : SURFACE WATER QUALITY DATA

Table: 10.2.3.1
Area: Ib valley
Project: Samaleswari OCP

Project/OCP	Samaleswari OCP		IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Pandren Nallah near Global Washery u/s		
Date of sampling	27-May-24	25-Nov-24	
pH	7.66	7.89	6.5-8.5
Color (Hazen unit)	3	3	300
Dissolved Oxygen(mg/L)	6.3	6.8	4
BOD (3 days 27^0C(mg/L)	<2	<2	3
Chlorides(mg/L)	19.71	7.88	600
Sulphate(mg/L)	42.64	48.34	400
Nitrate(mg/L)	0.56	0.66	50
Fluoride(mg/L)	0.78	0.46	1.5
Total Hardness(mg/L)	91.63	162.92	-
Total dissolved solids (mg/L)	156	220	1500
TSS(mg/L)	22	64	-
Copper(mg/L)	<0.03	0.05	1.5
Iron(mg/L)	<0.1	<0.1	50
Zinc(mg/L)	<0.04	<0.04	15
Lead(mg/L)	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	0.1
MPN (Index/100 ml)	31	25	_

Table: 10.2.3.2
Area: Ib valley
Project: Samaleswari OCP

Project/OCP	**Samaleswari OCP**		**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**Pandren Nallah Before Confluence Point with Lilari Nallah d/s**		
Date of sampling	**27-May-24**	**25-Nov-24**	
pH	7.78	7.95	**6.5-8.5**
Color (Hazen unit)	1	2	**300**
Dissolved Oxygen(mg/L)	5.9	6.4	**4**
BOD (3 days 27^0C(mg/L)	<2	<2	**3**
Chlorides(mg/L)	13.8	29.56	**600**
Sulphate(mg/L)	40.8	22.21	**400**
Nitrate(mg/L)	0.78	0.84	**50**
Fluoride(mg/L)	0.38	0.44	**1.5**
Total Hardness(mg/L)	103.58	147.02	**-**
Total dissolved solids (mg/L)	176	226	**1500**
TSS(mg/L)	26	68	**-**
Copper(mg/L)	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	<0.04	**15**
Lead(mg/L)	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	58	26	_

Table: 10.2.3.3
Area: Ib valley
Project: Samaleswari OCP

Project/OCP	**Samaleswari OCP**		**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**Lajkura Pond Water**		
Date of sampling	**27-May-24**	**25-Nov-24**	
pH	7.53	7.74	**6.5-8.5**
Color (Hazen unit)	3	3	**300**
Dissolved Oxygen(mg/L)	6.7	6.5	**4**
BOD (3 days 270C(mg/L)	<2	<2	**3**
Chlorides(mg/L)	33.50	78.84	**600**
Sulphate(mg/L)	108.4	53.62	**400**
Nitrate(mg/L)	0.86	2.20	**50**
Fluoride(mg/L)	0.42	0.52	**1.5**
Total Hardness(mg/L)	250.99	190.73	**-**
Total dissolved solids (mg/L)	354	428	**1500**
TSS(mg/L)	48	46	**-**
Copper(mg/L)	<0.03	0.04	**1.5**
Iron(mg/L)	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.9	**15**
Lead(mg/L)	<0.005	0.01	**0.1**
Cadmium(mg/L)	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	58	21	_

Table: 10.2.3.4

Area: Ib valley

Project: Lajkura OCP

Project/OCP	**Lajkura OCP**		**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**U/S of Baghmara Nala at Discharge Point**		
Date of sampling	**27-May-24**	**25-Nov-24**	
pH	7.46	7.61	**6.5-8.5**
Color (Hazen unit)	2	1	**300**
Dissolved Oxygen(mg/L)	6.2	6.8	**4**
BOD (3 days 270C(mg/L)	<2	<2	**3**
Chlorides(mg/L)	13.8	11.83	**600**
Sulphate(mg/L)	12.26	13.99	**400**
Nitrate(mg/L)	<0.5	<0.5	**50**
Fluoride(mg/L)	0.47	0.63	**1.5**
Total Hardness(mg/L)	95.62	47.68	**-**
Total dissolved solids (mg/L)	146	86	**1500**
TSS(mg/L)	30	36	**-**
Copper(mg/L)	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.06	**15**
Lead(mg/L)	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	46	11	**_**

Table: 10.2.3.5

Area: Ib valley

Project: Lajkura OCP

Project/OCP	**Lajkura OCP**		**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**D/S of Baghmara Nala at Discharge Point**		
Date of sampling	**27-May-24**	**25-Nov-24**	
pH	7.55	7.73	**6.5-8.5**
Color (Hazen unit)	1	4	**300**
Dissolved Oxygen(mg/L)	5.9	6.4	**4**
BOD (3 days 270C(mg/L)	<2	<2	**3**
Chlorides(mg/L)	15.77	13.80	**600**
Sulphate(mg/L)	14.72	8.60	**400**
Nitrate(mg/L)	<0.5	<0.5	**50**
Fluoride(mg/L)	0.74	0.55	**1.5**
Total Hardness(mg/L)	75.70	59.60	**-**
Total dissolved solids (mg/L)	134	92	**1500**
TSS(mg/L)	46	42	**-**
Copper(mg/L)	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.14	**15**
Lead(mg/L)	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	49	12	**_**

Table: 10.2.3.6

Area: Lakhanpur

Project: LBL OCP

Project/OCP	LBL OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Pulijhor Stream Near Tingismal Village (u/s of Lakhanpur OCP)				
Date of Sampling	28-May-24	27-Aug-24	26-Nov-24	27-Jan-25	
pH	7.82	6.96	7.39	7.23	**6.5-8.5**
Color (Hazen unit)	1	5	3	4	**300**
Dissolved Oxygen(mg/L)	6.6	6.8	7.0	6.3	**4**
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	**3**
Chlorides(mg/L)	19.71	11.83	11.83	11.58	**600**
Sulphate(mg/L)	46.8	36.82	34.36	134.66	**400**
Nitrate(mg/L)	0.66	1.28	1.65	3.78	**50**
Fluoride(mg/L)	0.58	0.40	0.60	0.53	**1.5**
Total Hardness(mg/L)	79.68	15.87	202.65	214.57	-
Total dissolved solids (mg/L)	172	108	248	320	**1500**
TSS(mg/L)	24	38	32	35	-
Copper(mg/L)	<0.03	<0.03	0.05	<0.03	**1.5**
Iron(mg/L)	<0.1	0.100	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.085	<0.04	0.2	**15**
Lead(mg/L)	<0.005	<0.005	0.01	0.009	**0.1**
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	32	32	10	6.1	_

Table: 10.2.3.7

Area: Lakhanpur

Project: LBL OCP

Project/OCP	LBL OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Pulijhor Stream Near Darlipalil Village before Confluence to Lilari Nallah (d/s of Lakhanpur OCP)				
Date of Sampling	28-May-24	27-Aug-24	26-Nov-24	27-Jan-25	
pH	7.49	7.03	7.57	7.29	6.5-8.5
Color (Hazen unit)	4	4	2	4	300
Dissolved Oxygen(mg/L)	5.6	7.0	6.8	6.0	4
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	3
Chlorides(mg/L)	21.68	13.8	11.83	13.51	600
Sulphate(mg/L)	126.8	34.93	15.71	144.32	400
Nitrate(mg/L)	0.92	1.58	1.63	4.04	50
Fluoride(mg/L)	0.42	0.32	0.40	0.60	1.5
Total Hardness(mg/L)	239.04	27.78	162.92	218.55	-
Total dissolved solids (mg/L)	348	116	214	326	1500
TSS(mg/L)	48	44	40	45	-
Copper(mg/L)	<0.03	<0.03	0.04	0.04	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	50
Zinc(mg/L)	<0.04	0.115	<0.04	0.17	15
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	0.1
MPN (Index/100 ml)	38	38	11	8.1	_

Table: 10.2.3.8

Area: Lakhanpur

Project: LBL OCP

Project/OCP	**LBL OCP**				**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**Lilari Nallah Near Kudaloi Village (u/s of Lakhanpur OCP)**				
Date of Sampling	**28-May-24**	**27-Aug-24**	**26-Nov-24**	**27-Jan-25**	
pH	7.58	6.85	6.79	7.72	**6.5-8.5**
Color (Hazen unit)	2	3	1	3	**300**
Dissolved Oxygen(mg/L)	6.3	6.9	6.3	6.6	**4**
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	**3**
Chlorides(mg/L)	19.71	11.83	11.83	13.51	**600**
Sulphate(mg/L)	56.8	3.66	2.98	135.21	**400**
Nitrate(mg/L)	0.54	<0.5	<0.5	3.82	**50**
Fluoride(mg/L)	0.61	0.75	<0.3	0.41	**1.5**
Total Hardness(mg/L)	107.57	15.87	27.82	242.39	**-**
Total dissolved solids (mg/L)	186	54	48	348	**1500**
TSS(mg/L)	46	22	30	39	**-**
Copper(mg/L)	<0.03	<0.03	0.05	0.03	**1.5**
Iron(mg/L)	<0.1	<0.1	0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.064	0.05	<0.04	**15**
Lead(mg/L)	<0.005	<0.005	0.006	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	48	48	12	12	_

Table: 10.2.3.9

Area: Lakhanpur

Project: LBL OCP

Project/OCP	LBL OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Lilari Nallah Near Lilari Bridge Village (d/s of Lakhanpur OCP)				
Date of Sampling	28-May-24	27-Aug-24	26-Nov-24	27-Jan-25	
pH	7.69	7.24	7.48	7.85	6.5-8.5
Color (Hazen unit)	4	3	1	4	300
Dissolved Oxygen(mg/L)	6.7	6.6	6.0	6.2	4
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	3
Chlorides(mg/L)	23.65	5.91	13.8	11.58	600
Sulphate(mg/L)	142.4	5.17	106.63	28.36	400
Nitrate(mg/L)	1.10	<0.5	3.34	<0.5	50
Fluoride(mg/L)	0.53	<0.3	0.32	0.87	1.5
Total Hardness(mg/L)	239.04	11.91	254.31	99.34	-
Total dissolved solids (mg/L)	324	56	328	144	1500
TSS(mg/L)	54	42	46	44	-
Copper(mg/L)	<0.03	<0.03	0.04	<0.03	1.5
Iron(mg/L)	<0.1	0.10	<0.1	<0.1	50
Zinc(mg/L)	<0.04	0.045	0.040	0.04	15
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	0.1
MPN (Index/100 ml)	58	58	12	14	_

Table: 10.2.3.10

Area: Lakhanpur

Project: LBL OCP

Project/OCP	LBL OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Confluence point of Lilari Nallah with IB River				
Date of sampling	28-May-24	27-Aug-24	26-Nov-24	27-Jan-25	
pH	7.76	7.11	7.20	7.25	**6.5-8.5**
Color (Hazen unit)	3	2	1	3	**300**
Dissolved Oxygen(mg/L)	6.1	7.2	6.8	7.0	**4**
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	**3**
Chlorides(mg/L)	9.85	5.91	9.85	13.51	**600**
Sulphate(mg/L)	10.72	5.93	20.25	23.84	**400**
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	**50**
Fluoride(mg/L)	0.40	<0.3	0.66	0.54	**1.5**
Total Hardness(mg/L)	39.84	11.91	75.50	83.45	-
Total dissolved solids (mg/L)	106	58	124	162	**1500**
TSS(mg/L)	34	46	34	36	-
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	**1.5**
Iron(mg/L)	<0.1	0.16	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.078	0.13	0.05	**15**
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	33	33	26	20	_

Table: 10.2.3.11

Area: Lakhanpur

Project: LBL OCP

Project/OCP	LBL OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Jurabaga Pond				
Date of sampling	28-May-24	27-Aug-24	26-Nov-24	27-Jan-25	
pH	7.87	7.06	7.39	7.39	6.5-8.5
Color (Hazen unit)	2	4	1	1	300
Dissolved Oxygen(mg/L)	6.8	6.7	6.4	6.8	4
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	3
Chlorides(mg/L)	11.82	11.83	59.13	15.44	600
Sulphate(mg/L)	9.68	52.84	22.82	26.30	400
Nitrate(mg/L)	<0.5	3.20	2.99	1.24	50
Fluoride(mg/L)	0.34	0.75	0.50	0.44	1.5
Total Hardness(mg/L)	35.86	79.37	154.97	55.63	-
Total dissolved solids (mg/L)	98	148	278	108	1500
TSS(mg/L)	38	52	38	42	-
Copper(mg/L)	<0.03	<0.03	<0.03	0.03	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	50
Zinc(mg/L)	0.04	0.107	0.06	0.2	15
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	0.1
MPN (Index/100 ml)	79	79	13	15	_

Table: 10.2.3.12

Area: Lakhanpur

Project: LBL OCP

Project/OCP	LBL OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Adhapada Village				
Date of sampling	28-May-24	27-Aug-24	26-Nov-2024	27-Jan-25	
pH	7.34	7.34	7.12	7.16	6.5-8.5
Color (Hazen unit)	1	4	2	4	300
Dissolved Oxygen(mg/L)	6.4	6.3	6.6	6.9	4
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	3
Chlorides(mg/L)	15.77	7.88	11.83	13.51	600
Sulphate(mg/L)	8.16	13.37	3.53	7.12	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	50
Fluoride(mg/L)	0.38	1.91	0.36	0.36	1.5
Total Hardness(mg/L)	55.78	19.84	43.71	35.67	-
Total dissolved solids (mg/L)	104	118	76	90	1500
TSS(mg/L)	40	30	28	39	-
Copper(mg/L)	<0.03	<0.03	0.04	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	50
Zinc(mg/L)	<0.04	0.116	0.07	<0.04	15
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	0.1
MPN (Index/100 ml)	120	120	26	26	_

Table: 10.2.3.13

Area: Mahalaxmi

Project: Basundhara (W)

Project/OCP	Basundhara (W)		IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Basundhara River u/s point near Tilkipara		
Date of sampling	30-Aug-24	28-Jan-25	
pH	6.90	7.33	6.5-8.5
Color (Hazen unit)	2	3	300
Dissolved Oxygen(mg/L)	7.3	6.2	4
BOD (3 days 270C(mg/L)	<2	<2	3
Chlorides(mg/L)	5.91	21.23	600
Sulphate(mg/L)	17.91	20.96	400
Nitrate(mg/L)	<0.5	<0.5	50
Fluoride(mg/L)	0.63	0.40	1.5
Total Hardness(mg/L)	11.91	55.63	-
Total dissolved solids (mg/L)	58	138	1500
TSS(mg/L)	26	34	-
Copper(mg/L)	<0.03	0.03	1.5
Iron(mg/L)	0.14	<0.1	50
Zinc(mg/L)	0.085	0.73	15
Lead(mg/L)	<0.005	0.014	0.1
Cadmium(mg/L)	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	-
Phenolics(mg/L)	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	0.1
MPN (Index/100 ml)		12	_

Table: 10.2.3.14

Area: Mahalaxmi

Project: Basundhara (W)

Project/OCP	Basundhara (W)		IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Basundhara River d/s point near Tilkipara		
Date of sampling	30-Aug-24	28-Jan-25	
pH	6.94	7.41	6.5-8.5
Color (Hazen unit)	4	2	300
Dissolved Oxygen(mg/L)	7.0	6.0	4
BOD (3 days 270C(mg/L)	<2	<2	3
Chlorides(mg/L)	7.88	23.16	600
Sulphate(mg/L)	18.79	26.63	400
Nitrate(mg/L)	<0.5	<0.5	50
Fluoride(mg/L)	0.45	0.45	1.5
Total Hardness(mg/L)	15.87	63.58	-
Total dissolved solids (mg/L)	64	142	1500
TSS(mg/L)	34	43	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	0.11	<0.1	50
Zinc(mg/L)	0.094	0.07	15
Lead(mg/L)	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	-
Phenolics(mg/L)	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	0.1
MPN (Index/100 ml)		17	_

Table: 10.2.3.15

Area: Basundhara
Project: Kulda OCP

Project/OCP	Kulda OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Basundhara River near Bankibahal bridge as u/s water				
Date of sampling	29-May-24	30-Aug-24	27-Nov-24	28-Jan-25	
pH	7.50	6.98	7.16	7.50	6.5-8.5
Color (Hazen unit)	2	3	3	1	300
Dissolved Oxygen(mg/L)	6.7	6.4	6.8	6.7	4
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	3
Chlorides(mg/L)	13.8	5.91	7.88	11.58	600
Sulphate(mg/L)	24.34	17.15	13.01	17.12	400
Nitrate(mg/L)	0.62	<0.5	<0.5	1.52	50
Fluoride(mg/L)	0.42	<0.3	0.51	0.51	1.5
Total Hardness(mg/L)	107.57	15.87	43.71	59.60	-
Total dissolved solids (mg/L)	180	56	86	134	1500
TSS(mg/L)	36	36	34	39	-
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	0.22	<0.1	<0.1	50
Zinc(mg/L)	<0.04	0.080	<0.04	0.05	15
Lead(mg/L)	<0.005	<0.005	<0.005	0.006	0.1
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	0.1
MPN (Index/100 ml)	79	79	12	14	_

Table: 10.2.3.16

Area: Basundhara

Project: Kulda OCP

Project/OCP	**Kulda OCP**				**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**Basundhara River near Barpali Village as d/s water**				
Date of sampling	**29-May-24**	**30-Aug-24**	**27-Nov-24**	**28-Jan-25**	
pH	7.73	6.23	6.54	7.69	**6.5-8.5**
Color (Hazen unit)	3	4	4	1	**300**
Dissolved Oxygen(mg/L)	6.3	6.5	6.3	6.3	**4**
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	**3**
Chlorides(mg/L)	17.74	5.91	7.88	13.51	**600**
Sulphate(mg/L)	16.82	11.36	13.25	23.29	**400**
Nitrate(mg/L)	0.98	<0.5	<0.5	<0.5	**50**
Fluoride(mg/L)	0.33	<0.3	0.33	0.35	**1.5**
Total Hardness(mg/L)	55.78	19.84	47.68	67.55	**-**
Total dissolved solids (mg/L)	122	42	94	138	**1500**
TSS(mg/L)	46	106	30	46	**-**
Copper(mg/L)	<0.03	<0.03	<0.03	0.04	**1.5**
Iron(mg/L)	<0.1	0.67	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.173	<0.04	0.07	**15**
Lead(mg/L)	<0.005	<0.005	<0.005	0.008	**0.1**
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	84	84	31	21	_

Table: 10.2.3.17

Area: Basundhara OCP

Project: Kulda OCP

Project/OCP	**Kulda OCP**				**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**Chattanjhor nallah near Tumulia Village as u/s water**				
Date of sampling	**29-May-24**	**30-Aug-24**	**27-Nov-24**	**28-Jan-25**	
pH	7.86	6.15	6.48	7.13	**6.5-8.5**
Color (Hazen unit)	2	5	3	1	**300**
Dissolved Oxygen(mg/L)	6.8	6.7	6.6	6.6	**4**
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	**3**
Chlorides(mg/L)	11.82	3.94	7.88	9.65	**600**
Sulphate(mg/L)	10.76	12.78	6.84	10.27	**400**
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	**50**
Fluoride(mg/L)	0.46	<0.3	0.42	0.70	**1.5**
Total Hardness(mg/L)	47.81	11.91	55.63	39.74	**-**
Total dissolved solids (mg/L)	106	38	88	88	**1500**
TSS(mg/L)	40	110	34	28	**-**
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.1	0.79	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.232	<0.04	0.05	**15**
Lead(mg/L)	<0.005	<0.005	0.017	0.012	**0.1**
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	70	70	23	23	_

Table: 10.2.3.18

Area: Basundhara OCP

Project: Kulda OCP

Project/OCP	**Kulda OCP**				**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**Chattanjhor nallah near Siarmal Village as d/s water**				
Date of sampling	**29-May-24**	**30-Aug-24**	**27-Nov-24**	**28-Jan-25**	
pH	7.91	6.74	6.60	7.25	**6.5-8.5**
Color (Hazen unit)	1	5	2	1	**300**
Dissolved Oxygen(mg/L)	5.9	6.7	6.1	6.2	**4**
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	**3**
Chlorides(mg/L)	11.82	5.91	9.85	11.58	**600**
Sulphate(mg/L)	8.28	33.08	6.73	16.37	**400**
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	**50**
Fluoride(mg/L)	0.61	<0.3	0.48	<0.3	**1.5**
Total Hardness(mg/L)	47.81	15.87	35.76	55.63	**-**
Total dissolved solids (mg/L)	96	56	64	98	**1500**
TSS(mg/L)	34	114	28	36	**-**
Copper(mg/L)	<0.03	<0.03	<0.03	0.04	**1.5**
Iron(mg/L)	<0.1	0.55	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.154	<0.04	0.08	**15**
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	79	79	38	38	**_**

Table: 10.2.3.19

Area: Basundhara OCP

Project: Kulda OCP

Project/OCP	Kulda OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Kund Pond water				
Date of sampling	29-May-24	30-Aug-24	27-Nov-24	28-Jan-25	
pH	7.56	6.32	6.63	7.60	6.5-8.5
Color (Hazen unit)	2	3	1	2	300
Dissolved Oxygen(mg/L)	5.5	6.2	6.6	6.8	4
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	3
Chlorides(mg/L)	9.85	5.91	7.88	7.72	600
Sulphate(mg/L)	12	13.25	6.62	10.55	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	50
Fluoride(mg/L)	0.85	0.38	0.60	0.33	1.5
Total Hardness(mg/L)	63.74	15.87	51.66	47.68	-
Total dissolved solids (mg/L)	114	44	78	76	1500
TSS(mg/L)	40	94	32	35	-
Copper(mg/L)	<0.03	<0.03	0.03	0.03	1.5
Iron(mg/L)	<0.1	0.51	<0.1	<0.1	50
Zinc(mg/L)	<0.04	0.305	0.21	0.12	15
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	0.1
MPN (Index/100 ml)	63	63	26	26	_

Table: 10.2.3.20

Area: Basundhara

Project: Garjanbahal OCP

Project/OCP	Garjanbahal				IS:2296-1982 Tolerance for Inland Surface Water (Class C)
NAME OF STATIONS	Basundhara River near Bandhpali Village as d/s water				
Date of sampling	29-May-24	30-Aug-24	27-Nov-24	28-Jan-25	
pH	7.67	6.72	6.79	7.51	6.5-8.5
Color (Hazen unit)	1	5	1	3	300
Dissolved Oxygen(mg/L)	6.0	6.5	6.3	6.7	4
BOD (3 days 270C(mg/L)	<2	<2	<2	<2	3
Chlorides(mg/L)	7.88	7.88	7.88	9.65	600
Sulphate(mg/L)	10.20	24.36	23.31	29.45	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	50
Fluoride(mg/L)	0.33	<0.3	<0.3	0.37	1.5
Total Hardness(mg/L)	59.76	19.84	47.68	55.63	-
Total dissolved solids (mg/L)	98	60	88	126	1500
TSS(mg/L)	46	118	36	23	-
Copper(mg/L)	<0.03	<0.03	<0.03	0.04	1.5
Iron(mg/L)	<0.1	0.55	<0.1	<0.1	50
Zinc(mg/L)	<0.04	0.130	<0.04	0.05	15
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.005
Oil & Grease	<4.0	<4.0	<4.0	<4.0	0.1
MPN (Index/100 ml)	84	84	12	12	_

Table: 10.2.3.21

Area: Basundhara OCP

Project: Garjanbahal

Project/OCP	Garjanbahal		IS:2296-1982 Tolerance for Inland Surface Water (Class C)
NAME OF STATIONS	Basundhara River near Bankibahal bridge as u/s of Duduka (Reported)		
Date of sampling	29-May-24	27-Nov-24	
pH	7.50	7.16	6.5-8.5
Color (Hazen unit)	2	3	300
Dissolved Oxygen(mg/L)	6.7	6.8	4
BOD (3 days 270C(mg/L)	<2	<2	3
Chlorides(mg/L)	13.8	7.88	600
Sulphate(mg/L)	24.34	13.01	400
Nitrate(mg/L)	0.62	<0.5	50
Fluoride(mg/L)	0.42	0.51	1.5
Total Hardness(mg/L)	107.57	43.71	-
Total dissolved solids (mg/L)	180	86	1500
TSS(mg/L)	36	34	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Zinc(mg/L)	<0.04	<0.04	15
Lead(mg/L)	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	–
Arsenic(mg/L)	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	0.005
Oil & Grease	<4.0	<4.0	0.1
MPN (Index/100 ml)	79	12	_

Table: 10.2.3.22

Area: Basundhara OCP

Project: Garjanbahal

Project/OCP	Garjanbahal		IS:2296-1982 Tolerance for Inland Surface Water (Class C)
NAME OF STATIONS	Basundhara River near Barpali Village as d/s water (Reported Only)		
Date of sampling	29-May-24	27-Nov-24	
pH	7.73	6.54	6.5-8.5
Color (Hazen unit)	3	4	300
Dissolved Oxygen(mg/L)	6.3	6.3	4
BOD (3 days 270C(mg/L)	<2	<2	3
Chlorides(mg/L)	17.74	7.88	600
Sulphate(mg/L)	16.82	13.25	400
Nitrate(mg/L)	0.98	<0.5	50
Fluoride(mg/L)	0.33	0.33	1.5
Total Hardness(mg/L)	55.78	47.68	-
Total dissolved solids (mg/L)	122	94	1500
TSS(mg/L)	46	30	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Zinc(mg/L)	<0.04	<0.04	15
Lead(mg/L)	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	0.005
Oil & Grease	<4.0	<4.0	0.1
MPN (Index/100 ml)	84	31	_

Table: 10.2.3.23

Area: Orient

Project: Orient Mine No. 1 & 2

Project/OCP	Orient Mine No. 1 & 2		IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	U/S of Baghmara Nala at Discharge Point		
Date of sampling	27-May-24	25-Nov-24	
pH	7.75	7.47	6.5-8.5
Color (Hazen unit)	3	1	300
Dissolved Oxygen(mg/L)	6.6	6.7	4
BOD (3 days 270C(mg/L)	<2	<2	3
Chlorides(mg/L)	13.8	7.88	600
Sulphate(mg/L)	14.82	15.21	400
Nitrate(mg/L)	<0.5	<0.5	50
Fluoride(mg/L)	0.42	0.53	1.5
Total Hardness(mg/L)	67.73	59.60	-
Total dissolved solids (mg/L)	118	92	1500
TSS(mg/L)	30	38	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.1	<0.1	50
Zinc(mg/L)	<0.04	0.33	15
Lead(mg/L)	<0.005	0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	_
Arsenic(mg/L)	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	0.05
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	0.1
MPN (Index/100 ml)	58	12	_

Table: 10.2.3.24

Area: Orient

Project: Orient Mine No. 1 & 2

Project/OCP	**Orient Mine No. 1 & 2**		**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**D/S of Baghmara Nala at Discharge Point**		
Date of sampling	**27-May-24**	**25-Nov-24**	
pH	7.82	7.53	**6.5-8.5**
Color (Hazen unit)	2	2	**300**
Dissolved Oxygen(mg/L)	6.3	6.2	**4**
BOD (3 days 270C(mg/L)	<2	<2	**3**
Chlorides(mg/L)	15.77	9.85	**600**
Sulphate(mg/L)	16.24	14.60	**400**
Nitrate(mg/L)	<0.5	<0.5	**50**
Fluoride(mg/L)	0.70	0.42	**1.5**
Total Hardness(mg/L)	75.70	59.60	**-**
Total dissolved solids (mg/L)	136	98	**1500**
TSS(mg/L)	48	46	**-**
Copper(mg/L)	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	0.1	**15**
Lead(mg/L)	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	63	14	**_**

Table: 10.2.3.25

Area: Orient

Project: Orient Mine No. 3

Project/OCP	**Orient Mine No. 3**		**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**Pond Water at Budhijam Village**		
Date of sampling	**27-May-24**	**25-Nov-24**	
pH	7.92	7.72	**6.5-8.5**
Color (Hazen unit)	3	2	**300**
Dissolved Oxygen(mg/L)	6.5	6.4	**4**
BOD (3 days 270C(mg/L)	<2	<2	**3**
Chlorides(mg/L)	23.65	21.68	**600**
Sulphate(mg/L)	18.16	24.05	**400**
Nitrate(mg/L)	<0.5	<0.5	**50**
Fluoride(mg/L)	0.88	0.49	**1.5**
Total Hardness(mg/L)	67.73	95.37	**-**
Total dissolved solids (mg/L)	146	138	**1500**
TSS(mg/L)	26	28	**-**
Copper(mg/L)	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.1	<0.1	**50**
Zinc (mg/L)	<0.04	<0.04	**15**
Lead(mg/L)	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	50	25	**_**

Table: 10.2.3.26

Area: Orient

Project: HBI

Project/OCP	**HBI**		**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**IB River near Kutabaga Village at Bridge Point**		
Date of sampling	**27-May-24**	**25-Nov-24**	
pH	8.04	7.92	**6.5-8.5**
Color (Hazen unit)	1	2	**300**
Dissolved Oxygen(mg/L)	6.7	6.2	**4**
BOD (3 days 270C(mg/L)	<2	<2	**3**
Chlorides(mg/L)	11.82	9.85	**600**
Sulphate(mg/L)	12.36	4.74	**400**
Nitrate(mg/L)	<0.5	<0.5	**50**
Fluoride(mg/L)	0.47	0.47	**1.5**
Total Hardness(mg/L)	63.74	55.63	**-**
Total dissolved solids (mg/L)	108	98	**1500**
TSS(mg/L)	28	24	**-**
Copper(mg/L)	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	<0.04	**15**
Lead(mg/L)	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	**0.005**
Oil & Grease (mg/L)	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	46	12	**_**

Table: 10.2.3.27

Area: Orient

Project: Orient Mine No. 4

Project/OCP	**Orient Mine No. 4**		**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**IB River Near Charbhati Village as u/s Water for IB Valley Coalfield**		
Date of sampling	**27-May-24**	**25-Nov-24**	
pH	7.96	7.86	**6.5-8.5**
Color (Hazen unit)	3	4	**300**
Dissolved Oxygen(mg/L)	6.5	6.6	**4**
BOD (3 days 270C(mg/L)	<2	<2	**3**
Chlorides(mg/L)	15.77	7.88	**600**
Sulphate(mg/L)	24.38	4.96	**400**
Nitrate(mg/L)	<0.5	<0.5	**50**
Fluoride(mg/L)	0.65	0.74	**1.5**
Total Hardness(mg/L)	99.60	43.71	**-**
Total dissolved solids (mg/L)	140	92	**1500**
TSS(mg/L)	34	28	**-**
Copper(mg/L)	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	<0.04	**15**
Lead(mg/L)	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	**0.005**
Oil & Grease(mg/L)	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	47	13	**_**

Table: 10.2.3.28

Area: Orient

Project: Orient Mine No. 4

Project/OCP	**Orient Mine No. 4**		**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**IB River Bridge of NH200 at Gondghora Village as u/s of Orient Area**		
Date of sampling	**27-May-24**	**25-Nov-24**	
pH	7.98	7.81	**6.5-8.5**
Color (Hazen unit)	2	3	**300**
Dissolved Oxygen(mg/L)	6.2	7.2	**4**
BOD (3 days 270C(mg/L)	<2	<2	**3**
Chlorides(mg/L)	15.77	9.85	**600**
Sulphate(mg/L)	34.46	21.10	**400**
Nitrate(mg/L)	<0.5	<0.5	**50**
Fluoride(mg/L)	0.60	0.61	**1.5**
Total Hardness(mg/L)	99.60	83.45	**-**
Total dissolved solids (mg/L)	152	126	**1500**
TSS(mg/L)	44	22	**-**
Copper(mg/L)	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.1	<0.1	**50**
Zinc(mg/L)	<0.04	<0.04	**15**
Lead(mg/L)	<0.005	<0.005	**0.1**
Cadmium(mg/L)	<0.001	<0.001	**0.01**
Total Chromium (mg/L)	<0.01	<0.01	**_**
Arsenic(mg/L)	<0.005	<0.005	**0.2**
Selenium(mg/L)	<0.005	<0.005	**0.05**
Hexavalent Chromium,(mg/L)	<0.05	<0.05	
Phenolics(mg/L)	<0.001	<0.001	**0.005**
Oil & Grease(mg/L)	<4.0	<4.0	**0.1**
MPN (Index/100 ml)	58	25	**_**

GROUND WATER LEVEL AT PIEZOMETRIC LOCATIONS

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PIEZOMETER LEVEL DATA

Table:10.2.4.1

Area	Project	Name of the Station	Date of Sampling	Below Ground Levels (meter)
Ib valley	Samaleswari OCP	Piezometer No MIP 04; Village Kutabaga; (Believer's Church School) Latitude 21° 47 '55" N Longitude 83°56'24" E	13-May-24	14.32
		Piezometer No MIP 04; Village Kutabaga; (Believer's Church School) Latitude 21° 47 '55" N Longitude 83°56'24" E	20-Aug-24	4.61
		Piezometer No MIP 04; Village Kutabaga; (Believer's Church School) Latitude 21° 47 '55" N Longitude 83°56'24" E	18-Nov-24	7.5
		Piezometer No MIP 04; Village Kutabaga; (Believer's Church School) Latitude 21° 47 '55" N Longitude 83°56'24" E	06-Jan-25	8.2
	Lajkura OCP	Piezometer No MIP 02; Village Gumadera; Village High School 21°47'50" N Longitude 83°52'37" E	13-May-24	Inaccessible
		Piezometer No MIP 02; Village Gumadera; Village High School 21°47'50" N Longitude 83°52'37" E	20-Aug-24	Inaccessible
		Piezometer No MIP 02; Village Gumadera; Village High School 21°47'50" N Longitude 83°52'37" E	18-Nov-24	Pump fitted depth could not be measured
		Piezometer No MIP 02; Village Gumadera; Village High School 21°47'50" N Longitude 83°52'37" E	06-Jan-25	Pump fitted depth could not be measured
Lakhanpur	Lakhanpur	Piezometer No MIP 10; Village Dahaldera; Inside the Premisses of UP School. Latitude 21 ° 46 '51" N Longitude 83 ° 48'47" E	14-May-24	17.13
		Piezometer No MIP 10; Village Dahaldera; Inside the Premisses of UP School. Latitude 21 ° 46 '51" N Longitude 83 ° 48'47" E	21-Aug-24	15.26
		Piezometer No MIP 10; Village Dahaldera; Inside the Premisses of UP School. Latitude 21 ° 46 '51" N Longitude 83 ° 48'47" E	18-Nov-24	12.1
		Piezometer No MIP 10; Village Dahaldera; Inside the Premisses of UP School. Latitude 21 ° 46 '51" N Longitude 83 ° 48'47" E	06-Jan-25	15.6
Lakhanpur	Lilari OCP	Piezometer No MIP 06; Infront of Lilari Mines Project Office. Latitude 21.77826 N Longitude 85.8580 E	14-May-24	16.7
		Piezometer No MIP 06; Infront of Lilari Mines Project Office. Latitude 21.77826 N Longitude 85.8580 E	21-Aug-24	15.21
		Piezometer No MIP 06; Infront of Lilari Mines Project Office. Latitude 21.77826 N Longitude 85.8580 E	18-Nov-24	15.53
		Piezometer No MIP 06; Infront of Lilari Mines Project Office. Latitude 21.77826 N Longitude 85.8580 E	06-Jan-25	16.7
Lakhanpur	LBL OCP	Piezometer No MIP 07; Infront of DAV school Bandbahal, Inside colony substationLatitude 21.01800 N Longitude 85.13027 E	14-May-24	4.18
		Piezometer No MIP 07; Infront of DAV school Bandbahal, Inside colony substationLatitude 21.01800 N Longitude 85.13027 E	21-Aug-24	7.3
		Piezometer No MIP 07; Infront of DAV school Bandbahal, Inside colony substationLatitude 21.01800 N Longitude 85.13027 E	18-Nov-24	7
		Piezometer No MIP 07; Infront of DAV school Bandbahal, Inside colony substationLatitude 21.01800 N Longitude 85.13027 E	06-Jan-25	7.3
		Piezometer No MIP 08; Village Kusraloi, Inside the Premises of Prathamik Vidyalaya Latitude 21.01800 N Longitude 85.13027 E	14-May-24	9.27
		Piezometer No MIP 08; Village Kusraloi, Inside the Premises of Prathamik Vidyalaya Latitude 21.01800 N Longitude 85.13027 E	21-Aug-24	8.2
		Piezometer No MIP 08; Village Kusraloi, Inside the Premises of Prathamik Vidyalaya Latitude 21.01800 N Longitude 85.13027 E	18-Nov-24	8.2

		Piezometer No MIP 08; Village Kusraloi, Inside the Premises of Prathamik Vidyalaya Latitude 21.01800 N Longitude 85.13027 E	06-Jan-25	9.27
		Piezometer No MIP 09; Village Junion; Inside the Premisses of State Govt. Horticulture InstituteLatitude 21°45'49" N Longitude 83°47'42" E.	14-May-24	8
		Piezometer No MIP 09; Village Junion; Inside the Premisses of State Govt. Horticulture InstituteLatitude 21°45'49" N Longitude 83°47'42" E.	21-Aug-24	7.16
		Piezometer No MIP 09; Village Junion; Inside the Premisses of State Govt. Horticulture InstituteLatitude 21°45'49" N Longitude 83°47'42" E.	18-Nov-24	7.16
		Piezometer No MIP 09; Village Junion; Inside the Premisses of State Govt. Horticulture InstituteLatitude 21°45'49" N Longitude 83°47'42" E.	06-Jan-25	8
Mahalaxmi	**Basundhara (W) OCP**	Piezometer No MIP 13; Village Tumlia; Inside the Campus of Manikeswari College.	15-May-24	13.62
		Piezometer No MIP 13; Village Tumlia; Inside the Campus of Manikeswari College.	22-Aug-24	9.81
		Piezometer No MIP 13; Village Tumlia; Inside the Campus of Manikeswari College.	18-Nov-24	9.6
		Piezometer No MIP 13; Village Tumlia; Inside the Campus of Manikeswari College.	06-Jan-25	10.2
		Piezometer No MIP 15; Back Side of Sardega Primary School.Latitude 22 °4'8" N Logitude 83°43'19" E	15-May-24	Pump fitted
		Piezometer No MIP 15; Back Side of Sardega Primary School.Latitude 22 °4'8" N Logitude 83°43'19" E	22-Aug-24	Pump fitted
Mahalaxmi	**Basundhara (W) OCP**	Piezometer No MIP 15; Back Side of Sardega Primary School.Latitude 22 °4'8" N Logitude 83°43'19" E	18-Nov-24	13.9
		Piezometer No MIP 15; Back Side of Sardega Primary School.Latitude 22 °4'8" N Logitude 83°43'19" E	06-Jan-25	14.26
		Piezometer No MIP 16; Village Kulhaparha (new basti) on the road from Sardega to Gopalpur Latitude 22 °3'25" N Longitude 83 ° 42'36" E	15-May-24	18.74
		Piezometer No MIP 16; Village Kulhaparha (new basti) on the road from Sardega to Gopalpur Latitude 22 °3'25" N Longitude 83 ° 42'36" E	21-Aug-24	
		Piezometer No MIP 16; Village Kulhaparha (new basti) on the road from Sardega to Gopalpur Latitude 22 °3'25" N Longitude 83 ° 42'36" E	18-Nov-24	Demolished
		Piezometer No MIP 16; Village Kulhaparha (new basti) on the road from Sardega to Gopalpur Latitude 22 °3'25" N Longitude 83 ° 42'36" E	06-Jan-25	Demolished
		Piezometer No MIP 17; Village Gopalpur; CMPDI Exploration Camp. Latitude 22° 3' 15"N Logitude 83 ° 42'17" E	15-May-24	13.43
		Piezometer No MIP 17; Village Gopalpur; CMPDI Exploration Camp. Latitude 22° 3' 15"N Logitude 83 ° 42'17" E	22-Aug-24	11.09
		Piezometer No MIP 17; Village Gopalpur; CMPDI Exploration Camp. Latitude 22° 3' 15"N Logitude 83 ° 42'17" E	18-Nov-24	10
		Piezometer No MIP 17; Village Gopalpur; CMPDI Exploration Camp. Latitude 22° 3' 15"N Logitude 83 ° 42'17" E	06-Jan-25	11.35
Basundhara	**Kulda OCP**	Piezometer No MIP 01; Village Garjanbahal (Village School Campus)Latitude 22 °0'41" N Longitude 83 ° 45'52" E	14-May-24	10.76
		Piezometer No MIP 01; Village Garjanbahal (Village School Campus)Latitude 22 °0'41" N Longitude 83 ° 45'52" E	23-Aug-24	Inaccessible
		Piezometer No MIP 01; Village Garjanbahal (Village School Campus)Latitude 22 °0'41" N Longitude 83 ° 45'52" E	18-Nov-24	16.7
		Piezometer No MIP 01; Village Garjanbahal (Village School Campus)Latitude 22 °0'41" N Longitude 83 ° 45'52" E	06-Jan-25	18
		Piezometer No MIP 11; Village Karlikachar; Infront of Primary School. Latitude 22.013755 N Longitude 83.745114 E	15-May-24	Pump fitted

		Piezometer No MIP 11; Village Karlikachar; Infront of Primary School. Latitude 22.013755 N Longitude 83.745114 E	22-Aug-24	Pump fitted
		Piezometer No MIP 12; Village Balinga; MCL Office. Latitude 22 ° 1'59 " N Longitude 83°45'15" E	15-May-24	1.37
		Piezometer No MIP 12; Village Balinga; MCL Office. Latitude 22 ° 1'59 " N Longitude 83°45'15" E	22-Aug-24	1.29
		Piezometer No MIP 12; Village Balinga; MCL Office. Latitude 22 ° 1'59 " N Longitude 83°45'15" E	18-Nov-24	6.1
		Piezometer No MIP 12; Village Balinga; MCL Office. Latitude 22 ° 1'59 " N Longitude 83°45'15" E	06-Jan-25	7
		Piezometer No MIP 14; Village Kulda; Primary School Campus. Latitude 22 ° 1'55" N Longitude 83°43'47" E	15-May-24	Inaccessible
		Piezometer No MIP 14; Village Kulda; Primary School Campus. Latitude 22 ° 1'55" N Longitude 83°43'47" E	22-Aug-24	Inaccessible
		Piezometer No MIP 14; Village Kulda; Primary School Campus. Latitude 22 ° 1'55" N Longitude 83°43'47" E	18-Nov-24	Demolished
		Piezometer No MIP 14; Village Kulda; Primary School Campus. Latitude 22 ° 1'55" N Longitude 83°43'47" E	06-Jan-25	Demolished
Basundhara	**Garjanbahal OCP**	Piezometer No MIP 01; Village Garjanbahal (Village School Campus)(Reported only) Latitude 22 °0'41" N Longitude 83 ° 45'52" E	15-May-24	10.76
		Piezometer No MIP 01; Village Garjanbahal (Village School Campus)(Reported only) Latitude 22 °0'41" N Longitude 83 ° 45'52" E	22-Aug-24	6.16
		Piezometer No MIP 01; Village Garjanbahal (Village School Campus)(Reported only) Latitude 22 °0'41" N Longitude 83 ° 45'52" E	18-Nov-24	16.7
		Piezometer No MIP 01; Village Garjanbahal (Village School Campus)(Reported only) Latitude 22 °0'41" N Longitude 83 ° 45'52" E	06-Jan-25	18
		Piezometer No MIP 11; Village Karlikachar; Infront of Primary School.(Reported only) Latitude 22.013755 N Longitude 83.745114 E	15-May-24	Pump fitted
		Piezometer No MIP 11; Village Karlikachar; Infront of Primary School.(Reported only) Latitude 22.013755 N Longitude 83.745114 E	22-Aug-24	Pump fitted
Orinet	**Orient Mine No. 1 & 2**	Piezometer No MIP 03; Beside Ib Valley GM House. Latitude 21.85446 N Longitude 83.926961 E	16-May-24	9.16
		Piezometer No MIP 03; Beside Ib Valley GM House. Latitude 21.85446 N Longitude 83.926961 E	23-Aug-24	7.27
		Piezometer No MIP 03; Beside Ib Valley GM House. Latitude 21.85446 N Longitude 83.926961 E	18-Nov-24	7.95
		Piezometer No MIP 03; Beside Ib Valley GM House. Latitude 21.85446 N Longitude 83.926961 E	06-Jan-25	8.11
	Orient Mine No. 3	Piezometer No MIP 05; Village Chauliberna; Inside Nursing high School Campus Latitude21 °49'4" N Longitude 83°52'43"E	16-May-24	31.19
		Piezometer No MIP 05; Village Chauliberna; Inside Nursing high School Campus Latitude21 °49'4" N Longitude 83°52'43"E	23-Aug-24	29.42
		Piezometer No MIP 05; Village Chauliberna; Inside Nursing high School Campus Latitude21 °49'4" N Longitude 83°52'43"E	18-Nov-24	15.16
		Piezometer No MIP 05; Village Chauliberna; Inside Nursing high School Campus Latitude21 °49'4" N Longitude 83°52'43"E	06-Jan-25	20.15
	HBI	Piezometer No MIP 05; Village Chauliberna; Inside Nursing High School Campus (Reported only) Latitude21 °49'4" N Longitude 83°52'43"E	16-May-24	31.19
		Piezometer No MIP 05; Village Chauliberna; Inside Nursing High School Campus (Reported only) Latitude21 °49'4" N Longitude 83°52'43"E	23-Aug-24	29.42

		Piezometer No MIP 05; Village Chauliberna; Inside Nursing High School Campus (Reported only) Latitude21 °49'4" N Longitude 83°52'43"E	18-Nov-24	15.16
		Piezometer No MIP 05; Village Chauliberna; Inside Nursing High School Campus (Reported only) Latitude21 °49'4" N Longitude 83°52'43"E	06-Jan-25	20.15

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