

**Environmental Monitoring Report
For
January-2026**

**Project: Samleswari OCP
Area: Ib Valley
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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Test Report



AMBIENT AIR QUALITY DATA

Area : Ib Valley

(Compliance Station)

Project :

Samleswari OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO ₂	NO _x	CO (mg/m ³)	Dust Generating Source	Distance from DGS
03-Jan-26	West of the Mine	298	189	75	20.50	35.76	-	Distance From 'y' Curve Railway Siding	About 450m
03-Jan-26	South of the Mine	261	178	67	21.16	36.74	-	Mine Haul Roads	About 400m
03-Jan-26	East of the Mine	241	152	65	14.69	25.08	-	Coal Transportation Road	About 500m
21-Jan-26	West of the Mine	267	149	65	15.49	22.19	-	Distance From 'y' Curve Railway Siding	About 450m
21-Jan-26	South of the Mine	295	173	67	14.95	26.31	-	Mine Haul Roads	About 400m
21-Jan-26	East of the Mine	283	168	76	16.31	38.49	-	Coal Transportation Road	About 500m

J. H. H. H.
Authorized Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR

J. H. H. H.

MoEF Standards Notification dated 25th
 September, 2009

500 250 120 120 62(8 Hours)



Test Report

AMBIENT AIR QUALITY DATA

Area : Ib Valley

(Reference Station)

Project :

Samleswari OCP

(conc. in µg/cu.m.)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
01-Jan-26	Kudaloi Village	175	68	43	12.47	18.82	Mining Activities	About 1000m
02-Jan-26	Kudaloi Village	210	77	48	14.78	21.96	Mining Activities	About 1000m
05-Jan-26	Rampur Sub Area (Reported only)	217	85	49	15.85	38.43	Coal Stock And CT Road	About 1000m
05-Jan-26	Khokelmal (Reported Only)	216	83	47	13.72	41.10	Railway siding	About 1000m
06-Jan-26	Khokelmal (Reported Only)	195	74	43	13.89	29.89	Railway siding	About 1000m
06-Jan-26	Rampur Sub Area (Reported only)	164	83	35	16.74	30.40	Coal Stock And CT Road	About 1000m
08-Jan-26	Kudaloi Village	193	73	41	16.98	27.82	Mining Activities	About 1000m
09-Jan-26	Kudaloi Village	198	75	46	10.59	32.93	Mining Activities	About 1000m
12-Jan-26	Khokelmal (Reported Only)	224	85	49	12.37	41.22	Railway siding	About 1000m
12-Jan-26	Rampur Sub Area (Reported only)	206	86	45	16.06	28.41	Coal Stock And CT Road	About 1000m
13-Jan-26	Rampur Sub Area (Reported only)	212	88	49	21.82	25.87	Coal Stock And CT Road	About 1000m
13-Jan-26	Khokelmal (Reported Only)	237	93	51	11.32	35.55	Railway siding	About 1000m
16-Jan-26	Kudaloi Village	216	93	49	12.45	22.09	Mining Activities	About 1000m
17-Jan-26	Kudaloi Village	213	85	47	13.44	39.28	Mining Activities	About 1000m
19-Jan-26	Khokelmal (Reported Only)	221	92	50	14.78	21.96	Railway siding	About 1000m
19-Jan-26	Rampur Sub Area (Reported only)	198	75	43	13.91	16.32	Coal Stock And CT Road	About 1000m
20-Jan-26	Rampur Sub Area (Reported only)	209	84	45	10.26	21.26	Coal Stock And CT Road	About 1000m
20-Jan-26	Khokelmal (Reported Only)	216	84	47	16.98	27.82	Railway siding	About 1000m
22-Jan-26	Kudaloi Village	204	82	45	11.00	33.88	Mining Activities	About 1000m
23-Jan-26	Kudaloi Village	228	90	50	12.73	38.58	Mining Activities	About 1000m
27-Jan-26	Khokelmal (Reported Only)	211	87	45	10.59	32.93	Railway siding	About 1000m
27-Jan-26	Rampur Sub Area (Reported only)	220	88	48	14.94	24.20	Coal Stock And CT Road	About 1000m

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BHUBANESWAR

Signature

Project :

Samleswari OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

<i>Date of Sampling</i>	<i>Monitoring Station</i>	<i>SPM</i>	<i>PM10</i>	<i>PM2.5</i>	<i>SO2</i>	<i>NOx</i>	<i>Dust Generating Source(DGS)</i>	<i>Distance from DGS</i>
28-Jan-26	Rampur Sub Area (Reported only)	185	74	43	13.38	31.42	Coal Stock And CT Road	About 1000m
28-Jan-26	Khokelmal (Reported Only)	207	80	43	11.69	21.51	Railway siding	About 1000m
30-Jan-26	Kudaloi Village	188	76	42	10.75	24.47	Mining Activities	About 1000m
31-Jan-26	Kudaloi Village	204	83	45	12.99	33.16	Mining Activities	About 1000m

Signature
Authorized Signatory
CMPDI, RI-VII, LAB
SHUBANESWAR

Signature

*N-11QS.2609

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Test Report



AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area :

Ib Valley

Project :

Samleswari OCP

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
01-Jan-26	Kudaloi Village	<20.0	27.78	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
02-Jan-26	Kudaloi Village	<20.0	24.08	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
05-Jan-26	Rampur Sub Area (Reported only)	<20.0	24.58	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
05-Jan-26	Khokelmal (Reported Only)	<20.0	26.05	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
06-Jan-26	Rampur Sub Area (Reported only)	<20.0	11.30	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
06-Jan-26	Khokelmal (Reported Only)	<20.0	27.53	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
08-Jan-26	Kudaloi Village	<20.0	20.15	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
09-Jan-26	Kudaloi Village	<20.0	17.45	<0.1	<1.0	<1.0	1.8	BQL(QL=0.7)	BQL
12-Jan-26	Rampur Sub Area (Reported only)	<20.0	23.85	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
12-Jan-26	Khokelmal (Reported Only)	<20.0	25.32	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
13-Jan-26	Khokelmal (Reported Only)	<20.0	25.07	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
13-Jan-26	Rampur Sub Area (Reported only)	<20.0	21.13	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
16-Jan-26	Kudaloi Village	<20.0	26.30	<0.1	<1.0	<1.0	1.7	BQL(QL=0.7)	BQL
17-Jan-26	Kudaloi Village	<20.0	22.37	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
19-Jan-26	Rampur Sub Area (Reported only)	<20.0	16.22	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-Jan-26	Khokelmal (Reported Only)	<20.0	22.12	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
20-Jan-26	Rampur Sub Area (Reported only)	<20.0	20.90	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
20-Jan-26	Khokelmal (Reported Only)	<20.0	19.92	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
22-Jan-26	Kudaloi Village	<20.0	13.03	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
23-Jan-26	Kudaloi Village	<20.0	12.53	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
27-Jan-26	Rampur Sub Area (Reported only)	<20.0	19.42	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
27-Jan-26	Khokelmal (Reported Only)	<20.0	18.68	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
28-Jan-26	Khokelmal (Reported Only)	<20.0	13.03	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL

Standard	100(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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BHUBANESWAR

Janak

Project :

Samleswari OCP

Date of Sampling	Monitoring Station	Ammonia(NH ₃)	Ozone(O ₃)	Lead(Pb)	Arsenic(As)	Nickel(Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
28-Jan-26	Rampur Sub Area (Reported only)	<20.0	21.13	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
30-Jan-26	Kudaloi Village	<20.0	28.77	<0.1	<1.0	<1.0	1.7	BQL(QL=0.7)	BQL
31-Jan-26	Kudaloi Village	<20.0	27.03	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hour)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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Jitendra
Authorized Signatory
CMPD, RI-VII, LAG
BHUBANESWAR

Jitendra



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CMPDI
भारत सरकार

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Ib Valley

PROJECT :

Samleswari OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
12-Jan-26	East of the Mine	62.4	56.1
12-Jan-26	Khokelmal (Reported Only)	52.4	39.7
12-Jan-26	South of the Mine	52.9	43.5
12-Jan-26	Kudaloi Village	49.2	41.6
12-Jan-26	Rampur Sub Area	53.3	40.7
12-Jan-26	West of the Mine	52.6	40.2
28-Jan-26	East of the Mine	52.8	39.7
28-Jan-26	South of the Mine	51.1	40.6
28-Jan-26	Rampur Sub Area	49.6	42.8
28-Jan-26	Khokelmal (Reported Only)	52.8	40.6
28-Jan-26	Kudaloi Village	50.9	41.3
28-Jan-26	West of the Mine	49.3	42.8

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


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Test Report

EFFLUENT QUALITY DATA

Area :

Ib Valley

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

Project :

Samaleswari OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
15-Jan-26	Mine Sump Water	6.84	<4.0	28	20	-	-	-	
15-Jan-26	Inlet of ETP	-	-	-	-	-	-	-	Under maintenance
15-Jan-26	Outlet of ETP	-	-	-	-	-	-	-	Under maintenance
31-Jan-26	Inlet of ETP	-	-	-	-	-	-	-	Under maintenance
31-Jan-26	Outlet of ETP	-	-	-	-	-	-	-	Under maintenance

MoEF Standard Notification dated 25th September, 2009
and MoEF Schedule VI, General standard for discharge
of Environmental Pollutants Part A: Effluents

5.5-9.0	10	100	250	30
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Test Report

EFFLUENT QUALITY DATA

Area :

IB Valley

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

Project :

Samaleswari OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	MPN/100mL
15-Jan-26	STP Outlet	7.53	-	25	-	<2.0	-	-	210
15-Jan-26	STP Inlet	7.29	-	33	-	2.7	-	-	280
31-Jan-26	STP Outlet	7.44	-	31	-	<2.0	-	-	240
31-Jan-26	STP Inlet	7.13	-	39	-	2.6	-	-	350

Katunak
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Janak

G.S.R. 126 5(E) Effluent discharge standards (applicable to all mode of disposal), Sewage Treatment Plants (STPs)	6.5-9.5	-	<100	-	30	-	<1000
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Drinking Water Quality Data IB Valley Area

Project / OCP	Samaleswari OCP		Indian Drinking Standards (IS-10500):2012	
	Well Water From Kudopali	Tap Water From Samaleswari OCP Colony		
Monitoring Station				
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Colour(Hazen)	3.0	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3.2	2.1	1	5
pH	6.75	7.03	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	45.6	136.8	200	600
Chloride(mg/L)	61.7	26.99	250	1000
Sulphate(mg/L)	52.60	4.66	200	400
Nitrate(mg/L)	46.3	<0.5	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	173.38	108.86	200	600
Calcium(mg/L)	45.25	30.70	75	200
Fluoride(mg/L)	0.39	0.69	1	1.5
Total Dissolve Solid(mg/L)	304	196	500	2000
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.04	<0.04	1	No relaxation
Zinc(mg/L)	<0.04	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	0.5	2.4

J. K. Jaiswal
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jaiswal



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निर्भरता
cmpdi
सर्वोत्तम

Drinking Water Quality Data IB Valley Area

Project / OCP	Samaleswari OCP		Indian Drinking Standards (IS-10500):2012	
	Well Water From Kudopali	Tap Water From Samaleswari OCP Colony		
Monitoring Station				
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	14.61	9.76	-	-
Potassium(mg/L)	5.26	4.67	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

K. K. Khatun
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jamuna



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रि-वी एम
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मिनी कोटा

Drinking Water Quality Data IB Valley Area

Project / OCP	Samleswari OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Inlet Water from IWSS, IB Valley Area	Outlet Water from IWSS, IB Valley Area		
Date of Sampling	15-Jan-2026	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Colour(Hazen)	2	1	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1.7	1.9	3.0	1	5
pH	7.74	7.59	6.78	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	86.64	82.08	41.04	200	600
Chloride(mg/L)	17.35	15.42	59.77	250	1000
Sulphate(mg/L)	30.14	34.11	56.30	200	400
Nitrate(mg/L)	<0.5	<0.5	47.4	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	100.8	100.8	161.28	200	600
Calcium(mg/L)	27.47	25.86	43.63	75	200
Fluoride(mg/L)	0.69	0.65	0.42	1	1.5
Total Dissolve Solid(mg/L)	172	170	302	500	2000
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.04	<0.04	<0.1	1	No relaxation
Zinc(mg/L)	<0.04	<0.04	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	2.4

Jaiswal



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विशेष लैब
cmpdi
Nini Kotna

Drinking Water Quality Data IB Valley Area

Project / OCP	Samleswari OCP			Indian Drinking Standards (IS-10500):2012	
	Inlet Water from IWSS, IB Valley Area	Outlet Water from IWSS, IB Valley Area	Well Water From Lajkura		
Monitoring Station					
Date of Sampling	15-Jan-2026	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	7.56	7.14	15.62	-	-
Potassium(mg/L)	2.78	2.17	9.6	-	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

J. Tanai
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jamali



Samleswarl OCP

Kucalor Village

West of the Mine

South of the Mine

Rampur Sub Area

Kholajimel

Legend

Monitoring Station

Google Earth

**Environmental Monitoring Report
For
January-2026**

**Project: Lajkura OCP
Area: Ib Valley
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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Test Report



AMBIENT AIR QUALITY DATA

Area : **Ib Valley**

(Compliance Station)

Project :

Lajkura OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	CO (mg/m ³)	Dust Generating Source	Distance from DGS
03-Jan-26	Near South Coal Stock	293	192	76	13.94	37.64	-	Mining Activities, Coal Transportation	About 500m
03-Jan-26	Near Project Office	241	144	67	17.47	40.78	-	Domestic, OCP, Transportation	About 500m
21-Jan-26	Near South Coal Stock	270	164	73	13.52	21.33	-	Mining Activities, Coal Transportation	About 500m
21-Jan-26	Near Project Office	253	149	67	20.81	40.38	-	Domestic, OCP, Transportation	About 500m

Tattawak
 Authorized Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR

Jagmeet

MoEF Standards Notification dated 25th
 September, 2000

500	250		120	120	62(8 Hours)
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NRI
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Multi-Brand

Test Report

AMBIENT AIR QUALITY DATA

Area : **Ib Valley**

(Reference Station)

Project :

Lajkura OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
01-Jan-26	VIP Guest House IB Valley	157	64	33	19.75	32.29	Coal Stock Yard, Surface Bunker, Coal	About 800m
02-Jan-26	VIP Guest House IB Valley	220	85	47	19.86	24.89	Coal Stock Yard, Surface Bunker, Coal	About 800m
05-Jan-26	Khokelmal	216	83	47	13.72	41.10	Railway siding	About 1000m
05-Jan-26	Chuakani	195	83	47	15.26	28.35	Transportation	About 300m
06-Jan-26	Chuakani	187	77	42	14.64	31.60	Transportation	About 300m
06-Jan-26	Khokelmal	195	74	43	13.89	29.89	Railway siding	About 1000m
08-Jan-26	VIP Guest House IB Valley	208	81	44	18.49	27.77	Coal Stock Yard, Surface Bunker, Coal	About 800m
09-Jan-26	VIP Guest House IB Valley	196	74	42	15.71	33.28	Coal Stock Yard, Surface Bunker, Coal	About 800m
12-Jan-26	Chuakani	182	74	39	18.61	24.70	Transportation	About 300m
12-Jan-26	Khokelmal	224	85	49	12.37	41.22	Railway siding	About 1000m
13-Jan-26	Chuakani	223	90	52	14.62	19.81	Transportation	About 300m
13-Jan-26	Khokelmal	237	93	51	11.32	35.55	Railway siding	About 1000m
16-Jan-26	VIP Guest House IB Valley	198	78	44	15.09	30.12	Coal Stock Yard, Surface Bunker, Coal	About 800m
17-Jan-26	VIP Guest House IB Valley	183	74	42	12.98	27.04	Coal Stock Yard, Surface Bunker, Coal	About 800m
19-Jan-26	Chuakani	188	75	42	12.45	23.90	Transportation	About 300m
19-Jan-26	Khokelmal	221	92	50	14.78	21.96	Railway siding	About 1000m
20-Jan-26	Khokelmal	216	84	47	16.98	27.82	Railway siding	About 1000m
20-Jan-26	Chuakani	221	79	49	14.32	20.60	Transportation	About 300m
22-Jan-26	VIP Guest House IB Valley	177	71	40	18.92	42.36	Coal Stock Yard, Surface Bunker, Coal	About 800m
23-Jan-26	VIP Guest House IB Valley	207	83	46	14.56	27.94	Coal Stock Yard, Surface Bunker, Coal	About 800m
27-Jan-26	Chuakani	197	76	44	22.64	34.33	Transportation	About 300m
27-Jan-26	Khokelmal	211	87	45	10.59	32.93	Railway siding	About 1000m

*N.L.Q.S. 2009

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CMPDI, RI-VII, LAB
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Janak

Project :

Lajkura OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

<i>Date of Sampling</i>	<i>Monitoring Station</i>	<i>SPM</i>	<i>PM10</i>	<i>PM2.5</i>	<i>SO2</i>	<i>NOx</i>	<i>Dust Generating Source(DGS)</i>	<i>Distance from DGS</i>
28-Jan-26	Chuakani	190	72	43	16.13	28.50	Transportation	About 300m
28-Jan-26	Khokelmal	207	80	43	11.69	21.51	Railway siding	About 1000m
30-Jan-26	VIP Guest House IB Valley	175	73	39	16.61	23.14	Coal Stock Yard, Surface Bunker, Coal	About 800m
31-Jan-26	VIP Guest House IB Valley	195	72	42	15.92	19.72	Coal Stock Yard, Surface Bunker, Coal	About 800m

K. Patra
Authorized Signatory
CMPDI, RI-VII, LAS
BHUBANESWAR

Janak

*N44@5,2009		100	60	80	80
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AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area :

Ib Valley

Project :

Lajkura OCP

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
01-Jan-26	VIP Guest House IB Valley	<20.0	14.02	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
02-Jan-26	VIP Guest House IB Valley	<20.0	15.23	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
05-Jan-26	Khokelmal	<20.0	26.05	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
05-Jan-26	Chuakani	<20.0	21.13	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
06-Jan-26	Khokelmal	<20.0	27.53	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
06-Jan-26	Chuakani	<20.0	18.68	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
08-Jan-26	VIP Guest House IB Valley	<20.0	15.73	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
09-Jan-26	VIP Guest House IB Valley	<20.0	18.93	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
12-Jan-26	Khokelmal	<20.0	25.32	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
12-Jan-26	Chuakani	<20.0	27.03	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
13-Jan-26	Chuakani	<20.0	28.02	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
13-Jan-26	Khokelmal	<20.0	25.07	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
16-Jan-26	VIP Guest House IB Valley	<20.0	22.12	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
17-Jan-26	VIP Guest House IB Valley	<20.0	11.30	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
19-Jan-26	Khokelmal	<20.0	22.12	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-Jan-26	Chuakani	<20.0	21.88	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
20-Jan-26	Khokelmal	<20.0	19.92	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
20-Jan-26	Chuakani	<20.0	12.53	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
22-Jan-26	VIP Guest House IB Valley	<20.0	21.63	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
23-Jan-26	VIP Guest House IB Valley	<20.0	13.03	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
27-Jan-26	Khokelmal	<20.0	18.68	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
27-Jan-26	Chuakani	<20.0	17.95	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
28-Jan-26	Chuakani	<20.0	15.98	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(3 hours)	01(annual)	05(annual)
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Project :

Lajkura OCP

Date of Sampling	Monitoring Station	Ammonia(NH ₃)	Ozone(O ₃)	Lead(Pb)	Arsenic(As)	Nickel(Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
28-Jan-26	Khokelmal	<20.0	13.03	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
30-Jan-26	VIP Guest House IB Valley	<20.0	24.58	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
31-Jan-26	VIP Guest House IB Valley	<20.0	23.10	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hourly)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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T. Mohan
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janak



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TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Ib Valley

PROJECT :

Lajkura OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
12-Jan-26	Khokelmal	52.4	39.7
12-Jan-26	Near Project Office	62.5	56.8
12-Jan-26	VIP Guest House, IB Valley	49.8	42.2
12-Jan-26	Near South Coal Stock	60.3	54.9
12-Jan-26	Chuakani	50.6	41.3
28-Jan-26	Near South Coal Stock	49.4	41.7
28-Jan-26	Near Project Office	52.1	42.6
28-Jan-26	Khokelmal	52.8	40.6
28-Jan-26	Chuakani	49.3	42.7
28-Jan-26	VIP Guest House, IB Valley	50.6	42.5

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


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राष्ट्रीय पर्यावरण
संरक्षण बोर्ड
सर्वोच्च
संस्थान
संयुक्त प्रशासन
संयुक्त प्रशासन
संयुक्त प्रशासन

Test Report

EFFLUENT QUALITY DATA

Area :

IB Valley

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

Project :

Lajkura OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
15-Jan-26	Outlet of MDTP	4.12	<4.0	34	36	-	-	-	
15-Jan-26	Inlet of MDTP	3.48	4.2	49	68	-	-	-	
15-Jan-26	Lajkura Railway Siding	3.77	4.4	47	60	-	-	-	
15-Jan-26	Mine Sump Water	3.68	<4.0	30	24	-	-	-	
15-Jan-26	Inlet of ETP	3.74	4.6	57	88	-	-	-	
15-Jan-26	Outlet of ETP	3.98	<4.0	38	36	-	-	-	
31-Jan-26	Lajkura Railway Siding	3.98	4.8	54	68	-	-	-	
31-Jan-26	Outlet of ETP	4.11	<4.0	35	36	-	-	-	
31-Jan-26	Inlet of ETP	3.92	4.4	53	72	-	-	-	

Fattawish
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jyoti

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

EFFLUENT QUALITY DATA

Area :

IB Valley

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

Project :

Lajkura OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	MPN/100mL
15-Jan-26	STP Inlet	-	-	-	-	-	-	-	Under maintenance
15-Jan-26	STP Outlet	-	-	-	-	-	-	-	Under maintenance
31-Jan-26	STP Outlet	-	-	-	-	-	-	-	Under maintenance
31-Jan-26	STP Inlet	-	-	-	-	-	-	-	Under maintenance

T. Koushil
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESHWAR

Jasanti

G.S.R. 126 5(E) Effluent discharge standards (applicable to all mode of disposal), Sewage Treatment Plants (STPs)

6.5-9.5	-	<100	-	30	-	<1000
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महानगर

Drinking Water Quality Data IB Valley Area

Project / OCP	Lajkura OCP		Indian Drinking Standards (IS-10500):2012	
	Madhuban Nagar Well Water	Adarsh Nagar Colony Well Water		
Monitoring Station				
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Colour(Hazen)	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2.2	3.4	1	5
pH	5.22	6.43	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	13.68	155.04	200	600
Chloride(mg/L)	19.28	55.91	250	1000
Sulphate(mg/L)	18.63	25.34	200	400
Nitrate(mg/L)	10.86	2.17	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	56.45	161.28	200	600
Calcium(mg/L)	8.08	43.63	75	200
Fluoride(mg/L)	0.30	0.60	1	1.5
Total Dissolve Solid(mg/L)	104	294	500	2000
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.05	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	1	No relaxation
Zinc(mg/L)	0.08	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	0.5	2.4

T. Jaisankar
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jaisankar



सीएमपीडीआई
रिवी एन
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Mini Kotna

Drinking Water Quality Data IB Valley Area

Project / OCP	Lajkura OCP		Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Madhuban Nagar Well Water	Adarsh Nagar Colony Well Water	
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	6.48	15.80	-	-
Potassium(mg/L)	2.46	5.63	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

Jatnas
Authorized Signatory
CMPDI, RI-VII, LAG
BHUBANESWAR

Jatnas



सीएमपीडीआई
के.ए.सी.
cmpdi
मिनी रोडमा

Drinking Water Quality Data IB Valley Area

Project / OCP	Lajkura OCP		Indian Drinking Standards (IS-10500):2012	
	Chhualiberna Village Well Water	VIP Guest House Tap Water		
Monitoring Station				
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Colour(Hazen)	2	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1.8	1.7	1	5
pH	5.32	7.50	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	9.12	82.08	200	600
Chloride(mg/L)	17.35	15.42	250	1000
Sulphate(mg/L)	12.6	32.6	200	400
Nitrate(mg/L)	11.50	<0.5	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	36.29	100.8	200	600
Calcium(mg/L)	9.70	29.09	75	200
Fluoride(mg/L)	0.40	0.74	1	1.5
Total Dissolve Solid(mg/L)	94	172	500	2000
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.1	0.1	1	No relaxation
Zinc(mg/L)	0.06	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	0.5	2.4

Signature
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Signature



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Mini Ratna

Drinking Water Quality Data IB Valley Area

Project / OCP	Lajkura OCP		Indian Drinking Standards (IS-10500):2012	
	Chhualiberna Village Well Water	VIP Guest House Tap Water	Acceptable	Permissible
Monitoring Station				
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	9.76	6.94	-	-
Potassium(mg/L)	3.23	1.96	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

T. Tamsil
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jamali

Lajkura OCP



Legend

Monitoring Station

Google Earth

**Environmental Monitoring Report
For
January-2026**

**Project: Central Hospital
Area: Ib Valley
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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Test Report

EFFLUENT QUALITY DATA

Area :

IB Valley

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

Project :

Central Hospital

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
15-Jan-26	Discharge of Hospital	7.29	<4.0	29	28	2.8	-	-	

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CMPDI, RI-VII, LAB
BHUBANESWAR

Jasmati

MoEF Standard Notification dated 25th September, 2000
and MoEF Schedule VI, General standard for discharge
of Environmental Pollutants Part A: Effluents

5.5-9.0	10	100	250	30
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Environmental Monitoring Report For January-2026

Project: Integrated LBL OCP
Area: Lakhanpur
Coalfield: Ib Valley



Mahanadi Coalfields Limited



Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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Test Report

AMBIENT AIR QUALITY DATA

Area : **Lakhanpur** (Compliance Station)

Project : **LBL OCP** (conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	CO (mg/m ³)	Dust Generating Source	Distance from DGS
10-Jan-26	West of Lakhanpur Quarry Near Solada	275	143	66	17.60	23.45	1.2	Mining Activities	About 500m
10-Jan-26	Kirulbal Village	271	189	75	12.10	24.20	1.8	Mining Activities	About 500m
10-Jan-26	BOCM Workshop	255	145	66	19.27	32.54	1.0	Mining Activities	About 500m
10-Jan-26	Lilari Magazine House	247	148	68	10.75	24.47	1.4	Coal Transportation	About 500m
29-Jan-26	West of Lakhanpur Quarry Near Solada	279	163	68	12.64	16.88	1.8	Mining Activities	About 500m
29-Jan-26	Kirulbal Village	258	149	63	12.99	38.68	1.7	Mining Activities	About 500m
29-Jan-26	BOCM Workshop	295	161	72	21.25	18.53	1.3	Mining Activities	About 500m
29-Jan-26	Lilari Magazine House	287	166	78	12.85	28.09	1.3	Coal Transportation	About 500m

Signature

Authorised Signatory
CMPDI, RI-VII, LAB
BHIBANESWAR

MoEF Standards Notification dated 23rd
September, 2008

500	250		120	120	62(8 Hours)
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AMBIENT AIR QUALITY DATA

Area :

Lakhanpur

(Reference Station)

Project :

LBL OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
05-Jan-26	Bartap Village North West of Mine	205	75	39	21.57	24.53	Domestic Anthropogenic Source	About 2km
05-Jan-26	Ardhapara Village South East of Mine	194	77	43	20.80	31.23	Transportation	About 1000m
05-Jan-26	Gumadera Village North of Mine	166	67	36	17.79	33.05	Domestic Source and Mining Activities	About 3km
05-Jan-26	Barihapali Village South West of Mine	234	88	51	17.55	31.11	Domestic Anthropogenic Source	About 1.6km
05-Jan-26	Lakhanpur Police Station West of Mine	196	81	48	12.45	22.09	Mining Activities	About 1.6km
05-Jan-26	Ramada Village South of Mine	206	76	41	14.46	17.67	Domestic Anthropogenic Source	About 2Km
05-Jan-26	Kadum Rehab Centre East of Mine	196	78	45	16.75	35.56	Mining Activities	About 2km
06-Jan-26	Kadam Rehab Centre East of Mine	217	85	49	18.93	23.71	Mining Activities	About 2km
06-Jan-26	Lakhanpur Police Station West of Mine	241	91	53	13.44	39.28	Mining Activities	About 1.6km
06-Jan-26	Bartap Village North West of Mine	168	68	36	16.92	24.85	Domestic Anthropogenic Source	About 2km
06-Jan-26	Gumadera Village North of Mine	218	81	47	14.16	28.77	Domestic Source and Mining Activities	About 3km
06-Jan-26	Barihapali Village South West of Mine	198	76	42	17.33	29.89	Domestic Anthropogenic Source	About 1.6km
06-Jan-26	Ramada Village South of Mine	226	83	47	15.72	24.91	Domestic Anthropogenic Source	About 2Km
06-Jan-26	Ardhapara Village South East of Mine	181	72	40	17.93	24.81	Transportation	About 1000m
12-Jan-26	Kadam Rehab Centre East of Mine	178	80	42	15.87	22.11	Mining Activities	About 2km
12-Jan-26	Lakhanpur Police Station West of Mine	217	76	47	11.00	33.88	Mining Activities	About 1.6km
12-Jan-26	Gumadera Village North of Mine	206	75	44	19.27	35.79	Domestic Source and Mining Activities	About 3km
12-Jan-26	Ramada Village South of Mine	239	89	50	15.72	42.10	Domestic Anthropogenic Source	About 2Km
12-Jan-26	Bartap Village North West of Mine	211	79	44	17.53	16.96	Domestic Anthropogenic Source	About 2km
12-Jan-26	Barihapali Village South West of Mine	208	80	46	15.51	27.99	Domestic Anthropogenic Source	About 1.6km
12-Jan-26	Ardhapara Village South East of Mine	210	80	48	14.09	29.01	Transportation	About 1000m
13-Jan-26	Ramada Village South of Mine	228	85	49	11.85	19.17	Domestic Anthropogenic Source	About 2Km

*NAAQS, 2009

100 60 80 80

Project :

LBL OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
13-Jan-26	Kadam Rehab Centre East of Mine	186	73	44	11.98	25.96	Mining Activities	About 2km
13-Jan-26	Bartap Village North West of Mine	216	85	49	20.80	25.48	Domestic Anthropogenic Source	About 2km
13-Jan-26	Barihapali Village South West of Mine	227	91	51	19.63	25.30	Domestic Anthropogenic Source	About 1.6km
13-Jan-26	Lakhanpur Police Station West of Mine	177	70	42	12.73	38.58	Mining Activities	About 1.6km
13-Jan-26	Ardhapara Village South East of Mine	204	83	45	19.85	24.02	Transportation	About 1000m
13-Jan-26	Gumadera Village North of Mine	193	72	41	11.86	22.74	Domestic Source and Mining Activities	About 3km
19-Jan-26	Bartap Village North West of Mine	196	82	44	23.00	32.47	Domestic Anthropogenic Source	About 2km
19-Jan-26	Ardhapara Village South East of Mine	217	89	49	17.57	20.85	Transportation	About 1000m
19-Jan-26	Gumadera Village North of Mine	211	82	45	18.62	31.30	Domestic Source and Mining Activities	About 3km
19-Jan-26	Barihapali Village South West of Mine	193	81	45	18.17	32.29	Domestic Anthropogenic Source	About 1.6km
19-Jan-26	Lakhanpur Police Station West of Mine	185	72	40	13.94	37.64	Mining Activities	About 1.6km
19-Jan-26	Ramada Village South of Mine	215	85	48	21.37	23.35	Domestic Anthropogenic Source	About 2Km
19-Jan-26	Kadam Rehab Centre East of Mine	229	89	51	22.67	23.80	Mining Activities	About 2km
20-Jan-26	Kadam Rehab Centre East of Mine	207	79	44	17.11	27.49	Mining Activities	About 2km
20-Jan-26	Lakhanpur Police Station West of Mine	191	76	43	11.09	18.82	Mining Activities	About 1.6km
20-Jan-26	Bartap Village North West of Mine	193	79	42	14.72	34.37	Domestic Anthropogenic Source	About 2km
20-Jan-26	Gumadera Village North of Mine	195	75	42	22.17	23.17	Domestic Source and Mining Activities	About 3km
20-Jan-26	Barihapali Village South West of Mine	205	77	43	13.29	36.22	Domestic Anthropogenic Source	About 1.6km
20-Jan-26	Ramada Village South of Mine	208	81	45	23.12	26.63	Domestic Anthropogenic Source	About 2Km
20-Jan-26	Ardhapara Village South East of Mine	207	85	48	19.20	30.80	Transportation	About 1000m
27-Jan-26	Kadam Rehab Centre East of Mine	213	85	48	11.32	32.35	Mining Activities	About 2km
27-Jan-26	Ramada Village South of Mine	196	76	44	13.32	26.44	Domestic Anthropogenic Source	About 2Km
27-Jan-26	Lakhanpur Police Station West of Mine	206	84	45	18.67	17.73	Mining Activities	About 1.6km
27-Jan-26	Gumadera Village North of Mine	233	90	51	10.79	26.98	Domestic Source and Mining Activities	About 3km
27-Jan-26	Bartap Village North West of Mine	202	83	44	12.03	16.96	Domestic Anthropogenic Source	About 2km

INLQS, 2009		100	60	80	80
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Testmark
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jamali

Project :**LBL OCP****(conc. in $\mu\text{g}/\text{cu.m.}$)**

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
27-Jan-26	Barihapali Village South West of Mine	223	86	49	18.74	31.03	Domestic Anthropogenic Source	About 1.6km
27-Jan-26	Ardhapara Village South East of Mine	227	93	51	17.43	26.71	Transportation	About 1000m
28-Jan-26	Ramada Village South of Mine	186	73	47	17.70	21.92	Domestic Anthropogenic Source	About 2Km
28-Jan-26	Kadam Rehab Centre East of Mine	199	74	43	17.84	23.01	Mining Activities	About 2km
28-Jan-26	Bartap Village North West of Mine	198	78	41	17.98	30.06	Domestic Anthropogenic Source	About 2km
28-Jan-26	Barihapali Village South West of Mine	204	84	46	11.83	28.48	Domestic Anthropogenic Source	About 1.6km
28-Jan-26	Lakhanpur Police Station West of Mine	210	90	48	16.00	32.63	Mining Activities	About 1.6km
28-Jan-26	Ardhapara Village South East of Mine	205	83	47	16.55	31.56	Transportation	About 1000m
28-Jan-26	Gumadera Village North of Mine	194	79	43	18.61	22.23	Domestic Source and Mining Activities	About 3km

T. H. H. H.
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 CMPDI, RI-VII, LAB
 BHUBANESWAR

J. H. H.

*NAQS, 2009

100 60 80 80

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area : **Lakhanpur**

Project : **LBL OCP**

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
05-Jan-26	Gumadera Village North of Mine	<20.0	25.82	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
05-Jan-26	Lakhanpur Police Station West of Mine	<20.0	23.10	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
05-Jan-26	Barihapali Village South West of Mine	<20.0	23.85	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
05-Jan-26	Kadam Rehab Centre East of Mine	<20.0	14.25	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
05-Jan-26	Bartap Village North West of Mine	<20.0	26.05	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
05-Jan-26	Ardhapara Village South East of Mine	<20.0	21.88	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
05-Jan-26	Ramada Village South of Mine	<20.0	11.80	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
06-Jan-26	Ramada Village South of Mine	<20.0	24.58	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
06-Jan-26	Bartap Village North West of Mine	<20.0	20.65	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
06-Jan-26	Gumadera Village North of Mine	<20.0	17.95	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
06-Jan-26	Barihapali Village South West of Mine	<20.0	26.30	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
06-Jan-26	Kadam Rehab Centre East of Mine	<20.0	22.87	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
06-Jan-26	Ardhapara Village South East of Mine	<20.0	23.60	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
06-Jan-26	Lakhanpur Police Station West of Mine	<20.0	23.35	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
12-Jan-26	Ramada Village South of Mine	<20.0	23.60	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
12-Jan-26	Bartap Village North West of Mine	<20.0	18.68	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
12-Jan-26	Barihapali Village South West of Mine	<20.0	11.80	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
12-Jan-26	Ardhapara Village South East of Mine	<20.0	17.45	<0.1	<1.0	<1.0	1.8	BQL(QL=0.7)	BQL
12-Jan-26	Gumadera Village North of Mine	<20.0	24.58	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
12-Jan-26	Kadam Rehab Centre East of Mine	<20.0	28.27	<0.1	<1.0	<1.0	1.7	BQL(QL=0.7)	BQL
12-Jan-26	Lakhanpur Police Station West of Mine	<20.0	25.32	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
13-Jan-26	Ardhapara Village South East of Mine	<20.0	24.33	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
13-Jan-26	Ramada Village South of Mine	<20.0	19.92	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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Project :

LBL OCP

Date of Sampling	Monitoring Station	Ammonia(NH ₃)	Ozone(O ₃)	Lead(Pb)	Arsenic(As)	Nickel(Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
13-Jan-26	Gumadera Village North of Mine	<20.0	26.55	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
13-Jan-26	Kadam Rehab Centre East of Mine	<20.0	16.97	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
13-Jan-26	Bartap Village North West of Mine	<20.0	13.03	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
13-Jan-26	Lakhanpur Police Station West of Mine	<20.0	19.42	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
13-Jan-26	Barihapali Village South West of Mine	<20.0	17.45	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
19-Jan-26	Gumadera Village North of Mine	<20.0	27.03	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
19-Jan-26	Kadam Rehab Centre East of Mine	<20.0	27.53	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-Jan-26	Ramada Village South of Mine	<20.0	12.05	<0.1	<1.0	<1.0	1.8	BQL(QL=0.7)	BQL
19-Jan-26	Lakhanpur Police Station West of Mine	<20.0	13.52	<0.1	<1.0	<1.0	1.7	BQL(QL=0.7)	BQL
19-Jan-26	Bartap Village North West of Mine	<20.0	11.55	<0.1	<1.0	<1.0	1.8	BQL(QL=0.7)	BQL
19-Jan-26	Ardhapara Village South East of Mine	<20.0	19.42	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
19-Jan-26	Barihapali Village South West of Mine	<20.0	26.05	<0.1	<1.0	<1.0	1.8	BQL(QL=0.7)	BQL
20-Jan-26	Barihapali Village South West of Mine	<20.0	25.82	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
20-Jan-26	Bartap Village North West of Mine	<20.0	15.73	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
20-Jan-26	Gumadera Village North of Mine	<20.0	21.13	<0.1	<1.0	<1.0	1.8	BQL(QL=0.7)	BQL
20-Jan-26	Ramada Village South of Mine	<20.0	12.05	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
20-Jan-26	Lakhanpur Police Station West of Mine	<20.0	18.68	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
20-Jan-26	Ardhapara Village South East of Mine	<20.0	25.82	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
20-Jan-26	Kadam Rehab Centre East of Mine	<20.0	21.13	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
27-Jan-26	Barihapali Village South West of Mine	<20.0	23.85	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
27-Jan-26	Ardhapara Village South East of Mine	<20.0	18.18	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
27-Jan-26	Bartap Village North West of Mine	<20.0	26.05	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
27-Jan-26	Ramada Village South of Mine	<20.0	16.97	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
27-Jan-26	Gumadera Village North of Mine	<20.0	20.90	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
27-Jan-26	Lakhanpur Police Station West of Mine	<20.0	11.55	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
27-Jan-26	Kadam Rehab Centre East of Mine	<20.0	22.62	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
28-Jan-26	Ardhapara Village South East of Mine	<20.0	27.78	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
Standard		400(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)

Authorized Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR

Janak

Project :

LBL OCP

Date of Sampling	Monitoring Station	Ammonia(NH ₃)	Ozone(O ₃)	Lead(Pb)	Arsenic(As)	Nickel(Ni)	CO	Benzo(a)Pyrene	Benzene
		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	(mg/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
28-Jan-26	Barihapali Village South West of Mine	<20.0	21.13	<0.1	<1.0	<1.0	1.8	BQL(QL=0.7)	BQL
28-Jan-26	Gumadera Village North of Mine	<20.0	16.47	<0.1	<1.0	<1.0	1.8	BQL(QL=0.7)	BQL
28-Jan-26	Lakhanpur Police Station West of Mine	<20.0	15.98	<0.1	<1.0	<1.0	1.7	BQL(QL=0.7)	BQL
28-Jan-26	Bartap Village North West of Mine	<20.0	15.23	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
28-Jan-26	Kadam Rehab Centre East of Mine	<20.0	23.35	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
28-Jan-26	Ramada Village South of Mine	<20.0	17.70	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hour)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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 Authorised Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR





सौरजपीडीआई
 FOR THE
cmpdi
 CENTRAL MONITORING PROGRAM

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Lakhanpur

PROJECT :

LBL OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
13-Jan-26	West of Lakhanpur Quarry Near Solada	52.8	41.6
13-Jan-26	Gumadera Village North of Mine	49.2	39.4
13-Jan-26	Kadam Rehab Centre East of Mine	51.4	40.9
13-Jan-26	BOCM Workshop	49.2	42.7
13-Jan-26	Ramada Village South of Mine	52.8	42.6
13-Jan-26	Bartap Village North West of Mine	49.2	41.4
13-Jan-26	Kirulbal Village	51.3	42.8
13-Jan-26	Near Lilari Magazine House	52.6	41.3
13-Jan-26	Lakhanpur Police Station West of Mine	50.6	40.6
13-Jan-26	Barihapali Village South West of Mine	50.3	40.8
13-Jan-26	Ardhapara Village South East of Mine	52.1	40.6
27-Jan-26	Ramada Village South of Mine	50.2	42.4
27-Jan-26	Kadam Rehab Centre East of Mine	49.8	42.7
27-Jan-26	Ardhapara Village South East of Mine	49.8	40.8
27-Jan-26	Bartap Village North West of Mine	50.2	41.3
27-Jan-26	West of Lakhanpur Quarry Near Solada	50.1	41.6
27-Jan-26	Gumadera Village North of Mine	52.7	39.8
27-Jan-26	Barihapali Village South West of Mine	52.7	40.9
27-Jan-26	Lakhanpur Police Station West of Mine	51.3	41.4
27-Jan-26	Kirulbal Village	50.6	40.9
27-Jan-26	BOCM Workshop	49.6	40.3
27-Jan-26	Near Lilari Magazine House	51.2	42.6

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

J. J. Jha
 Authorised Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR

J. J. Jha

EFFLUENT QUALITY DATA

Area :

Lakhanpur

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

Project :

LBL OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
15-Jan-26	Outlet of Secondary Sedimentation Tank, Lakhanpur	7.06	<4.0	35	40	-	-	-	
15-Jan-26	Mine Sump Water, Lakhanpur	6.31	<4.0	25	28	-	-	-	
15-Jan-26	Outlet of ETP, Belpahar	7.27	<4.0	26	28	-	-	-	
15-Jan-26	Mine Sump Water, Belpahar	6.27	<4.0	29	32	-	-	-	
15-Jan-26	Outlet of ETP, Lakhanpur	7.18	<4.0	30	32	-	-	-	
15-Jan-26	Mine Sump Water, Lilari	6.40	<4.0	31	24	-	-	-	
15-Jan-26	Inlet of ETP, Lakhanpur	6.84	4.8	56	96	-	-	-	
15-Jan-26	Inlet of Secondary Sedimentation Tank, Lakhanpur	6.82	5.2	69	96	-	-	-	
15-Jan-26	ECO Tank, Belpahar	7.81	<4.0	41	36	-	-	-	
15-Jan-26	Clear Water Tank of MDTP, Belpahar	6.79	<4.0	38	44	-	-	-	
15-Jan-26	Inlet of MDTP, Belpahar	6.67	5.2	72	96	-	-	-	
15-Jan-26	Inlet of ETP, Belpahar	7.06	<4.0	34	40	-	-	-	
31-Jan-26	Inlet of ETP, Lakhanpur	7.03	4.4	45	60	-	-	-	
31-Jan-26	Inlet of ETP, Belpahar	7.18	4.2	40	52	-	-	-	
31-Jan-26	Outlet of ETP, Belpahar	7.40	<4.0	29	32	-	-	-	
31-Jan-26	Outlet of ETP, Lakhanpur	7.29	<4.0	31	32	-	-	-	

Signature
Authorized Signatory
CMPDI, RI-VII, LAB
SHUBANESWAR

Signature

MoEF Standard Notification dated 25th September, 2009 and MoEF Schedule VI, General standard for discharge of Environmental Pollutants Part A: Effluents

5.5-9.0	10	100	250	30
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सर्वमपीडीआई
सर्वमपीडीआई
cmpd
सर्वमपीडीआई

Test Report

EFFLUENT QUALITY DATA

Area :

Lakhanpur

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

Project :

LBL OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	MPN/100mL
15-Jan-26	STP Inlet	7.26	-	43	-	3.3	-	-	350
15-Jan-26	Clear Water Tank of Sewage Treatment Plant	7.39	-	30	-	<2.0	-	-	220
31-Jan-26	STP Inlet	7.37	-	37	-	2.5	-	-	280
31-Jan-26	Clear Water Tank of Sewage Treatment Plant	7.51	-	26	-	<2.0	-	-	150

G.S.R. 126 5(E) Effluent discharge standards (applicable to all mode of disposal), Sewage Treatment Plants (STPs)

6.5-9.5	-	<100	-	30	-	<1000
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सीएमपीडीआई
मिनी रत्न
cmpdi
Mini Ratna

Drinking Water Quality Data Lakhanpur Area

Project / OCP Monitoring Station	Integrated LBL OCP			Indian Drinking Standards (IS-10500):2012	
	LKP Project Office	IWSS Inlet-BIT	IWSS Outlet-BIT	Acceptable	Permissible
Date of Sampling	15-Jan-2026	15-Jan-2026	15-Jan-2026		
Colour(Hazen)	1	1	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2.1	2.6	2.2	1	5
pH	7.51	7.32	7.48	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	82.08	82.08	82.08	200	600
Chloride(mg/L)	13.50	13.50	15.42	250	1000
Sulphate(mg/L)	29.86	29.18	28.64	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	96.77	96.77	96.77	200	600
Calcium(mg/L)	25.86	27.47	27.47	75	200
Fluoride(mg/L)	0.96	0.97	0.90	1	1.5
Total Dissolve Solid(mg/L)	164	162	166	500	2000
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	<0.1	1	No relaxation
Zinc(mg/L)	<0.04	<0.04	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	2.4

Janant

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CMPDI, RI-VII, LAB
SHADANESTHAR



सीएमपीडीआई
निले रत्न
cmpdi
Nil-Ratna

Drinking Water Quality Data Lakhanpur Area

Project / OCP	Integrated LBL OCP			Indian Drinking Standards (IS-10500):2012	
	LKP Project Office	IWSS Inlet-BIT	IWSS Outlet-BIT	Acceptable	Permissible
Monitoring Station	15-Jan-2026	15-Jan-2026	15-Jan-2026		
Date of Sampling	15-Jan-2026	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	6.18	6.24	6.36	-	-
Potassium(mg/L)	1.35	1.78	1.77	-	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

Janak

Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Integrated LBL OCP



**Environmental Monitoring Report
For
January-2026**

**Project: Kulda OCP
Area: Basundhara
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



सीएमपीडीआई
मिनि रात्रो
cmpdi
Mini Ratna

Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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Test Report

AMBIENT AIR QUALITY DATA

Area : Basundhara

(Compliance Station)

Project :

Kulda OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	CO (mg/m3)	Dust Generating Source	Distance from DGS
03-Jan-26	Laikera Railway Siding	286	169	73	12.99	38.68	-	Coal Transportation	About 100m
03-Jan-26	Kulda PO Office	253	155	67	11.69	21.51	-	Mining Activities, Coal Transportation	About 100m
21-Jan-26	Laikera Railway Siding	257	153	67	12.54	25.41	-	Coal Transportation	About 100m
21-Jan-26	Kulda PO Office	281	167	74	17.47	40.78	-	Mining Activities, Coal Transportation	About 100m

J. Prasad
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

J. Prasad

MoEF Standards Notification dated 25th
September, 2009

500	250		120	120	82(8 Hours)
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Test Report



AMBIENT AIR QUALITY DATA

Area : Basundhara

(Reference Station)

Project :

Kulda OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
01-Jan-26	North of CHP, Teleimal	208	85	47	11.09	18.82	Domestic, OCP, Transportation	About 500m
01-Jan-26	Bilaimunda Village	233	94	51	15.74	31.42	Village Road	About 500m
01-Jan-26	External CT Road, Barpali	210	78	41	14.68	38.35	Mining Activities, Coal Transportation	About 500m
01-Jan-26	South West of Working Face, Chakarpur	209	81	45	17.08	41.17	Village Road	About 500m
02-Jan-26	Bilaimunda Village	203	78	44	19.89	36.18	Village Road	About 500m
02-Jan-26	South West of Working Face, Chakarpur	188	73	40	17.72	35.11	Village Road	About 500m
02-Jan-26	External CT Road, Barpali	216	82	45	15.34	35.06	Mining Activities, Coal Transportation	About 500m
02-Jan-26	North of CHP, Teleimal	177	74	42	16.55	27.08	Domestic, OCP, Transportation	About 500m
08-Jan-26	Bilaimunda Village	211	83	48	14.95	23.39	Village Road	About 500m
08-Jan-26	South West of Working Face, Chakarpur	197	78	42	21.68	26.30	Village Road	About 500m
08-Jan-26	North of CHP, Teleimal	174	68	40	18.61	40.34	Domestic, OCP, Transportation	About 500m
08-Jan-26	External CT Road, Barpali	221	87	49	12.20	31.42	Mining Activities, Coal Transportation	About 500m
09-Jan-26	South West of Working Face, Chakarpur	174	65	36	18.28	27.59	Village Road	About 500m
09-Jan-26	North of CHP, Teleimal	171	65	39	21.71	35.40	Domestic, OCP, Transportation	About 500m
09-Jan-26	External CT Road, Barpali	206	81	43	14.01	23.59	Mining Activities, Coal Transportation	About 500m
09-Jan-26	Bilaimunda Village	208	81	45	16.57	38.49	Village Road	About 500m
16-Jan-26	External CT Road, Barpali	193	74	41	10.62	33.12	Mining Activities, Coal Transportation	About 500m
16-Jan-26	North of CHP, Teleimal	226	92	50	20.03	38.01	Domestic, OCP, Transportation	About 500m
16-Jan-26	Bilaimunda Village	213	85	48	14.71	34.15	Village Road	About 500m
16-Jan-26	South West of Working Face, Chakarpur	199	79	44	12.07	22.42	Village Road	About 500m
17-Jan-26	External CT Road, Barpali	196	76	43	17.83	21.84	Mining Activities, Coal Transportation	About 500m
17-Jan-26	North of CHP, Teleimal	201	85	46	13.38	21.92	Domestic, OCP, Transportation	About 500m

N.C.125.2009

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Signature
 Authorised Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR

Signature

Project :

Kulda OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
17-Jan-26	Bilaimunda Village	225	89	50	17.73	27.17	Village Road	About 500m
17-Jan-26	South West of Working Face, Chakarpur	208	84	46	21.97	29.03	Village Road	About 500m
22-Jan-26	Bilaimunda Village	206	84	45	18.57	30.82	Village Road	About 500m
22-Jan-26	North of CHP, Teleimal	207	87	48	13.04	26.42	Domestic, OCP, Transportation	About 500m
22-Jan-26	South West of Working Face, Chakarpur	186	73	41	18.12	30.00	Village Road	About 500m
22-Jan-26	External CT Road, Barpali	216	81	48	16.81	23.84	Mining Activities, Coal Transportation	About 500m
23-Jan-26	Bilaimunda Village	196	78	43	19.63	33.23	Village Road	About 500m
23-Jan-26	External CT Road, Barpali	210	77	44	13.46	34.37	Mining Activities, Coal Transportation	About 500m
23-Jan-26	North of CHP, Teleimal	194	78	43	11.00	32.41	Domestic, OCP, Transportation	About 500m
23-Jan-26	South West of Working Face, Chakarpur	175	69	39	18.01	28.30	Village Road	About 500m
30-Jan-26	External CT Road, Barpali	195	74	41	18.58	28.77	Mining Activities, Coal Transportation	About 500m
30-Jan-26	North of CHP, Teleimal	189	73	41	17.73	18.11	Domestic, OCP, Transportation	About 500m
30-Jan-26	South West of Working Face, Chakarpur	201	82	45	20.91	35.61	Village Road	About 500m
30-Jan-26	Bilaimunda Village	236	94	51	19.32	16.11	Village Road	About 500m
31-Jan-26	South West of Working Face, Chakarpur	195	79	44	18.55	20.53	Village Road	About 500m
31-Jan-26	Bilaimunda Village	209	85	47	19.03	23.84	Village Road	About 500m
31-Jan-26	External CT Road, Barpali	223	91	49	19.80	26.82	Mining Activities, Coal Transportation	About 500m
31-Jan-26	North of CHP, Teleimal	235	95	51	16.05	28.40	Domestic, OCP, Transportation	About 500m

J. J. J. J.
Authorised Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR

J. J. J. J.

*N.1.1.08, 2009

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Test Report


AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area :

Basundhara

Project :

Kulda OCP

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	(mg/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
01-Jan-26	North of CHP, Teleimal	<20.0	22.12	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
01-Jan-26	Bilaimunda Village	<20.0	21.88	<0.1	<1.0	<1.0	0.2	BQL(QL=0.7)	BQL
01-Jan-26	South West of Working Face, Chakarpur	<20.0	21.88	<0.1	<1.0	<1.0	0.2	BQL(QL=0.7)	BQL
01-Jan-26	External CT Road, Barpali	<20.0	20.15	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
02-Jan-26	Bilaimunda Village	<20.0	15.48	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
02-Jan-26	External CT Road, Barpali	<20.0	16.22	<0.1	<1.0	<1.0	0.4	BQL(QL=0.7)	BQL
02-Jan-26	South West of Working Face, Chakarpur	<20.0	27.78	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
02-Jan-26	North of CHP, Teleimal	<20.0	23.85	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
08-Jan-26	Bilaimunda Village	<20.0	13.52	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
08-Jan-26	External CT Road, Barpali	<20.0	25.07	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
08-Jan-26	North of CHP, Teleimal	<20.0	19.17	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
08-Jan-26	South West of Working Face, Chakarpur	<20.0	24.83	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
09-Jan-26	External CT Road, Barpali	<20.0	12.05	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
09-Jan-26	North of CHP, Teleimal	<20.0	21.38	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
09-Jan-26	South West of Working Face, Chakarpur	<20.0	18.93	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
09-Jan-26	Bilaimunda Village	<20.0	11.80	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
16-Jan-26	South West of Working Face, Chakarpur	<20.0	19.42	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
16-Jan-26	North of CHP, Teleimal	<20.0	21.13	<0.1	<1.0	<1.0	0.4	BQL(QL=0.7)	BQL
16-Jan-26	Bilaimunda Village	<20.0	23.60	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
16-Jan-26	External CT Road, Barpali	<20.0	11.55	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
17-Jan-26	South West of Working Face, Chakarpur	<20.0	16.97	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
17-Jan-26	North of CHP, Teleimal	<20.0	26.30	<0.1	<1.0	<1.0	0.2	BQL(QL=0.7)	BQL
17-Jan-26	Bilaimunda Village	<20.0	24.83	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janaki

Project :

Kulda OCP

Date of Sampling	Monitoring Station	Ammonia(NH ₃)	Ozone(O ₃)	Lead(Pb)	Arsenic(As)	Nickel(Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(µg/m ³)	(ng/m ³)	(µg/m ³)
17-Jan-26	External CT Road, Barpali	<20.0	25.07	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
22-Jan-26	Bilaimunda Village	<20.0	16.47	<0.1	<1.0	<1.0	0.2	BQL(QL=0.7)	BQL
22-Jan-26	North of CHP, Teleimal	<20.0	27.03	<0.1	<1.0	<1.0	0.4	BQL(QL=0.7)	BQL
22-Jan-26	External CT Road, Barpali	<20.0	23.85	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
22-Jan-26	South West of Working Face, Chakarpur	<20.0	26.05	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
23-Jan-26	Bilaimunda Village	<20.0	20.65	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
23-Jan-26	South West of Working Face, Chakarpur	<20.0	23.35	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
23-Jan-26	North of CHP, Teleimal	<20.0	12.78	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
23-Jan-26	External CT Road, Barpali	<20.0	14.50	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
30-Jan-26	South West of Working Face, Chakarpur	<20.0	22.87	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
30-Jan-26	North of CHP, Teleimal	<20.0	21.63	<0.1	<1.0	<1.0	0.2	BQL(QL=0.7)	BQL
30-Jan-26	External CT Road, Barpali	<20.0	20.15	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
30-Jan-26	Bilaimunda Village	<20.0	13.77	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
31-Jan-26	External CT Road, Barpali	<20.0	16.72	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
31-Jan-26	Bilaimunda Village	<20.0	17.45	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
31-Jan-26	South West of Working Face, Chakarpur	<20.0	14.02	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
31-Jan-26	North of CHP, Teleimal	<20.0	12.05	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL

Standard	400(24hrs)	180(hour)	1.0(24h ours)	6.0(Annual)	20(Annual)	02(8hours)	01(annual)	05(annual)
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Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janaki



सीएनपीडीआई
CMPDI
भारत सरकार

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Basundhara

PROJECT :

Kulda OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
14-Jan-26	Kulda PO Office	58.1	53.4
14-Jan-26	Laikera Railway Siding	51.6	40.3
14-Jan-26	South West of Working Face Chakarpur	49.3	42.8
31-Jan-26	Kulda PO Office	52.8	42.7
31-Jan-26	South West of Working Face Chakarpur	49.7	39.6
31-Jan-26	Laikera Railway Siding	50.1	45.15

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

K. Jaisankar
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jaisankar



संयुक्त प्रयोगशाला
cmpdi
 CHEMICAL ANALYSIS

Test Report

EFFLUENT QUALITY DATA

Area :

Basundhara

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

Project :

Kulda OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
14-Jan-26	Mine Sump Water Near Kulda Nursery	6.76	<4.0	25	24	-			
14-Jan-26	Inlet of ETP	6.67	4.2	47	64	-			
14-Jan-26	Final Outlet Of ETP	6.81	<4.0	33	36	-			
30-Jan-26	Final Outlet Of ETP	6.94	<4.0	37	40	-			
30-Jan-26	Inlet of ETP	6.79	4.8	55	76	-			

Jatanaik
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

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MoEF Standard Notification dated 25th September, 2009
 and MoEF Schedule VI, General standard for discharge
 of Environmental Pollutants Part A: Effluents

5.5-9.0	10	100	250	30
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Kulda OCP

North of CHP, Telemal

External CT Road, Barpali

PO Office, Kulda OCP

Bijamunda Village

South West of Working Face, Chakaripur

Laikera Railway Siding

Legend

● Air Monitoring Locations

Google Earth

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**Environmental Monitoring Report
For
January-2026**

**Project: Garjanbahal OCP
Area: Basundhara
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



सीएमपीडीआई
मिनी रत्ना
cmpdi
Mini Ratna

Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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संयुक्त प्रदूषण नियंत्रण बोर्ड
भारत
CPCB
AIR QUALITY

Test Report

AMBIENT AIR QUALITY DATA

Area :

Basundhara

(Compliance Station)

Project :

Garjanbahal OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	CO (mg/m ³)	Dust Generating Source	Distance from DGS
03-Jan-26	Karlikachar Village	245	158	65	21.02	35.79	-	External Coal Transportation Road	About 500m
03-Jan-26	KAN-1 Near Coal Sampling Lab	295	185	73	19.47	29.59	-	Railway Siding, Transportation	About 500m
03-Jan-26	Garjanbahal Village	289	168	74	17.01	22.78	-	External Coal Transportation Road	About 500m
21-Jan-26	Karlikachar Village	278	158	65	20.94	29.99	-	External Coal Transportation Road	About 500m
21-Jan-26	KAN-1 Near Coal Sampling Lab	307	179	72	17.39	32.30	-	Railway Siding, Transportation	About 500m
21-Jan-26	Garjanbahal Village	271	155	64	15.34	21.19	-	External Coal Transportation Road	About 500m

T. Prasad
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

J. Prasad

MoEF Standards Notification dated 25th
September, 2000

500	250		120	120	92/8 (Hours)
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Test Report

AMBIENT AIR QUALITY DATA



DATA
CMPDI

Reference Station):

Basundhara

(Reference Station)

Project :

Garjanbahal OCP

(cont. from pg. 1)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
01-Jan-26	West of working face, Bihaimunda	193	84	40	19.85	29.16	South-West of Working Face	About 500m
01-Jan-26	South-East of Working Face, Kutabaga Village	187	76	41	14.95	19.29	South-East of Working Face	About 1000m
02-Jan-26	South-East of Working Face, Kutabaga Village	169	62	33	16.90	26.57	South-East of Working Face	About 1000m
02-Jan-26	West of working face, Bihaimunda	217	88	46	17.41	23.52	South-West of Working Face	About 500m
08-Jan-26	South-East of Working Face, Kutabaga Village	247	93	51	22.20	41.24	South-East of Working Face	About 1000m
08-Jan-26	West of working face, Bihaimunda	177	67	38	14.60	28.77	South-West of Working Face	About 500m
09-Jan-26	South-East of Working Face, Kutabaga Village	183	70	37	13.91	27.24	South-East of Working Face	About 1000m
09-Jan-26	West of working face, Bihaimunda	195	75	43	18.83	20.10	South-West of Working Face	About 500m
16-Jan-26	South-East of Working Face, Kutabaga Village	205	84	46	15.30	17.77	South-East of Working Face	About 1000m
16-Jan-26	West of working face, Bihaimunda	188	75	42	11.70	23.83	South-West of Working Face	About 500m
17-Jan-26	South-East of Working Face, Kutabaga Village	210	90	51	21.69	29.15	South-East of Working Face	About 1000m
17-Jan-26	West of working face, Bihaimunda	184	73	40	17.23	23.36	South-West of Working Face	About 500m
22-Jan-26	West of working face, Bihaimunda	215	86	48	13.39	31.73	South-West of Working Face	About 500m
22-Jan-26	South-East of Working Face, Kutabaga Village	201	81	44	12.88	25.63	South-East of Working Face	About 1000m
23-Jan-26	South-East of Working Face, Kutabaga Village	183	72	39	11.32	17.40	South-East of Working Face	About 1000m
23-Jan-26	West of working face, Bihaimunda	193	73	41	11.62	23.13	South-West of Working Face	About 500m
30-Jan-26	South-East of Working Face, Kutabaga Village	198	75	43	18.35	40.05	South-East of Working Face	About 1000m
30-Jan-26	West of working face, Bihaimunda	208	74	45	14.97	31.07	South-West of Working Face	About 500m
31-Jan-26	West of working face, Bihaimunda	203	78	44	14.44	16.86	South-West of Working Face	About 500m
31-Jan-26	South-East of Working Face, Kutabaga Village	219	91	49	19.39	35.25	South-East of Working Face	About 1000m

Authorized Signatory
CMPDI, RI-VII, LAB

Janak

W.L.GS.2009

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Test Report



AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area :

Basundhara

Project :

Garjanbahal OCP

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
01-Jan-26	West of working face, Bihaimunda	<20.0	14.25	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
01-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	25.07	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
02-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	17.45	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
02-Jan-26	West of working face, Bihaimunda	<20.0	15.00	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
08-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	12.28	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
08-Jan-26	West of working face, Bihaimunda	<20.0	25.82	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
09-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	28.27	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
09-Jan-26	West of working face, Bihaimunda	<20.0	18.18	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
16-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	25.07	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
16-Jan-26	West of working face, Bihaimunda	<20.0	12.28	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
17-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	16.22	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
17-Jan-26	West of working face, Bihaimunda	<20.0	20.15	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
22-Jan-26	West of working face, Bihaimunda	<20.0	19.42	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
22-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	22.87	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
23-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	24.83	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
23-Jan-26	West of working face, Bihaimunda	<20.0	28.27	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
30-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	25.57	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
30-Jan-26	West of working face, Bihaimunda	<20.0	18.18	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
31-Jan-26	West of working face, Bihaimunda	<20.0	15.00	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
31-Jan-26	South-East of Working Face, Kutabaga Village	<20.0	18.93	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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Authorised Signatory
CMPDI, RI-VII, LAB
CHIBANESWAR

Janak



सीएमपीडी
LAB, SHUBANERWAR
cmpdi

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Basundhara

PROJECT :

Garjhanbahal OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
14-Jan-26	Garjhanbahal Village	60.4	52.4
14-Jan-26	Karlakachar Village	52.1	39.6
31-Jan-26	Karlakachar Village	50.3	41.3
31-Jan-26	Garjhanbahal Village	52.7	42.8

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

Shubanerwar
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CEMO, RI-VII, LAB
SHUBANERWAR

Jamali



संवेदनशील
सर्वेक्षण
CMPDI
भारत सरकार

Test Report

EFFLUENT QUALITY DATA

Area :

Basundhuru

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

Project :

Garjanbahal OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
14-Jan-26	Outlet of Settling Tank (Kanika Siding)	7.65	<4.0	49	64	-	-	-	
14-Jan-26	Inlet of Settling Tank (Kanika Siding)	6.83	5.4	81	116	-	-	-	
14-Jan-26	Mine Sump Water	6.95	<4.0	34	32	-	-	-	
30-Jan-26	Inlet of Settling Tank (Kanika Siding)	7.07	5.0	66	92	-	-	-	
30-Jan-26	Mine Sump Water	6.96	<4.0	27	28	-	-	-	
30-Jan-26	Outlet of Settling Tank (Kanika Siding)	7.59	<4.0	40	56	-	-	-	

J. H. H. H.
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janak

MoEF Standard Notification dated 25th September, 2000
and MoEF Schedule VI, General standard for discharge
of Environmental Pollutants Part A: Effluents

5.5-9.0	10	100	250	30
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Garjanbahal OCP

Legend
Monitoring Station



Google Earth

**Environmental Monitoring Report
For
January-2026**

**Project: Basundhara(W) OCP
Area: Mahalaxmi Area
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

The test report shall not be reproduced in part or full without written approval of the competent authority



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Web: www.cmpdi.gov.in

Test Report

AMBIENT AIR QUALITY DATA

Area :

Mahalaxmi

(Compliance Station)

Project :

Basundhara (w) OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO ₂	NO _x	CO (mg/m ³)	Dust Generating Source	Distance from DGS
10-Jan-26	North of the Sardega Railway Siding, Kulapada	307	195	82	20.33	28.32	1.0	Mining Activities, OCP, Coal Transportation	About 500m
10-Jan-26	Body Workshop Basundhara	231	138	62	13.77	35.53	1.2	Mining Activities	About 100m
29-Jan-26	North of the Sardega Railway Siding, Kulapada	266	145	61	20.81	20.94	0.9	Mining Activities, OCP, Coal Transportation	About 500m
29-Jan-26	Body Workshop Basundhara	267	148	63	12.64	24.22	1.7	Mining Activities	About 100m

J. K. Saini
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

J. K. Saini

MoEF Standards Notification dated 25th
September, 2000

500

250

120

120

62(8
Hours)



Test Report

AMBIENT AIR QUALITY DATA

Area : **Mahalaxmi**

(Reference Station)

Project :

Basundhara (w) OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
01-Jan-26	Sarangjharla Village	171	69	37	14.22	19.08	Domestic	About 500m
01-Jan-26	Khamarpara Village	207	75	44	14.82	37.24	Mining Activities, Coal Transportation	About 500m
01-Jan-26	Ratansara Village	203	75	44	22.62	25.73	Transportation	About 100m
01-Jan-26	West of Coal Stock, Near Golf Course	181	71	38	15.68	27.67	Mining Activities, OCP, Transportation	About 500m
02-Jan-26	Khamarpara Village	189	69	42	15.69	28.29	Mining Activities, Coal Transportation	About 500m
02-Jan-26	West of Coal Stock, Near Golf Course	197	77	43	18.91	21.55	Mining Activities, OCP, Transportation	About 500m
02-Jan-26	Ratansara Village	175	67	38	13.43	33.26	Transportation	About 100m
02-Jan-26	Sarangjharla Village	163	63	32	18.21	23.36	Domestic	About 500m
08-Jan-26	Khamarpara Village	198	79	45	16.22	26.46	Mining Activities, Coal Transportation	About 500m
08-Jan-26	West of Coal Stock, Near Golf Course	215	83	47	17.08	42.03	Mining Activities, OCP, Transportation	About 500m
08-Jan-26	Sarangjharla Village	214	84	48	14.05	28.71	Domestic	About 500m
08-Jan-26	Ratansara Village	169	80	33	21.91	28.48	Transportation	About 100m
09-Jan-26	West of Coal Stock, Near Golf Course	195	73	42	17.38	25.69	Mining Activities, OCP, Transportation	About 500m
09-Jan-26	Sarangjharla Village	192	74	43	16.92	24.12	Domestic	About 500m
09-Jan-26	Ratansara Village	194	79	45	23.10	29.18	Transportation	About 100m
09-Jan-26	Khamarpara Village	179	71	40	14.46	40.69	Mining Activities, Coal Transportation	About 500m
16-Jan-26	Ratansara Village	179	75	41	20.58	25.49	Transportation	About 100m
16-Jan-26	Sarangjharla Village	173	69	38	18.80	23.29	Domestic	About 500m
16-Jan-26	Khamarpara Village	217	88	49	15.19	31.03	Mining Activities, Coal Transportation	About 500m
16-Jan-26	West of Coal Stock, Near Golf Course	202	77	44	20.35	34.52	Mining Activities, OCP, Transportation	About 500m
17-Jan-26	Ratansara Village	211	87	48	16.92	17.54	Transportation	About 100m
17-Jan-26	Sarangjharla Village	195	73	41	14.31	23.16	Domestic	About 500m

*NAAQS, 2009

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BHUBANESWAR

Signature

Project :**Basundhara (w) OCP****(conc. in $\mu\text{g}/\text{cu.m.}$)**

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
17-Jan-26	Khamarpara Village	208	81	45	13.89	29.89	Mining Activities, Coal Transportation	About 500m
17-Jan-26	West of Coal Stock, Near Golf Course	109	85	46	12.52	26.89	Mining Activities, OCP, Transportation	About 500m
22-Jan-26	Khamarpara Village	195	78	43	12.37	41.22	Mining Activities, Coal Transportation	About 500m
22-Jan-26	Sarangijharia Village	198	80	44	20.07	24.31	Domestic	About 500m
22-Jan-26	West of Coal Stock, Near Golf Course	193	76	41	22.56	31.23	Mining Activities, OCP, Transportation	About 500m
22-Jan-26	Ratansara Village	187	78	40	21.70	27.45	Transportation	About 100m
23-Jan-26	Khamarpara Village	212	84	46	11.32	35.55	Mining Activities, Coal Transportation	About 500m
23-Jan-26	Ratansara Village	198	76	43	13.43	25.69	Transportation	About 100m
23-Jan-26	Sarangijharia Village	207	86	48	21.04	24.52	Domestic	About 500m
23-Jan-26	West of Coal Stock, Near Golf Course	199	80	44	16.22	19.84	Mining Activities, OCP, Transportation	About 500m
30-Jan-26	Ratansara Village	216	84	48	21.12	25.59	Transportation	About 100m
30-Jan-26	Sarangijharia Village	203	78	44	12.65	35.66	Domestic	About 500m
30-Jan-26	West of Coal Stock, Near Golf Course	178	76	39	17.82	22.32	Mining Activities, OCP, Transportation	About 500m
30-Jan-26	Khamarpara Village	187	75	41	12.10	24.20	Mining Activities, Coal Transportation	About 500m
31-Jan-26	West of Coal Stock, Near Golf Course	186	83	41	13.86	19.74	Mining Activities, OCP, Transportation	About 500m
31-Jan-26	Khamarpara Village	196	80	44	12.47	18.82	Mining Activities, Coal Transportation	About 500m
31-Jan-26	Ratansara Village	210	82	46	19.39	22.99	Transportation	About 100m
31-Jan-26	Sarangijharia Village	189	72	40	12.59	20.46	Domestic	About 500m

Satish
 Authorized Signatory
 CMPD, RI-VII, LAB
 BHUBANESWAR

Jasmit

*NAQS, 2009		100	80	80	80
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Test Report

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area : **Mahalaxmi**

Project : **Basundhara (w) OCP**

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
01-Jan-26	Ratansara Village	<20.0	24.58	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
01-Jan-26	West of Coal Stock, Near Golf Course	<20.0	16.22	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
01-Jan-26	Sarangijharia Village	<20.0	18.43	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
01-Jan-26	Khamarpara Village	<20.0	21.38	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
02-Jan-26	West of Coal Stock, Near Golf Course	<20.0	14.02	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
02-Jan-26	Khamarpara Village	<20.0	27.28	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
02-Jan-26	Sarangijharia Village	<20.0	13.77	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
02-Jan-26	Ratansara Village	<20.0	24.08	<0.1	<1.0	<1.0	1.7	BQL(QL=0.7)	BQL
08-Jan-26	West of Coal Stock, Near Golf Course	<20.0	21.88	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
08-Jan-26	Khamarpara Village	<20.0	24.83	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
08-Jan-26	Ratansara Village	<20.0	23.35	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
08-Jan-26	Sarangijharia Village	<20.0	19.67	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
09-Jan-26	Khamarpara Village	<20.0	23.35	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
09-Jan-26	Ratansara Village	<20.0	16.72	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
09-Jan-26	Sarangijharia Village	<20.0	25.07	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
09-Jan-26	West of Coal Stock, Near Golf Course	<20.0	23.10	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
16-Jan-26	Sarangijharia Village	<20.0	13.52	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
16-Jan-26	Ratansara Village	<20.0	13.03	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
16-Jan-26	West of Coal Stock, Near Golf Course	<20.0	26.80	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
16-Jan-26	Khamarpara Village	<20.0	13.52	<0.1	<1.0	<1.0	1.7	BQL(QL=0.7)	BQL
17-Jan-26	Sarangijharia Village	<20.0	25.32	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
17-Jan-26	Ratansara Village	<20.0	15.00	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
17-Jan-26	West of Coal Stock, Near Golf Course	<20.0	13.27	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL

Standard	400(24hrs)	180(hour)	1.0(24hours)	6.0(Annual)	20(Annual)	02(8hours)	01(annual)	05(annual)
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Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janaki

Project :**Basundhara (w) OCP**

Date of Sampling	Monitoring Station	Ammonia(NH3)	Ozone(O3)	Lead(Pb)	Arsenic(As)	Nickel(Ni)	CO	Benzo(a)Pyrene	Benzene
		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	(ng/m^3)	(ng/m^3)	(ng/m^3)	(ng/m^3)	($\mu\text{g}/\text{m}^3$)
17-Jan-26	Khamarpara Village	<20.0	18.18	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
22-Jan-26	West of Coal Stock, Near Golf Course	<20.0	22.37	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
22-Jan-26	Ratansara Village	<20.0	14.02	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
22-Jan-26	Khamarpara Village	<20.0	11.07	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
22-Jan-26	Sarangijharia Village	<20.0	23.85	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
23-Jan-26	West of Coal Stock, Near Golf Course	<20.0	20.15	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
23-Jan-26	Sarangijharia Village	<20.0	12.53	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
23-Jan-26	Ratansara Village	<20.0	23.60	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
23-Jan-26	Khamarpara Village	<20.0	22.12	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
30-Jan-26	Sarangijharia Village	<20.0	15.73	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
30-Jan-26	Ratansara Village	<20.0	15.00	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
30-Jan-26	Khamarpara Village	<20.0	21.13	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
30-Jan-26	West of Coal Stock, Near Golf Course	<20.0	22.37	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
31-Jan-26	Khamarpara Village	<20.0	20.90	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
31-Jan-26	West of Coal Stock, Near Golf Course	<20.0	22.37	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
31-Jan-26	Sarangijharia Village	<20.0	22.37	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
31-Jan-26	Ratansara Village	<20.0	27.28	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL

Signature
 Authorised Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR

Signature

Standard	400(24hours)	180(hour)	1.0(24hours)	6.0(Annual)	20(Annual)	02(8hours)	01(annual)	05(annual)
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TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Mahalaxmi

PROJECT :

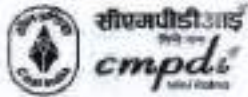
Basundhara (W) OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
14-Jan-26	North of the Sardega Railway Siding ,Kulapada	62.4	56.9
14-Jan-26	Sarangijharia Community Centre	49.3	40.7
14-Jan-26	Ratansara Village	52.8	41.3
14-Jan-26	West of Coal Stock , Near Golf Course	50.6	41.3
14-Jan-26	South-West of Working Face -Gopalpur Village,Near CMPDIL Camp	50.9	42.8
31-Jan-26	North of the Sardega Railway Siding ,Kulapada	52.1	41.6
31-Jan-26	South-West of Working Face -Gopalpur Village,Near CMPDIL Camp	49.5	42.5
31-Jan-26	Sarangijharia Community Centre	52.1	40.7
31-Jan-26	Ratansara Village	50.9	42.4
31-Jan-26	West of Coal Stock , Near Golf Course	50.6	39.2

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

Authorised Signatory
CMPDI, N-VII, LAG
BHUWANESWAR

Janak



Test Report

EFFLUENT QUALITY DATA

Area :

Mahalaxmi

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

Project :

Basundhara (W) OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
14-Jan-26	M1-Basundhara (E) OCP's Sump	6.94	<4.0	26	24	-	-	-	
14-Jan-26	Outlet of Excavation Workshop, B(W) OCP	7.33	<4.0	44	40	-	-	-	
14-Jan-26	Inlet of Excavation Workshop, B(W) OCP	7.14	4.8	67	92	-	-	-	
14-Jan-26	Sardega Railway Siding Sedimentation Pond	6.87	4.4	58	80	-	-	-	
14-Jan-26	Basundhara (W) OCP Mine Sump	6.97	<4.0	31	28	-	-	-	
30-Jan-26	M1-Basundhara (E) OCP's Sump	7.13	<4.0	33	28	-	-	-	
30-Jan-26	Inlet of Excavation Workshop, B(W) OCP	-	-	-	-	-	-	-	Dry
30-Jan-26	Outlet of Excavation Workshop, B(W) OCP	-	-	-	-	-	-	-	Dry
30-Jan-26	Basundhara (W) OCP Mine Sump	7.22	<4.0	38	36	-	-	-	
30-Jan-26	Sardega Railway Siding Sedimentation Pond	7.17	4.6	49	72	-	-	-	

Handwritten signature
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Handwritten signature

MoEF Standard Notification dated 25th September, 2009
and MoEF Schedule VI, General standard for discharge
of Environmental Pollutants Part A: Effluents

5.5-9.0	10	100	250	30
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सीएमपीडीआई
विनी लाल
cmpdi
Mini Satna

Drinking Water Quality Data Mahalaxmi Area

Project / OCP	Basundhara (W)	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Water Treatment Plant Clear Water Reservoir	Acceptable	Permissible
Date of Sampling	14-Jan-2026	Acceptable	Permissible
Colour(Hazen)	3	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3.3	1	5
pH	7.19	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	41.04	200	600
Chloride(mg/L)	19.28	250	1000
Sulphate(mg/L)	134.8	200	400
Nitrate(mg/L)	1.58	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	209.66	200	600
Calcium(mg/L)	45.25	75	200
Fluoride(mg/L)	0.91	1	1.5
Total Dissolve Solid(mg/L)	298	500	2000
Copper(mg/L)	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	0.1	0.3
Iron(mg/L)	<0.1	1	No relaxation
Zinc(mg/L)	<0.04	5	15
Lead(mg/L)	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	0.5	2.4

Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janak



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सर्वोत्तम
cmpdi
सर्वोत्तम

Drinking Water Quality Data Mahalaxmi Area

Project / OCP	Basundhara (W)	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Water Treatment Plant Clear Water Reservoir	Acceptable	Permissible
Date of Sampling	14-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	0.01	No relaxation
Sodium(mg/L)	6.48	-	-
Potassium(mg/L)	1.68	-	-
Phenolics(mg/L)	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	-	-

Jattawalk
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jattawalk

Basundhara (W) OCP

Sarangjhanra Village

Legend

● Air Monitoring Locations

North of the Sardega Railway Siding, Kuratpada

Khamarpara, East Side of Sardega Railway Siding

West of Coal Stock, Near Golf Course

Ratansarp Village

Google Earth

© 2006 Google

31m



**Environmental Monitoring Report
For
January-2026**

**Project: Basundhara(E) OCP
Area: Mahalaxmi Area
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



सीएमपीडीआई
सिंधी रत्न
cmpdi
Mini Ratna

Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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CPCB
cmpdi
INDIA

Test Report

AMBIENT AIR QUALITY DATA

Area :

Mahalaxmi

(Reference Station)

Project :

Basundhara (E) OCP

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
01-Jan-26	Khamarpara Village (Reported Only)	207	75	44	14.82	37.24	Mining Activities, Coal Transportation	About 500m
02-Jan-26	Khamarpara Village (Reported Only)	189	69	42	15.69	28.29	Mining Activities, Coal Transportation	About 500m
08-Jan-26	Khamarpara Village (Reported Only)	198	79	45	16.22	26.46	Mining Activities, Coal Transportation	About 500m
09-Jan-26	Khamarpara Village (Reported Only)	179	71	40	14.46	40.69	Mining Activities, Coal Transportation	About 500m
16-Jan-26	Khamarpara Village (Reported Only)	217	88	49	15.19	31.03	Mining Activities, Coal Transportation	About 500m
17-Jan-26	Khamarpara Village (Reported Only)	208	81	45	13.89	29.89	Mining Activities, Coal Transportation	About 500m
22-Jan-26	Khamarpara Village (Reported Only)	195	78	43	12.37	41.22	Mining Activities, Coal Transportation	About 500m
23-Jan-26	Khamarpara Village (Reported Only)	212	84	46	11.32	35.55	Mining Activities, Coal Transportation	About 500m
30-Jan-26	Khamarpara Village (Reported Only)	187	75	41	12.10	24.20	Mining Activities, Coal Transportation	About 500m
31-Jan-26	Khamarpara Village (Reported Only)	196	80	44	12.47	18.82	Mining Activities, Coal Transportation	About 500m

Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janak

*N-1105,2009

100 60 80 80

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area :

Mahalaxmi

Project :

Basundhara (E) OCP

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
01-Jan-26	Khamarpara Village (Reported Only)	<20.0	21.38	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
02-Jan-26	Khamarpara Village (Reported Only)	<20.0	27.28	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
08-Jan-26	Khamarpara Village (Reported Only)	<20.0	24.83	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
09-Jan-26	Khamarpara Village (Reported Only)	<20.0	23.35	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
16-Jan-26	Khamarpara Village (Reported Only)	<20.0	13.52	<0.1	<1.0	<1.0	1.7	BQL(QL=0.7)	BQL
17-Jan-26	Khamarpara Village (Reported Only)	<20.0	18.18	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
22-Jan-26	Khamarpara Village (Reported Only)	<20.0	11.07	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
23-Jan-26	Khamarpara Village (Reported Only)	<20.0	22.12	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
30-Jan-26	Khamarpara Village (Reported Only)	<20.0	21.13	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
31-Jan-26	Khamarpara Village (Reported Only)	<20.0	20.90	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL

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BHUBANESWAR

Janak

Standard	400(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8hours)	01(annual)	05(annual)
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सीएनपीडी
CMPDI
MAHARASHTRA

TABLE--

NOISE LEVEL MONITORING DATA

AREA :


Mahalaxmi

PROJECT :

Basundhara (E) OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
14-Jan-26	Quary Sump of Basundhara East OCP/ Near CHP of Basundhara East OCP	50.4	42.6
31-Jan-26	Quary Sump of Basundhara East OCP/ Near CHP of Basundhara East OCP	49.2	41.6

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


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BHUBANESWAR





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कोशी नल
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मिनी लोडर

Drinking Water Quality Data Mahalaxmi Area

Project / OCP	Basundhara (E)	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Basundhar East Sump Quarry OCP		
Date of Sampling	14-Jan-2026	Acceptable	Permissible
Colour(Hazen)	3	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3.1	1	5
pH	7.06	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	41.04	200	600
Chloride(mg/L)	17.35	250	1000
Sulphate(mg/L)	132.6	200	400
Nitrate(mg/L)	1.76	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	205.63	200	600
Calcium(mg/L)	45.25	75	200
Fluoride(mg/L)	0.97	1	1.5
Total Dissolve Solid(mg/L)	294	500	2000
Copper(mg/L)	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	0.1	0.3
Iron(mg/L)	<0.1	1	No relaxation
Zinc(mg/L)	<0.04	5	15
Lead(mg/L)	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	0.5	2.4

Tathnail
Authoritative Signatory
CMPDI, RE-VII, LAB
SHUBANESWAR

Jasmati



सीएमपीडीआई
निरीक्षण
cmpdi
मिनी लैब्स

Drinking Water Quality Data Mahalaxmi Area

Project / OCP	Basundhara (E)	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Basundhar East Sump Quarry OCP	Acceptable	Permissible
Date of Sampling	14-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	0.01	No relaxation
Sodium(mg/L)	7.28	-	-
Potassium(mg/L)	2.42	-	-
Phenolics(mg/L)	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	-	-

T. J. Jaisankar
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jaisankar

Environmental Monitoring Report For January-2026

Project: Orient Mine no. 1&2
Area: Orient
Coalfield: Ib Valley



MCL

Mahanadi Coalfields Limited



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श्रीमत्पद्मश्री
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Mini Ratna

Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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Test Report



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 १९८६ ईपि
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 CENTRAL POLLUTION CONTROL BOARD

AMBIENT AIR QUALITY DATA

Area :

Orient

(Compliance Station)

Project :

Orient Mine No. 1 & 2

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	CO (mg/m ³)	Dust Generating Source	Distance from DGS
07-Jan-26	Orient Mine No. 1 & 2	255	141	69	16.93	24.55	-	Coal Stock Yard, Surface Bunker, Coal	About 250m
24-Jan-26	Orient Mine No. 1 & 2	289	175	68	11.50	27.12	-	Coal Stock Yard, Surface Bunker, Coal	About 250m

Jeewanik
 Authorised Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR

Jamshet

MoEF Standards Notification dated 25th
 September, 2009

500	250		120	120	02(8 Hours)
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 CMPDI
 1987-1988

Test Report

AMBIENT AIR QUALITY DATA

Area :

Orient

(Reference Station)

Project :

Orient Mine No.1 & 2

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
05-Jan-26	Orient GM Office	165	66	37	12.18	23.33	Domestic and other Anthropogenic Activities	About 1000m
06-Jan-26	Orient GM Office	197	75	41	13.17	19.71	Domestic and other Anthropogenic Activities	About 1000m
12-Jan-26	Orient GM Office	205	78	43	13.69	29.29	Domestic and other Anthropogenic Activities	About 1000m
13-Jan-26	Orient GM Office	222	85	48	14.80	36.08	Domestic and other Anthropogenic Activities	About 1000m
19-Jan-26	Orient GM Office	212	80	44	11.44	26.92	Domestic and other Anthropogenic Activities	About 1000m
20-Jan-26	Orient GM Office	215	76	42	15.49	34.52	Domestic and other Anthropogenic Activities	About 1000m
27-Jan-26	Orient GM Office	207	84	46	16.58	27.72	Domestic and other Anthropogenic Activities	About 1000m
28-Jan-26	Orient GM Office	193	75	41	21.69	24.00	Domestic and other Anthropogenic Activities	About 1000m

Jatavali
 Authorised Signatory
 CMPDI, RI-VII, LAB
 BHUBANESWAR

Jatavali

*NAAQS, 2009

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Test Report



AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area :

Orient

Project :

Orient Mine No.1 & 2

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
05-Jan-26	Orient GM Office	<20.0	19.17	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
06-Jan-26	Orient GM Office	<20.0	23.10	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
12-Jan-26	Orient GM Office	<20.0	17.20	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
13-Jan-26	Orient GM Office	<20.0	16.97	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
19-Jan-26	Orient GM Office	<20.0	25.82	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
20-Jan-26	Orient GM Office	<20.0	18.18	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
27-Jan-26	Orient GM Office	<20.0	21.63	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
28-Jan-26	Orient GM Office	<20.0	14.50	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janak



सीएनपीडीआई
CMPDI
नवी दिल्ली

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Orient

PROJECT :

Orient Mine No. 1 & 2

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
12-Jan-26	VIP Guest House, IB Valley (Reported Only)	49.8	42.2
12-Jan-26	Orient Mine No. 1 & 2	50.3	40.6
28-Jan-26	Orient Mine No. 1 & 2	49.8	40.6
28-Jan-26	VIP Guest House, IB Valley (Reported Only)	50.6	42.5

MoEF Standard Notification dated 25th September, 2009	6.00 AM - 10.00 PM Leq 75dB(A) (Industrial)	10.00 PM - 6.00 AM Leq 70dB(A) (Industrial)
MoEF Standard Notification dated 25th September, 2000	6.00 AM - 10.00 PM Leq 55dB(A) (Residential)	10.00 PM - 6.00 AM Leq 45dB(A) (Residential)
MoEF Standard Notification dated 25th September, 2000	6.00 AM - 10.00 PM Leq 65dB(A) (Commercial)	10.00 PM - 6.00 AM Leq 55dB(A) (Commercial)
MoEF Standard Notification dated 25th September, 2000	6.00 AM - 10.00 PM Leq 50dB(A) (Silence Zone)	10.00 PM - 6.00 AM Leq 40dB(A) (Silence Zone)

Jatkar
Authorized Signatory
CMPDI, RI-VII, LAB
CHUBANESWAR

Jatkar



सौरजपीडीआर
CMPDI
LAB BUBANESWAR

Test Report

EFFLUENT QUALITY DATA

Area :

Orient

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

Project :

Orient Mine No. 1 & 2

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
15-Jan-26	Mine Sump of Mine No. 2	7.21	<4.0	37	28	-	-	-	
31-Jan-26	Mine Sump of Mine No. 2	7.35	<4.0	39	32	-	-	-	

Jeetavail
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jeetavail

MoEF Standard Notification dated 25th September, 2000
and MoEF Schedule VI, General standards for discharge
of Environmental Pollutants Part A: Effluents

5.5-9.0	10	100	250	30
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सीएमपीडीआई
CMPDI
Mini Ratna

Drinking Water Quality Data Orient Area

Project / OCP	Orient Mine No. 1 & 2		Indian Drinking Standards (IS-10500):2012	
	Budhijaam Colony	Mine no 1 & 2 Filter Plant	Acceptable	Permissible
Monitoring Station	15-Jan-2026	15-Jan-2026		
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Colour(Hazen)	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2.2	2.6	1	5
pH	7.42	6.95	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	109.44	127.68	200	600
Chloride(mg/L)	21.21	19.28	250	1000
Sulphate(mg/L)	24.11	27.53	200	400
Nitrate(mg/L)	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	112.9	129.02	200	600
Calcium(mg/L)	27.47	25.86	75	200
Fluoride(mg/L)	0.74	0.81	1	1.5
Total Dissolve Solid(mg/L)	188	204	500	2000
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	1	No relaxation
Zinc(mg/L)	<0.04	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	0.5	2.4

Signature
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Signature



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विशेष लैब
cmpdi
Mini lab

Drinking Water Quality Data Orient Area

Project / OCP	Orient Mine No. 1 & 2		Indian Drinking Standards (IS-10500):2012	
	Budhijaam Colony	Mine no 1 & 2 Filter Plant	Acceptable	Permissible
Monitoring Station	15-Jan-2026	15-Jan-2026		
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	7.77	5.80	-	-
Potassium(mg/L)	1.99	1.22	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

Tafawail
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janak

Environmental Monitoring Report For January-2026

Project: Orient Mine no. 3
Area: Orient
Coalfield: Ib Valley



Mahanadi Coalfields Limited



Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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Test Report

AMBIENT AIR QUALITY DATA

Area :

Orient

(Compliance Station)

Project :

Orient Mine No. 3

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	CO (mg/m3)	Dust Generating Source	Distance from DGS
07-Jan-26	Orient Mine No. 3	284	168	76	21.24	36.16	-	Coal Stockyard, Surface Bunker, Coal	About 200m
24-Jan-26	Orient Mine No. 3	274	159	66	10.82	24.56	-	Coal Stockyard, Surface Bunker, Coal	About 200m

Tattawach
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Januar

MoEF Standards Notification dated 25th
September, 2000

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Hours)



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cmpdi
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TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Orient

PROJECT :

Orient Mine No.3

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
12-Jan-26	Orient Mine No.3	52.8	41.9
28-Jan-26	Orient Mine No.3	51.6	42.4

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

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BHUBANESWAR

Signature



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cmpdi
 CHEMICAL ANALYSIS

Test Report

EFFLUENT QUALITY DATA

Area :

Orient

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

Project :

Orient Mine No. 3

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
15-Jan-26	Mine Sump of Mine No. 3	7.40	<4.0	30	24	-	-	-	
31-Jan-26	Mine Sump of Mine No. 3	7.56	<4.0	37	32	-	-	-	

Taffanait
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CMPDI, RI-VII, LAB
BHUBANESWAR

Janak

MoEF Standard Notification dated 25th September, 2000
 and MoEF Schedule VI, General standard for discharge
 of Environmental Pollutants Part A: Effluents

5.5-9.0	10	100	250	30
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रिपी वन
cmpdi
Water Analysis

Drinking Water Quality Data Orient Area

Project / OCP	Orient Mine No. 3 Mine no 3 Filter Plant	Indian Drinking Standards (IS-10500):2012	
		Acceptable	Permissible
Monitoring Station	15-Jan-2026		
Date of Sampling	2	5	15
Colour(Hazen)	Agreeable	Agreeable	Agreeable
Odour	Agreeable	Agreeable	Agreeable
Taste	1.6	1	5
Turbidity(NTU)	6.73	6.5-8.5	No relaxation
pH	68.4	200	600
Total Alkalinity(mg/L)	23.14	250	1000
Chloride(mg/L)	37.53	200	400
Sulphate(mg/L)	<0.5	45	No relaxation
Nitrate(mg/L)	112.9	200	600
Total Hardness (Ca CO ₃)(mg/L)	22.62	75	200
Calcium(mg/L)	0.77	1	1.5
Fluoride(mg/L)	176	500	2000
Total Dissolve Solid(mg/L)	<0.03	0.05	1.5
Copper(mg/L)	<0.04	0.1	0.3
Manganese(mg/L)	<0.1	1	No relaxation
Iron(mg/L)	<0.04	5	15
Zinc(mg/L)	<0.005	0.01	No relaxation
Lead(mg/L)	<0.001	0.003	No relaxation
Cadmium(mg/L)	<0.01	0.05	No relaxation
Total Chromium (mg/L)	<0.005	0.01	No relaxation
Arsenic(mg/L)	<0.2	0.5	2.4
Boron(mg/L)			

Hattarai
Authorized Signatory
CMPDI, RI-VII, LAB
SHRIRANGSWAR

Janak



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मिनि रोल
cmpdi
Mini Rollers

Drinking Water Quality Data Orient Area

Project / OCP	Orient Mine No. 3	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Mine no 3 Filter Plant	Acceptable	Permissible
Date of Sampling	15-Jan-2026		
Selenium(mg/L)	<0.005	0.01	No relaxation
Sodium(mg/L)	6.80	-	-
Potassium(mg/L)	1.42	-	-
Phenolics(mg/L)	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	-	-

J. J. J.
Authorized Signatory
CMPDI, RL-VII, LAB
SHIVAJINagar

J. J. J.

**Environmental Monitoring Report
For
January-2026**

**Project: Orient Mine no. 4
Area: Orient
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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Test Report

AMBIENT AIR QUALITY DATA

Area :

Orient

(Compliance Station)

Project :

Orient Mine No. 4

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	CO (mg/m ³)	Dust Generating Source	Distance from DGS
07-Jan-26	Orient Mine No. 4	279	163	73	14.36	26.67	-	Coal Transportation Road	About 300m
24-Jan-26	Orient Mine No. 4	309	183	72	19.13	19.19	-	Coal Transportation Road	About 300m

Signature
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Signature

MoEF Standards Notification dated 25th
September, 2000

500	250		120	120	02/8 (Hours)
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CIPDI
MAHARAJA

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Orient

PROJECT :

Orient Mine No.4

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
12-Jan-26	Orient Mine No.4	49.3	42.7
28-Jan-26	Orient Mine No.4	49.3	40.7

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

J. Jaiswal
Authorized Signatory
CIPDI, RI-VII, LAB
BHUBANESWAR

Jaiswal



Test Report

EFFLUENT QUALITY DATA

Area :

Orient

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

Project :

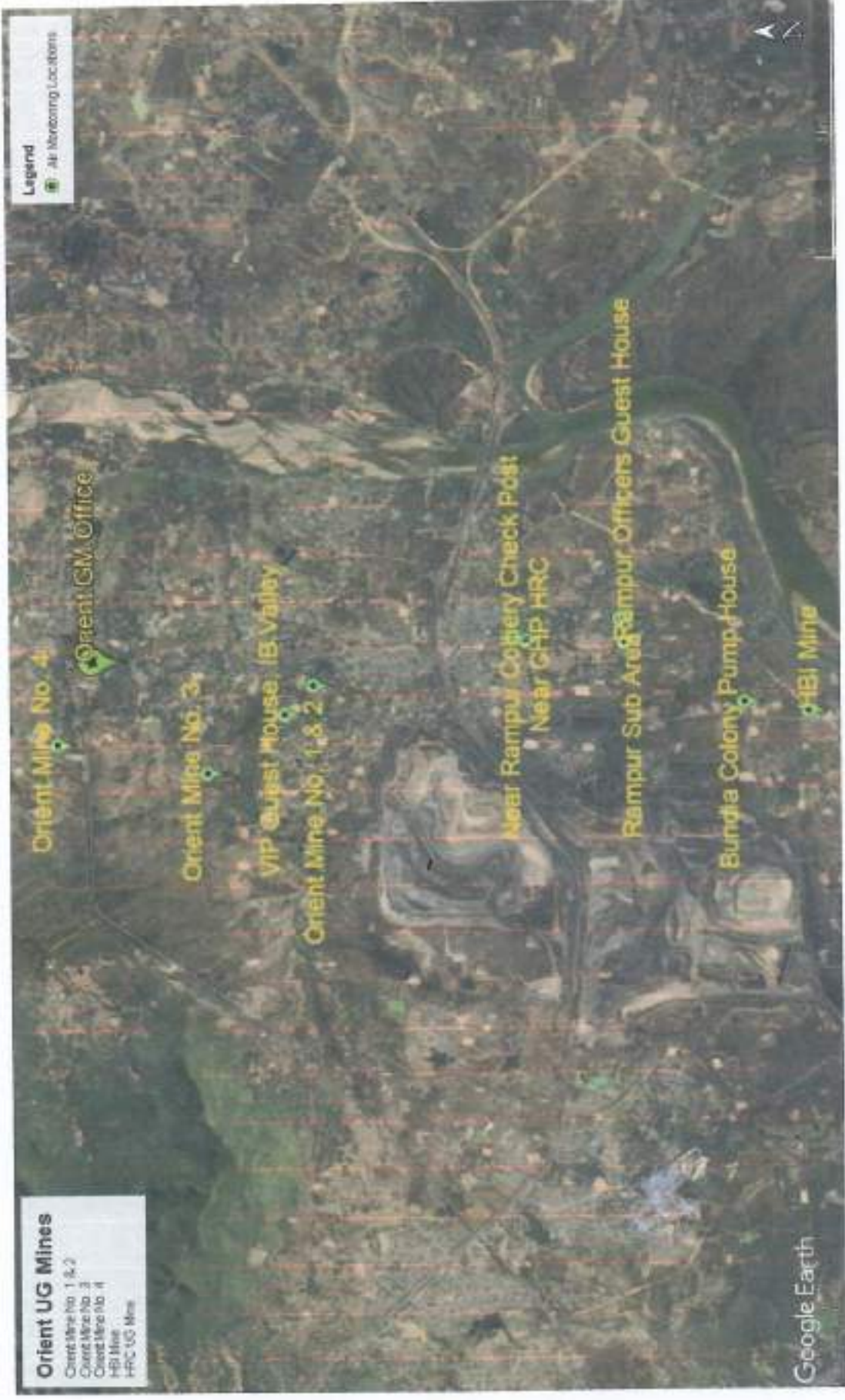
Orient Mine No. 4

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
15-Jan-26	Mine Sump of Mine No. 4	7.06	<4.0	24	20	-	-	-	
31-Jan-26	Mine Sump of Mine No. 4	7.27	<4.0	28	24	-	-	-	

To # email
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janak

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

- Orient Mine No. 1 & 2
- Orient Mine No. 3
- Orient Mine No. 4
- HBI Mine
- HRC UG Mine

Legend

- Air Monitoring Locations

**Environmental Monitoring Report
For
January-2026**

**Project: Hirakhand Bundia Mine
Area: Orient
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



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मिनी प्लान
cmpdi
Mini Plan

Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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CMPDI
CENTRAL POLLUTION CONTROL BOARD

Test Report

AMBIENT AIR QUALITY DATA

Area :

Orient

(Compliance Station)

Project :

HBI Mine

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	CO (mg/m ³)	Dust Generating Source	Distance from DGS
07-Jan-26	HBI Mine	283	163	72	19.21	25.60	-	Coal Stockyard, Surface Bunker, Coal Transport	About 100m
07-Jan-26	Bundia Colony Pump House	258	163	70	21.23	23.00	-	Coal Stockyard, Surface Bunker, Coal Transport	About 150m
24-Jan-26	HBI Mine	281	168	66	19.89	23.86	-	Coal Stockyard, Surface Bunker, Coal Transport	About 100m
24-Jan-26	Bundia Colony Pump House	275	157	67	10.32	20.60	-	Coal Stockyard, Surface Bunker, Coal Transport	About 150m

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Authorized Signatory
CMPDI, RI-VII, LAB
SHUBANESWAR

Jamun

MoEF Standards Notification dated 25th
September, 2000

500	250		120	120	02/8 Hours)
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सीएनपीडी
Cmpdi
Multi Services

Test Report

AMBIENT AIR QUALITY DATA

Area :

Orient

(Reference Station)

Project :

Hirakand Bundia Mine (HBM)

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
05-Jan-26	Rampur Sub Area	217	85	49	15.85	38.43	Coal Stock And CT Road	About 1000m
05-Jan-26	Rampur Officers Guest House	203	74	43	18.83	34.98	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
06-Jan-26	Rampur Officers Guest House	244	94	52	19.67	19.00	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
06-Jan-26	Rampur Sub Area	164	83	35	16.74	30.40	Coal Stock And CT Road	About 1000m
12-Jan-26	Rampur Sub Area	206	86	45	16.06	28.41	Coal Stock And CT Road	About 1000m
12-Jan-26	Rampur Officers Guest House	221	85	47	17.61	42.71	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
13-Jan-26	Rampur Officers Guest House	198	77	43	18.52	27.02	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
13-Jan-26	Rampur Sub Area	212	88	49	21.82	25.87	Coal Stock And CT Road	About 1000m
19-Jan-26	Rampur Sub Area	198	75	43	13.91	16.32	Coal Stock And CT Road	About 1000m
19-Jan-26	Rampur Officers Guest House	207	83	45	12.47	27.45	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
20-Jan-26	Rampur Officers Guest House	221	88	49	14.16	20.46	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
20-Jan-26	Rampur Sub Area	209	84	45	10.26	21.26	Coal Stock And CT Road	About 1000m
27-Jan-26	Rampur Officers Guest House	205	78	44	14.66	23.05	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
27-Jan-26	Rampur Sub Area	220	88	48	14.94	24.20	Coal Stock And CT Road	About 1000m
28-Jan-26	Rampur Sub Area	185	74	43	13.38	31.42	Coal Stock And CT Road	About 1000m
28-Jan-26	Rampur Officers Guest House	212	84	47	18.17	18.35	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m

Authorized Signatory
C/NO. 11-VII, LAB
SHUBANESWAR

Jasmat

*N/A/QS,2009

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Test Report



संयुक्त प्रदूषण नियंत्रण बोर्ड
भारत
CMPDI
भुवनेश्वर

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area :

Orient

Project :

Hirakand Bundia Mine (HBM)

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
05-Jan-26	Rampur Sub Area	<20.0	24.58	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
05-Jan-26	Rampur Officers Guest House	<20.0	20.90	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
06-Jan-26	Rampur Officers Guest House	<20.0	27.53	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
06-Jan-26	Rampur Sub Area	<20.0	11.30	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
12-Jan-26	Rampur Sub Area	<20.0	23.85	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
12-Jan-26	Rampur Officers Guest House	<20.0	25.07	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
13-Jan-26	Rampur Officers Guest House	<20.0	24.58	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
13-Jan-26	Rampur Sub Area	<20.0	21.13	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
19-Jan-26	Rampur Sub Area	<20.0	16.22	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-Jan-26	Rampur Officers Guest House	<20.0	19.17	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
20-Jan-26	Rampur Officers Guest House	<20.0	17.20	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
20-Jan-26	Rampur Sub Area	<20.0	20.90	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
27-Jan-26	Rampur Officers Guest House	<20.0	19.17	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
27-Jan-26	Rampur Sub Area	<20.0	19.42	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
28-Jan-26	Rampur Sub Area	<20.0	21.13	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
28-Jan-26	Rampur Officers Guest House	<20.0	16.47	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Signature



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RI-VII
CMPDI
BHUANESWAR

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Orient

PROJECT :

HBI Mine

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
12-Jan-26	Rampur Officer's Guest House	50.8	41.6
12-Jan-26	HBI Mine	52.9	41.3
12-Jan-26	Bundia Colony Pump House	49.3	42.9
12-Jan-26	Rampur Sub Area (Reported)	52.3	40.7
28-Jan-26	Rampur Sub Area (Reported)	49.6	42.8
28-Jan-26	Bundia Colony Pump House	49.9	40.8
28-Jan-26	HBI Mine	52.1	42.6
28-Jan-26	Rampur Officer's Guest House	52.4	41.2

MoEF Standard Notification dated 23th September, 2000	6.00 AM - 10.00 PM Leq 75dB(A) (Industrial)	10.00 PM - 6.00 AM Leq 70dB(A) (Industrial)
MoEF Standard Notification dated 25th September, 2000	6.00 AM - 10.00 PM Leq 55dB(A) (Residential)	10.00 PM - 6.00 AM Leq 45dB(A) (Residential)
MoEF Standard Notification dated 25th September, 2000	6.00 AM - 10.00 PM Leq 65dB(A) (Commercial)	10.00 PM - 6.00 AM Leq 55dB(A) (Commercial)
MoEF Standard Notification dated 25th September, 2000	6.00 AM - 10.00 PM Leq 50dB(A) (Silence Zone)	10.00 PM - 6.00 AM Leq 40dB(A) (Silence Zone)

Tajfawad
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jawad



सौरभपीडीआर
सर्वेक्षण
cmpdi

Test Report

EFFLUENT QUALITY DATA

Area :

Orient

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

Project :

HBI Mine

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	TDS	DO	Remarks
15-Jan-26	Mine Sump of HBM	7.49	<4.0	38	32	-	-	-	
31-Jan-26	Mine Sump of HBM	7.57	<4.0	32	40	-	-	-	

H. K. H. H. H.
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Janant

MoEF Standard Notification dated 25th September, 2000
and MoEF Schedule VI, General standard for discharge
of Environmental Pollutants Part A: Effluents

5.5-9.0	10	100	250	30
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सीएनपीडीआई
के.पी.एन.
cmpdi
Mini Rating

Drinking Water Quality Data Orient Area

Project / OCP	HBI Mine		Indian Drinking Standards (IS-10500):2012	
	Rampur Colony	HBI Water Filter Plant	Acceptable	Permissible
Monitoring Station	15-Jan-2026	15-Jan-2026		
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Colour(Hazen)	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2.5	2.8	1	5
pH	7.27	6.56	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	127.68	127.68	200	600
Chloride(mg/L)	30.85	34.70	250	1000
Sulphate(mg/L)	11.5	10.68	200	400
Nitrate(mg/L)	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	124.99	120.96	200	600
Calcium(mg/L)	30.70	30.70	75	200
Fluoride(mg/L)	0.65	0.70	1	1.5
Total Dissolve Solid(mg/L)	202	210	500	2000
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	1	No relaxation
Zinc(mg/L)	<0.04	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	0.5	2.4

Authorised Signatory
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Journal



सीएमपीडीआई
मिनी रतना
cmpdi
Mini Ratna

Drinking Water Quality Data Orient Area

Project / OCP	HBI Mine		Indian Drinking Standards (IS-10500):2012	
	Rampur Colony	HBI Water Filter Plant	Acceptable	Permissible
Monitoring Station				
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	7.28	12.22	-	-
Potassium(mg/L)	1.66	1.88	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

Staff mail
Authorized Signatory
CMPDI, RI-VII, LAS
SHUBANESWAR

Janak

**Environmental Monitoring Report
For
January-2026**

**Project: Hingir Rampur Colliery
Area: Orient
Coalfield: Ib Valley**



Mahanadi Coalfields Limited



Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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राष्ट्रीय प्रदूषण नियंत्रण बोर्ड
CMPDI
CENTRAL POLLUTION CONTROL BOARD

Test Report

AMBIENT AIR QUALITY DATA

Area :

Orient

(Compliance Station)

Project :

HRC

(conc. in $\mu\text{g}/\text{cu.m.}$)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	CO (mg/m3)	Dust Generating Source	Distance from DGS
07-Jan-26	Near Rampur Colliery Check Post	278	186	73	12.54	25.41	-	Mining allied activities	About 500m
07-Jan-26	Near CHP HRC	266	183	72	12.99	33.16	-	Mining allied activities	About 500m
24-Jan-26	Near Rampur Colliery Check Post	249	141	62	14.64	25.72	-	Mining allied activities	About 500m
24-Jan-26	Near CHP HRC	261	156	69	12.75	34.31	-	Mining allied activities	About 500m

K. Thakur
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

J. Kumar

MoEF Standards Notification dated 25th
September, 2000

500	250		120	120	92 (8 Hours)
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Test Report

AMBIENT AIR QUALITY DATA

Area : Orient (Reference Station)

Project : HRC (conc. in µg/cu.m.)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
05-Jan-26	Rampur Sub Area (Reported only)	217	85	49	15.85	38.43	Coal Stock And CT Road	About 1000m
05-Jan-26	Rampur Officers Guest House (Reported only)	203	74	43	18.83	34.98	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
06-Jan-26	Rampur Officers Guest House (Reported only)	244	94	52	19.67	19.00	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
06-Jan-26	Rampur Sub Area (Reported only)	164	83	35	16.74	30.40	Coal Stock And CT Road	About 1000m
12-Jan-26	Rampur Sub Area (Reported only)	206	86	45	16.06	28.41	Coal Stock And CT Road	About 1000m
12-Jan-26	Rampur Officers Guest House (Reported only)	221	85	47	17.61	42.71	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
13-Jan-26	Rampur Officers Guest House (Reported only)	198	77	43	18.52	27.02	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
13-Jan-26	Rampur Sub Area (Reported only)	212	88	49	21.82	25.87	Coal Stock And CT Road	About 1000m
19-Jan-26	Rampur Sub Area (Reported only)	198	75	43	13.91	16.32	Coal Stock And CT Road	About 1000m
19-Jan-26	Rampur Officers Guest House (Reported only)	207	83	45	12.47	27.45	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
20-Jan-26	Rampur Officers Guest House (Reported only)	221	88	49	14.16	20.46	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
20-Jan-26	Rampur Sub Area (Reported only)	209	84	45	10.26	21.26	Coal Stock And CT Road	About 1000m
27-Jan-26	Rampur Officers Guest House (Reported only)	205	78	44	14.66	23.05	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m
27-Jan-26	Rampur Sub Area (Reported only)	220	88	48	14.94	24.20	Coal Stock And CT Road	About 1000m
28-Jan-26	Rampur Sub Area (Reported only)	185	74	43	13.38	31.42	Coal Stock And CT Road	About 1000m
28-Jan-26	Rampur Officers Guest House (Reported only)	212	84	47	18.17	18.35	Coal Stockyard, Surface Bunker, Coal Transport	About 1000m

Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

[Handwritten Signature]

*N44QS,2009		100	60	80	80
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Test Report

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area :

Orient

Project :

HRC

Date of Sampling	Monitoring Station	Ammonia (NH ₃)	Ozone (O ₃)	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo(a)Pyrene	Benzene
		(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(mg/m ³)	(ng/m ³)	(µg/m ³)
05-Jan-26	Rampur Sub Area (Reported only)	<20.0	24.58	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
05-Jan-26	Rampur Officers Guest House (Reported only)	<20.0	20.90	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
06-Jan-26	Rampur Officers Guest House (Reported only)	<20.0	27.53	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
06-Jan-26	Rampur Sub Area (Reported only)	<20.0	11.30	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
12-Jan-26	Rampur Sub Area (Reported only)	<20.0	23.85	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
12-Jan-26	Rampur Officers Guest House (Reported only)	<20.0	25.07	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
13-Jan-26	Rampur Officers Guest House (Reported only)	<20.0	24.58	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
13-Jan-26	Rampur Sub Area (Reported only)	<20.0	21.13	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
19-Jan-26	Rampur Sub Area (Reported only)	<20.0	16.22	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-Jan-26	Rampur Officers Guest House (Reported only)	<20.0	19.17	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
20-Jan-26	Rampur Officers Guest House (Reported only)	<20.0	17.20	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
20-Jan-26	Rampur Sub Area (Reported only)	<20.0	20.90	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
27-Jan-26	Rampur Officers Guest House (Reported only)	<20.0	19.17	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
27-Jan-26	Rampur Sub Area (Reported only)	<20.0	19.42	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
28-Jan-26	Rampur Sub Area (Reported only)	<20.0	21.13	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
28-Jan-26	Rampur Officers Guest House (Reported only)	<20.0	16.47	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL

Standard	400(24 hours)	180(hours)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)
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Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Signature



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CMPDI
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TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Orient

PROJECT :

HRC

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
12-Jan-26	Near CHP HRC	51.3	40.8
12-Jan-26	Near Rampur Colliery Check Post	51.3	40.8
28-Jan-26	Near CHP HRC	50.6	42.8
28-Jan-26	Near Rampur Colliery Check Post	49.3	41.6

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

T. Anand
Authorised Signatory
CMPDI, RI-VII, LAB
ANANDSWAR

J. Anand

**Environmental Monitoring Report
For
January-2026**

Area: MCL HQ

Coalfield: Ib Valley



Mahanadi Coalfields Limited



Central Mine Planning & Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)

Regional Institute-VII, Samantpuri, P.O : RRL, Bhubaneswar-751013 (Odisha)
[Assistance from Environment Division, CMPDI(HQs), Ranchi]

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Drinking Water Quality Data MCL (HQ)

Project / OCP	MCL (HQ)		Indian Drinking Standards (IS-10500):2012	
	DAV School (Anand vihar)	Corporate Office (Jagrithi Vihar)	Acceptable	Permissible
Monitoring Station	DAV School (Anand vihar)	Corporate Office (Jagrithi Vihar)		
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Colour(Hazen)	1	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1.5	1.9	1	5
pH	7.66	7.76	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	95.76	91.20	200	600
Chloride(mg/L)	17.35	15.42	250	1000
Sulphate(mg/L)	24.11	26.02	200	400
Nitrate(mg/L)	<0.5	1.34	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	104.83	100.8	200	600
Calcium(mg/L)	33.94	29.09	75	200
Fluoride(mg/L)	0.72	0.64	1	1.5
Total Dissolve Solid(mg/L)	174	168	500	2000
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	1	No relaxation
Zinc(mg/L)	<0.04	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	0.5	2.4

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BHUBANESWAR

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cmpdi
Mini Ratna

Drinking Water Quality Data MCL (HQ)

Project / OCP	MCL (HQ)		Indian Drinking Standards (IS-10500):2012	
	DAV School (Anand vihar)	Corporate Office (Jagriti Vihar)	Acceptable	Permissible
Monitoring Station	DAV School (Anand vihar)	Corporate Office (Jagriti Vihar)		
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	5.69	5.68	-	-
Potassium(mg/L)	1.28	1.64	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

Tattanaik
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Jamath



सीएमपीडीआई
विश्वे वाच
cmpdi
Mini Ratna

Drinking Water Quality Data MCL (HQ)

Project / OCP	MCL(HQ)		Indian Drinking Standards (IS-10500):2012	
	Inlet to Water Treatment Plant (Anand Vihar)	Outlet to Water Treatment Plant (Anand Vihar)		
Date of Sampling	15-Jan-2026	15-Jan-2026	Acceptable	Permissible
Colour(Hazen)	1	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2.1	1.7	1	5
pH	7.38	7.63	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	95.76	95.76	200	600
Chloride(mg/L)	17.35	15.42	250	1000
Sulphate(mg/L)	28.49	28.76	200	400
Nitrate(mg/L)	1.20	1.37	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	104.83	104.83	200	600
Calcium(mg/L)	33.94	29.09	75	200
Fluoride(mg/L)	0.65	0.69	1	1.5
Total Dissolve Solid(mg/L)	184	178	500	2000
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	1	No relaxation
Zinc(mg/L)	<0.04	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	0.5	2.4

Tattamali
Authorized Signatory
CMPDI, RI-VII, LAG
SHUBANESWAR

Janak



सीएमपीडीआई
रिपी एन
cmpdi
Mini Rating

Drinking Water Quality Data MCL (HQ)

Project / OCP	MCL(HQ)		Indian Drinking Standards (IS-10500):2012	
	Inlet to Water Treatment Plant (Anand Vihar)	Outlet to Water Treatment Plant (Anand Vihar)		
Monitoring Station			Acceptable	Permissible
Date of Sampling	15-Jan-2026	15-Jan-2026	0.01	No relaxation
Selenium(mg/L)	<0.005	<0.005	-	-
Sodium(mg/L)	7.96	6.83	-	-
Potassium(mg/L)	2.19	1.89	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

Tatunail
Authorised Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

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