

**Environmental Monitoring Report  
Of  
Bharatpur Area  
For  
May-2025**

**Talcher Coalfield**



**MCL**

**Mahanadi Coalfields Limited**



**सीएमपीडीआई**  
मिनी रातना  
**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 ]

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

AMBIENT AIR QUALITY DATA

Area :

Bharatpur

(Compliance Station)

Project :

Bharatpur OCP

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

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Sources(DGS)	Distance from DGS
07-May-25	Near Regional Store	213	90	42	16.45	19.81	Mining Activities	About 500m
07-May-25	North-West Point of the Mine	195	82	39	12.87	32.55	Domestic & Mining Activities	About 500m
07-May-25	Near FTP/Workshop	205	82	37	12.51	22.64	Mining Activities & Coal Stock	Above 500m
21-May-25	Near Regional Store	193	82	40	24.86	28.89	Mining Activities	About 500m
21-May-25	North-West Point of the Mine	181	77	35	14.46	22.68	Domestic & Mining Activities	About 500m
21-May-25	Near FTP/Workshop	171	75	36	15.81	32.84	Mining Activities & Coal Stock	Above 500m

*Handwritten signature*

*Handwritten signature*

Authorized Signatory  
 CMPDI, NE-VII LAB  
 BHUBANESWAR

600	300		120	120
-----	-----	--	-----	-----

AMBIENT AIR QUALITY DATA

Area :

Bharatpur

(Reference Station)

Project :

Bharatpur 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
02-May-25	Khajuria Village	166	65	31	18.18	23.46		
02-May-25	Karnapur Village	129	54	24	17.47	40.78		
02-May-25	Near Joragdia Village	139	50	25	16.89	22.29	Transportation, Domestic Cooking	About 1km
02-May-25	Kalinga Colony	160	62	29	12.16	22.64		
03-May-25	Near Joragdia Village	159	64	30	19.19	40.45	Transportation, Domestic Cooking	About 1km
03-May-25	Khajuria Village	176	69	33	14.64	29.72		
03-May-25	Karnapur Village	168	67	33	12.54	25.41		
03-May-25	Kalinga Colony	138	53	27	10.67	22.68		
05-May-25	East of the Mine, Natedi Village (Reported Only)	148	55	26	13.89	34.92	Coal Transportation Road	About 2km
06-May-25	East of the Mine, Natedi Village (Reported Only)	161	62	29	12.10	21.46	Coal Transportation Road	About 2km
09-May-25	Karnapur Village	153	60	29	13.94	37.64		
09-May-25	Near Joragdia Village	141	53	25	19.36	22.68	Transportation, Domestic Cooking	About 1km
09-May-25	Kalinga Colony	119	47	22	10.84	31.37		
09-May-25	Khajuria Village	184	71	36	15.43	25.59		
10-May-25	Kalinga Colony	138	51	24	17.52	36.32		
10-May-25	Khajuria Village	129	51	24	10.27	23.46		
10-May-25	Karnapur Village	147	57	28	11.09	18.82		
10-May-25	Near Joragdia Village	173	68	32	18.39	31.94	Transportation, Domestic Cooking	About 1km
12-May-25	East of the Mine, Natedi Village (Reported Only)	167	65	32	13.89	31.94	Coal Transportation Road	About 2km
13-May-25	East of the Mine, Natedi Village (Reported Only)	151	54	28	12.01	33.43	Coal Transportation Road	About 2km
16-May-25	Karnapur Village	123	41	23	18.77	28.89		
16-May-25	Near Joragdia Village	130	50	24	15.85	27.24	Transportation, Domestic Cooking	About 1km

19.4.2009

100 60 80 80



**AMBIENT AIR QUALITY DATA**
**Area :**
**Bharatpur**
**(Reference Station)**
**Project :**
**Bharatpur 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
02-May-25	Khajuria Village	166	65	31	18.18	23.46		
02-May-25	Karnapur Village	129	54	24	17.47	40.78		
02-May-25	Near Joragdia Village	139	50	25	16.89	22.29	Transportation, Domestic Cooking	About 1km
02-May-25	Kalinga Colony	160	62	29	12.16	22.64		
03-May-25	Near Joragdia Village	159	64	30	19.19	40.45	Transportation, Domestic Cooking	About 1km
03-May-25	Khajuria Village	176	69	33	14.64	29.72		
03-May-25	Karnapur Village	168	67	33	12.54	25.41		
03-May-25	Kalinga Colony	138	53	27	10.67	22.68		
05-May-25	East of the Mine, Natedi Village (Reported Only)	148	55	26	13.89	34.92	Coal Transportation Road	About 2km
06-May-25	East of the Mine, Natedi Village (Reported Only)	161	62	29	12.10	21.46	Coal Transportation Road	About 2km
09-May-25	Karnapur Village	153	60	29	13.94	37.64		
09-May-25	Near Joragdia Village	141	53	25	19.36	22.68	Transportation, Domestic Cooking	About 1km
09-May-25	Kalinga Colony	119	47	22	10.84	31.37		
09-May-25	Khajuria Village	184	71	36	15.43	25.59		
10-May-25	Kalinga Colony	138	51	24	17.52	36.32		
10-May-25	Khajuria Village	129	51	24	10.27	23.46		
10-May-25	Karnapur Village	147	57	28	11.09	18.82		
10-May-25	Near Joragdia Village	173	68	32	18.39	31.94	Transportation, Domestic Cooking	About 1km
12-May-25	East of the Mine, Natedi Village (Reported Only)	167	65	32	13.89	31.94	Coal Transportation Road	About 2km
13-May-25	East of the Mine, Natedi Village (Reported Only)	151	54	28	12.01	33.43	Coal Transportation Road	About 2km
16-May-25	Karnapur Village	123	41	23	18.77	28.89		
16-May-25	Near Joragdia Village	130	50	24	15.85	27.24	Transportation, Domestic Cooking	About 1km
16-May-25	Khajuria Village	137	50	28	10.27	35.97		

**\*N.A.Q.S, 2009**

100	60	60	60
-----	----	----	----

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

*Art*

Project :

Bharatpur 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
16-May-25	Kalinga Colony	129	52	23	12.47	18.82		
17-May-25	Khajuria Village	130	46	25	13.35	33.02		
17-May-25	Karnapur Village	172	49	35	17.10	29.72		
17-May-25	Near Joragdia Village	124	46	22	18.57	15.19	Transportation, Domestic Cooking	About 1km
17-May-25	Kalinga Colony	145	54	30	14.78	21.96		
19-May-25	East of the Mine, Natedi Village (Reported Only)	130	48	25	19.19	32.19	Coal Transportation Road	About 2km
20-May-25	East of the Mine, Natedi Village (Reported Only)	126	41	23	11.06	21.90	Coal Transportation Road	About 2km
23-May-25	Karnapur Village	153	56	31	11.06	35.19		
23-May-25	Kalinga Colony	112	43	22	10.98	27.82		
23-May-25	Near Joragdia Village	158	61	29	14.22	36.75	Transportation, Domestic Cooking	About 1km
23-May-25	Khajuria Village	125	42	23	14.64	20.80		
24-May-25	Kalinga Colony	160	63	30	10.59	32.93		
24-May-25	Khajuria Village	134	52	25	15.81	21.11		
24-May-25	Karnapur Village	137	47	26	13.76	28.89		
24-May-25	Near Joragdia Village	142	55	26	12.57	28.23	Transportation, Domestic Cooking	About 1km
26-May-25	East of the Mine, Natedi Village (Reported Only)	129	49	26	14.62	24.24	Coal Transportation Road	About 2km
27-May-25	East of the Mine, Natedi Village (Reported Only)	119	45	24	14.26	28.23	Coal Transportation Road	About 2km
30-May-25	Kalinga Colony	167	66	31	11.69	21.51		
30-May-25	Karnapur Village	129	48	25	11.46	31.28		
30-May-25	Khajuria Village	154	57	29	15.39	31.20		
30-May-25	Near Joragdia Village	153	59	28	15.83	31.43	Transportation, Domestic Cooking	About 1km
31-May-25	Near Joragdia Village	125	48	23	18.43	22.29	Transportation, Domestic Cooking	About 1km
31-May-25	Kalinga Colony	140	41	23	12.99	38.68		
31-May-25	Karnapur Village	167	61	34	10.67	34.41		
31-May-25	Khajuria Village	145	55	27	18.57	37.54		

\*N/AQS, 2009

100

60

80

80

Authorised Signatory  
 C.M.P.O.I. RI-VII, LAB  
 BHUBANESWAR

1/10/25



सीएमपीडीआई  
निर्देशक  
cmpdi  
निर्देशक

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Bharatpur

Project	Bharatpur OCP							
Monitoring Station	Near Joragadia Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(µg/m <sup>3</sup> )
02-May-2025	<20.0	22.53	<0.1	<1.0	<1.0	1.2	BQL(QL =0.7)	BQL
03-May-2025	<20.0	21.22	<0.1	<1.0	<1.0	1.0	BQL(QL =0.7)	BQL
09-May-2025	<20.0	12.58	<0.1	<1.0	<1.0	1.3	BQL(QL =0.7)	BQL
10-May-2025	<20.0	20.97	<0.1	<1.0	<1.0	1.4	BQL(QL =0.7)	BQL
16-May-2025	<20.0	23.05	<0.1	<1.0	<1.0	1.2	BQL(QL =0.7)	BQL
17-May-2025	<20.0	25.68	<0.1	<1.0	<1.0	1.0	BQL(QL =0.7)	BQL
23-May-2025	<20.0	15.72	<0.1	<1.0	<1.0	1.2	BQL(QL =0.7)	BQL
24-May-2025	<20.0	19.92	<0.1	<1.0	<1.0	1.3	BQL(QL =0.7)	BQL
30-May-2025	<20.0	25.68	<0.1	<1.0	<1.0	0.9	BQL(QL =0.7)	BQL
31-May-2025	<20.0	20.18	<0.1	<1.0	<1.0	0.8	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)

*Ants*

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
विशेषज्ञ  
cmpdi  
विनी कर्मदा

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Bharatpur

Project	Bharatpur OCP							
Monitoring Station	Kalinga Colony							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(µg/m <sup>3</sup> )
02-May-2025	<20.0	21.22	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
03-May-2025	<20.0	25.68	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
09-May-2025	<20.0	15.72	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
10-May-2025	<20.0	25.68	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
16-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	0.4	BQL(QL=0.7)	BQL
17-May-2025	<20.0	24.37	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
23-May-2025	<20.0	20.18	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
24-May-2025	<20.0	19.13	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
30-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
31-May-2025	<20.0	15.20	<0.1	<1.0	<1.0	0.7	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)

*[Handwritten Signature]*

*[Handwritten Signature]*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
मिनी लैब  
cmpdi  
Mini Lab

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Bharatpur

Project	Bharatpur OCP							
Monitoring Station	Khajuria Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
02-May-2025	<20.0	25.68	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
03-May-2025	<20.0	13.63	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
09-May-2025	<20.0	19.92	<0.1	<1.0	<1.0	0.4	BQL(QL=0.7)	BQL
10-May-2025	<20.0	20.18	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
16-May-2025	<20.0	19.13	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
17-May-2025	<20.0	11.53	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
23-May-2025	<20.0	11.00	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
24-May-2025	<20.0	11.00	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
30-May-2025	<20.0	14.15	<0.1	<1.0	<1.0	0.4	BQL(QL=0.7)	BQL
31-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	0.5	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)

*Handwritten signature*

*Handwritten signature*  
Authorised Signatory  
CMPDI, H- VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
विश्व क्वालिटी  
cmpdi  
विश्व क्वालिटी

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Bharatpur

Project	Bharatpur OCP							
Monitoring Station	Karnapur Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
02-May-2025	<20.0	20.18	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
03-May-2025	<20.0	15.47	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
09-May-2025	<20.0	11.27	<0.1	<1.0	<1.0	0.4	BQL(QL=0.7)	BQL
10-May-2025	<20.0	13.63	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
16-May-2025	<20.0	15.98	<0.1	<1.0	<1.0	0.4	BQL(QL=0.7)	BQL
17-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
23-May-2025	<20.0	15.20	<0.1	<1.0	<1.0	0.3	BQL(QL=0.7)	BQL
24-May-2025	<20.0	24.37	<0.1	<1.0	<1.0	0.4	BQL(QL=0.7)	BQL
30-May-2025	<20.0	23.32	<0.1	<1.0	<1.0	0.2	BQL(QL=0.7)	BQL
31-May-2025	<20.0	18.35	<0.1	<1.0	<1.0	0.4	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)

*Handwritten signature*

Author: *Handwritten signature*  
CMPDI, Pt. VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
मिनी एन  
cmpdi  
Mini En

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Bharatpur

Project	Bharatpur OCP							
Monitoring Station	Near Natedi Village(Reported Only)							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(µg/m <sup>3</sup> )
05-May-2025	<20.0	20.18	<0.1	<1.0	<1.0	0.6	BQL(QL =0.7)	BQL
06-May-2025/	<20.0	13.10	<0.1	<1.0	<1.0	0.8	BQL(QL =0.7)	BQL
12-May-2025	<20.0	25.42	<0.1	<1.0	<1.0	0.7	BQL(QL =0.7)	BQL
13-May-2025	<20.0	1.48	<0.1	<1.0	<1.0	0.9	BQL(QL =0.7)	BQL
19-May-2025	<20.0	20.43	<0.1	<1.0	<1.0	0.8	BQL(QL =0.7)	BQL
20-May-2025	<20.0	24.37	<0.1	<1.0	<1.0	0.6	BQL(QL =0.7)	BQL
26-May-2025	<20.0	12.05	<0.1	<1.0	<1.0	0.7	BQL(QL =0.7)	BQL
27-May-2025	<20.0	16.77	<0.1	<1.0	<1.0	0.8	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)

*Author*

Author: *Author*  
CMPDI, R- VII, LAB  
RHUBANESWAR



सीएमपीडी  
CMPDI  
भारत

TABLE--

**NOISE LEVEL MONITORING DATA**

AREA :

Bharatpur

PROJECT :

Bharatpur OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
13-May-25	North West Point of the Mine	68.2	46.2
13-May-25	Near Regional Store	70.3	47.2
13-May-25	Near Wokshop	70.1	58.9
13-May-25	Kalinga Colony	47.3	35.2
15-May-25	Natedi Village (Reported)	62.3	45.1
27-May-25	North West Point of the Mine	66.3	52.4
27-May-25	Near Regional Store	65.8	52.3
27-May-25	Near Wokshop	68.7	56.8
27-May-25	Kalinga Colony	47.1	38.6
29-May-25	Natedi Village (Reported)	45.7	39.1

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)

*Katpadi*  
Authorised Signatory  
CMPDI, RI-VI, LAB  
BHUSANESWAR

*[Handwritten Signature]*

**EFFLUENT QUALITY DATA**

Area :

Bharatpur

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

Project :

Bharatpur OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
13-May-25	Mine Sump Water - Old Quarry Sump	7.30	-	-	-	-	
13-May-25	Rakas Quarry Sump	6.93	-	-	-	-	
13-May-25	Workshop ETP Clear Water Tank	7.47	<4.0	59	40	-	
13-May-25	Workshop Inlet	7.51	4.4	77	56	-	
29-May-25	Workshop ETP Clear Water Tank	7.36	<4.0	47	36	-	

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

## EFFLUENT QUALITY DATA

Area :

Bharatpur

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

Project :

Bharatpur OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	MPN/100mL
13-May-25	STP INLET	8.01	-	28	-	<2	81
13-May-25	STP Outlet (PH,TSS,MPN,BOD)	7.80	-	16	-	<2	70
29-May-25	STP INLET	7.79	-	31	-	<2	84
29-May-25	STP Outlet (PH,TSS,MPN,BOD)	7.64	-	23	-	<2	32

G.S.R. 1765(E) Effluent discharge standards (applicable to all mode of disposal), Sewage Treatment Plants (STPs)	6.5-9.0	-	<100	-	30	<1000
--	---------	---	------	---	----	-------



सीएमपीडी  
भारत  
cmpdi  
भारत

## Drinking Water Quality Data Bharatpur Area

Project / OCP	Bharatpur OCP			Indian Drinking Standards (IS-10500):2012	
	Tap water in Nehru Satabdi Nagar A Type Quarters	Tap water in Nehru Satabdi Nagar B Type Quarters	Tap water in Nehru Satabdi Nagar C Type Quarters		
Date of Sampling	13-May-2025	13-May-2025	13-May-2025	Acceptable	Permissible
Colour(Hazen)	2	2	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	1	5
pH	7.05	6.91	7.90	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	159.68	163.88	54.63	200	600
Chloride(mg/L)	15.56	15.56	7.78	250	1000
Sulphate(mg/L)	9.15	9.27	12.17	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	147.41	143.42	59.76	200	600
Calcium(mg/L)	35.13	35.13	14.37	75	200
Fluoride(mg/L)	0.67	0.84	0.36	1	1.5
Total Dissolve Solid(mg/L)	240	246	112	500	2000
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.22	0.22	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	<0.1	1.0	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

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडी  
RI-VII  
CMPDI  
भुवनेश्वर

## Drinking Water Quality Data Bharatpur Area

Project / OCP	Bharatpur OCP				Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Tap water in Nehru Satabdi Nagar Transit House	Taleipasi Village Open Well	Joragadia Village Open Well		
Date of Sampling	13-May-2025	13-May-2025	13-May-2025	13-May-2025	Acceptable	Permissible
Colour(Hazen)	4	4	2	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	3	1	1	1	5
pH	7.48	7.62	7.71	8.30	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	268.93	537.86	50.42	58.83	200	600
Chloride(mg/L)	62.24	31.12	7.78	11.67	250	1000
Sulphate(mg/L)	58.84	27.34	6.95	7.18	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	239.04	382.46	55.78	59.76	200	600
Calcium(mg/L)	54.3	62.28	14.37	17.57	75	200
Fluoride(mg/L)	0.78	1.06	0.41	0.62	1	1.5
Total Dissolve Solid(mg/L)	522	684	102	112	500	2000
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	<0.1	<0.1	1.0	No relaxation
Zinc(mg/L)	<0.04	1.49	<0.04	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	2.4

*Handwritten signature*

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



सीएमपीडी आई  
लिमिटेड  
cmpdi  
Water Analysis

## Drinking Water Quality Data Bharatpur Area

Project / OCP	Bharatpur OCP			Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Tap water in Nehru Satabdi Nagar A Type Quarters	Tap water in Nehru Satabdi Nagar B Type Quarters	Tap water in Nehru Satabdi Nagar C Type Quarters		
Date of Sampling	13-May-2025	13-May-2025	13-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	10.62	10.38	7.82	-	-
Potassium(mg/L)	6.62	6.09	2.52	-	-
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	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

Project / OCP	Bharatpur OCP				Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Tap water in Nehru Satabdi Nagar Transit House	Taleipasi Village Open Well	Joragadia Village Open Well	Time Office,BOCP		
Date of Sampling	13-May-2025	13-May-2025	13-May-2025	13-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	40.90	51.96	5.77	4.65	-	-
Potassium(mg/L)	20.04	16.27	1.90	1.33	-	-
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	0.2	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	-	-

*Handwritten signature*

*Handwritten signature*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

**Environmental Monitoring Report  
Of  
Bhubaneswari Area  
For  
May-2025**

**IB Valley Coalfield**



**Mahanadi Coalfields Limited**



**सीएमपीडीआई**  
मिनी 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]

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



ଶିବପୀଠୀ ୧୧୫  
 cmpdi  
 ଚଳିତା

Test Report

AMBIENT AIR QUALITY DATA

Area :

Bhubaneswari

(Compliance Station)

Project :

Bhubaneswari 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
07-May-25	B.C.M.L. Workshop	203	85	42	14.26	28.23	Mining activities, O.B. Dump yard	About 400 to 500m
07-May-25	Silo Substation Office	208	85	41	19.89	23.11		
21-May-25	B.C.M.L. Workshop	189	82	37	11.85	37.54	Mining activities, O.B. Dump yard	About 400 to 500m
21-May-25	Silo Substation Office	183	84	37	20.86	20.80		

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

*[Handwritten Signature]*

600	300		120	120
-----	-----	--	-----	-----

**AMBIENT AIR QUALITY DATA**

Area :

Bhubaneswari

(Reference Station)

Project :

Bhubaneswari 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
02-May-25	Naraharipur Village	162	64	30	16.89	34.17		
03-May-25	Naraharipur Village	143	52	27	10.84	41.27		
09-May-25	Naraharipur Village	173	68	32	19.60	27.24		
10-May-25	Naraharipur Village	181	72	35	14.26	30.46		
16-May-25	Naraharipur Village	131	47	24	19.60	22.29		
17-May-25	Naraharipur Village	135	51	26	19.19	35.49		
23-May-25	Naraharipur Village	146	56	27	11.64	23.77		
24-May-25	Naraharipur Village	166	68	32	10.14	30.46		
30-May-25	Naraharipur Village	160	63	31	18.77	36.32		
31-May-25	Naraharipur Village	154	58	30	12.01	35.66		



\*N.44(QS),2009

100 60 80 80

**AMBIENT AIR QUALITY DATA**

Area :

**Bhubaneswari****(Reference Station)**

Project :

**Bhubaneswari 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
02-May-25	Kandhal Village (Reported Only)	133	47	22	13.89	29.89		
02-May-25	Naraharipur Village	162	64	30	16.89	34.17		
03-May-25	Naraharipur Village	143	52	27	10.84	41.27		
03-May-25	Kandhal Village (Reported Only)	167	65	32	12.37	41.22		
09-May-25	Kandhal Village (Reported Only)	135	52	23	11.32	35.55		
09-May-25	Naraharipur Village	173	68	32	19.60	27.24		
10-May-25	Kandhal Village (Reported Only)	140	55	26	12.10	24.20		
10-May-25	Naraharipur Village	181	72	35	14.26	30.46		
16-May-25	Kandhal Village (Reported Only)	155	58	32	12.45	22.09		
16-May-25	Naraharipur Village	131	47	24	19.60	22.29		
17-May-25	Kandhal Village (Reported Only)	141	55	27	13.44	39.28		
17-May-25	Naraharipur Village	135	51	26	19.19	35.49		
23-May-25	Kandhal Village (Reported Only)	167	66	31	11.600	33.88		
23-May-25	Naraharipur Village	146	56	27	11.64	23.77		
24-May-25	Naraharipur Village	166	68	32	10.14	30.46		
24-May-25	Kandhal Village (Reported Only)	109	41	22	12.73	38.58		
24-May-25	Kandhal Village (Reported Only)	109	41	22	12.73	38.58		
30-May-25	Kandhal Village (Reported Only)	178	68	35	10.75	24.47		
30-May-25	Naraharipur Village	160	63	31	18.77	36.32		
31-May-25	Naraharipur Village	154	58	30	12.01	35.66		
31-May-25	Kandhal Village (Reported Only)	131	52	24	12.99	33.16		

\*N/AQS,2009

100 80 80 80



सीएमपीडीआई  
मिनी रूय  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Bhubaneswari

Project	Bhubaneswari OCP							
Monitoring Station	Naraharipur Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
02-May-2025	<20.0	19.92	<0.1	<1.0	<1.0	1.2	BQL(Q L=0.7)	BQL
03-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.3	BQL(Q L=0.7)	BQL
09-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	1.2	BQL(Q L=0.7)	BQL
10-May-2025	<20.0	21.75	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
16-May-2025	<20.0	20.43	<0.1	<1.0	<1.0	1.4	BQL(Q L=0.7)	BQL
17-May-2025	<20.0	12.05	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
23-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.2	BQL(Q L=0.7)	BQL
24-May-2025	<20.0	18.35	<0.1	<1.0	<1.0	1.4	BQL(Q L=0.7)	BQL
30-May-2025	<20.0	14.15	<0.1	<1.0	<1.0	0.9	BQL(Q L=0.7)	BQL
31-May-2025	<20.0	12.58	<0.1	<1.0	<1.0	1.0	BQL(Q L=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)

*Adhikari*

*K. S. Pattnaik*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

**TABLE--****NOISE LEVEL MONITORING DATA**

AREA :

Bhubaneswar

PROJECT :

Bhubaneswar OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
13-May-25	Naraharipur Village	46.9	35.5
13-May-25	Silo Substaion Office	65.9	51.7
13-May-25	BCML Workshop	67.6	55.4
14-May-25	Kandhal Village (Reported)	43.7	35.3
27-May-25	Naraharipur Village	45.1	39.7
27-May-25	Silo Substaion Office	67.1	59.3
27-May-25	BCML Workshop	67.9	58.1
28-May-25	Kandhal Village (Reported)	46.9	39.7

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 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)

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

*[Signature]*

## EFFLUENT QUALITY DATA

Area :

Bhubaneswari

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

Project :

Bhubaneswari OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
13-May-25	Mine Sump Water	7.17	<4.0	74	64	-	
13-May-25	O & G Trap Inlet	7.35	<4.0	36	20	-	
13-May-25	O & G Trap Outlet	7.53	<4.0	36	28	-	
29-May-25	O & G Trap Inlet	7.07	6.8	128	324	-	
29-May-25	O & G Trap Outlet	7.22	5.0	68	96	-	

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





## Drinking Water Quality Data Bhubaneswari Area

Project / OCP	Bhubaneswari OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Workshop BCML	Deulbera Office, BCML	Time Office BBSRLOCP	
Date of Sampling	13-May-2025	13-May-2025	13-May-2025	Acceptable	Permissible
Colour(Hazen)	1	3	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	2	1	5
pH	7.96	7.69	7.80	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	71.43	42.02	163.88	200	600
Chloride(mg/L)	13.61	11.67	13.61	250	1000
Sulphate(mg/L)	31.17	113.55	9.38	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	103.58	171.31	151.39	200	600
Calcium(mg/L)	27.15	44.72	35.13	75	200
Fluoride(mg/L)	0.69	0.50	0.72	1	1.5
Total Dissolve Solid(mg/L)	184	282	252	500	2000
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.21	0.1	0.3
Iron(mg/L)	<0.1	<0.1	<0.1	1.0	No relaxation
Zinc(mg/L)	0.06	0.12	<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

*Handwritten signature*

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
विश्वीय  
cmpdi  
Water Quality

## Drinking Water Quality Data Bhubaneswari Area

Project / OCP	Bhubaneswari OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Workshop BCML	Deulbera Office, BCML	Time Office BBSRI,OCP	
Date of Sampling	13-May-2025	13-May-2025	13-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	9.14	11.35	10.50	-	-
Potassium(mg/L)	3.28	4.46	6.21	-	-
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	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

*Yatavanshi*  
Authorized Signatory  
CMPDI, RT-VII, LAB  
BHUBANESWAR

**Environmental Monitoring Report  
Of  
Hingula Area  
For  
May-2025**

**Talcher Coalfield**



**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*



सीएनपीडी  
CMPDI

Test Report

AMBIENT AIR QUALITY DATA

Area :

Hingula

(Compliance Station)

Project :

Hingula 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
08-May-25	Time Office	209	89	42	26.24	31.28	Mining Operations and Haul Road	About 200m
08-May-25	South West Side of the Mine	203	85	40	12.94	23.03	Mining Operations	About 300m
22-May-25	Time Office	180	79	37	19.84	31.94	Mining Operations and Haul Road	About 200m
22-May-25	South West Side of the Mine	185	84	39	24.37	34.17	Mining Operations	About 300m

*Auth*

Authorized Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

500	250		120	120
-----	-----	--	-----	-----



ଶିବପୀଠୀ ଲାବ  
cmpdi

Test Report

AMBIENT AIR QUALITY DATA

Area :

Hingula

(Compliance Station)

Project :

Balaram 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
08-May-25	Pump House near Outsourcing Working Patch	183	79	36	8.53	27.01	Mining Operation And Coal Transportation Road	About 200m
08-May-25	Near Project Office	218	94	44	10.67	32.06	Mining Activities	About 500m
22-May-25	Pump House near Outsourcing Working Patch	182	73	36	18.31	22.29	Mining Operation And Coal Transportation Road	About 200m
22-May-25	Near Project Office	198	84	41	12.96	31.74	Mining Activities	About 500m

*Handwritten signature*

Handwritten signature  
Authorized Signatory  
CMPDI, RYK LAB  
BHUBANESWAR

600	300		120	120
-----	-----	--	-----	-----

**AMBIENT AIR QUALITY DATA**

Area :

Hingula

(Reference Station)

Project :

Hingula 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-May-25	Balichandrapur Village	167	66	31	12.93	27.24		
05-May-25	Banabaspur Village	147	57	28	17.52	41.27		
05-May-25	North East of the Mine, Solda Village	155	66	31	18.60	35.97	Coal Transportation Road	About 2km
05-May-25	Kankarei Village	159	63	29	11.69	21.51		
05-May-25	Sanamahitala Village	151	56	29	13.71	32.69		
06-May-25	Kankarei Village	135	53	25	12.09	38.68		
06-May-25	Balichandrapur Village	178	70	33	16.27	31.37		
06-May-25	North East of the Mine, Solda Village	170	73	34	10.92	19.81	Coal Transportation Road	About 2km
06-May-25	Banabaspur Village	155	61	29	19.36	20.33		
06-May-25	Sanamahitala Village	143	53	28	13.49	23.03		
12-May-25	Sanamahitala Village	164	64	30	19.19	27.37		
12-May-25	Kankarei Village	121	48	22	12.45	22.09		
12-May-25	North East of the Mine, Solda Village	134	53	25	19.03	34.17	Coal Transportation Road	About 2km
12-May-25	Banabaspur Village	150	59	28	11.80	19.10		
12-May-25	Balichandrapur Village	156	62	29	11.85	36.75		
13-May-25	North East of the Mine, Solda Village	147	59	29	22.08	36.40	Coal Transportation Road	About 2km
13-May-25	Banabaspur Village	144	55	26	13.89	20.80		
13-May-25	Sanamahitala Village	132	48	25	14.39	21.23		
13-May-25	Balichandrapur Village	162	64	30	10.27	22.68		
13-May-25	Kankarei Village	153	58	29	13.44	39.28		
19-May-25	North East of the Mine, Solda Village	132	47	23	22.89	31.94	Coal Transportation Road	About 2km
19-May-25	Banabaspur Village	135	45	25	18.18	24.24		

NO <sub>2</sub> (µg/m <sup>3</sup> )		100	60	80	80
--------------------------------------	--	-----	----	----	----

Project :

Hingula 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
19-May-25	Sanamahitula Village	114	40	19	26.57	36.32		
19-May-25	Kankarei Village	141	55	27	15.02	28.93		
19-May-25	Balichandrapur Village	167	56	31	13.43	23.46		
20-May-25	Kankarei Village	128	50	24	15.02	25.26		
20-May-25	Balichandrapur Village	156	52	29	17.52	27.24		
20-May-25	North East of the Mine, Solda Village	140	53	26	27.13	24.76	Coal Transportation Road	About 2km
20-May-25	Banabaspur Village	146	49	27	10.51	27.49		
20-May-25	Sanamahitula Village	146	56	27	18.21	29.72		
25-May-25	Kankarei Village	166	65	31	17.10	38.79		
26-May-25	Banabaspur Village	162	55	29	11.06	24.24		
26-May-25	Sanamahitula Village	130	51	23	14.99	35.19		
26-May-25	Balichandrapur Village	146	49	27	17.10	26.41		
26-May-25	North East of the Mine, Solda Village	125	43	21	15.77	24.52	Coal Transportation Road	About 2km
26-May-25	Kankarei Village	188	73	36	18.18	28.15		
27-May-25	North East of the Mine, Solda Village	154	57	28	18.31	20.80	Coal Transportation Road	About 2km
27-May-25	Banabaspur Village	175	60	31	15.02	36.75		
27-May-25	Sanamahitula Village	123	46	21	14.75	31.20		
27-May-25	Balichandrapur Village	123	41	23	10.01	33.96		

*Handwritten signature*

14/05/2025		100	60	60	80
------------	--	-----	----	----	----

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*Handwritten signature*

**AMBIENT AIR QUALITY DATA**

Area :

Hingula

(Reference Station)

Project :

Balram 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-May-25	Purunasahi Village	142	55	27	14.87	19.10		
05-May-25	East of the Mine, Natedi Village	148	55	26	13.89	34.92	Coal Transportation Road	About 2km
05-May-25	North West of the Mine, Solda Village (Reported Only)	155	66	31	18.60	35.97	Coal Transportation Road	About 2km
05-May-25	Natada Village	162	64	30	13.46	21.90	Anthropogenic Activities, Local	About 2km
06-May-25	North West of the Mine, Solda Village (Reported Only)	170	73	34	10.92	19.81	Coal Transportation Road	About 2km
06-May-25	Purunasahi Village	159	64	31	11.78	34.67		
06-May-25	Natada Village	137	51	24	17.39	35.97	Anthropogenic Activities, Local	About 2km
06-May-25	East of the Mine, Natedi Village	161	62	29	12.10	21.46	Coal Transportation Road	About 2km
12-May-25	Natada Village	147	57	28	14.60	33.84	Anthropogenic Activities, Local	About 2km
12-May-25	North West of the Mine, Solda Village (Reported Only)	134	53	25	19.03	34.17	Coal Transportation Road	About 2km
12-May-25	Purunasahi Village	150	60	28	17.75	28.93		
12-May-25	East of the Mine, Natedi Village	167	65	32	13.89	31.94	Coal Transportation Road	About 2km
13-May-25	North West of the Mine, Solda Village (Reported Only)	147	59	29	22.08	36.40	Coal Transportation Road	About 2km
13-May-25	Purunasahi Village	165	71	33	10.74	32.69		
13-May-25	East of the Mine, Natedi Village	151	54	28	12.01	33.43	Coal Transportation Road	About 2km
13-May-25	Natada Village	135	50	25	17.52	34.67	Anthropogenic Activities, Local	About 2km
19-May-25	Purunasahi Village	149	39	20	15.53	30.50		
19-May-25	North West of the Mine, Solda Village (Reported Only)	132	47	23	22.89	31.94	Coal Transportation Road	About 2km
19-May-25	East of the Mine, Natedi Village	130	48	25	19.19	32.19	Coal Transportation Road	About 2km
19-May-25	Natada Village	172	65	33	17.27	21.54	Anthropogenic Activities, Local	About 2km
20-May-25	North West of the Mine, Solda Village (Reported Only)	140	53	26	27.13	24.76	Coal Transportation Road	About 2km
20-May-25	Purunasahi Village	132	49	25	18.21	35.97		

19.4.2019

100 60 80 80

*Handwritten signature*

Project :

Balram OCP

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

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Base Generating Source(DGS)	Distance from DGS
20-May-25	Natada Village	158	57	31	16.14	30.46	Anthropogenic Activities, Local	About 2km
20-May-25	East of the Mine, Natedi Village	126	41	23	11.06	21.90	Coal Transportation Road	About 2km
26-May-25	Natada Village	150	51	28	15.43	30.46	Anthropogenic Activities, Local	About 2km
26-May-25	Purunasahi Village	127	43	22	22.49	21.11		
26-May-25	East of the Mine, Natedi Village	129	49	26	14.62	24.24	Coal Transportation Road	About 2km
26-May-25	North West of the Mine, Solda Village (Reported Only)	125	43	21	15.77	24.52	Coal Transportation Road	About 2km
27-May-25	North West of the Mine, Solda Village (Reported Only)	154	57	28	18.31	20.80	Coal Transportation Road	About 2km
27-May-25	East of the Mine, Natedi Village	119	45	24	14.26	28.23	Coal Transportation Road	About 2km
27-May-25	Purunasahi Village	136	53	25	21.37	19.31		
27-May-25	Natada Village	157	55	29	18.97	17.54	Anthropogenic Activities, Local	About 2km

\*X.I.I.Q.S. 2009

100 60 80 80

  
 Authorised Signatory  
 CMPDI, RI-VII, LAB  
 BHUBANESWAR





सीएमपीडीआई  
विश्व कल्याण  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Hingula

Project	Hingula OCP							
Monitoring Station	Balichandrapur Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzen e
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	12.58	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
06-May-2025	<20.0	16.50	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
12-May-2025	<20.0	12.32	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
13-May-2025	<20.0	17.55	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
19-May-2025	<20.0	22.02	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
20-May-2025	<20.0	24.37	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
26-May-2025	<20.0	24.37	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
27-May-2025	<20.0	19.65	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
Standard	400(24h ours)	180(h our)	1.0(24h ours)	6.0(Ann ual)	20(Ann ual)	02(8hou rs)	01(annu al)	05(ann ual)

*[Handwritten signature]*

*[Handwritten signature]*  
C.M.P.D.I. Hingula  
RUBANESWAR



सीएमपीडीआई  
विश्वे गम  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Hingula

Project	Hingula OCP							
Monitoring Station	Kankarei Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzen e
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	22.80	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
06-May-2025	<20.0	14.42	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
12-May-2025	<20.0	19.92	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
13-May-2025	<20.0	13.88	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-May-2025	<20.0	20.70	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
20-May-2025	<20.0	12.58	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
25-May-2025	<20.0	11.78	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
26-May-2025	<20.0	22.27	<0.1	<1.0	<1.0	0.9	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)

*[Handwritten signature]*

*[Handwritten signature]*  
RUBANESWAR



सीएमपीडीआई  
विद्यया ऽमृतमश्नुते  
cmpdi  
Mini Kato

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area:Hingula

Project	Hingula OCP							
Monitoring Station	Solada Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzen e
	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(µg/m <sup>3</sup> )
05-May-2025	<20.0	25.93	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
06-May-2025	<20.0	23.85	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
12-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
13-May-2025	<20.0	23.58	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-May-2025	<20.0	22.27	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
20-May-2025	<20.0	11.00	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
26-May-2025	<20.0	15.20	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
27-May-2025	<20.0	15.20	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
Standard	400(24hours)	180 (hour)	1.0(24hours)	6.0(Annual)	20(Annual)	02(8hours)	01(annual)	05(annual)

*[Handwritten signature]*

*[Handwritten signature]*  
CMPDI, N. V. K. LAB  
AHUBANESWAR



सीएमपीडीआई  
मिरी रत्ना  
cmpdi  
Miri Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area:Hingula

Project	Hingula OCP							
Monitoring Station	Banabaspur Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzen e
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	16.25	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
06-May-2025	<20.0	26.47	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
12-May-2025	<20.0	14.15	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
13-May-2025	<20.0	25.93	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
19-May-2025	<20.0	23.05	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
20-May-2025	<20.0	18.35	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
26-May-2025	<20.0	27.25	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
27-May-2025	<20.0	16.25	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
Standard	400(24hours)	180(hour)	1.0(24hours)	6.0(Annual)	20(Annual)	02(8hours)	01(annual)	05(annual)

Ant

RHUBANESWAR



सीएमपीडीआई  
रिपोरिंग  
cmpdi  
Mini Report

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Hingula

Project	Hingula OCP							
Monitoring Station	Sanamahitala Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzen e
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	15.47	<0.1	<1.0	<1.0	0.6	BQL(QL =0.7)	BQL
06-May-2025	<20.0	23.32	<0.1	<1.0	<1.0	0.7	BQL(QL =0.7)	BQL
12-May-2025	<20.0	19.65	<0.1	<1.0	<1.0	0.8	BQL(QL =0.7)	BQL
13-May-2025	<20.0	13.88	<0.1	<1.0	<1.0	0.7	BQL(QL =0.7)	BQL
19-May-2025	<20.0	13.37	<0.1	<1.0	<1.0	0.6	BQL(QL =0.7)	BQL
20-May-2025	<20.0	15.72	<0.1	<1.0	<1.0	0.8	BQL(QL =0.7)	BQL
26-May-2025	<20.0	14.42	<0.1	<1.0	<1.0	0.7	BQL(QL =0.7)	BQL
27-May-2025	<20.0	11.27	<0.1	<1.0	<1.0	0.6	BQL(QL =0.7)	BQL
Standard	400(24h ours)	180 (hour)	1.0(24h ours)	6.0(Annual)	20 (Annual)	02(8hours)	01 (annual)	05(annual)

*[Handwritten signature]*

*[Handwritten signature]*  
Authorised Signatory  
CMPDI, Ri-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
विश्वे गुरु  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Hingula

Project	Balram OCP							
Monitoring Station	East Mine, Natedi Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(μg/m <sup>3</sup> )
05-May-2025	<20.0	20.18	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL(QL=2.5)
06-May-2025	<20.0	13.10	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL(QL=2.5)
12-May-2025	<20.0	25.42	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL(QL=2.5)
13-May-2025	<20.0	13.88	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL(QL=2.5)
19-May-2025	<20.0	20.43	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL(QL=2.5)
20-May-2025	<20.0	24.37	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL(QL=2.5)
26-May-2025	<20.0	12.05	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL(QL=2.5)
27-May-2025	<20.0	16.77	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL(QL=2.5)
Standard	400(24 hours)	180(hour)	1.0(24 hours)	6.0(Annual)	20(Annual)	02(8 hours)	01(annual)	05(annual)

*[Handwritten Signature]*

*[Handwritten Signature]*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
निर्भी एम  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Hingula

Project	Balram OCP							
Monitoring Station	Natada Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	12.05	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL(QL=2.5)
06-May-	<20.0	23.32	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL(QL=2.5)
12-May-2025	<20.0	26.73	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL(QL=2.5)
13-May-2025	<20.0	21.75	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL(QL=2.5)
19-May-2025	<20.0	20.43	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL(QL=2.5)
20-May-2025	<20.0	14.15	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL(QL=2.5)
26-May-2025	<20.0	12.58	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL(QL=2.5)
27-May-2025	<20.0	25.93	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL(QL=2.5)
Standard	400(24h ours)	180(h our)	1.0(24h ours)	6.0(A nnual)	20(Ann ual)	02(8hou rs)	01(annu al)	05(annu al)

*Handwritten signature*

*Handwritten signature*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
विश्व स्तर पर  
cmpdi  
Mini Lab

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Hingula

Project	Balram OCP							
Monitoring Station	Purunasahi Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(μg/m <sup>3</sup> )
05-May-2025	<20.0	17.82	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
06-May-2025	<20.0	20.43	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
12-May-2025	<20.0	26.20	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
13-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-May-2025	<20.0	26.98	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
20-May-2025	<20.0	21.48	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
26-May-2025	<20.0	19.65	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
27-May-2025	<20.0	22.02	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
Standard	400(24h ours)	180(hour)	1.0(24h ours)	6.0(Annual)	20(Annual)	02(8hours)	01(annual)	05(annual)

*Handwritten signature*

*Handwritten signature*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
नरे वर  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area:Hingula

Project	Balram OCP							
Monitoring Station	Solada Village (Reported Only)							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	25.93	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
06-May-2025	<20.0	23.85	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
12-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
13-May-2025	<20.0	23.58	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-May-2025	<20.0	22.27	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
20-May-2025	<20.0	11.00	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
26-May-2025	<20.0	15.20	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
27-May-2025	<20.0	15.20	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
Standard	400(24h ours)	180(ho ur)	1.0(24h ours)	6.0(An nual)	20(An nual)	02(8ho urs)	01(annual )	05(annu al)

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



सीएमपीडीआई  
विश्वे शान्ति  
**cmpdi**  
मिनी लैबो

**AMBIENT AIR QUALITY DATA**

**Area: Hingula**

<b>Project</b>	<b>Hingula OCP</b>
<b>Monitoring Station</b>	<b>Time Office</b>
<b>Date of sampling</b>	<b>Carbon Monoxide (CO)</b>
	<b>mg/m<sup>3</sup></b>
08-May-2025	1.3
22-May-2025	1.4
<b>Standard</b>	<b>02(8 Hours)</b>

<b>Project</b>	<b>Hingula OCP</b>
<b>Monitoring Station</b>	<b>South West side of Mine</b>
<b>Date of sampling</b>	<b>Carbon Monoxide (CO)</b>
	<b>mg/m<sup>3</sup></b>
08-May-2025	1.5
22-May-2025	1.6
<b>Standard</b>	<b>02(8 Hours)</b>

*Handwritten signature*

*Fattani L*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
भारत सरकार  
cmpdi  
भारत सरकार

TABLE--

**NOISE LEVEL MONITORING DATA**

AREA :

Hingula

PROJECT :

Hingula OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
15-May-25	South West Side of the Mine	63.1	43.3
15-May-25	Solda Village	49.7	37.9
15-May-25	Kankarei Village	43.3	38.1
15-May-25	Time Office	71.8	59.5
29-May-25	South West Side of the Mine	64.2	54.2
29-May-25	Solda Village	47.3	39.1
29-May-25	Kankarei Village	47.1	39.1
29-May-25	Time Office	65.4	55.8

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)

*Fathma*  
Authorised Signatory  
CMPDI, FI-VII, LAB  
BHUBANESWAR

*Art*



सीएमपीडी आई  
CMPDI  
INDIA

TABLE--

**NOISE LEVEL MONITORING DATA**

AREA :

Hingula

PROJECT :

Balaram OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
15-May-25	Natada Village	45.3	34.2
15-May-25	Solada Village (Reported only)	59.7	43.9
15-May-25	Near Natedi Village	52.3	39.1
15-May-25	Pump House Near Outsourcing Working Patch	70.3	52.7
15-May-25	Near Project Office Balram OCP	69.9	57.4
29-May-25	Natada Village	45.9	37.8
29-May-25	Solada Village (Reported only)	47.3	39.1
29-May-25	Near Natedi Village	45.7	39.1
29-May-25	Pump House Near Outsourcing Working Patch	62.4	53.7
29-May-25	Near Project Office Balram OCP	64.1	51.3

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)

Kattawach  
Authorised Signatory  
CMPDI, E-1, VII, LAB  
BHUBANESWAR

*[Handwritten Signature]*

**EFFLUENT QUALITY DATA**

Area :

Hingula

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

Project :

Balram OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
15-May-25	Gandhisagar (Mine Sump)	7.87	<4.0	16	8	-	
15-May-25	Inlet of O & G Trap	7.46	<4.0	53	36	-	
15-May-25	Outlet of O & G Trap	7.57	<4.0	39	24	-	
31-May-25	Inlet of O & G Trap	7.33	<4.0	43	40	-	
31-May-25	Outlet of O & G Trap	7.34	<4.0	31	28	-	

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

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*Handwritten signature*

## EFFLUENT QUALITY DATA

Area :

Hingula

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

Project :

Hingula OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
15-May-25	Inlet of O & G Trap	7.18	<4.0	58	48	-	
15-May-25	Mine Sump Water	6.76	<4.0	26	16	-	
15-May-25	Outlet of O & G Trap	7.39	<4.0	37	20	-	
31-May-25	Inlet of O & G Trap	6.89	<4.0	44	32	-	
31-May-25	Outlet of O & G Trap	7.07	<4.0	38	28	-	

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

  
 Authorised Signatory  
 CMPDI, RI-VII, LAB  
 BHUBANESWAR




**EFFLUENT QUALITY DATA**

Area :

Hingula

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

Project :

Balram OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	MPN/100mL
15-May-25	STP Inlet of Balram Colony	6.97	-	45		<2	120
15-May-25	STP Outlet of Balram Colony	7.15	-	33	-	<2	84
31-May-25	STP Inlet of Balram Colony	6.79	-	44	-	<2.0	70
31-May-25	STP Outlet of Balram Colony	7.11	-	32	-	<2	38

G.S.R. 1265(E) Effluent discharge standards (applicable to all mode of disposal), Sewage Treatment Plants (STPs)

6.5-9.0

-

&lt;100

-

30

&lt;1000

 T. Hingula  
 Authorised Signatory  
 CMPDI, RI-VII, LAB  
 BHUBANESWAR



सीएमपीडी आई  
विश्वविद्यालय  
cmpdi  
भुवनेश्वर

## Drinking Water Quality Data Hingula Area

Project / OCP	Hingula OCP			Indian Drinking Standards (IS-10500):2012	
	Time Office Water	Gopalprasad Village Bore Well Water	Kumunda Village Bore Well Water		
Monitoring Station	15-May-2025	15-May-2025	15-May-2025	Acceptable	Permissible
Date of Sampling	15-May-2025	15-May-2025	15-May-2025	Acceptable	Permissible
Colour(Hazen)	3	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	3	2	1	5
pH	7.04	6.98	7.83	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	37.82	67.23	71.43	200	600
Chloride(mg/L)	19.45	15.56	17.50	250	1000
Sulphate(mg/L)	90.36	67.68	165.7	200	400
Nitrate(mg/L)	3.13	1.05	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	143.42	123.5	258.96	200	600
Calcium(mg/L)	39.92	35.13	70.27	75	200
Fluoride(mg/L)	0.72	0.46	1.06	1	1.5
Total Dissolve Solid(mg/L)	246	230	408	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	0.12	1.0	No relaxation
Zinc(mg/L)	0.05	<0.04	0.05	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

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

*Signature*



सीएमपीडी आई  
रिपोर्टिंग  
cmpdi  
NRI Patho

## Drinking Water Quality Data Hingula Area

Project / OCP	Balaram OCP			Indian Drinking Standards (IS-10500):2012	
	Danara Village Borewell Water	Balaram Colony	Nakeipasi Village Bore Well Water		
Date of Sampling	15-May-2025	15-May-2025	15-May-2025	Acceptable	Permissible
Colour(Hazen)	4	1	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	2	1	5
pH	7.96	7.90	7.71	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	256.32	50.42	63.03	200	600
Chloride(mg/L)	54.46	9.72	15.56	250	1000
Sulphate(mg/L)	7.53	9.50	128.05	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	179.28	59.76	219.12	200	600
Calcium(mg/L)	36.73	15.97	63.88	75	200
Fluoride(mg/L)	0.82	0.50	0.90	1	1.5
Total Dissolve Solid(mg/L)	416	108	344	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	1.0	No relaxation
Zinc(mg/L)	0.26	<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

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडी आई  
सी.एम.डी.  
cmptdi  
भुवनेश्वर

## Drinking Water Quality Data Hingula Area

Project / OCP	Hingula OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Time Office Water	Gopalprasad Village Bore Well Water		
Date of Sampling	15-May-2025	15-May-2025	15-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	8.70	10.73	10.90		
Potassium(mg/L)	4.32	6.48	9.08		
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	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

Project / OCP	Balaram OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Danara Village Borewell Water	Balaram Colony		
Date of Sampling	15-May-2025	15-May-2025	15-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	32.67	5.33	4.52		
Potassium(mg/L)	23.68	2.70	5.55		
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	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

Authorised Signatory  
CMED, RI-VII, LAB  
BHUBANESWAR

*Handwritten signature*

**Environmental Monitoring Report  
Of  
Jagannath Area  
For  
May-2025**

**Talcher Coalfield**



**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*

AMBIENT AIR QUALITY DATA

Area :

Jagannath

(Compliance Station)

Project :

Ananta 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
07-May-25	North East of Mine	210	86	40	15.70	25.66	Open-Cast Mine	Less than 500m
07-May-25	Near NBVI Station (Reported)	204	79	37	12.51	33.25	CHP, CT Road	About 600m
21-May-25	North East of Mine	180	74	34	15.09	22.29	Open-Cast Mine	Less than 500m
21-May-25	Near NBVI Station (Reported)	179	78	35	17.02	23.77	CHP, CT Road	About 600m

Project :

Jagannath 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
07-May-25	Near MDTP	217	85	41	10.01	30.42	Railway Siding CHP	About 800m
07-May-25	Near NBVI Station	204	79	37	12.51	33.25	CHP, CT Road	About 600m
21-May-25	Near MDTP	187	83	39	14.06	21.11	Railway Siding CHP	About 800m
21-May-25	Near NBVI Station	179	78	35	17.02	23.77	CHP, CT Road	About 600m

Katmanaut

1/1/25

Authorised Signatory  
CMPDI, RI-VII-LAB  
BHUBANESWAR

500	250		100	120
-----	-----	--	-----	-----

**AMBIENT AIR QUALITY DATA**

Area :

Jagannath

(Reference Station)

Project :

Jagannath 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-May-25	Kurihan Village	151	60	28	15.85	38.79		
05-May-25	CWS Colony, Meeti	173	68	32	9.76	23.77	Mining Activity	About 1500 m
06-May-25	CWS Colony, Meeti	145	55	26	14.64	26.00	Mining Activity	About 1500 m
06-May-25	Kurihan Village	164	64	31	17.93	38.79		
12-May-25	Kurihan Village	159	62	30	10.51	32.69		
12-May-25	CWS Colony, Meeti	157	64	30	9.76	36.40	Mining Activity	About 1500 m
13-May-25	CWS Colony, Meeti	168	70	33	16.60	33.63	Mining Activity	About 1500 m
13-May-25	Kurihan Village	188	72	37	11.68	29.72		
19-May-25	Kurihan Village	128	46	24	13.76	28.89		
19-May-25	CWS Colony, Meeti	129	41	23	15.02	25.02	Mining Activity	About 1500 m
20-May-25	CWS Colony, Meeti	148	57	29	11.46	29.72	Mining Activity	About 1500 m
20-May-25	Kurihan Village	164	65	31	13.76	38.79		
26-May-25	CWS Colony, Meeti	129	45	25	9.21	17.56	Mining Activity	About 1500 m
26-May-25	Kurihan Village	153	51	28	12.39	31.20		
27-May-25	Kurihan Village	134	44	25	13.04	21.11		
27-May-25	CWS Colony, Meeti	137	47	26	16.80	19.10	Mining Activity	About 1500 m

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*[Handwritten Signature]*

\*N.A.QS, 2009

100	60	80	80
-----	----	----	----

**AMBIENT AIR QUALITY DATA**

Area :

Jagannathi

(Reference Station)

Project :

Ananta OCP

(conc. in µg/cu.m.)

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO2	NOx	Dust Generating Source(DGS)	Distance from DGS
02-May-25	Guthasahi Village	130	51	24	13.76	27.24	Mining Activities	About 3km
02-May-25	Asanababali Village	156	62	29	19.19	25.59	Domestic and Mining Activities	About 4km
02-May-25	Central Nursery	140	53	25	13.51	37.14	Open-Cast Mine	Less than 500m
02-May-25	Sibarampur Village	165	70	34	13.23	39.62	Domestic and Mining Activities	About 4km
03-May-25	Asanababali Village	135	53	25	13.14	33.43	Domestic and Mining Activities	About 4km
03-May-25	Sibarampur Village	148	61	29	14.36	30.54	Domestic and Mining Activities	About 4km
03-May-25	Central Nursery	151	57	27	15.02	39.62	Open-Cast Mine	Less than 500m
07-May-25	Guthasahi Village	172	67	33	12.64	36.75	Mining Activities	About 3km
09-May-25	Asanababali Village	162	64	30	13.83	26.59	Domestic and Mining Activities	About 4km
09-May-25	Sibarampur Village	135	58	27	20.22	21.11	Domestic and Mining Activities	About 4km
09-May-25	Guthasahi Village	154	56	28	16.80	18.40	Mining Activities	About 3km
09-May-25	Central Nursery	152	57	28	16.89	31.20	Open-Cast Mine	Less than 500m
10-May-25	Sibarampur Village	165	70	33	16.00	24.06	Domestic and Mining Activities	About 4km
10-May-25	Guthasahi Village	132	50	24	20.44	28.89	Mining Activities	About 3km
10-May-25	Central Nursery	141	55	27	15.62	23.03	Open-Cast Mine	Less than 500m
10-May-25	Asanababali Village	140	55	26	17.93	27.24	Domestic and Mining Activities	About 4km
10-May-25	Central Nursery	153	61	28	15.43	28.06	Open-Cast Mine	Less than 500m
10-May-25	Guthasahi Village	156	45	29	14.60	28.06	Mining Activities	About 3km
10-May-25	Asanababali Village	150	50	28	16.14	28.97	Domestic and Mining Activities	About 4km
16-May-25	Sibarampur Village	131	47	24	15.53	31.28	Domestic and Mining Activities	About 4km
17-May-25	Central Nursery	159	59	33	11.26	27.49	Open-Cast Mine	Less than 500m
17-May-25	Guthasahi Village	140	56	25	17.93	24.76	Mining Activities	About 3km

10.4.1/28.2022		100	60	80	80
----------------	--	-----	----	----	----

*Handwritten signature*

Project :

Ananta OCP

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

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	Dust Generating Source(DGS)	Distance from DGS
17-May-25	Asanabahali Village	135	45	25	18.02	20.06	Domestic and Mining Activities	About 4km
17-May-25	Sihampur Village	143	56	27	16.60	34.41	Domestic and Mining Activities	About 4km
23-May-25	Asanabahali Village	167	56	31	12.93	31.37	Domestic and Mining Activities	About 4km
23-May-25	Guthasahi Village	127	43	34	13.89	29.89	Mining Activities	About 3km
23-May-25	Sihampur Village	152	53	28	22.38	24.52	Domestic and Mining Activities	About 4km
23-May-25	Central Nursery	133	51	26	11.80	29.01	Open-Cast Mine	Less than 500m
24-May-25	Asanabahali Village	156	52	29	13.04	37.54	Domestic and Mining Activities	About 4km
24-May-25	Central Nursery	140	54	27	10.73	28.30	Open-Cast Mine	Less than 500m
24-May-25	Guthasahi Village	138	56	24	12.37	41.22	Mining Activities	About 3km
24-May-25	Sihampur Village	128	50	23	20.91	33.02	Domestic and Mining Activities	About 4km
30-May-25	Central Nursery	138	47	26	13.99	29.04	Open-Cast Mine	Less than 500m
30-May-25	Guthasahi Village	153	58	31	11.32	35.55	Mining Activities	About 3km
30-May-25	Sihampur Village	139	54	25	14.46	27.37	Domestic and Mining Activities	About 4km
30-May-25	Asanabahali Village	129	43	24	11.26	31.94	Domestic and Mining Activities	About 4km
31-May-25	Sihampur Village	118	45	22	24.63	23.46	Domestic and Mining Activities	About 4km
31-May-25	Asanabahali Village	162	54	30	14.62	28.15	Domestic and Mining Activities	About 4km
31-May-25	Central Nursery	130	45	25	11.26	27.01	Open-Cast Mine	Less than 500m
31-May-25	Guthasahi Village	164	63	32	12.10	24.20	Mining Activities	About 3km

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

*A. Jaisankar*

\*N 14 (S, 2009)

	100	80	60	80
--	-----	----	----	----



सीएमपीडीआई  
विशेष एल  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Jagannath

Project	Ananta OCP							
Monitoring Station	Guthasahi Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(μg/m <sup>3</sup> )
02-May-2025	<20.0	24.90	<0.1	<1.0	<1.0	1.2	BQL(Q L=0.7)	BQL
03-May-2025	<20.0	14.93	<0.1	<1.0	<1.0	1.2	BQL(Q L=0.7)	BQL
09-May-2025	<20.0	24.63	<0.1	<1.0	<1.0	1.1	BQL(Q L=0.7)	BQL
10-May-2025	<20.0	21.22	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
16-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.3	BQL(Q L=0.7)	BQL
17-May-2025	<20.0	23.05	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
23-May-2025	<20.0	18.08	<0.1	<1.0	<1.0	1.1	BQL(Q L=0.7)	BQL
24-May-2025	<20.0	23.58	<0.1	<1.0	<1.0	0.9	BQL(Q L=0.7)	BQL
30-May-2025	<20.0	18.08	<0.1	<1.0	<1.0	0.8	BQL(Q L=0.7)	BQL
31-May-2025	<20.0	20.70	<0.1	<1.0	<1.0	1.0	BQL(Q L=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)

*Handwritten signature*

*Handwritten signature*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
निजी एल  
cmpdi  
Mini Rotinc

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Jagannath

Project	Ananta OCP							
Monitoring Station	Sibarampur Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(µg/m <sup>3</sup> )
02-May-2025	<20.0	11.27	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
03-May-2025	<20.0	21.22	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
09-May-2025	<20.0	27.25	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
10-May-2025	<20.0	18.35	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
16-May-2025	<20.0	14.67	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
17-May-2025	<20.0	11.27	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
23-May-2025	<20.0	20.97	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
24-May-2025	<20.0	26.98	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
30-May-2025	<20.0	14.15	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
31-May-2025	<20.0	16.50	<0.1	<1.0	<1.0	0.6	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)

*Ante*

*Ante*  
Authorised Signatory  
CMPDI, R-I-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
निर्मल  
cmpdi  
Mini Roha

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Jagannath

Project	Ananta OCP							
Monitoring Station	Asanabahali Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(µg/m <sup>3</sup> )
02-May-2025	<20.0	27.25	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
03-May-2025	<20.0	23.32	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
09-May-2025	<20.0	13.88	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
10-May-2025	<20.0	18.08	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
16-May-2025	<20.0	21.48	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
17-May-2025	<20.0	15.98	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
23-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
24-May-2025	<20.0	17.30	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
30-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
31-May-2025	<20.0	13.88	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
Standard	400(24h ours)	180(hou r)	1.0(24h ours)	6.0(Ann ual)	20(Ann ual)	02(8hou rs)	01(annual )	05(annu al)

*Handwritten signature*

*Handwritten signature*  
 Authorised Signatory  
 CMPDI, RI-VII, LAB  
 BHUBANESWAR



सीएमपीडीआई  
विनी एम  
cmpdi  
Mini Roto

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Jagannath

Project	Ananta OCP							
Monitoring Station	Central Nursery							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(μg/m <sup>3</sup> )
02-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
03-May-2025	<20.0	17.30	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
09-May-2025	<20.0	13.88	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
10-May-2025	<20.0	26.20	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
16-May-2025	<20.0	23.05	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
17-May-2025	<20.0	22.80	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
23-May-2025	<20.0	22.27	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
24-May-2025	<20.0	24.10	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
30-May-2025	<20.0	25.68	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
31-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
Standard	400(24h ours)	180(hou r)	1.0(24h ours)	6.0(Ann ual)	20(Ann ual)	02(8hou rs)	01(annual )	05(annu al)

*Aditi*

*Jagannath*  
Authorised Signatory  
CMPDI, KI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
विश्वीय  
cmpdi  
Mini Report

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Jagannath

Project	Jagannath OCP							
Monitoring Station	CWS Colony, Meeti							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	22.80	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
06-May-2025	<20.0	15.47	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
12-May-2025	<20.0	17.55	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
13-May-2025	<20.0	18.08	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
19-May-2025	<20.0	26.20	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
20-May-2025	<20.0	23.05	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
26-May-2025	<20.0	11.53	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
27-May-2025	<20.0	13.88	<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(Shou rs)	01(annual )	05(annual)

*[Handwritten signature]*

Authorised Signatory  
CMPDI, R/VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
रिपोर्टिंग  
cmpdi  
Mini Report

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Jagannath

Project	Jagannath OCP							
Monitoring Station	Kurihan Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	25.15	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
06-May-2025	<20.0	22.80	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
12-May-2025	<20.0	25.68	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
13-May-2025	<20.0	14.15	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
19-May-2025	<20.0	25.15	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
20-May-2025	<20.0	24.10	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
26-May-2025	<20.0	22.27	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
27-May-2025	<20.0	11.78	<0.1	<1.0	<1.0	0.9	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)

*Anto*

*Anto*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR.



सीएमपीडीआई  
विश्व काल  
**cmpdi**  
Miri Ratna

*AMBIENT AIR QUALITY DATA*

*Area: Jagannath*

<b>Project</b>	<b>Ananta OCP</b>
<b>Monitoring Station</b>	<b>North-East of the Mine</b>
<b>Date of sampling</b>	<b>Carbon Monoxide (CO)</b>
	<b>mg/m<sup>3</sup></b>
07-May-2025	1.4
21-May-2025	1.3
<b>Standard</b>	<b>02(8 Hours)</b>

*AdE*

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



सीएमपीडीआई  
CMPDI  
भुवनेश्वर

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Jagannath

PROJECT :

Ananta OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
13-May-25	North East of the Mine	65.3	44.1
13-May-25	Guthasahi Village	53.3	48.1
13-May-25	Central Nursery	68.1	50.1
27-May-25	North East of the Mine	64.2	56.9
27-May-25	Guthasahi Village	47.1	41.3
27-May-25	Central Nursery	59.6	51.7

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 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)

*Handwritten signature*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESHWAR

*Handwritten signature*



सीएनपीडी  
CMPDI  
भुवनेश्वर

TABLE-

NOISE LEVEL MONITORING DATA

AREA :

Jagannath

PROJECT :

Jagannath OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
13-May-25	Near NBVL Station	65.1	54.5
13-May-25	Near MDTP	65.5	53.1
13-May-25	CWS Colony, MEETI	49.6	40.6
13-May-25	Central Nursery (Reported only)	68.1	50.1
27-May-25	Near NBVL Station	65.4	51.3
27-May-25	Near MDTP	64.8	56.1
27-May-25	CWS Colony, MEETI	47.6	40.1
27-May-25	Central Nursery (Reported only)	59.6	51.7

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 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)

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

*A. K. S.*



सीएनपीडीआई  
1986-89  
cmpdi  
www.cmpdi.org

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Jagannath

PROJECT :

Balanda OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
13-May-25	Near NBVL Station (Reported only)	65.1	54.5
27-May-25	Near NBVL Station (Reported only)	65.4	51.3

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)

Jagannath

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

**EFFLUENT QUALITY DATA**

Area :

Jagannath

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

Project :

Ananta OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
13-May-25	Mine Sump Water	7.57	<4.0	14	8	-	
13-May-25	O & G Trap Inlet	6.78	<4.0	31	28		
13-May-25	O & G Trap Outlet	6.87	<4.0	19	12		
29-May-25	O & G Trap Inlet	6.69	<4.0	37	32		
29-May-25	O & G Trap Outlet	6.72	<4.0	21	20		

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
---------	----	-----	-----	----

*Handwritten signature*

## EFFLUENT QUALITY DATA

Area :

Jagannath

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

Project :

Ananta OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	MPN/100mL
13-May-25	STP INLET	6.95	-	29	-	<2	70
13-May-25	STP OUTLET	6.82	-	29	-	<2	56
29-May-25	STP INLET	7.02	-	31	-	<2	61
29-May-25	STP OUTLET	6.50	-	22	-	<2	49

G.S.R. 1265(E) Effluent discharge standards (applicable to all mode of disposal), Sewage Treatment Plants (STPs)

6.5-9.0	-	<100	-	30	<1000
---------	---	------	---	----	-------

*T. Jitendra*  
 Authorised Signatory  
 CMPDI, RI-VII, LAB  
 BHUBANESWAR

*A. Jitendra*



**EFFLUENT QUALITY DATA**

Area :

Jagannath

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

Project :

Jagannath OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
13-May-25	Face Sump	3.91	<4.0	43	32	-	
13-May-25	O & G Trap Inlet	6.70	<4.0	30	24	-	
13-May-25	O & G Trap Outlet	6.96	<4.0	26	16	-	
13-May-25	Sump at Quarry No. 4, Naer MDTP	7.77	<4.0	18	12	-	
29-May-25	O & G Trap Inlet	6.65	<4.0	37	32	-	
29-May-25	O & G Trap Outlet	6.86	<4.0	28	20	-	

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
---------	----	-----	-----	----

*Adhik*



## EFFLUENT QUALITY DATA

Area :

Jagannath

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

Project :

Jagannath OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	MPN/100mL
13-May-25	STP INLET	6.74	-	35	-	<2	94
13-May-25	STP OUTLET	7.15	-	23	-	<2	38
29-May-25	STP INLET	6.98	-	31	-	<2	78
29-May-25	STP OUTLET	7.05	-	27	-	<2	61

G.S.R. 1265(E) Effluent discharge standards (applicable to all mode of disposal), Sewage Treatment Plants (STPs)

6.5-9.0	-	<100	-	30	<1000
---------	---	------	---	----	-------

*T. J. Nayak*

Authorised Signatory  
CMPDI, RI-VII, LAG  
BHUBANESWAR

*Atk*



सीएमपीडीआई  
मिनी रोल  
cmpdi  
Mini Roll

## Drinking Water Quality Data Jagannath Area

Project / OCP	Jagannath OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Balanda Colony	Jagannath Colony		
Date of Sampling	13-May-2025	13-May-2025	13-May-2025	Acceptable	Permissible
Colour(Hazen)	3	1	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	3	1	5
pH	7.68	7.67	6.62	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	58.83	54.63	71.43	200	600
Chloride(mg/L)	15.56	9.72	44.73	250	1000
Sulphate(mg/L)	154.1	13.67	55.6	200	400
Nitrate(mg/L)	<0.05	<0.5	46.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	227.09	67.73	159.36	200	600
Calcium(mg/L)	65.48	15.97	44.72	75	200
Fluoride(mg/L)	10.09	0.40	0.61	1	1.5
Total Dissolve Solid(mg/L)	364	118	346	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	1.0	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

*K. Anand*  
Authorised Signatory  
CMPDI, KI-VII, LAB  
JODHPUR

*[Signature]*



सीएमपीडी आई  
रिपी लैब  
cmpdi  
Water Testing

## Drinking Water Quality Data Jagannath Area

Project / OCP	Ananta OCP		Indian Drinking Standards (IS-10500):2012	
	Ananta Colony	Dera Village Tube Well Water		
Monitoring Station				
Date of Sampling	13-May-2025	13-May-2025	Acceptable	Permissible
Colour(Hazen)	2	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	1	5
pH	7.40	7.87	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	168.08	54.63	200	600
Chloride(mg/L)	11.67	9.72	250	1000
Sulphate(mg/L)	3.71	11.12	200	400
Nitrate(mg/L)	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	171.31	55.78	200	600
Calcium(mg/L)	46.31	14.37	75	200
Fluoride(mg/L)	1.00	0.51	1	1.5
Total Dissolve Solid(mg/L)	250	108	500	2000
Copper(mg/L)	<0.03	0.040	0.05	1.5
Manganese(mg/L)	0.15	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	1.0	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  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडी आई  
RI-VII  
cmpdi  
May 2025

## Drinking Water Quality Data Jagannath Area

Project / OCP	Jagannath OCP			Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Balanda Colony	Jagannath Colony	Rakas Village Well Water	Acceptable	Permissible
Date of Sampling	13-May-2025	13-May-2025	13-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	11.59	7.03	21.37	-	-
Potassium(mg/L)	7.25	1.66	10.86	-	-
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	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

Project / OCP	Ananta OCP		Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Ananta Colony	Dera Village Tube Well Water	Acceptable	Permissible
Date of Sampling	13-May-2025	13-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	5.28	7.25	-	-
Potassium(mg/L)	3.76	1.94	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

*[Handwritten Signature]*

*[Handwritten Signature]*  
**Authorised Signatory  
 CMPDI, RI-VII, LAB  
 BHUBANESWAR**

**Environmental Monitoring Report  
Of  
Kaniha Area  
For  
May-2025**

**Talcher Coalfield**



**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*



सीएनपीडी  
CMPDI  
Bhubaneswar

Test Report

AMBIENT AIR QUALITY DATA

Area :

Kaniha

(Compliance Station)

Project :

Kaniha 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
08-May-25	Near External OB Dump, Jamania	216	85	40	14.26	22.29	Mining Activities	About 500m
08-May-25	New Time Office (Near Z-Patch)	192	83	38	18.57	27.37	Mining Activities	About 500m
08-May-25	Near Project Office	205	88	41	18.39	34.92	Mining Activities	About 500m
21-May-25	Near Project Office	188	78	39	17.86	33.96	Mining Activities	About 500m
22-May-25	Near External OB Dump, Jamania	184	81	38	18.77	24.76	Mining Activities	About 500m
22-May-25	New Time Office (Near Z-Patch)	175	70	33	19.90	24.24	Mining Activities	About 500m

Tatwaik  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

Arsh

MoEF Standards Notification dated 25th  
September, 2009

600	300		120	120
-----	-----	--	-----	-----

**AMBIENT AIR QUALITY DATA**

Area :

**Kaniha**

(Reference Station)

Project :

**Kaniha OCP**

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

Date of Sampling	Monitoring Station	SPM	PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	Dust Generating Source(DGS)	Distance from DGS
05-May-25	Kansamunda Village	144	55	26	11.00	33.88		
05-May-25	Gandaberua	183	72	34	17.39	23.46		
05-May-25	South Of Proposed Quarry Limit of KOCP	155	64	31	22.71	36.32	Mining Activities	About 500m
05-May-25	Guiland, South West of Mine	141	55	27	13.35	23.94		
05-May-25	Near Harichandanpur	146	57	27	9.76	31.20		
05-May-25	Kaniha (North of the Mine)	169	66	32	12.47	18.82	Mining Activities	About 500m
06-May-25	South Of Proposed Quarry Limit of KOCP	152	62	30	14.91	33.43	Mining Activities	About 500m
06-May-25	Near Harichandanpur	152	60	28	16.68	34.67		
06-May-25	Kansamunda Village	158	64	30	12.73	38.58		
06-May-25	Kaniha (North of the Mine)	165	64	30	14.78	21.96	Mining Activities	About 500m
06-May-25	Guiland, South West of Mine	173	68	32	18.02	31.94		
06-May-25	Gandaberua	149	51	27	13.14	31.94		
12-May-25	Kaniha (North of the Mine)	137	51	24	16.98	27.82	Mining Activities	About 500m
12-May-25	South Of Proposed Quarry Limit of KOCP	133	55	26	18.38	26.41	Mining Activities	About 500m
12-May-25	Kansamunda Village	178	71	35	10.75	34.47		
12-May-25	Guiland, South West of Mine	153	60	29	19.19	40.45		
12-May-25	Near Harichandanpur	129	49	23	16.68	23.11		
12-May-25	Gandaberua	179	70	34	13.33	25.59		
13-May-25	Guiland, South West of Mine	143	55	26	16.99	28.15		
13-May-25	South Of Proposed Quarry Limit of KOCP	146	63	29	13.47	33.63	Mining Activities	About 500m
13-May-25	Kansamunda Village	152	59	28	12.99	33.16		
13-May-25	Near Harichandanpur	141	55	27	16.14	35.66		

\*N11Q5 2009

100 80 80 80

*[Handwritten Signature]*

Project :

Kaniha 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-May-25	Gandaberna	181	77	36	15.02	22.29		
13-May-25	Kaniha (North of the Mine)	140	55	26	10.59	32.93	Mining Activities	About 500m
19-May-25	Kansamunda Village	121	47	23	10.84	33.84		
19-May-25	South Of Proposed Quarry Limit of KOCP	134	52	25	22.89	35.66	Mining Activities	About 500m
19-May-25	Guiland, South West of Mine	140	54	27	16.20	35.97		
19-May-25	Near Harichandanpur	125	43	21	13.83	25.02		
19-May-25	Gandaberna	138	51	25	13.89	28.23		
19-May-25	Kaniha (North of the Mine)	121	47	23	17.47	40.78	Mining Activities	About 500m
20-May-25	South Of Proposed Quarry Limit of KOCP	128	41	23	20.35	33.02	Mining Activities	About 500m
20-May-25	Near Harichandanpur	130	48	26	11.06	17.54		
20-May-25	Kansamunda Village	133	51	26	16.20	36.75		
20-May-25	Kaniha (North of the Mine)	141	56	26	12.54	25.41	Mining Activities	About 500m
20-May-25	Guiland, South West of Mine	161	61	30	15.39	22.29		
20-May-25	Gandaberna	127	52	24	16.99	20.33		
26-May-25	Kaniha (North of the Mine)	159	61	31	13.94	37.64	Mining Activities	About 500m
26-May-25	Guiland, South West of Mine	121	47	23	10.54	29.72		
26-May-25	Kansamunda Village	167	66	31	11.26	35.66		
26-May-25	Near Harichandanpur	118	45	22	15.41	28.15		
26-May-25	Gandaberna	146	56	29	18.97	21.11		
26-May-25	South Of Proposed Quarry Limit of KOCP	145	53	27	12.60	21.23	Mining Activities	About 500m
27-May-25	South Of Proposed Quarry Limit of KOCP	123	42	20	14.53	26.80	Mining Activities	About 500m
27-May-25	Guiland, South West of Mine	133	51	26	15.02	22.64		
27-May-25	Kansamunda Village	154	52	29	14.26	23.77		
27-May-25	Gandaberna	121	49	23	17.39	24.24		
27-May-25	Near Harichandanpur	146	56	27	18.97	28.93		
27-May-25	Kaniha (North of the Mine)	174	69	32	11.09	18.82	Mining Activities	About 500m

N.I.Q.S.2009

100

60

80

80

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*Arts*



सीएमपीडीआई  
मिने रान  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Kaniha

Project	Kaniha OCP							
Monitoring Station	Near Harichandanpur							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	11.27	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
06-May-2025	<20.0	15.47	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
12-May-2025	<20.0	21.75	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
13-May-2025	<20.0	22.02	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
19-May-2025	<20.0	25.42	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
20-May-2025	<20.0	12.05	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
26-May-2025	<20.0	13.88	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
27-May-2025	<20.0	23.58	<0.1	<1.0	<1.0	0.5	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)

*[Handwritten signature]*

Authn. *[Signature]*  
CMPDI, Ki-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
विनी एम  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Kaniha

Project	Kaniha OCP							
Monitoring Station	Kaniha North of the Mine							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
06-May-2025	<20.0	14.93	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
12-May-2025	<20.0	22.80	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
13-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-May-2025	<20.0	25.68	<0.1	<1.0	<1.0	1.5	BQL(QL=0.7)	BQL
20-May-2025	<20.0	13.3	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
26-May-2025	<20.0	16.77	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
27-May-2025	<20.0	16.77	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
Standard	400(24h hours)	180(hour)	1.0(24h hours)	6.0(Annual)	20(Annual)	02(8hours)	01(annual)	05(annual)

*Handwritten signature*

*Handwritten signature*  
Authorised Signatory  
CMPDI, VI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
मिनी रोल  
cmpdi  
Mini Roll

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Kaniha

Project	Kaniha OCP							
Monitoring Station	South of Proposed Quarry Limit of KOCP							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (α) Pyrene	Benzene
	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(μg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(ng/m <sup>3</sup> )	(μg/m <sup>3</sup> )
05-May-2025	<20.0	16.25	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
06-May-2025	<20.0	26.98	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
12-May-2025	<20.0	27.52	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
13-May-2025	<20.0	11.27	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
19-May-2025	<20.0	21.75	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
20-May-2025	<20.0	12.32	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
26-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
27-May-2025	<20.0	12.58	<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)

*1 date*

*Handwritten signature*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
cmpdi  
Mini Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Kaniha

Project	Kaniha OCP							
Monitoring Station	Kansamunda Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	21.75	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
06-May-2025	<20.0	23.58	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
12-May-2025	<20.0	25.42	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
13-May-2025	<20.0	16.50	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
19-May-2025	<20.0	15.20	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
20-May-2025	<20.0	26.73	<0.1	<1.0	<1.0	1.6	BQL(QL=0.7)	BQL
26-May-2025	<20.0	26.98	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
27-May-2025	<20.0	24.63	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
Standard	400(24h ours)	180(ho ur)	1.0(24h ours)	6.0(An nual)	20(Ann ual)	02(8hou rs)	01(annual)	05(annu al)

*[Handwritten signature]*

*[Handwritten signature]*  
Authorised Signatory  
CMPDI, Ri-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
विश्वीय पर्यावरण  
cmpdi  
Nihil Ratio

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Kaniha

Project	Kaniha OCP							
Monitoring Station	Guiland, South West of the Mine							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	16.50	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
06-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
12-May-2025	<20.0	22.80	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
13-May-2025	<20.0	15.47	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
19-May-2025	<20.0	23.05	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
20-May-2025	<20.0	19.13	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
26-May-2025	<20.0	22.02	<0.1	<1.0	<1.0	1.4	BQL(QL=0.7)	BQL
27-May-2025	<20.0	21.75	<0.1	<1.0	<1.0	1.5	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)

*[Handwritten signature]*

*[Handwritten signature]*  
Authorised Signatory  
CMPDI, Ki-VII, LAB  
RHUBANESWAR



सीएमपीडीआई  
विभी एवं  
**cmpdi**  
Miri Ratna

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Kaniha

Project	Kaniha OCP							
Monitoring Station	Gandaberana							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	27.25	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
06-May-2025	<20.0	21.22	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
12-May-2025	<20.0	13.10	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
13-May-2025	<20.0	15.47	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
19-May-2025	<20.0	21.48	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
20-May-2025	<20.0	21.48	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
26-May-2025	<20.0	27.77	<0.1	<1.0	<1.0	0.5	BQL(QL=0.7)	BQL
27-May-2025	<20.0	15.98	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
Standard	400(24h ours)	180(hour)	1.0(24h ours)	6.0(Annual)	20(Annual)	02(8hours)	01(annual)	05(annual)

*[Handwritten signature]*

*[Handwritten signature]*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
RHUBANESWAR



सीएमपीडीआई  
मिनी एल  
**cmpdi**  
Mini Ratna

**AMBIENT AIR QUALITY DATA**

**Area: Kaniha**

<b>Project</b>	<b>KanihaOCP</b>
<b>Monitoring Station</b>	<b>Near Project Office</b>
<b>Date of sampling</b>	<b>Carbon Monoxide (CO)</b>
	<b>mg/m<sup>3</sup></b>
08-May-2025	1.4
22-May-2025	1.6
<b>Standard</b>	<b>02(8 Hours)</b>

<b>Project</b>	<b>KanihaOCP</b>
<b>Monitoring Station</b>	<b>New Time Office (Near Z-Patch)</b>
<b>Date of sampling</b>	<b>Carbon Monoxide (CO)</b>
	<b>mg/m<sup>3</sup></b>
08-May-2025	1.5
22-May-2025	1.4
<b>Standard</b>	<b>02(8 Hours)</b>

<b>Project</b>	<b>KanihaOCP</b>
<b>Monitoring Station</b>	<b>Near External OB Dump, Jamania</b>
<b>Date of sampling</b>	<b>Carbon Monoxide (CO)</b>
	<b>mg/m<sup>3</sup></b>
08-May-2025	1.3
22-May-2025	1.4
<b>Standard</b>	<b>02(8 Hours)</b>

<b>Project</b>	<b>KanihaOCP</b>
<b>Monitoring Station</b>	<b>Old Site Office</b>
<b>Date of sampling</b>	<b>Carbon Monoxide (CO)</b>
	<b>mg/m<sup>3</sup></b>
08-May-2025	1.3
22-May-2025	1.5
<b>Standard</b>	<b>02(8 Hours)</b>

*[Handwritten signature]*

*[Handwritten signature]*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएनपीडीआई  
CMPDI  
भुवनेश्वर

TABLE--

NOISE LEVEL MONITORING DATA

AREA :

Kaniha

PROJECT :

Kaniha OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
15-May-25	Kansamunda Village (West of the Mine)	49.2	42.3
15-May-25	Near External OB Dump, Jamania	69.8	53.6
15-May-25	Near Time Office (Near Z-Patch)	70.1	64.3
15-May-25	Near Project Office	70.1	58.3
29-May-25	Kansamunda Village (West of the Mine)	48.7	40.3
29-May-25	Near External OB Dump, Jamania	64.7	51.2
29-May-25	Near Time Office (Near Z-Patch)	63.1	52.4
29-May-25	Near Project Office	62.3	53.7

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 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)

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





सीमापीडी  
CMPDI

TABLE--

**EFFLUENT QUALITY DATA**

Area :

Kaniha

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

Project :

Kaniha OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
15-May-25	Clear Water Pond	7.69	<4.0	41	28	-	
15-May-25	Kansamunda Sump	7.01	<4.0	56	64	-	
15-May-25	Pre Sedimentation Pond	7.73	<4.0	53	32	-	
15-May-25	Z-Patch Sump	7.30	<4.0	19	12	-	
31-May-25	Clear Water Pond	7.40	<4.0	42	24	-	
31-May-25	Pre Sedimentation Pond	6.14	<4.0	38	28	-	

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

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
जिसे वन  
cmpdi  
Mini Report

## Drinking Water Quality Data Kaniha Area

Project / OCP	Kaniha		Indian Drinking Standards (IS-10500):2012	
	Telisinga Well Water	Jarda Village Well Water	Acceptable	Permissible
Monitoring Station				
Date of Sampling	15-May-2025	15-May-2025		
Colour(Hazen)	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	4	1	5
pH	6.55	8.22	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16.81	239.51	200	600
Chloride(mg/L)	36.95	40.84	250	1000
Sulphate(mg/L)	39.97	11.12	200	400
Nitrate(mg/L)	12.19	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	99.6	175.3	200	600
Calcium(mg/L)	28.75	35.13	75	200
Fluoride(mg/L)	1.05	0.85	1	1.5
Total Dissolve Solid(mg/L)	224	384	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	1.0	No relaxation
Zinc(mg/L)	0.13	0.13	5	15
Lead(mg/L)	<0.005	0.007	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

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

*[Handwritten Signature]*



सीएमपीडीआई  
सिखे और  
cmpdi  
Mini Ratna

## Drinking Water Quality Data Kaniha Area

Project / OCP	Kaniha		Indian Drinking Standards (IS-10500):2012	
	Telisinga Well Water	Jarda Village Well Water		
Monitoring Station				
Date of Sampling	15-May- 2025	15-May- 2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	13.00	24.38	-	-
Potassium(mg/L)	5.60	27.41	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

*K. Prasad*  
Authorized Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*A. K. S.*

**Environmental Monitoring Report  
Of  
Lingaraj Area  
For  
May-2025**

**Talcher Coalfield**



**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*



Test Report

AMBIENT AIR QUALITY DATA

Area :

Lingaraj

(Compliance Station)

Project :

Lingaraj 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
11-Apr-25	GM Office Lingraj	203	88	46	15.24	33.61		
11-Apr-25	Near Silo Conveyor Belt	207	80	42	11.56	23.52		
22-Apr-25	GM Office Lingraj	208	92	47	10.51	31.37		
22-Apr-25	Near Silo Conveyor Belt	214	85	41	14.30	21.82		
07-May-25	GM Office Lingraj	210	83	39	13.59	22.64		
07-May-25	Near Silo Conveyor Belt	206	87	39	9.65	29.01		
21-May-25	GM Office Lingraj	190	84	40	14.22	24.11		
21-May-25	Near Silo Conveyor Belt	178	78	36	12.79	35.66		

*K. J. Patil*  
Authorised Signatory  
CMPDI, FI-VII, LAB  
MUMBAI SWR

*[Signature]*

MoEF Standards Notification dated 23rd  
September, 2009

800	300		120	120
-----	-----	--	-----	-----

**AMBIENT AIR QUALITY DATA**

Area :

Lingaraj

(Reference Station)

Project :

Lingaraj 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
02-May-25	Balunga Khamar Village	160	62	29	12.51	37.14		
02-May-25	Kandhal Village	133	47	22	13.89	29.89		
02-May-25	Lingaraj Township	143	56	27	17.64	27.49		
03-May-25	Balunga Khamar Village	173	68	32	15.81	28.93		
03-May-25	Kandhal Village	167	65	32	12.37	41.22		
03-May-25	Lingaraj Township	135	53	25	18.02	19.31		
09-May-25	Kandhal Village	135	52	23	11.32	35.55		
09-May-25	Balunga Khamar Village	151	60	28	13.14	29.72		
09-May-25	Lingaraj Township	153	60	28	16.68	31.37		
10-May-25	Lingaraj Township	183	72	34	12.01	20.06		
10-May-25	Kandhal Village	140	55	26	12.10	24.20		
10-May-25	Balunga Khamar Village	135	53	25	15.85	27.24		
16-May-25	Balunga Khamar Village	177	59	33	17.52	34.67		
16-May-25	Kandhal Village	155	58	32	12.45	22.09		
16-May-25	Lingaraj Township	163	63	30	15.77	26.74		
17-May-25	Balunga Khamar Village	140	47	26	10.84	29.72		
17-May-25	Lingaraj Township	126	42	23	14.62	32.84		
17-May-25	Kandhal Village	141	55	27	13.44	39.28		
23-May-25	Balunga Khamar Village	150	50	28	18.35	23.11		
23-May-25	Kandhal Village	167	66	31	11.600	33.88		
23-May-25	Lingaraj Township	175	71	36	10.54	34.92		
24-May-25	Kandhal Village	109	41	22	12.73	38.58		

IS:1405:2009		100	60	80	80
--------------	--	-----	----	----	----

*Ant*

Project :

Lingaraj 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
24-May-25	Lingaraj Township	127	41	22	15.02	26.18		
24-May-25	Balunga Khamar Village	129	43	24	12.39	24.52		
30-May-25	Balunga Khamar Village	146	49	27	18.02	26.00		
30-May-25	Kardhal Village	178	68	35	10.75	24.47		
30-May-25	Lingaraj Township	167	63	32	18.02	32.69		
31-May-25	Lingaraj Township	140	48	26	16.89	33.43		
31-May-25	Balunga Khamar Village	123	41	23	14.62	34.41		
31-May-25	Kardhal Village	131	52	24	12.99	33.16		

\*N-11(Q/S.2009

100 60 80 80

  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR





सीएमपीडीआई  
निर्मल लैब  
cmpdi  
निर्मल लैब

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Lingaraj

Project	Lingaraj OCP							
Monitoring Station	Kandhal Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
02-May-2025	<20.0	24.37	<0.1	<1.0	<1.0	1.2	BQL(Q L=0.7)	BQL
03-May-2025	<20.0	15.98	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
09-May-2025	<20.0	13.88	<0.1	<1.0	<1.0	1.2	BQL(Q L=0.7)	BQL
10-May-2025	<20.0	21.22	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
16-May-2025	<20.0	11.27	<0.1	<1.0	<1.0	1.1	BQL(Q L=0.7)	BQL
17-May-2025	<20.0	18.87	<0.1	<1.0	<1.0	0.9	BQL(Q L=0.7)	BQL
23-May-2025	<20.0	16.50	<0.1	<1.0	<1.0	0.8	BQL(Q L=0.7)	BQL
24-May-2025	<20.0	13.63	<0.1	<1.0	<1.0	0.7	BQL(Q L=0.7)	BQL
30-May-2025	<20.0	17.03	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
31-May-2025	<20.0	19.92	<0.1	<1.0	<1.0	1.2	BQL(Q L=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)

*[Handwritten signature]*

*[Handwritten signature]*  
ANALYST  
CMPDI, NAAQS LAB  
BHUBANESWAR



सीएमपीडीआई  
विशेष रूप से  
**cmpdi**  
Mini Patra

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: *Lingaraj*

Project	Lingaraj OCP							
Monitoring Station	Lingaraj Township							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
02-May-2025	<20.0	13.63	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
03-May-2025	<20.0	19.13	<0.1	<1.0	<1.0	1.2	BQL(Q L=0.7)	BQL
09-May-2025	<20.0	26.47	<0.1	<1.0	<1.0	1.3	BQL(Q L=0.7)	BQL
10-May-2025	<20.0	19.65	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
16-May-2025	<20.0	16.77	<0.1	<1.0	<1.0	1.4	BQL(Q L=0.7)	BQL
17-May-2025	<20.0	15.72	<0.1	<1.0	<1.0	1.2	BQL(Q L=0.7)	BQL
23-May-2025	<20.0	25.42	<0.1	<1.0	<1.0	1.0	BQL(Q L=0.7)	BQL
24-May-2025	<20.0	13.63	<0.1	<1.0	<1.0	1.3	BQL(Q L=0.7)	BQL
30-May-2025	<20.0	22.53	<0.1	<1.0	<1.0	1.5	BQL(Q L=0.7)	BQL
31-May-2025	<20.0	13.10	<0.1	<1.0	<1.0	1.0	BQL(Q L=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)

*Handwritten signature/initials*

*Handwritten signature/initials*  
Cmpdi  
BHUBANESWAR



सीएमपीडीआई  
केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
cmpdi  
केन्द्रीय प्रदूषण नियंत्रण बोर्ड


AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Lingaraj

Project	Lingaraj OCP							
Monitoring Station	Balunga Khamar Village							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
02-May-2025	<20.0	19.38	<0.1	<1.0	<1.0	0.9	BQL(Q L=0.7)	BQL
03-May-2025	<20.0		<0.1	<1.0	<1.0	0.8	BQL(Q L=0.7)	BQL
09-May-2025	<20.0	18.60	<0.1	<1.0	<1.0	0.6	BQL(Q L=0.7)	BQL
10-May-2025	<20.0	25.42	<0.1	<1.0	<1.0	0.7	BQL(Q L=0.7)	BQL
16-May-2025	<20.0	21.75	<0.1	<1.0	<1.0	0.8	BQL(Q L=0.7)	BQL
17-May-2025	<20.0	25.93	<0.1	<1.0	<1.0	0.4	BQL(Q L=0.7)	BQL
23-May-2025	<20.0	20.97	<0.1	<1.0	<1.0	0.5	BQL(Q L=0.7)	BQL
24-May-2025	<20.0	12.83	<0.1	<1.0	<1.0	0.6	BQL(Q L=0.7)	BQL
30-May-2025	<20.0	22.53	<0.1	<1.0	<1.0	0.7	BQL(Q L=0.7)	BQL
31-May-2025	<20.0	13.37	<0.1	<1.0	<1.0	0.8	BQL(Q L=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)

*Handwritten signature/initials*

*Handwritten signature*  
CMPDI, A. S. S. LAB  
BHUBANESWAR

 <b>सीएमपीडीआई</b> <small>सि.ए.ए.ए.</small> <b>cmpdi</b> <small>Mini Rama</small>	<b>AMBIENT AIR QUALITY DATA</b> <b>Area: Lingaraj</b>
	<b>Project</b> Lingaraj OCP <b>Monitoring Station</b> Near Silo Conveyor Belt <b>Date of sampling</b> Carbon Monoxide (CO) <small>mg/m<sup>3</sup></small> 07-May-2025 1.6 21-May-2025 1.5 <b>Standard</b> 02(8 Hours)

<b>Project</b> Lingaraj OCP <b>Monitoring Station</b> Near Coal Corridor <b>Date of sampling</b> Carbon Monoxide (CO) <small>mg/m<sup>3</sup></small> 07-May-2025 1.8 21-May-2025 1.6 <b>Standard</b> 02(8 Hours)	

*Handwritten signature*

*Handwritten signature*  
**Authorised Signatory**  
**CMPDI, RI-VII, LAB**  
**BHUBANESWAR**



सीएनपीडीआई  
CMPDI  
भुवनेश्वर

TABLE--

**NOISE LEVEL MONITORING DATA**

AREA :

Lingaraj

PROJECT :

Lingaraj OCP

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
14-May-25	Lingaraj Township	65.1	56.2
14-May-25	Balunga Khamar Village	45.1	36.9
14-May-25	Kandhal Village	43.7	35.3
14-May-25	Near Silo Conveyor Belt	68.9	57.3
28-May-25	Lingaraj Township	45.3	37.4
28-May-25	Balunga Khamar Village	47.3	39.7
28-May-25	Kandhal Village	46.9	39.7
28-May-25	Near Silo Conveyor Belt	69.1	57.4

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)

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

*[Signature]*

**EFFLUENT QUALITY DATA**

Area :

Lingaraj

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

Project :

Lingaraj OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
14-May-25	Filter Outlet of Workshop ETP	6.11	<4.0	35	28	-	
14-May-25	Inlet of ETP Near Dumper Parking	7.39	<4.0	27	28	-	
14-May-25	Inlet of Workshop ETP	6.37	4.8	65	88	-	
14-May-25	Mine Sump Water	7.94	-	-	-	-	
15-May-25	Clear Water Reservoir of ETP Near Dumper Parking	7.82	<4.0	23	24	-	
30-May-25	Clear Water Reservoir of ETP Near Dumper Parking	7.56	<4.0	25	16	-	
30-May-25	Filter Outlet of Workshop ETP	6.15	4.4	60	80	-	
30-May-25	Inlet of ETP Near Dumper Parking	7.19	<4.0	29	20	-	
30-May-25	Inlet of Workshop ETP	6.38	5.2	69	96	-	

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


**EFFLUENT QUALITY DATA**

Area :

Lingaraj

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

Project :

Lingaraj OCP

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	MPN/100mL
14-May-25	STP Inlet at Lingaraj Township	6.87	-	35	-	<2	84
14-May-25	STP Outlet at Lingaraj Township	6.71	-	27	-	<2	70
30-May-25	STP Inlet at Lingaraj Township	6.83	-	40	-	<2	81
30-May-25	STP Outlet at Lingaraj Township	6.62	-	29	-	<2	56

G.S.R. 1265(E) Effluent discharge standards (applicable to all mode of disposal), Sewage Treatment Plants (STPs)

6.5-9.0

-

&lt;100

-

30

&lt;1000



सीएमपीडीआई  
लिमिटेड  
cmpdi  
Mini Bhatia

## Drinking Water Quality Data Lingraj Area

Project / OCP	Lingraj OCP		Indian Drinking Standards (IS-10500):2012	
	GM Office, Lingraj Area	Balunga Khamar Village Well		
Monitoring Station				
Date of Sampling	14-May-2025	14-May-2025	Acceptable	Permissible
Colour(Hazen)	1	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	5
pH	6.55	7.12	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	21.01	109.25	200	600
Chloride(mg/L)	40.84	31.12	250	1000
Sulphate(mg/L)	10.66	74.16	200	400
Nitrate(mg/L)	18.9	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	71.71	179.28	200	600
Calcium(mg/L)	20.76	49.51	75	200
Fluoride(mg/L)	0.30	0.70	1	1.5
Total Dissolve Solid(mg/L)	146	316	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	1.0	No relaxation
Zinc(mg/L)	0.04	0.09	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

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

*[Signature]*



सीएमपीडी  
महाराष्ट्र  
CMPDI  
महाराष्ट्र

## Drinking Water Quality Data Lingraj Area

Project / OCP	Lingraj OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Deulbera Village Well	Talabera Village Well	Kankili Village Well	Acceptable
Date of Sampling	14-May-2025	14-May-2025	14-May-2025		
Colour(Hazen)	3	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	3	1	5
pH	7.92	7.96	8.09	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	239.51	54.63	277.33	200	600
Chloride(mg/L)	40.84	9.72	38.9	250	1000
Sulphate(mg/L)	9.50	11.01	12.98	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	171.31	59.76	223.10	200	600
Calcium(mg/L)	33.54	14.37	41.52	75	200
Fluoride(mg/L)	0.81	0.55	0.62	1	1.5
Total Dissolve Solid(mg/L)	384	110	418	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	1.0	No relaxation
Zinc(mg/L)	0.14	<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

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*[Handwritten Signature]*



सीएमपीडी आई  
 १०-११-११  
 cmpdi  
 Unit 10/11/11

## Drinking Water Quality Data Lingraj Area

Project / OCP	Lingraj OCP		Indian Drinking Standards (IS-10500):2012	
Monitoring Station	GM Office, Lingraj Area	Balunga Khamar Village Well	Acceptable	Permissible
Date of Sampling	14-May-2025	14-May-2025		
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	10.73	12.86		
Potassium(mg/L)	3.23	9.86		
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

Project / OCP	Lingraj OCP			Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Deulbera Village Well	Talabera Village Well	Kankili Village Well	Acceptable	Permissible
Date of Sampling	14-May-2025	14-May-2025	14-May-2025		
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	23.97	5.35	25.02		
Potassium(mg/L)	27.71	1.70	13.20		
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	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

Authorised Signatory  
 CMPDI, RI-VII, LAB  
 BHUBANESWAR

**Environmental Monitoring Report  
Of  
Talcher Area  
For  
May-2025**

**Talcher Coalfield**



**Mahanadi Coalfields Limited**



**सीएमपीडीआई**  
मिनी 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 ]

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



Test Report

**AMBIENT AIR QUALITY DATA**

Area :

Talcher

(Compliance Station)

Project :

Talcher Colliery

(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
08-May-25	Near Canteen Talcher Colliery	193	71	34	14.26	37.14	Local Transportation	About 500m
08-May-25	Officer Club, Talcher Area	195	75	37	10.89	28.23	Mining Activities, Ananta, Lingaraj & Bharatpur OCP	About 1000m
22-May-25	Near Canteen Talcher Colliery	173	69	39	10.24	18.23	Local Transportation	About 500m
22-May-25	Officer Club, Talcher Area	174	66	32	13.57	24.06	Mining Activities, Ananta, Lingaraj & Bharatpur OCP	About 1000m

*Dattatrayak*  
Authorized Signatory  
C.M.P.D., Pt. VII, LAB  
Bhubaneswar

Limit of SPM as per CPCRI, New Delhi dated 25th September 1986	600	300		120	120
--	-----	-----	--	-----	-----



Test Report

AMBIENT AIR QUALITY DATA

Area :

Talcher

(Compliance Station)

Project :

Nandira Colliery

(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
08-May-25	Project Office	196	84	39	16.09	22.64	Mining Activities, Transportation, CHP	About 500m
08-May-25	Sub-station	192	81	37	13.98	24.76	Transportation & Railway Sidings of BOC P	About 500m
22-May-25	Project Office	176	65	33	17.30	19.31	Mining Activities, Transportation, CHP	About 500m
22-May-25	Sub-station	167	75	34	13.87	19.59	Transportation & Railway Sidings of BOC P	About 500m

Authorised Signatory  
CMPDI  
BHUBANESWAR

600	300		120	120
-----	-----	--	-----	-----



**AMBIENT AIR QUALITY DATA**

Area :

Talcher

(Reference Station)

Project :

Nandira Colliery

(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
02-May-25	Nandira Colony	189	74	35	11.64	34.17	Local Transportation,	About 500m
03-May-25	Nandira Colony	166	65	31	18.02	26.74	Local Transportation,	About 500m
05-May-25	East of the Mine, Natedi Village (Reported Only)	148	55	26	13.89	34.92	Coal Transportation Road	About 2km
06-May-25	East of the Mine, Natedi Village (Reported Only)	161	62	29	12.10	21.46	Coal Transportation Road	About 2km
09-May-25	Nandira Colony	142	53	25	11.94	28.36	Local Transportation,	About 500m
10-May-25	Nandira Colony	147	55	27	13.23	33.96	Local Transportation,	About 500m
12-May-25	East of the Mine, Natedi Village (Reported Only)	167	65	32	13.89	31.94	Coal Transportation Road	About 2km
13-May-25	East of the Mine, Natedi Village (Reported Only)	151	54	28	12.01	33.43	Coal Transportation Road	About 2km
16-May-25	Nandira Colony	142	54	27	18.57	30.50	Local Transportation,	About 500m
17-May-25	Nandira Colony	155	56	29	13.43	32.06	Local Transportation,	About 500m
19-May-25	East of the Mine, Natedi Village (Reported Only)	130	48	25	19.19	32.19	Coal Transportation Road	About 2km
20-May-25	East of the Mine, Natedi Village (Reported Only)	126	41	23	11.06	21.90	Coal Transportation Road	About 2km
23-May-25	Nandira Colony	138	49	26	13.51	31.20	Local Transportation,	About 500m
24-May-25	Nandira Colony	158	67	32	14.30	33.96	Local Transportation,	About 500m
26-May-25	East of the Mine, Natedi Village (Reported Only)	129	49	26	14.62	24.24	Coal Transportation Road	About 2km
27-May-25	East of the Mine, Natedi Village (Reported Only)	119	45	24	14.26	28.23	Coal Transportation Road	About 2km
30-May-25	Nandira Colony	167	71	33	9.56	17.56	Local Transportation,	About 500m
31-May-25	Nandira Colony	153	53	29	15.36	18.23	Local Transportation,	About 500m

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

NAQS, 2009		100	60	80	80
------------	--	-----	----	----	----

*Atk*

**AMBIENT AIR QUALITY DATA**

Area :

Talcher

(Reference Station)

Project :

Mandapal Sand Mine

(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
02-May-25	Near Pachismeshwar Temple	164	64	31	15.02	39.19	Mining Activity	Less than 500m
02-May-25	Near Mandapal Chowk	162	64	30	18.35	33.02	Mining Activity	Less than 500m
03-May-25	Near Mandapal Chowk	135	53	25	17.93	36.32	Mining Activity	Less than 500m
03-May-25	Near Pachismeshwar Temple	179	71	33	10.89	19.34	Mining Activity	Less than 500m
09-May-25	Near Mandapal Chowk	129	51	24	18.39	20.06	Mining Activity	Less than 500m
09-May-25	Near Pachismeshwar Temple	157	63	29	11.68	35.49	Mining Activity	Less than 500m
10-May-25	Near Mandapal Chowk	148	58	28	10.14	28.23	Mining Activity	Less than 500m
10-May-25	Near Pachismeshwar Temple	164	64	31	13.76	37.97	Mining Activity	Less than 500m
16-May-25	Near Mandapal Chowk	118	44	21	15.90	24.52	Mining Activity	Less than 500m
16-May-25	Near Pachismeshwar Temple	152	55	29	15.47	20.06	Mining Activity	Less than 500m
17-May-25	Near Mandapal Chowk	126	46	26	16.93	13.43	Mining Activity	Less than 500m
17-May-25	Near Pachismeshwar Temple	163	61	32	19.69	23.03	Mining Activity	Less than 500m
23-May-25	Near Pachismeshwar Temple	139	50	26	14.95	27.49	Mining Activity	Less than 500m
23-May-25	Near Mandapal Chowk	127	61	22	19.36	21.11	Mining Activity	Less than 500m
24-May-25	Near Mandapal Chowk	151	57	29	17.01	27.37	Mining Activity	Less than 500m
24-May-25	Near Pachismeshwar Temple	144	55	27	22.69	25.81	Mining Activity	Less than 500m
30-May-25	Near Mandapal Chowk	134	59	24	17.73	24.76	Mining Activity	Less than 500m
30-May-25	Near Pachismeshwar Temple	133	52	24	12.71	22.68	Mining Activity	Less than 500m
31-May-25	Near Pachismeshwar Temple	126	41	22	22.97	30.54	Mining Activity	Less than 500m
31-May-25	Near Mandapal Chowk	148	53	27	12.09	24.24	Mining Activity	Less than 500m

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

100 00 80 80

*[Handwritten Signature]*



सीएमपीडीआई  
निर्देशक  
cmpdi  
Miri Rotno

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Talcher

Project	Nandira							
Monitoring Station	Near Natedi Village (Reported Only)							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
05-May-2025	<20.0	20.18	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
06-May-2025	<20.0	13.10	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
12-May-2025	<20.0	25.42	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
13-May-2025	<20.0	1.48	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
19-May-2025	<20.0	20.43	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
20-May-2025	<20.0	24.37	<0.1	<1.0	<1.0	0.6	BQL(QL=0.7)	BQL
26-May-2025	<20.0	12.05	<0.1	<1.0	<1.0	0.7	BQL(QL=0.7)	BQL
27-May-2025	<20.0	16.77	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
Standard	400(24 hours)	180(hour)	1.0(24 hours)	6.0(Annual)	20(Annual)	04(1 hours)	01(annual)	05(annual)

*[Handwritten Signature]*

*[Handwritten Signature]*  
Authorized Signatory  
CMPDI, RI-VII, LAB  
BHIRANESWAR



सीएमपीडीआई  
विश्वी सान  
cmpdi  
Mini Rotro

AMBIENT AIR QUALITY DATA (NAAQS PARAMETER)

Area: Talcher

Project	Nandira							
Monitoring Station	Nandira Colony							
Date of sampling	Ammonia (NH <sub>3</sub> )	Ozone (O <sub>3</sub> )	Lead (Pb)	Arsenic (As)	Nickel (Ni)	CO	Benzo (a) Pyrene	Benzene
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\text{mg}/\text{m}^3$ )	( $\text{ng}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
02-May-2025	<20.0	11.27	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
03-May-2025	<20.0	19.38	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
09-May-2025	<20.0	24.63	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
10-May-2025	<20.0	15.72	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
16-May-2025	<20.0	13.37	<0.1	<1.0	<1.0	1.2	BQL(QL=0.7)	BQL
17-May-2025	<20.0	17.82	<0.1	<1.0	<1.0	1.0	BQL(QL=0.7)	BQL
23-May-2025	<20.0	16.25	<0.1	<1.0	<1.0	1.3	BQL(QL=0.7)	BQL
24-May-2025	<20.0	22.27	<0.1	<1.0	<1.0	0.9	BQL(QL=0.7)	BQL
30-May-2025	<20.0	18.08	<0.1	<1.0	<1.0	0.8	BQL(QL=0.7)	BQL
31-May-2025	<20.0	25.68	<0.1	<1.0	<1.0	1.1	BQL(QL=0.7)	BQL
Standard	400(24 hours)	180(hour)	1.0(24 hours)	6.0(Annual)	20(Annual)	04(1 hours)	01(annual)	05(annual)

*[Handwritten signature]*

Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएनपीडीआई  
CMPDI  
Bhubaneswar

TABLE--

**NOISE LEVEL MONITORING DATA**

AREA :

Talcher

PROJECT :

Deulbera Colliery

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
14-May-25	Manager's Office	69.7	49.9
28-May-25	Manager's Office	59.9	50.3

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, RI-VII, LAB  
BHUBANESWAR





सीएमपीडीआई  
CMPDI  
भुवनेश्वर

TABLE--

**NOISE LEVEL MONITORING DATA**

AREA :

Talcher

PROJECT :

Nandira Colliery

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
14-May-25	Project Office	70.3	52.1
14-May-25	Sub Station, Nandira Colliery	67.3	49.1
28-May-25	Project Office	61.7	53.4
28-May-25	Sub Station, Nandira Colliery	63.5	53.4

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)

  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR





ଶ୍ରୀରାମପିଣ୍ଡିଆରୀ  
ସର୍ବିସ୍  
cmpdi  
ଭୁବନେଶ୍ୱର

TABLE--

**NOISE LEVEL MONITORING DATA**

AREA :

Talcher

PROJECT :

Talcher Colliery

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
14-May-25	Officers Club, Talcher Area	71.3	50.3
14-May-25	Near Canteen, Talcher Colliery	69.7	49.7
28-May-25	Officers Club, Talcher Area	57.1	48.1
28-May-25	Near Canteen, Talcher Colliery	59.1	49.3

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, RI-VII, LAB  
BHUBANESWAR





सीएनपीडीआई  
CMPDI  
AIR & SOUND

TABLE--

**NOISE LEVEL MONITORING DATA**

AREA :

Talcher

PROJECT :

Mandapal Sand Mine

DATE OF SAMPLING	STATION	Noise Level Measurement in Leq dB(A)	
		DAY	NIGHT
14-May-25	Near Gopinathpur Village	62.3	46.7
28-May-25	Near Gopinathpur Village	47.1	37.8

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)

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

*[Signature]*



सीएनपीडीआई  
CMPDI  
भुवनेश्वर

TABLE--

**EFFLUENT QUALITY DATA**

Area :

Talcher

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

Project :

Talcher Colliery

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
15-May-25	Talcher Colliery Sedimentation Tank Discharge	7.29	<4.0	27	24	-	
30-May-25	Talcher Colliery Sedimentation Tank Discharge	6.78	<4.0	27	20	-	

*Prof. Ananta Kumar*  
Authorized Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

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

*A. Ananta*



सीएनपीडी  
एन सी  
cmpdi

TABLE--

**EFFLUENT QUALITY DATA**

Area :

Talcher

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

Project :

Nandira Colliery

Date of Sampling	Sampling Station	pH	Oil & Grease	TSS	COD	BOD	Remarks
14-May-25	Nandira Colliery Sedimentation Tank Discharge	7.21	<4.0	23	12	-	
30-May-25	Nandira Colliery Sedimentation Tank Discharge	7.18	<4.0	28	16	-	

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

*K. Pattnaik*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*A. Pattnaik*



सीएमपीडी आई  
RI-VII  
cmpdi  
भुवनेश्वर

## Drinking Water Quality Data Talcher Area

Project / OCP	Talcher U/G		Indian Drinking Standards (IS-10500):2012	
	Canteen Water, GM Office	Canteen , Talcher Colliery		
Monitoring Station				
Date of Sampling	13-May-2025	13-May-2025	Acceptable	Permissible
Colour(Hazen)	3	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	5
pH	7.41	7.12	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	54.63	63.03	200	600
Chloride(mg/L)	13.61	21.39	250	1000
Sulphate(mg/L)	119.35	92.24	200	400
Nitrate(mg/L)	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	191.23	159.36	200	600
Calcium(mg/L)	54.3	38.33	75	200
Fluoride(mg/L)	0.90	0.48	1	1.5
Total Dissolve Solid(mg/L)	312	278	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	1.0	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

*T. H. Anand*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*A. Jais*



सीएमपीडी  
ମିଳି ୧୨  
cmpdi  
ମିଳି ୧୨

## Drinking Water Quality Data Talcher Area

Project / OCP	Nandira U/G		Indian Drinking Standards (IS-10500):2012	
	Canteen , Nandira Colliery	Pit Top, Nandira Colliery		
Monitoring Station				
Date of Sampling	14-May-2025	14-May-2025	Acceptable	Permissible
Colour(Hazen)	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	5
pH	7.08	7.28	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	58.83	67.23	200	600
Chloride(mg/L)	13.61	13.61	250	1000
Sulphate(mg/L)	106	101.4	200	400
Nitrate(mg/L)	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	167.33	167.33	200	600
Calcium(mg/L)	38.33	39.92	75	200
Fluoride(mg/L)	0.61	0.57	1	1.5
Total Dissolve Solid(mg/L)	282	286	500	2000
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.20	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	1.0	No relaxation
Zinc(mg/L)	<0.04	0.09	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

*Handwritten signature*

*Handwritten signature*  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR



सीएमपीडीआई  
विद्ये सत्यं  
cmpdi  
Mini Ratna

## Drinking Water Quality Data Talcher Area

Project / OCP	Deulbera U/G			Indian Drinking Standards (IS-10500):2012	
	Deulbera Colliery Mine Discharge at Pit Top	Rani Park Submersible Pump	Deulbera Manager Office Tap Water		
Date of Sampling	14-May-2025	14-May-2025	14-May-2025	Acceptable	Permissible
Colour(Hazen)	4	1	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	3	1	5
pH	7.72	7.46	6.38	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	138.67	50.42	54.63	200	600
Chloride(mg/L)	35.01	9.72	35.01	250	1000
Sulphate(mg/L)	122.80	6.95	104.76	200	400
Nitrate(mg/L)	5.03	<0.5	5.13	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	250.99	55.78	199.2	200	600
Calcium(mg/L)	65.48	14.37	44.72	75	200
Fluoride(mg/L)	0.58	0.53	0.46	1	1.5
Total Dissolve Solid(mg/L)	430	102	342	500	2000
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	0.23	0.1	0.3
Iron(mg/L)	<0.1	<0.1	<0.1	1.0	No relaxation
Zinc(mg/L)	<0.04	<0.04	0.15	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

अनुमोदित  
Authorised Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*[Handwritten Signature]*



सीएमपीडीआई  
मिनी रत्न  
cmpdi  
Mini Ratna

## Drinking Water Quality Data Talcher Area

Project / OCP	Handhidhua Colliery			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	19X Cut Road Bore Hole Point	Pit Top Water	RWSS (Pit Top Water )	
Date of Sampling	14-May-2025	14-May-2025	14-May-2025	Acceptable	Permissible
Colour(Hazen)	4	3	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	3	1	5
pH	6.5	6.51	6.58	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	67.23	21.01	58.83	200	600
Chloride(mg/L)	29.17	35.01	29.17	250	1000
Sulphate(mg/L)	157	37.19	140.2	200	400
Nitrate(mg/L)	<0.5	11.17	<0.5	45	No relaxation
Total Hardness (Ca CO <sub>3</sub> )(mg/L)	243.02	107.57	215.14	200	600
Calcium(mg/L)	55.89	30.34	49.51	75	200
Fluoride(mg/L)	0.48	0.89	0.44	1	1.5
Total Dissolve Solid(mg/L)	412	228	368	500	2000
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.27	<0.04	0.25	0.1	0.3
Iron(mg/L)	<0.1	<0.1	<0.1	1.0	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

*Taffanale*  
Authorised Signatory  
CMPDI, KI-VII, LAB  
BHUBANESWAR

*A. Mohan*



सीएमपीडीआई  
विनोद कान  
cmpdi  
Mini Scheme

## Drinking Water Quality Data Talcher Area

Project / OCP	Talcher U/G		Indian Drinking Standards (IS-10500):2012	
	Canteen Water, GM Office	Canteen , Talcher Colliery		
Monitoring Station				
Date of Sampling	13-May-2025	13-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	8.03	10.78	-	-
Potassium(mg/L)	5.27	5.67	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

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

*[Signature]*



सीएमपीडीआई  
विश्वे ज्ञान  
cmpdi  
1991 BIDD

## Drinking Water Quality Data Talcher Area

Project / OCP	Nandira U/G		Indian Drinking Standards (IS-10500):2012	
	Canteen , Nandira Colliery	Pit Top, Nandira Colliery		
Date of Sampling	14-May-2025	14-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	5.40	8.44	-	-
Potassium(mg/L)	4.89	5.04	-	-
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	0.2	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	-	-

  
Authorized Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR





सीएमपीडीआई  
रि-वी एन  
cmpdi  
Mini-Scheme

## Drinking Water Quality Data Talcher Area

Project / OCP	Deulbera U/G			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Deulbera Colliery Mine Discharge at Pit Top	Rani Park Submersible Pump		
Date of Sampling	14-May-2025	14-May-2025	14-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	17.14	4.26	14.85		
Potassium(mg/L)	10.02	1.48	7.87		
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	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

*Taffarail*  
Authorized Signatory  
CMPDI, RI-VII, LAB  
BHUBANESWAR

*1/1/25*



सीएमपीडीआई  
राज्य एवं  
cmpdi  
राज्य एवं

## Drinking Water Quality Data Talcher Area

Project / OCP	Handhidhua Colliery			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	19X Cut Road Bore Hole Point	Pit Top Water		
Date of Sampling	14-May-2025	14-May-2025	14-May-2025	Acceptable	Permissible
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	15.21	12.94	14.25	-	-
Potassium(mg/L)	8.91	5.16	8.35	-	-
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	1.0
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

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

*Talcher*