

ମହାନଦୀ କୋଲଫିଲ୍ଡ୍ସ ଲିମିଟେଡ୍

महानदी कोलफील्ड्स लिमिटेड

Mahanadi Coalfields Limited
(A Subsidiary of Coal India Limited)

OFFICE OF THE PROJECT OFFICER
INTEGRATED LAKHANPUR-BELPAHAR-LILARI
OPENCAST MINE, LAKHANPUR AREA
PO- BANDUBAHAL COLONY (768 211)
DIST-JHARSUGUDA, (ODISHA)

PL-08615-23103

Email Address- po-lkpp.mcl@coalindia.in



MCL

Ref. No.: MCL/LKPA/PO/Intg. LBL/ENVT/2025-26/2857

Date 23/10/2025

To

The Coal Controller,
Coal Controller's Organisation,
Ministry of Coal,
SCOPE MINAR,
5th floor, Core – II,
Laxmi Nagar, Delhi -110092.

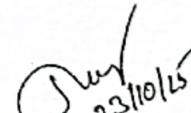
Sub: Status of half yearly monitoring of mine closure activities based on different milestones and timeframe as per approved mine closure plan for the period April 2025 to September 2025 in respect of ILBL OCP, Lakhanpur Area, MCL.

Sir,

Please find herewith the Half Yearly report of Mine Closure Activities during the period April, 2025 to September, 2025 in respect of ILBL OCP, Lakhanpur Area, MCL.

Thanking you

Yours faithfully,


23/10/25
GM(MIN)/Project officer
ILBL OCP

2/23
Lakhanpur Area
G.M (Min) / Project Officer
Integrated LBL OCP
Lakhanpur Area MCL

Copy to:

- 1.The coal controller, Govt. of India, Ministry of coal, 1 Council house street, Kolkata-700001.
- 2.OSD, Coal controllers organization, Anand vihar, MCL Complex, Burla, Sambalpur, Odisha- 768020
- 3.General Manager, Lakhanpur Area.
- 4.General Manager, (Envt. & Forest), MCL HQ.
- 5.GM(Min.)/Project Officer, ILBL OCP.
- 6.Area Environment officer, Lakhanpur
- 7.P.E.O, ILBL OCP
8. Office copy.

HALF-YEARLY REPORT OF MINE CLOSURE ACTIVITIES

Monitoring of Mine Closure Activities based on different Milestones and timeframe as per approved Mine Closure Plan for the period April 2025 to September 2025

a) Brief description of Mine: -


1. Name of Mine: -**Integrated Lakhapur-Belpahar-Lilari Opencast Project**
2. Name of Company: -**Mahanadi Coalfields Limited**
3. Mine Type (OC/UG/Mixed): -**Opencast**
4. GR (Mill Tones): -**1720.256 Mt**
5. Mineable Reserve and PRC (MT): -**1291.52 Mt**
6. Lease Hold Area (Ha): -**4399.246 Ha**
7. Total Surface Area (Ha): -**4742.877 Ha.**
8. Life of Mine: - **41 Years** as per approved MP & MCP
9. Balance Life: - **40 Years**

b) Milestones wise parameters for progressive mine closure activities against approved Mine Closure Plan are as given under: -

SI No.	Name of Mine Closure Activity Milestones	Status of Completion during the current year (April 2025 - September 2025)		Reason for any shortfall
		Target	Achievement	
1.	Coal produced (in Te)	38010000	15635496.88	-
2.	Void area (in Ha)	-	0.00	Remarks: (Decoaled area - Backfilled area) is taken as void area.
3.	Top soil removed (m ³)	-	9311292.86	Remarks: Top soil which is being excavated is spread throughout the OB dumps and slopes.
4.	Spreading of Top soil (m ³)	-	9311292.86	Remarks: Top soil which is being excavated is spread throughout the OB dumps and slopes.
5.	Removal of OB (m ³)	88500000	44308830.63	

6.	Void backfilled (m ³)	-	-	Remarks: OB which is being excavated is progressively back filled
7.	Land reclaimed (Ha.)	Nil	Nil	-
8.	Type of reclamation			
A	Physical reclamation	NIL	NIL	Rehandling of existing OB dumps will be carried out.
B	Biological reclamation	NIL	NIL	Biological Reclamation of External OB Dump of 22.65 Ha has been Completed. Further, Rehandling of the existing OB dumps will be carried out.
9.	Plantation			
A	Plantation in safe zone	NIL	NIL	Biological Reclamation of External OB Dump of 22.65 Ha has been Completed.
B	Plantation in OB dump area	NIL	NIL	
10.	Air Quality management (Descriptive report to be attached)	Attached as Annexure-I		
11.	Water Quality Management (Descriptive report to be attached)	Attached as Annexure-II		
12.	Fencing of mine void area	--	--	Mining in progress

13.	Stowing of U/G mines (m ³)	N.A.	N.A.	N.A.
14.	Surface filling if any, for carving mines (m ³) (Descriptive report to be attached)	N.A.	N.A.	N.A.


23/10/15
Signature of Project officer,

Designation :GM Mining/ Project officer
G.M (Min) / Project Officer
Integrated LBL OCP
Lakhanpur Area MCL

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**Ambient Air Quality Monitoring Data
For Compliance station at BOCM Workshop (Core Zone)**

Date of Sampling	PM 2.5	PM10	SO ₂	NO _x	SPM
11-Apr-25	52	123	14.72	31.02	236
24-Apr-25	46	96	12.13	22.19	218
07-May-25	40	93	13.31	22.22	184
21-May-25	38	83	11.96	20.08	189
07-Jun-25	35	76	10.79	29.66	171
30-Jun-25	37	81	11.94	21.88	170
07-Jul-25	40	81	13.72	29.94	188
22-Jul-25	43	88	16.68	34.02	198
07-Aug-25	41	94	16.20	36.42	206
22-Aug-25	45	102	17.74	25.74	213

**Ambient Air Quality Monitoring Data
For Compliance station at Kirulbal Village (Core Zone)**

Date of Sampling	PM 2.5	PM10	SO ₂	NO _x	SPM
11-Apr-25	48	115	12.10	24.20	207
23-Apr-25	51	105	12.54	25.41	233
07-May-25	31	67	10.59	32.93	166
21-May-25	35	73	12.54	25.41	189
07-Jun-25	34	70	12.10	31.75	173
20-Jun-25	39	88	12.99	19.94	177
07-Jul-25	37	85	12.10	24.20	188
22-Jul-25	40	83	12.99	38.68	194
07-Aug-25	28	65	12.10	24.20	163
22-Aug-25	43	110	12.10	18.10	202

**Ambient Air Quality Monitoring Data
For Compliance station at Lilari Magazine House (Core Zone)**

Date of Sampling	PM 2.5	PM10	SO ₂	NO _x	SPM
11-Apr-25	49	117	10.75	24.47	217
23-Apr-25	51	98	9.93	21.33	227
07-May-25	46	95	13.94	37.64	215
21-May-25	43	89	16.45	32.55	209
07-Jun-25	39	86	10.75	25.85	189
20-Jun-25	42	95	14.40	21.77	203
07-Jul-25	45	108	10.75	24.47	211
22-Jul-25	41	87	14.55	29.77	195
07-Aug-25	40	88	10.75	24.47	189
22-Aug-25	40	93	10.75	21.75	189

Ambient Air Quality Monitoring Data
For Compliance station at West of Lakhanpur Quarry Near Solada (Core Zone)

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM
11-Apr-25	52	125	11.37	23.28	231
24-Apr-25	45	87	13.20	34.09	206
07-May-25	39	81	10.02	28.21	203
21-May-25	37	79	13.60	31.58	188
07-Jun-25	35	76	8.90	18.53	174
30-Jun-25	39	91	14.42	27.14	196
07-Jul-25	44	96	17.10	33.56	215
22-Jul-25	43	91	18.48	29.87	207
07-Aug-25	41	87	14.55	23.99	205
22-Aug-25	43	95	17.55	19.33	206

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Drinking Water Quality Data Lakhanpur Area

Project / OCP	Integrated LBL OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	LKP Project Office	IWSS Inlet-BIT	IWSS Outlet-BIT	Acceptable
Date of Sampling	12-Jun-2025	12-Jun-2025	12-Jun-2025		
Colour(Hazen)	2	3	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	3	1	5
pH	7.67	7.92	7.76	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	92	96	100	200	600
Chloride(mg/L)	10	12	10	250	1000
Sulphate(mg/L)	19.52	16.32	14.76	200	400
Nitrate(mg/L)	<0.5	<0.5	<0.5	45	No relaxation
Total Hardness (Ca CO ₃)(mg/L)	96	88	84	200	600
Calcium(mg/L)	25.6	19.2	17.6	75	200
Fluoride(mg/L)	0.55	<0.3	<0.3	1	1.5
Total Dissolve Solid(mg/L)	185	180	192	500	2000
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.04	<0.04	<0.04	0.1	0.3
Iron(mg/L)	<0.1	<0.1	<0.1	1	No relaxation
Zinc(mg/L)	<0.04	<0.04	<0.04	5	15
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.003	No relaxation
Total Chromium (mg/L)	<0.01	<0.01	<0.01	0.05	No relaxation
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	2.4



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Drinking Water Quality Data Lakhanpur Area

Project / OCP	Integrated LBL OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	LKP Project Office	IWSS Inlet-BIT	IWSS Outlet-BIT	Acceptable
Date of Sampling	12-Jun-2025	12-Jun-2025	12-Jun-2025		
Selenium(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Sodium(mg/L)	14.67	15.16	14.85		
Potassium(mg/L)	2.23	1.93	2.25		
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2	1
MPN (Index/100 ml)	Not Detected	Not Detected	Not Detected	-	-

Signature
Authorized Signatory
CMPDI, RI-VII, LAB
BHUBANESWAR

Signature



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Surface Water Quality Data Lakhanpur Area

Project/OCP	LBL OCP			IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Confluence point of Lilari Nallah with IB River	Jurabaga Pond	Adhapada Village	
Date of sampling	1-Jul-25	2-Jul-25	0703-2025	
pH	6.80	6.90	6.80	6.5-8.5
Color (Hazen unit)	2	2	2	300
Dissolved Oxygen(mg/L)	6.7	6.5	6.3	4
BOD (3 days 27°C)(mg/L)	<2	<2	<2	3
Chlorides(mg/L)	7.79	38.94	15.58	600
Sulphate(mg/L)	54.16	15.71	5.32	400
Nitrate(mg/L)	17.42	2.15	0.55	50
Fluoride(mg/L)	0.58	0.47	0.30	1.5
Total Hardness(mg/L)	35.76	47.68	23.84	-
Total dissolved solids (mg/L)	182	141	92	1500
TSS(mg/L)	61	37	34	-
Copper(mg/L)	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	0.11	<0.1	<0.1	50
Zinc(mg/L)	0.05	0.1	0.08	15
Lead(mg/L)	<0.005	<0.005	<0.005	0.1
Cadmium(mg/L)	<0.001	<0.001	<0.001	0.01
Total Chromium (mg/L)	<0.01	<0.01	<0.01	-
Arsenic(mg/L)	<0.005	<0.005	<0.005	0.2
Selenium(mg/L)	<0.005	<0.005	<0.005	0.05
Chromium(as Cr ⁶⁺)(mg/L)	<0.05	<0.05	<0.05	0.05
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.005
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	0.1
MPN (Index/100 ml)	46	130	110	-
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	0.2

Authorised Signatory
CMPDI, P. VII, LAB
BHUBANESWAR

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Surface Water Quality Data Lakhanpur Area

Project/OCP	LBL OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
	NAME OF STATIONS	Pulijhor Stream Near Tingismal Village (u/s of Lakhanpur OCP)	Pulijhor Stream Near Darlipalil Village before Confluence to Lilari Nallah (d/s of Lakhanpur OCP)	Lilari Nallah Near Kudaloi Village (u/s of Lakhanpur OCP)	
Date of Sampling	27-Jun-25	28-Jun-25	29-Jun-25	30-Jun-25	6.5-8.5
pH	6.57	6.84	6.90	6.61	300
Color (Hazen unit)	2	2	2	3	4
Dissolved Oxygen(mg/L)	6.3	6.1	6.6	6.4	3
BOD (3 days 27°C)(mg/L)	<2	<2	<2	<2	600
Chlorides(mg/L)	9.73	11.68	5.84	9.73	400
Sulphate(mg/L)	76.62	78.70	33.64	84.81	50
Nitrate(mg/L)	2.97	2.99	17.25	3.16	1.5
Fluoride(mg/L)	0.47	0.41	0.50	0.72	-
Total Hardness(mg/L)	31.83	123.18	35.76	115.23	1500
Total dissolved solids (mg/L)	124	166	112	188	-
TSS(mg/L)	34	38	39	55	1.5
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	50
Iron(mg/L)	<0.1	<0.1	0.12	<0.1	15
Zinc(mg/L)	0.04	0.06	0.09	0.06	0.1
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01
Cadmium(mg/L)	<0.001	<0.001	<0.001	<0.001	-
Total Chromium (mg/L)	<0.01	<0.01	<0.01	<0.01	0.2
Arsenic(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Selenium(mg/L)	<0.005	<0.005	<0.005	<0.005	0.05
Chromium(as Cr ⁶⁺)(mg/L)	<0.05	<0.05	<0.05	<0.05	0.005
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.1
Oil & Grease (mg/L)	<4.0	<4.0	<4.0	<4.0	-
MPN (Index/100 ml)	43	58	63	84	0.2
Residual Free Chlorine(mg/L)	<0.2	<0.2	<0.2	<0.2	

S. Attanai
Authorised Signatory
C.M.P.D.I., E-7/II, LAB
SHUBANGS NAR

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