

ENVIRONMENTAL STATEMENT

(Form – V)

*Under Rule – 14 of Environment Protection Rules, 1986
and Amendment, 1993
of*

Jagannath Area, MCL

For the year 2024-25



MCL

Mahanadi Coalfields Ltd.

**Post: Jagruti Vihar, Burla,
Dist: Sambalpur, Orissa-768020**

ENVIRONMENTAL STATEMENT

(Form-v)

Under Rule—14 Of Environment Protection Rules,1986

And Amendment,1993

Of

Ananta Opencast Project

For the year 2024—25



MCL

Mahanadi Coalfields Ltd.

Post: Jagruti Vihar, Burla

Dist : Sambalpur, Odisha—768020

FORM-V
ENVIRONMENTAL STATEMENT

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING
31ST MARCH 2025

PART-A

(i)	Name and address of the owner / Occupier of the Industry operation or process (<i>Name of the Project Officer/ Sub-Area Manager & Office address to be given.</i>)	:	Sri- Akshaya Kumar Das GM(Min)/Project Officer, Office of the Project Officer, Ananta Opencast Project, P.O. Dera- 759 103, Dist.: Angul, Orissa
(ii)	Industry Category	:	Primary (Coal Mining Operation)
(iii)	(a) Production Capacity	:	20 MTPA
	(b) Coal Production during the year 2024-25	:	19.99 MT
(iv)	Year of Establishment	:	1988
(v)	Date of last Environmental Statement Submitted	:	30.09.2024

PART- B

WATER AND RAW MATERIAL CONSUMPTION

Note: Average Water Consumption in (KL/Day) for the whole year is given. Raw material consumption is given per unit of Coal produced.

(I) WATER CONSUMPTION (KL/DAY):

SL	Industrial / Mining	Consumption in KL/Day
1(a)	Haul Road Dust Suppression	1500.00
(b)	Dust Suppression at CHP	70.00
(c)	Dust Suppression at Siding	550.00
(d)	Fire Fighting	180.00
(e)	Workshop	50.00
(f)	Others (Service building, Watering Green Belt etc.)	30.00
2.	Domestic	NIL *
3.	Grand Total in KL/Day	2380.00

* Domestic water supply from IWSS Lingaraj Area Talcher.

Name of Product	Water consumption per Unit of Product(Liter/ton)	
	2023-24	2024 -25
Coal	34.22	43.43



(ii) RAW MATERIAL CONSUMPTION (Per ton of coal)

Name of Raw Material	Consumption of Raw Material (Per Ton of Coal Produced)	
	2023-24	2024-25
H.S. Diesel (Ltrs/ T)	2.04 (Dept. +Cont.)	2.52(Dept. +Cont.)
Petrol(Ltrs/ T)	NIL	NIL
Lubricants(Ltrs/ T)	0.025(Dept. +Cont.)	0.024(Dept. +Cont.)
Electricity(kwh/T)	0.685	0.352
Explosives(Kg/T)	0.746	0.793

PART-C**POLLUTION DISCHARGED TO ENVIRONMENT/UNIT OF OUTPUT***(Parameters as specified in the consent issued)*

Pollutants	Quantity of Pollutants discharged mass/day (KL / day)	Concentration of Pollutants in discharges (mass/ volume)	% of Variation from Prescribed Standards with Reasons
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Effluent Water (Annual average)

		Mine sump	OGT Outlet	STP Outlet	Within Prescribed Standard
TSS(mg/l)	Not possible to Quantify	--	33.00	32.54	
BOD(mg/l)		--	--	<2	
COD(mg/l)		--	26.00	--	
pH		7.4	7.57	7.4	
O&G (mg/l)		--	<4.00	--	
MPN/100ml		-	-	56.62	

AIR (Ambient Air Quality of one station- Annual average: Gutha Shahi A2)

SPM(ug/m3)	Not Possible to Quantify		188.52
PM 10 (ug/m3)			82.22
PM 2.5 (ug/m3)			41.56
SO2(ug/m3)			15.04
NOx (ug/m3)			24.48

PART-D**HAZARDOUS WASTES**

As specified under Hazardous Waste Management & Handling Rules, 1989)

	Hazardous Waste	Total Quantity (Liter/Kg)	
		During the financial year 2023-24	During the current financial year 2024-25
(a)	From Process ;		
i	Burnt Oil recovered in Workshop	43825 Ltrs	44770 Ltrs
ii	Oil soaked filters in Nos.	435 Nos.	334 nos.
(b)	From Pollution Control facility :		
i	Oil / Oil emulsion recovery from Oil & Grease Trap.	10 Ltrs	11 Ltrs
ii	Oily sludge from ETP	10 m ³	50 m ³
iii	Chemical Waste (if any)	NIL	NIL

PART – E
SOLID WASTES (Other than Hazardous)

	Particulars	Total Quantity of Solid Waste Generated (Mm ³).	
		2023-24	2024-25
a	From Process(Top Soil & OB)	33.871 Mm ³	35.397 Mm ³
b	From Pollution Control facilities (STP & Shed-Pond Sludge)	STP - 48 m ³	STP - 50 m ³
c	(I) Qnty. Recycled or Re-utilized (OB Back filled)	33.871 Mm ³	35.397 Mm ³
	(ii) Sold	NIL	NIL
	(iii) Disposed	NIL	NIL

PART-F

PLEASE SPECIFY THE CHARACTERSTICS (IN TERMS OF CONCENTRATION AND QUANTUN) OF HAZARDOUS AS WELL AS SOLID WASTE AND INDICATE THE DISPOSAL PRACTICE ADPOTED FOR BOTH THESE CATEGORIES OF WASTES.

(I) Hazardous Wastes:

Name of Hazardous Waste	Quantity generated in the year-2024-25	Disposal Practices
Burnt oil from work shop (Ltrs)	44770 Ltrs	Auction to authorized recyclers
Oil soaked filter from workshop	334 Nos.	Disposed in Impervious Pit
Oil & Grease from ETP/OGT (Ltrs)	11 Ltrs	Auction to authorized recyclers
Oily Sludge from ETP/OGT (m ³)	50 m ³	Disposed in Impervious Pit
Oil emulsion	NIL	-
Chemical Waste, if any	NIL	-
Battery(Nos.)	55 Nos.	Auction to authorized recyclers

Note: A detailed note on disposal practices of the above waste should be given separately.

(II) Solid Wastes:

Solid Waste	Quantity generated In the year 2024-25	Disposal Practices
Top Soil (Mm ³)	0.38 Mm ³	Spread over the backfilled area for reclamation
OB (Mm ³)	35.017 Mm ³	Used to filled quarry voids.
Sludge from STP	50 m ³	Used as manure

Land Reclamation and OB disposal – Progressive till March- 2025

	Area (Ha.)	Volume / No. of Plants
(1) External OB Dump	10.80 Ha	1.96 Mm ³ /27000 Nos.
(2) Excavated land	667.15 Ha	292.221 Mm ³
(3) Land affected (1+2)	677.95 Ha	-
(4) Backfilled (Out of 2)	419.84 Ha	290.261 Mm ³ + 12.34 Mm ³ (From Bhubaneswari OCP) Total--302.601 Mm ³
(5) Land Physically reclaimed(Out of 3)	142 Ha	
(6) Land Bio logically reclaimed(Out of 3)	116.1*Ha	331874Nos.

* Out of 116.1 Ha Biological reclamation, 10.80 Ha is external OB dump reclamation.

PART-G

**IMPACT OF POLLUTION CONTROL MEASURES ON CONSERVATION OF
NATURAL RESOURCES AND CONSEQUENTLY ON COST OF PRODUCTION**

In order to carry out mining in an eco- friendly manner, a detail EMP was prepared by Regional Institute- VII of CMPDIL. The main pollution control measures suggested in EMP along with the measures implemented so far have been summarized in the Table 1.1 to 1.2

TABLE-1.1
AIR POLLUTION CONTROL MEASURES

Sl.No	EMP PROVISIONS	Whether provided or not	Remarks
1.	Watering and grading of all roads to minimize air borne dust from vehicles.	Provided	
2.	Biological reclamation of land	Provided	
3.	Green Belt around mine & infrastructures.	Provided	
4.	Drills fitted with dust control devices.	Provided	
5.	Dust Suppression/dust extraction system to be provided in CHP	Provided	
6.	Improved maintenance of Plant & Machinery	Provided	
7.	Mechanized coal transportation system	Provided	

TABLE-1.2**WATER POLLUTION CONTROL MEASURES**

Sl.N	EMP Provision	Whether provided or not	Remarks
1.	Mine Water is to be collected in central sump on dip side of pit. This will act as Sedimentation lagoon.	Provided	Total sump capacity = 29.6 Lakhs m³
2.	Run-off around reclamation area will be controlled by providing catch drains and sedimentation lagoon combination.	Provided	
3.	Surface run-off from external dump would be collected through a series of contour drains, which would be connected, to a water retention pond. The clear water from this pond will be discharged to natural watercourse.	Provided	
4.	Domestic wastewater will be treated in screens, oxidation pond/ aerated lagoon. Sanitary waste to be disposed off into septic tank & soak-away pit.	Provided	STP of 0.51 MLD Capacity provided
5.	Workshop effluent will be treated in Oil & Grease Trap & Sedimentation Tank.	Provided	ETP of 140 m³ capacity provided
6.	Zero discharge from Mine shall be maintained.	Maintained	
7.	Piezometer shall be installed for measurement of under- ground water depth and its quality.	Provided	PZ No.- MTP-05 Near Ananta canteen & two more piezometers are installed near Project Office & near Sub Station.

TABLE-1.3**LAND RECLAMATION**

S.No.	EMP Provisions	whether provided or not	Remarks
01.	Top Soil Management :- Proper stripping, storage and Relocation of topsoil.	Provided	
02.	Technical Reclamation of O.B Dump : Proper reshaping and regarding of top surface, providing drainage arrangement and top soil spreading for external and internal dumps.	Provided	
03.	Biological Reclamation :- Plantation of suitable yearly Species of herbs, shrubs & plants over technically Reclaimed dumps.	Provided	

Page- 6IMPACT OF POLLUTION CONTROL MEASURES ON COST OF PRODUCTION

Cost of Environmental Management during 2024-25 was Rs.4.88 per ton of Coal.

PART-H


Additional measures / investment proposal (2025-26) for environmental protection including abatement of pollution, prevention of pollution.

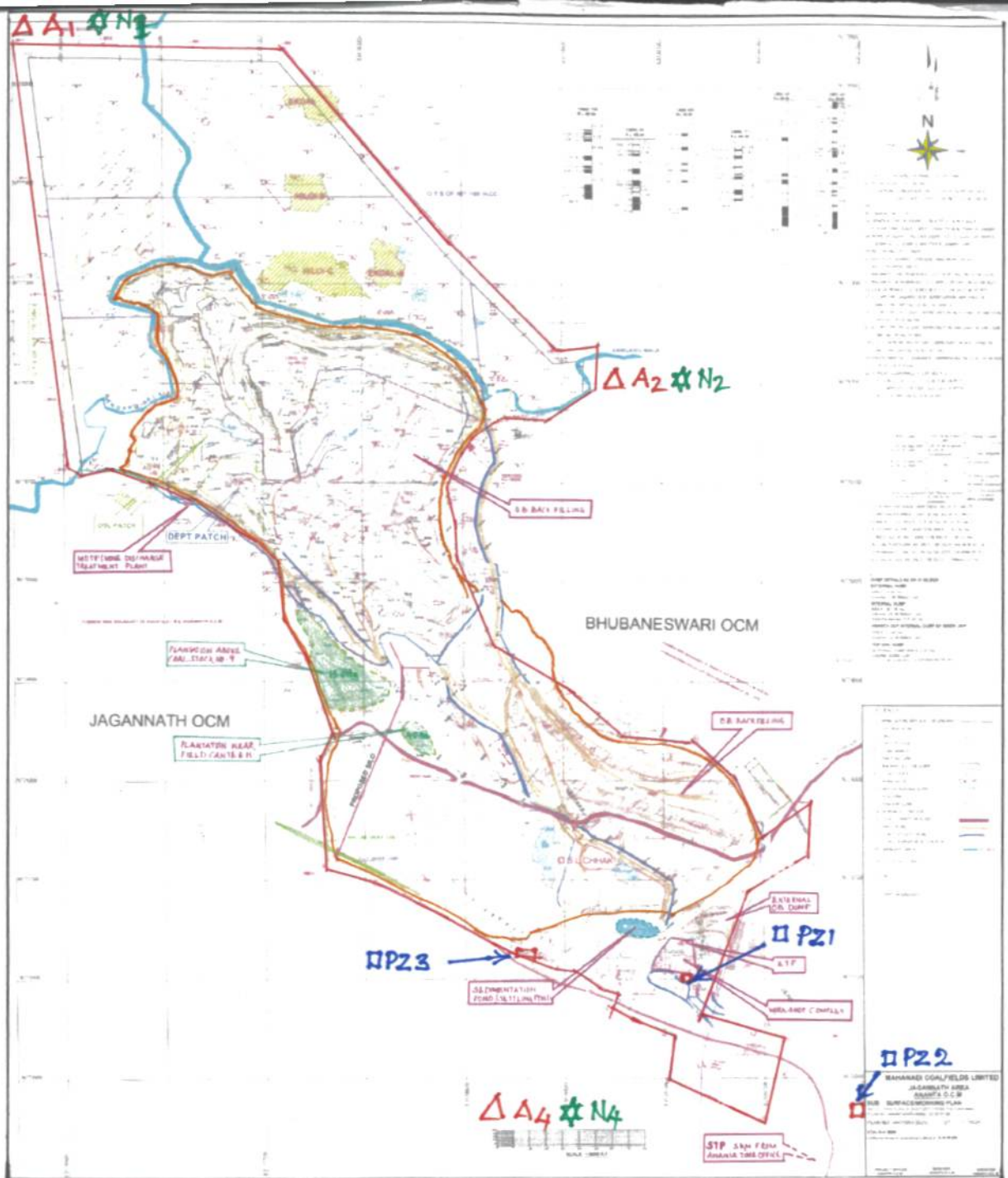
HEADS	AMOUNT in Rs. (approx. in lakhs)
CTO Fee	80.00
Dust suppression (Dept.)	300.00
Dust suppression (Contractual.)	60.00
Plantation	500.00
Environmental monitoring by CMPDIL	114.85
ETP and STP operation and maint. Cost	100.00
Cleaning of roads and service buildings	50.00
Installation of CAAQMS	65.00
Installation of Fog cannon	400.00
Installation of Wheel washing system	80.00
Installation of wind Barrier	1000.00
Installation of Env't. Display Board	2.50
Ground water abstraction charges	15.00
Deployment of mechanical road sweeper	60.00
Deployment of mobile fog cannon	100.00
Installation of DWLR	28.00
Construction of retaining wall	600.00
Grand total	3555.35

PART - I**ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT**

Note: Please attach a plan showing the relevant features like present working / quarry, External Dump, Back filling, Plantation, Sedimentation Pond / MDTP, O& G Trap, ETP, Workshop, CHP, STP etc and Environmental Monitoring Stations.


2.9.25
Env't. Officer,
Ananta OC Project


Project Officer,
Ananta OC Project
Project Officer
Ananta Opencast Project
Jagannath Area, MCL



AIR, NOISE & WATER MONITORING STATIONS.

- | | | |
|---|------------------------|------------------------|
| 1. GUTHA SAHI VILLAGE | $\Delta A_1 \star N_1$ | OW2 |
| 2. NORTH EAST OF MINE | $\Delta A_2 \star N_2$ | DERA TUBE WELL |
| 3. CENTRAL NURSERY OPP. GM OFFICE (JA) | $\Delta A_3 \star N_3$ | $\Delta A_3 \star N_3$ |
| 4. NEAR NBVL STATION JNC | $\Delta A_4 \star N_4$ | CENTRAL NURSERY |
| 5. ANANTA VIHAR COLONY TAP WATER | OW1 | OW1 |
| 6. DERA TUBE WELL WATER | OW2 | ANANTA VIHAR |
| 7. PIEZO METER (MTP-05) NEAR AOCF CANTEN | $\square PZ1$ | |
| 8. PIEZO METER (MTP-05) NEAR AOCF PO OFFICE | $\square PZ2$ | |
| 9. PIEZO METER (MTP-05) NEAR 33 kv. Sub. Stn. | $\square PZ3$ | |

Jb
2-9-25
SURVEY OFFICER
ANANTA OCP

Qm
2-9-25
ENVT. OFFICER
ANANTA OCP

Jb
2/9/25
PROJECT OFFICER
ANANTA OCP