

FORM-V

ENVIRONMENTAL STATEMENT

Environment statement for the financial year ending 31st March 2025

Part – A

- i) Name & Address of the owner/ occupier of the industry operation or process (Name of the Project Officer/ Sub-Area Manager & Office address to be given) : Shri Mootha Chandra Sekhar, Project Officer, Basundhara (West) OCP, Mahalaxmi Area, PO: Basundhara, Dist.: Sundargarh (Odisha), Pin: 770076.
- ii) Industry Category : Primary (Coal Mining Operation).
- iii) Production Capacity (Coal production during the year 2024-25) : 8.0 MT (539995.84 tons).
- iv) Year of establishment : 16.02.2004.
- v) Date of the last Environmental Statement submitted. : 30.09.2024.

Part – B

Water & Raw Material Consumption

Note: Average Water Consumption (Cum/ day) for the whole year is given. Raw material consumption is given per unit of coal produced.

(I) Water Consumption (Cum/ day):

Serial No.	Industrial/ Mining	Consumption in Cum/ day
1. a	Haul Road Dust Suppression	1772
b	Dust Suppression at CHP	N.A.
c	Dust Suppression at Siding	225
d	Fire Fighting	N.A.
e	Workshop	10.00
f	Others	5.00
2.	Domestic	Nil
	Total in kl/ day	2012

Name of the Product	Water Consumption per unit of product (ℓ/ t)	
	2023-24	2024-25
Coal	802.01	1359.97

(II) Raw Material Consumption (per ton of coal):

Name of Raw Material	Consumption of Raw Material (per ton of Coal produced)	
	2023-2024	2024-2025
H.S. Diesel (ℓ/ t)	1.068	1.568
Petrol (ℓ/ t)	0.00037	Nil
Lubricants (ℓ/ t)	0.019	0.028
Electricity (Units/ t)	4.877	1.812
Explosives (kg/ t)	0.051	0.020

Part – C

Pollution Discharged to Environment/ Unit of Output

(Parameter as specified in the ‘Consent’ issued)

Pollutants	Quantity of pollutants discharged (mass/ day)	Concentrations of pollutants in discharges (mass/ volume)			Percentage variation from prescribed standards with reasons
Monitoring Station: M1-Basundhara (E) OCP's Sump (Annual Average)					
		Mine Effluent	OGT Outlet	STP Outlet	Values within prescribed limits.
TSS (mg/ℓ)	Not possible to quantify	34.60	-	-	
BOD mg/ℓ)		-	-	-	
COD (mg/ℓ)		31.67	-	-	
pH		7.40	-	-	
O & G (mg/ℓ)		<4.00	-	-	
Ambient air quality of one station (Annual Average): Southwest of Working Face Gopalpur Village, Near CMPDI Camp (Annual Average)					
SPM (μg/m ³)	Not possible to quantify	246.08			Values within prescribed limits.
PM ₁₀ (μg/m ³)		134.50			

SO ₂ (µg/m ³)		14.78	
NO _x (µg/m ³)		21.70	
PM _{2.5} (µg/m ³)		50.17	

Part – D

Hazardous Wastes

As specified under Hazardous Wastes (Management & Handling) Rules, 1989.

Hazardous Waste	Total Quantity	
	During the previous financial year (2023-24)	During the current financial year (2024-25)
(a) From process:		
i. Burnt Oil in Workshops	10930 Liters	10080 liters
ii. Oil-soaked filters	460 Numbers	448 Numbers
(b) From pollution control facilities:		
i. Oil/ Oil emulsion recovery from Oil & Grease Trap	Nil	Nil
ii. Oily sludge	Not present	Not present
iii. Chemical Waste (if any)	Not present	Not present

Part – E

Solid Wastes (other than hazardous)

Particulars	Total Quantity	
	During the previous financial year (2023-24)	During the current financial year (2024-25)
(a) From process (Topsoil and Over burden)	0.137 MM ³	0.099 MM ³
(b) From pollution control facilities (STP & Sed-Pond Sludge)	-	-
(c) 1- Quantity recycled or re-utilized (OB back-filled)	0.137 MM ³	0.273 MM ³ (0.099 MM ³ backfilled and 0.174 MM ³ backfilled from external OB dump.)

2- Sold	-	
3- Disposed	-	

Part – F

Please specify the characteristics (in terms of concentration & quantum) of hazardous as well as solid waste and indicate the disposal practice adopted for both these categories of wastes.

(I) Hazardous Wastes:

Name of Hazardous Wastes	Quantity generated in the year 2024-25	Disposal Practices
Burnt Oil, etc. (ℓ) (from W/Shop)	10080 Liters	Transferred to regional store from where it is auctioned to authorized agency.
Oil-soaked filters(kg) (from W/Shop)	448 Numbers	Disposed in impervious lined pit
Oil & Grease (kg) (from ETP/OGT)	Nil	N.A.
Oily Sludge (te.) (From ETP/OGT)	Not present	N.A.
Oil emulsion	Not present	N.A.
Chemical Waste if any (kg)	Not present	N.A.
Battery (nos.)	20	Transferred to Regional Store

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

(II) Solid Wastes:

Solid Waste	Quantity generated in the year 2024-2025	Disposal Practices
Topsoil (m ³)	Nil	Topsoil not scraped
OB (m ³)	0.099 MM ³	Backfilled
STP & Sed-Pond Sludge	-	-

Land Reclamation & OB disposal – progressive till 31st March 2025:

Particulars	Area (ha.)	OB Volume/ Nos. of Plants
1) External OB dump	1.52	0.057
2) Excavated land	214.30	34.668
3) Land affected (1+2)	214.30	-
4) Backfilled (out of 2)	170.97	34.612
5) Land physically reclaimed (out of 3)	35.50	Nil
6) Land biologically reclaimed (out of 3)	22.67	67825 nos.

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 detailed Environmental Management Plan (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 Table-1.1 to 1.3.

Table – 1.1

Air Pollution Control Measures

Sl. No.	EMP Provisions	Whether provided or not	Remarks
1	Water sprinkling and grading of all roads to minimize air-borne dust from vehicles.	Provided	<ol style="list-style-type: none"> 1. 3844 meters of internal coal transportation road have been concreted. 2. Installation of 80 nos. of mist sprayers on a stretch of 2.2 Km, from Bankibahal check gate to Basundhara check gate, has been done. 3. 04 nos. of 28 kl water tankers are used for dust suppression. 4. A truck mounted fog cannon has been deployed as well. 5. There are 115 sprinklers installed

			along the coal transportation road from Basundhara check gate to Sardega Railway siding and 8 sprinklers have been installed along the platform of the siding.
2	Biological reclamation of land.	Provided	2,34,785 nos. of trees planted on an area of 92.42 ha till date by OFDC/CGRVVN, govt. agencies of Orissa & Chhattisgarh in and around mines, the density being 2500/ ha. The OB dump is being re-handled and will be used for technical reclamation of internal dump and topsoil is being spread over the surface for carrying out plantation.
3	Green belt around mine & infrastructures.	Provided	A total of 46000 plants has been planted over the safety zone area, i.e., 18.40 ha.
4	Drills fitted with dust control devices.	Provided	Water Injection system is provided for wet drilling as well as dust extractors are provided.
5	Dust suppression/ dust extraction system to be provided in CHP.	Provided	CHP is non-functional at present but mist blowers along with fixed sprinklers have been installed at CHP.
6	Improved maintenance of plant & machinery.	Provided	By systematic and scheduled maintenance.
7	Mechanized coal transportation system.	Provided	-

Table – 1.2

Water Pollution Control Measures

Sl. No.	EMP Provisions/ Additional precautions	Whether provided or not	Remarks
1	Mine water is to be collected in central sump on dip side of pit. This will act as	Provided	Two numbers of sumps have been established in the

	sedimentation lagoon.		abandoned quarry area and in Basundhara (W) OCP's mine void, which serves as artificial ground water recharge resource.
2	Run-off around reclamation area will be controlled by providing catch drains and sedimentation lagoon combination.	Provided	Drains constructed.
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 re-utilized.	Provided	Drains have been constructed.
4	Domestic wastewater will be treated in screens, oxidation pond/ aerated lagoon. Sanitary waste to be disposed of into septic tank & soak-pit.	-	Septic tank and soak pit combination provided.
5	Workshop effluents will be treated in oil & grease trap & sedimentation tank.	Not Provided	Yet to be constructed.
6	Zero discharge from mine shall be maintained.	Maintained	Measures are being taken.
7	Piezometers shall be installed for measurement of under-ground water depth and its quality.	Provided	4 nos. of piezometers are installed at the following locations: 1. MIP 13: Village Tumulia, inside the campus of Manikeswari College. 2. MIP 15: Backside of Sardega Primary school 3. MIP 16: Village Kulhparha (new basti) on the road from Sardega to Gopalpur 4. MIP 17: Village Gopalpur, CMPDI Exploration

Table – 1.3
Land Reclamation

Sl. No.	EMP Provisions	Whether provided or not	Remarks
1	Topsoil Management: Proper stripping, Storage, and Relocation of topsoil.	Provided	The entire top soil has been re-utilized.
2	Physical Reclamation of OB Dump: Proper reshaping and regrading of top surface, providing drainage arrangements and topsoil spreading on external and internal dumps.	Under progress	External dump is active.
3	Biological Reclamation: Plantation of suitable species of herbs, shrubs & indigenous trees over technically reclaimed dumps.	Provided	2,34,785 nos. of trees planted on an area of 92.42 Ha till date by OFDC/CGRVVN, govt. agencies of Orissa & Chhattisgarh in and around mines, the density being 2500/ ha. The OB dump is being re-handled and will be used for technical reclamation of internal dump and topsoil is being spread over the surface for carrying out plantation.

IMPACT OF POLLUTION CONTROL MEASURES ON COST OF PRODUCTION

Cost of Environmental Management during 2024-2025 was **Rs. 61.00 per ton of coal.**

Part – H

Additional measures/ investment proposal for environmental protection including abatement of pollution, prevention of pollution.

Head	Amount Rs. (approx.)
Repairing of CT road	7,00,00,000.00
ETP & OGT upgradation	2,00,000.00
Dust suppression	1,00,00,000.00
Annual CAAQMS charges	7,50,000.00
REM Expenses	2,25,00,000.00
Consent to Operate Fees	75,000.00
Total	10,35,25,000.00

Part – I

Any other particulars for improving the quality of the environment.

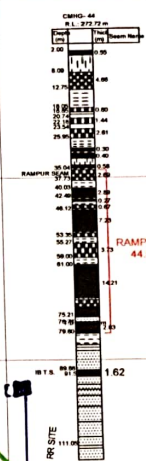
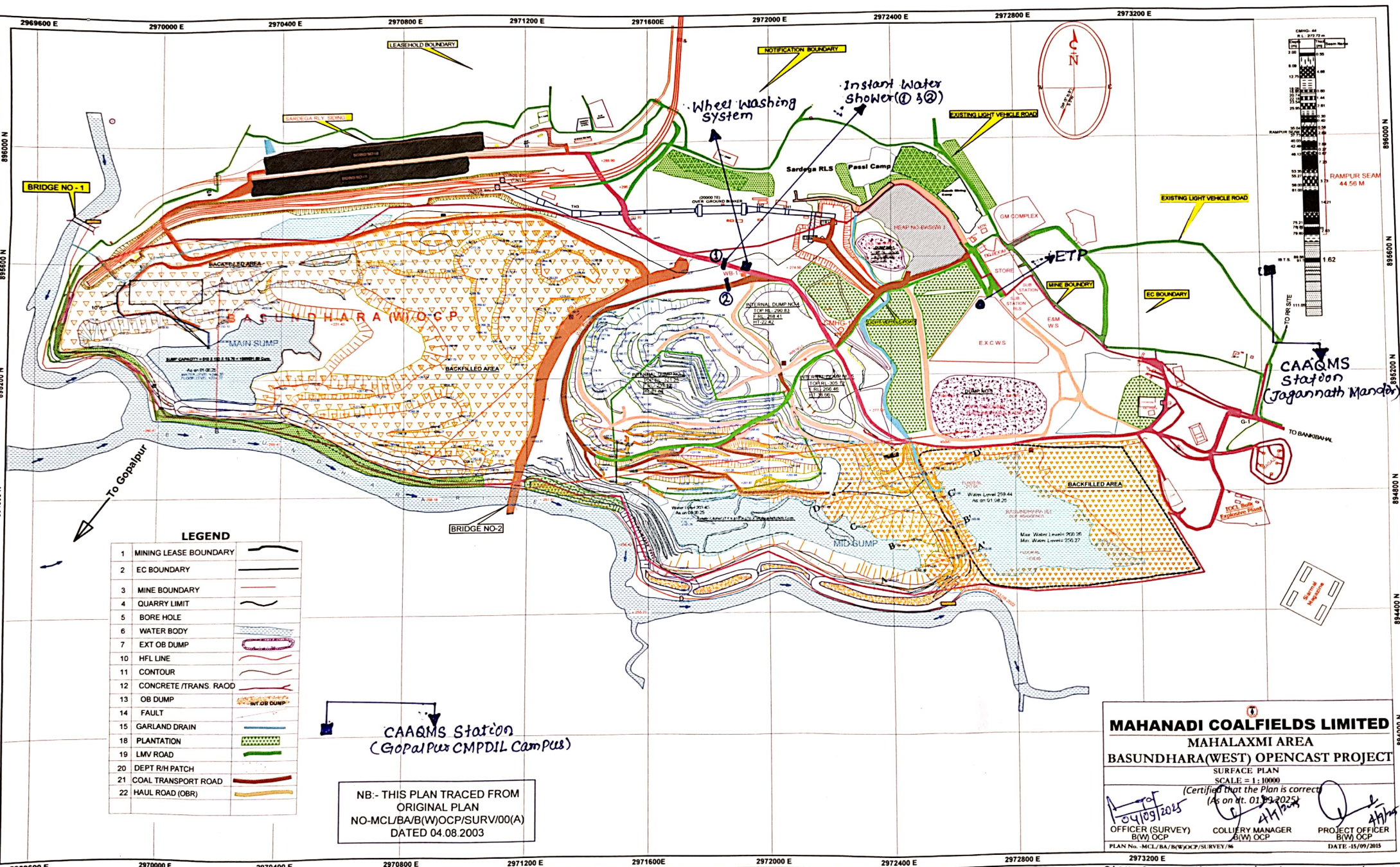
Note: Please attach a plan showing the relevant features like Present Working/ Quarry, External Dump, Back-filling, Plantation, Sedimentation Pond/ MDTP, Oil & Grease Trap/ ETP, Workshop, CHP, STP, etc. and Environmental Monitoring Stations: Attached.

 9/9/20

Signature of the Project Officer.

(with seal)

Project Officer, Basundhara (W) OCP
परियोजना अधिकारी, बसुंधरा (प) ओसीपी



LEGEND

1	MINING LEASE BOUNDARY	
2	EC BOUNDARY	
3	MINE BOUNDARY	
4	QUARRY LIMIT	
5	BORE HOLE	
6	WATER BODY	
7	EXT OB DUMP	
10	HFL LINE	
11	CONTOUR	
12	CONCRETE /TRANS ROAD	
13	OB DUMP	
14	FAULT	
15	GARLAND DRAIN	
18	PLANTATION	
19	LMV ROAD	
20	DEPT R/H PATCH	
21	COAL TRANSPORT ROAD	
22	HAUL ROAD (OBR)	

NB:- THIS PLAN TRACED FROM ORIGINAL PLAN NO-MCL/BA/B(W)OCP/SURV/00(A) DATED 04.08.2003

MAHANADI COALFIELDS LIMITED
MAHALAXMI AREA
BASUNDHARA (WEST) OPENCAST PROJECT
 SURFACE PLAN
 SCALE = 1 : 10000
 (Certified that the Plan is correct
 As on dt. 01.09.2025)
 10/09/2025
 OFFICER (SURVEY) B(W) OCP
 COLLIERY MANAGER B(W) OCP
 PROJECT OFFICER B(W) OCP
 PLAN No. - MCL/BA/B(W)OCP/SURV/00
 DATE - 15/09/2015

PLAN NO - MCL/MLA/POB(U)OCP/SURV/ENV/113 DI-04.09.25