

ENVIRONMENTAL STATEMENT

(Form – V)

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

Talcher Coalfield, MCL

For the year 2024-25



MCL

Mahanadi Coalfields Ltd.

Post: Jagruti Vihar, Burla,

Dist: Sambalpur, Orissa-768020

o/c.

ENVIRONMENTAL STATEMENT

(Form – V)

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

Hingula 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

Hingula Opencast Mine

For the year 2024-25



MCL

Mahanadi Coalfields Ltd.

Post: Jagruti Vihar, Burla,

Dist: Sambalpur, Orissa-768020

FORM-V
ENVIRONMENTAL STATEMENT

Environmental statement for the financial year ending 31st Mar, 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)
- Sri Padmanava Swain
Project Officer (Hingula OCP)
P.O –Gopal Prasad, Talcher
Dist: Angul, Odisha
Pin: 759103
- ii) Industry Category : Primary (Coal Mining Operation)
- iii) Production Capacity (Coal production
During the year 2024-25) : 15 MTPA (14.16 Million tonne)
- iv) Year of establishment : 1998
- v) Date of the last Environmental
Statement submitted. : 30th September, 2024

Part – B

Water & Raw Material Consumption

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

(I) Water Consumption (Cu-m/ day):

Ser No.	Industrial/ Mining	Consumption in Cu-m/ day
1. a	Haul Road Dust Suppression	1754
b	Dust Suppression at CHP	---
c	Dust Suppression at Siding & Coal Stock	1736
d	Fire Fighting	28
e	Workshop	50
f	Others	50
2.	Domestic	80
3.	Total in kℓ/ day	3698

Name of the Product	Water Consumption per unit of product (ℓ/ t)	
	2023-24	2024-25
Coal	98.48	95.29

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

Name of Raw Material	Consumption of Raw Material (per tonne of Coal produced)	
	2023-24	2024-25
H.S. Diesel (ℓ/ t)	1.04	0.96
Petrol (ℓ/ t)	NIL	NIL
Lubricants (ℓ/ t)	0.52	0.506
Electricity (Units/ t)	0.814	0.369
Explosives (kg/ t)	0.484	0.747

Swain

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
Water (annual average)					
		Mine Effluent	OGT Outlet	STP Outlet	
TSS (mg/ℓ)	Not possible to quantify	31	38	NA	Within Prescribed Limit
BOD mg/ℓ			---		
COD (mg/ℓ)		20	29.167		
pH		7.51	7.79		
O & G (mg/ℓ)		<4.0	<4.0		
Air (Ambient air quality of one station – annual average): Time office					
SPM (µg/m ³)	Not possible to quantify	243.00			Within Prescribed Limit
PM ₁₀ (µg/m ³)		144.00			
PM _{2.5} (µg/m ³)		61.00			
SO ₂ (µg/m ³)		13.66			
NO _x (µg/m ³)		29.19			

Part – D
Hazardous Wastes

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

Hazardous Waste	Total Quantity (kg)	
	During the previous financial year (2023-24)	During the current financial year (2024-25)
(a) From process :		
i. Burnt Oil in Workshops	25690 ltr	26190 ltr
ii. Oil soaked filters	183 nos	168 nos
(b) From pollution control facilities:		
i. Oil/ Oil imulsion recovery from Oil & Grease Trap	890 lit (Oil)	960 lit (Oil)
ii. Oily sludge	44 T (Oily Sludge)	25 T (Oily Sludge)
iii. Chemical Waste(if any)	Nil	Nil

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 (Top soil and Over burden)	18.26 Mm ³	30.27 Mm ³
(b) From pollution control facilities (STP & Sed-Pond Sludge)	-----	-----
(c) 1- Quantity recycled or re-utilized (OB back-filled)	18.26 Mm ³	30.27 Mm ³
2- Sold	-----	-----
3- Disposed	-----	-----

P. S. S.

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)	23590 ltr	By Auction to authorized parties
Oil soaked filters(kg) (from W/Shop)	168 nos	Disposed off in impervious lined pit
Oil & Grease (kg) (from ETP/ OGT)	960 lit (Oil)	By Auction to authorized parties
Oily Sludge (te.) (from ETP/ OGT)	25 T (Oily Sludge)	Disposed off in impervious lined pit
Oil imulsion	-----	---
Chemical Waste if any (kg)	-----	---
Battery (nos.)	57 (Nos)	By Auction to authorized parties

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

(II) Solid Wastes:

Solid Waste	Quantity generated in the year 2024-25	Disposal Practices
Top Soil (m ³)	14900 m ³	Spread over OB dump for reclamation
OB (m ³)	30.25 Mm ³	Used to fill the quarry voids
STP & Sed-Pond Sludge	-----	Used as manure

Land Reclamation & OB disposal – progressive till March, 2025 :

	Area (ha.)	OB Volume/ Nos. of Plants
1) External OB dump	80.00	32.82 Mm ³
2) Excavated land	431.81	137.78 Mm ³
3) Land affected (1+2)	511.81	-----
4) Backfilled (out of 2)	23.44	104.96 Mm ³
5) Land physically reclaimed (out of 3)	0.00	-----
6) Land biologically reclaimed (out of 3) *11.25 ha OB dumped in external OB dump and 8.87 ha OB dumped in internal dump during 2021-22	0.00	0

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 the 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	
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	By 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 sedimentation lagoon.	Provided	
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 re-utilised	Provided	
4	Domestic waste water will be treated in screens, oxidation pond/ aerated lagoon. Sanitary waste to be disposed off into septic tank & soak-pit.	Provided	STP provided for Balram Colony.
5	Workshop effluents will be treated in oil & grease trap & sedimentation tank.	Provided	
6	Zero discharge from mine shall be maintained.	Maintained	
7	Piezometers shall be installed for measurement of under-ground water depth and its quality	Provided	MTP-14 Inside the premises of Pirakhaman village Primary school MTP -15 Besides Sujan Pradhan's House in Chhotoberani Village near Nalla MTP-16 Backside of Hingula mandir VIP guesthouse

**Table - 1.3
Land Reclamation**

Sl. No.	EMP Provisions	Whether provided or not	Remarks
1	Top soil Management: Proper stripping, Storage, and Relocation of top soil.	Provided	
2	Physical Reclamation of OB Dump: Proper reshaping and regrading of top surface, Providing drainage arrangements and top soil spreading on external and internal dumps.	Provided	
3	Biological Reclamation: Plantation of suitable species of herbs, shrubs & indigenous trees over technically reclaimed dumps.	Provided	

IMPACT OF POLLUTION CONTROL MEASURES ON COST OF PRODUCTION

COST OF ENVIRONMENTAL MANAGEMENT DURING 2024-25 was Rs.5.47 per tonne of Coal.

Part - H

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

Head	Amount Rs. (approx)
Tree Plantation	20,00,000
Environmental Monitoring	2,50,00,000
Mobiles & fixed water sprinkler and other dust suppression measures	2,00,00,000
Road repairing	50,00,000
Catch/Garland drain	3,00,000
Maintenance of Continuous Ambient Air Quality Monitoring Station	3,00,000
ETP	50,00,000
Total	5,76,00,000

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.

[Signature]
22/9/25

Signature of the Project Officer.

(With seal)

[Signature]
**GM. (Mining)/Project Officer
Hingula OCP**

