

FORM-V

ENVIRONMENTAL STATEMENT

Environmental statement for the financial year ending 31st Mar, 2022

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 D Sahoo Project Officer (T&H/D), Talcher Colliery, At/Po: Dera, Talcher, DT: Angul, Odisha, PIN-759103.
(ii)	Industry Category	Primary (Coal mining operation)
(iii)	Production Capacity (Coal production during the year 2021-22)	0.27 MTPA 0.00 MTPA (Production suspended since 24.02.2018)
(iv)	Year of establishment	1928
(v)	Date of the last Environmental Statement submitted	23.09.2021

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	-
b	Dust Suppression at CHP	-
c	Dust Suppression at Siding	-
d	Fire Fighting	-
e	Workshop	-
f	Boiler Feed	378
g	Others	6344
2.	Domestic	1212
3.	Total in KL/ day	7934

Name of the Product	Water Consumption per unit of product (l/ t)	
	2019-20	2020-21
Coal	NA; Coal Production suspended since 24.02.2018	

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

Name of Raw Material	Consumption of Raw Material (per one of Coal produced)	
	2020-21	2021-22
H.S. Diesel (ℓ/ t)	Coal Production suspended since 24.02.2018	
Petrol (ℓ/ t)		
Lubricants (ℓ/ t)		
Electricity (Units/ t)		
Explosives (kg/ t)		

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	33.04	NA	NA	Within permissible limits
BOD mg/ℓ)		NA	NA	NA	
COD (mg/ℓ)		25.91	NA	NA	
pH		7.41	NA	NA	
O & G (mg/ℓ)		< 4.0	NA	NA	
Air (Ambient air quality of one station - annual average)					
Monitoring Station: Near Canteen, Talcher Colliery					
SPM (μg/m ³)	Not possible to quantify	158.78			Within permissible limits
RPM (μg/m ³):		(I) 99.39			
a) PM ₁₀		b37.61			
b) PM _{2.5}		16.52			
SO ₂ (μg/m ³)		25.07			
NO _x (μg/m ³)					

Part - D**Hazardous Wastes**

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

Hazardous Waste	Total Quantity (kg)	
	During the previous financial year (2020-21)	During the current financial year (2021-22)
(a) From process :	-	-
i. Burnt Oil in Workshops	350	Nil
ii. Oil soaked filters	Nil	Nil
(b) From pollution control facilities:	-	-
i. Oil/ Oil imulsion recovery from Oil & Grease Trap	Nil	Nil
ii. Oily sludge	Nil	Nil
iii. Chemical Waste (if any)	Nil	Nil

Part – E
Solid Wastes (other than hazardous)

Particulars	Total Quantity	
	During the previous financial year (2020-21)	During the current financial year (2021-22)
(II) From process (Top soil and Over burden)	Not Applicable	Not Applicable
(b) From pollution control facilities (STP & Sed-Pond Sludge)	Nil	Nil
(III) 11- Quantity recycled or re-utilized (OB back-filled)	Not Applicable	Not Applicable
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.

(IV) Hazardous Wastes:

Name of Hazardous Wastes	Quantity generated in the year 2021-22	Disposal Practices
Burnt Oil, etc. (ℓ) (from W/Shop)	Nil	NA
Oil soaked filters(kg) (from W/Shop)	NA	NA
Oil & Grease (kg) (from ETP/ OGT)	NA	NA
Oily Sludge (te.) (from ETP/ OGT)	NA	NA
Oil imulsion	NA	NA
Chemical Waste if any (kg)	NA	NA
Battery (nos.)	Nil	NA

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

(II) Solid Wastes:

Solid Waste	Quantity generated in the year 2021-22	Disposal Practices
Top Soil (m ³)	Not Applicable	Not Applicable
OB (m ³)		
STP & Sed-Pond Sludge (m ³)	82	Used Filter bed sand is being utilized for filling low lying areas

Land Reclamation & OB disposal – progressive till March, 2022:

**	Area (ha.)	OB Volume/ Nos. of Plants
1) External OB dump	Not Applicable	
2) Excavated land		
3) Land affected (1+2)		
4) Backfilled (out of 2)		
5) Land physically reclaimed (out of 3)		
6) Land biologically reclaimed (out of 3)		

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.	NA	-
2	Biological reclamation of land.	NA	-
3	Green belt around mine & infrastructures.	Provided	Plantation done in and around mine leasehold area
4	Drills fitted with dust control devices.	NA	-
5	Dust suppression/ dust extraction system to be provided in CHP.	No	CHP not exists
6	Improved maintenance of plant & machinery.	Provided	Preventive maintenance system is being done
7	Mechanized coal transportation system.	NA	Coal production discontinued since 24.02.2018

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	There are sumps available for each sections at underground to collect all mine water and these acts as primary sedimentation lagoon.
2	Run-off around reclamation area will be controlled by providing catch drains and sedimentation lagoon combination.	NA	
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	NA	
4	Domestic waste water will be treated in screens, oxidation pond/ aerated lagoon. Sanitary waste to be disposed off into septic tank & soak-pit.	Septic Tank & Soak pit provided	Planning, Preparation of layout and detailed estimate is under progress for construction of STP
5	Workshop effluents will be treated in oil & grease trap & sedimentation tank.	NA	
6	Zero discharge from mine shall be maintained.	-	Discontinued UG mine
7	Piezometers shall be installed for measurement of under-ground water depth and its quality	Nil	

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.	Not Applicable	
2	Physical Reclamation of OB Dump: Proper reshaping and regarding of top surface, Providing drainage arrangements and top soil spreading on external and internal dumps.		
3	Biological Reclamation: Plantation of suitable species of herbs, shrubs & indigenous trees over technically reclaimed dumps.		

IMPACT OF POLLUTION CONTROL MEASURES ON COST OF PRODUCTION

Cost of Environmental Management during **2021-22: Not Applicable**, as there was no coal production. However, total expenditure made towards environment during 2021-22 was 55.254 Lakhs, the same given in/as Annexure-I.

Part - H

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

Head	Amount in Lakhs. (approx)
Environmental Monitoring	21.901
Plantation, Plant distribution, Development of Children Park	27.00
Cleaning of Slow sand filter beds	3.20
Renewal of NoC/GW abstraction fee (02 years)	180.00
Water Audit Report	2.035
Comprehensive Hydrogeological Report with modeling	4.757
Digital Water Level Recorder	2.00
Honey Bee keeping	0.35
Vertical Greenery system	3.20
Roof top rainwater harvesting system	5.50
Progressive Mine Closure Report	12.00
Development of Nursery	1.00
Celebration of World Environment Day	0.25
Misc. & others	5.00
Total	268.193

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 of the Project Officer

(with seal)

परियोजना पदाधिकारी
तालचेर, हाण्डिघुआँ एवं देउलबेडा

