

FORM-V

ENVIRONMENTAL STATEMENT

Environmental statement for the financial year ending 31st March, 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 Virendra Kumar Singh
Project Officer, Lilari OCP, Post- Jorabaga,
Via- Belpahar, Dist-Jharsuguda (Odisha)
PIN-768217
- ii) Industry Category : Primary (Coal Mining Operation)
- iii) Production Capacity (Coal production during the year 2020-21) : NIL (Mine has been discontinued from 01.04.2018)
- iv) Year of establishment : 1988
- 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	00
b	Dust Suppression at CHP	-
c	Dust Suppression at Siding	-
d	Fire Fighting	00
e	Workshop	00
f	Others	-
2.	Domestic	00
3.	Total in kℓ/ day	00

Name of the Product	Water Consumption per unit of product (ℓ/ t)	
	2020-21	2021-22
Coal	00	00

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

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

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
		Mine Effluent	OGT Outlet	STP Outlet	
Water (annual average)					
TSS (mg/l)	No water discharged during 2021-22. Mine has been discontinued from 01.04.2018	--	--	--	
BOD mg/l)		--	--	--	
COD (mg/l)		--	--	--	
pH		--	--	--	
O & G (mg/l)		--	--	--	
Air (Ambient air quality of one station – annual average): Near Lilari Magazine House					
SPM ($\mu\text{g}/\text{m}^3$)	Not possible to quantify	131.46			
RPM ($\mu\text{g}/\text{m}^3$)		212.08			
SO ₂ ($\mu\text{g}/\text{m}^3$)		14.55			
NO _x ($\mu\text{g}/\text{m}^3$)		23.72			

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 :	NIL	NIL
i. Burnt Oil in Workshops	NIL	NIL
ii. Oil soaked filters	NIL	NIL
(b) From pollution control facilities:	NIL	NIL
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)
(a) From process (Top soil and Over burden)	NIL	NIL
(b) From pollution control facilities (STP & Sed-Pond Sludge)	NIL	NIL
(c) 1- Quantity recycled or re-utilized (OB back-filled)	NIL	NIL
2- Sold	NIL	NIL
3- Disposed	NIL	NIL

(Signature)

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.	Not applicable	
2	Biological reclamation of land.	Provided	
3	Green belt around mine & infrastructures.	Provided	
4	Drills fitted with dust control devices.	Not applicable	
5	Dust suppression/ dust extraction system to be provided in CHP.	N.A.	No CHP
6	Improved maintenance of plant & machinery.	Not Applicable	
7	Mechanized coal transportation system.	--	

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	Project Report of Lilari OCP was approved up to 31.03.2018. Mine has been discontinued from 01.04.2018. Further the mine will be a part of Integrated Lakhanpur-Belpahar-Lilari Project as per approved PR. All run-off water is allowed to accumulate in mine sump.
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	Project Report of Lilari OCP was approved upto 31.03.2018. Mine has been discontinued from 01.04.2018. Further the mine will be a part of Integrated Lakhanpur-Belpahar-Lilari Project as per approved PR. All run-off water is allowed to accumulate in mine sump.
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	Common township with integrated township of LKP Area.
5	Workshop effluents will be treated in oil & grease trap & sedimentation tank.	Not Applicable	
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	MIP-06 Near Project Office Lilari OCP

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.	-----	
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	

(Signature)

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 2021-22	Disposal Practices
Burnt Oil, etc. (ℓ) (from W/Shop)	NIL	Mine has been discontinued from 01.04.2018
Oil soaked filters(kg) (from W/Shop)	NIL	Mine has been discontinued from 01.04.2018
Oil & Grease (kg) (from ETP/ OGT)	NIL	Mine has been discontinued from 01.04.2018
Oily Sludge (te.) (from ETP/ OGT)	NIL	Mine has been discontinued from 01.04.2018
Oil imulsion	NIL	Mine has been discontinued from 01.04.2018
Chemical Waste if any (kg)	NIL	Mine has been discontinued from 01.04.2018
Battery (nos.)	NIL	Mine has been discontinued from 01.04.2018

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)	---	Mine has been discontinued from 01.04.2018
OB (m ³)	NIL	Mine has been discontinued from 01.04.2018
STP & Sed-Pond Sludge		

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

	Area (ha.)	OB Volume/ Nos. of Plants
1) External OB dump	25.40	1.37 Mm ³ /72251 Nos
2) Excavated land	60.30	19.92 Mm ³
3) Land affected (1+2)	85.70	----
4) Backfilled (out of 2)	41.47	18.42 Mm ³
5) Land physically reclaimed (out of 3)	26.00	----
6) Land biologically reclaimed (out of 3)	51.40 [#]	130266 Nos.

[#]the figure includes the biological reclaimed area of 25.40 Ha of external OB dump.

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.



IMPACT OF POLLUTION CONTROL MEASURES ON COST OF PRODUCTION

COST OF ENVIRONMENTAL MANAGEMENT DURING 2021-22 was Rs. 11.38 Lakhs.

Part – H

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

Head	Amount Rs. (in Lakhs)
1. Plantation	0.00
2. CTO Fees	0.75
3. Air & water monitoring	10.63
Total	11.38

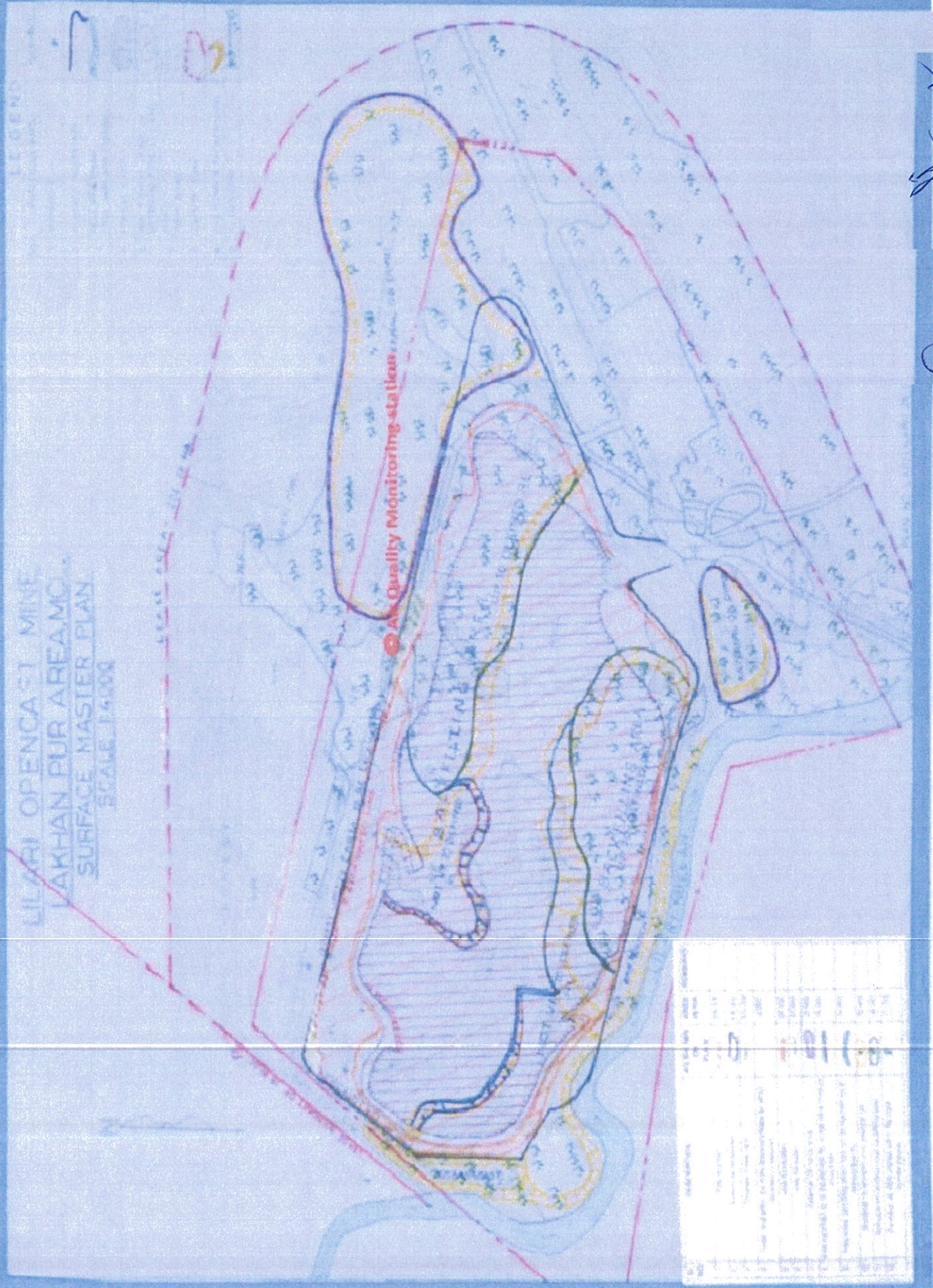
Part – I

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.

2/9/22
Project Officer
Lilari OCP
Project Officer
Lakhanpur OCP
Lakhanpur Area, MCL

LILARI OPENCAST MINE
 LAKHANPUR AREA, MC
 SURFACE MASTER PLAN
 SCALE: 1:4000



Sl. No.	Symbol	Description
1	(Red dashed line)	Boundary of the mine area
2	(Blue outline)	Area reserved for the mine
3	(Yellow outline)	Area reserved for the mine
4	(Orange outline)	Area reserved for the mine
5	(Red circle with dot)	Air Quality Monitoring station

[Signature]
 Project Officer
 Lakhanpur OCP

[Signature]
 02/09/22