

**ENVIRONMENT AUDIT STATEMENT**  
**FORM-V**

**MAHADEOPURI UG MINE**

**FY 2023-24**

**Prepared by:**



**April - 2024**

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***WESTERN COALFIELDS LIMITED***

***ENVIRONMENT DEPARTMENT***

***PENCH AREA***

***PARASIA - 480441***

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## INTRODUCTION

### 1.1 Genesis

Industrial pollution in our country is on increase and is creating a high-risk environment. Various legislations viz. The water (Prevention & Control of Pollution) Act, 1974, The Air (Prevention & Control of Pollution) Act, 1981 and The Environment (Protection) Act, 1986 have come into force and organization created to combat pollution. It is being realized that industry and environment should go hand – in – hand so as to achieve sustainable development. Also, over the years, awareness has brought in realization to consider environmental protection a bare necessity. Consideration of environmental factors at par with production helps in minimizing material losses and also in reduction of liabilities in the long run.

### 1.2 Need Of Environmental Statement

Environmental Audit is a technique being introduced for integrating the interest of the industry and the environment so that these could be mutually supportive. This technique is basically a part of industry's internal procedures in meeting their responsibilities towards better environment. Also, the policy statement for abatement of pollution by the Govt. of India provides for submission of environmental statement by all concerned industries, which would subsequently evolve into an environmental audit. A notification under the Environment (Protection) Rules, 1986 has been issued on April 22, 1993, requiring industries to submit an environmental statement for the financial Year ending on March 31 in Form V to the concerned State Pollution Control Boards on or before September 30 every Year beginning 1993. The Department of Company Affairs also agreed to include this requirement as a part of the Director's Annual Report.

The submission of an environmental statement is applicable to the following.

- i) Those who require consent under the water (Prevention & Control of Pollution) Act, 1974;
- ii) Those who require consent under the Air (Prevention & Control of Pollution) Act, 1981; and

Those who require authorization under Hazardous wastes (Management & Handling) Rules, 1989.

Vide Gazette Notification No. G.S.R.329 (E) dated 13th March, 1992, the Ministry of Environment & Forests, Govt. of India have made provisions for Mandatory Environmental Statement as follows:

#### **Quote**

"Every person carrying on an industry, operation or process requiring consent under Section 25 of the Water Act, 1974 or under Section 21 of the Air Act, 1981 or both or authorization under the Hazardous Water Rules, 1989 issued under the Environmental Protection Act, 1986 shall submit an Environmental Audit Report for the financial year ending 31st March in Form – V to the concerned State Pollution Control Board on or before 30th September every year beginning 1993".

#### **Unquote**

In order to comply with the statutory requirement as well as to maintain corporate image in the region recognizing the importance of comprehensive structural mechanism to ensure that the mining activities do not cause any effects on environment.



## 2.0 Basis of Environment Statement

### 2.1 Water Quality

Water is not directly used during mining for coal production except for dust suppression. It percolates into working area during mining operation. However, water is consumed for other purposes; mainly for domestic supply, industrial supply. Part "B" of the proforma contains detailed break-up of water consumption.

Raw materials used in coal mining activities are explosives and POL for machines and automobiles, steel, timber, cement, etc.

Pollution discharged into water has been calculated on the basis of water analysis and identified water pollutants. The main pollutants in mine water are suspended solids. The other sources of pollution in the effluent from various processes include oil and grease (from Workshop and CHP).

### 2.2. Air Quality

Ambient air quality is monitored to study the level of air pollution. CHP has been indicated as fugitive source in reports and mobile sources are HEMM moving on haul road, blasting, exhaust from vehicles and HEMMs, loose materials of OB dumps and burning of coal.

### 2.3 Mining

Mining activity produces less quantity of any hazardous waste; and it is shown in Part "D" of Form - V. Solid waste produced from mining activities is overburden (OB) material. **Recycling process of this material is normally done by suitably backfilling the same in the extracted portion of the quarry.**

### 2.4 Pollution Control Methods

The pollution abatement measures for the sake of Environmental Statement are:

- Dust suppression by water spray;
- Afforestation;
- OB Dump Reclamation
- Water spraying to prevent burning of coal.

Items identical under Part "H" of the proforma are those items which the Consultants have felt necessary which is also true for Part "I" in order to help Western Coalfields Limited to organize their abatement efforts for performing mining activities without adversely affecting the environment.

**FORM – V**  
**ENVIRONMENT STATEMENT FOR COAL MINING PROJECT**  
**FINANCIAL YEAR ENDING MARCH 2024**

**PART – A**

| Sr. No. | Particulars                                           |                                                                                                                 |
|---------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1.      | Name and address of the Mine                          | Mahadeopuri UG Mine<br>Village & P.O.: Parasia<br>Tehsil: Parasia<br>Distt: Chhindwara<br>State: Madhya Pradesh |
| 2.      | Industry category                                     | Category "A"                                                                                                    |
| 3.      | Production capacity                                   | 0.25 MTY                                                                                                        |
| 4.      | Year of Establishment                                 | 1989                                                                                                            |
| 5.      | Date of last Environmental Statement Report submitted | 30th September, 2023                                                                                            |

**PART – B**

**WATER & RAW MATERIALS CONSUMPTION**

**Table – A Water consumption on Usage Pattern**

| Sr.no.    | Water Consumption Category                  | Quantity/usage (in KL/day) |
|-----------|---------------------------------------------|----------------------------|
| <b>a)</b> | <b>Industrial</b>                           |                            |
| i.        | Dust Suppression/recycling for roof support | 200                        |
| ii.       | Fir Fighting                                | 55                         |
| iii.      | Workshop and others                         | -                          |
| iv.       | Green Belt/Plantation                       | 40                         |
| v.        | CHP Beneficiation                           | -                          |
| <b>b)</b> | <b>Domestic</b>                             |                            |
| i.        | Domestic use                                | 5                          |
| ii.       | Green Belt/Plantation                       |                            |
|           | <b>TOTAL</b>                                | <b>300</b>                 |

**Table – B Water Consumption Against Production (Including Recycled)**

| Name of Product | Water Consumption per unit of product<br>(including recycled) |                                  |
|-----------------|---------------------------------------------------------------|----------------------------------|
|                 | During the previous FY<br>2022-23                             | During the current FY<br>2023-24 |
| COAL            | 667.64 l/t                                                    | 2758.10 l/t                      |



**Table – C Raw Material Consumption**

| Name of raw material | Name of product | Consumption of raw material per unit of product |                               |
|----------------------|-----------------|-------------------------------------------------|-------------------------------|
|                      |                 | During the previous FY 2022-23                  | During the current FY 2023-24 |
| Explosive (Kg/ton)   | Coal            | 0.52 kg/t                                       | 0.46 kg/t                     |

**PART - C**

**Pollution discharged to Environment/unit of output (Parameters specified in the Consent issued)**

| I.  | Pollutants | Quantity of Pollution Generated                                | Percentage variation from prescribed standards with reasons |
|-----|------------|----------------------------------------------------------------|-------------------------------------------------------------|
| (A) | Water      | Water Quality Monitoring reports attached for the year 2023-24 | Values of all parameters are within permissible limits.     |
| (B) | Air        | Air Quality Monitoring reports attached for the year 2023-24   | Values of all parameters are within permissible limits.     |
| (C) | Noise      | Noise Quality Monitoring reports attached for the year 2023-24 | Values of all parameters are within permissible limits.     |

**PART - D**

**HAZARDOUS WASTE**

(As specified under Hazardous Waste/ Management & Handling Rules, 2003)

| 1.  | Hazardous Waste                   | Total Quantity (kg)            |                               |
|-----|-----------------------------------|--------------------------------|-------------------------------|
|     |                                   | During the previous FY 2022-23 | During the current FY 2023-24 |
| (a) | From Process                      | Nil                            | Nil                           |
| (b) | From Pollution Control Facilities | Nil                            | Nil                           |

**PART - E**

**SOLID WASTES**

| Sno. | Waste Generation                               | Total Quantity                 |                               |
|------|------------------------------------------------|--------------------------------|-------------------------------|
|      |                                                | During the previous FY 2022-23 | During the current FY 2023-24 |
| a)   | From Process                                   | Nil                            | Nil                           |
| b)   | From Pollution Control Facilities              | Nil                            | Nil                           |
| c)   | Quantity recycled or dumped within quarry void | Nil                            | Nil                           |
| d)   | Sold                                           | Nil                            | Nil                           |
| e)   | Disposed (as external dumps)                   | Nil                            | Nil                           |

**Mm<sup>3</sup> = Million Cubic Metre**

**Note: It is an underground mine.**

### **PART - F**

**please specify characteristics (in terms of concentration & quantum) of hazard as well as solid wastes and indicate disposal practice adopted for both these categories of water.**

The hazardous waste is disposed through:

- Solid wastes in the mine are in the form of overburden material which comprises of sandstone, conglomerates, sandy and clayey shales.

### **PART - G**

**Impacts of pollution control measures on conservation of natural resources and consequently on coal production.**

The brief summary of Pollution Control Measures taken for this mine is as under:

**G.0** In order to carry out mining operations in an environmentally, friendly and planned manner, the sources of pollution were identified and measures were suggested to keep them within permissible limits.

#### **G.1 SOURCES OF AIR POLLUTION**

The likely sources of air pollution are as under:

- Drilling operation;
- Blasting operation;
- Loading and transportation of Coal/OB;
- Wind Erosion of Coal Stock/OB Dumps;
- Haul Road/Coal Transportation Roads;
- Exhaust from vehicular movement.

##### **G.1.1 Measures for Control of Air Pollution**

For control of air pollution, measures suggested are:

- Tree plantation along the periphery of the quarry, CHP, around other service buildings along the sides of permanent haul road and open land;
- Regular cleaning of transportation road.

##### **G.1.2 Implementation Status**

- Water is sprinkled by mobile sprinkler (maintained by HOE contactor)

#### **G.2 WATER POLLUTION**

##### **G.2.1 Sources of Water Pollution**

The identified sources of water pollution are as under:

TDS and TSS due to mining operation present in the mine water (mainly coal particles);

##### **G.2.2 Water Pollution Control Measures**

- The main pollutant responsible for water pollution is suspended solids. Sedimentation pond should be provided to take care of this pollutant.

##### **G.2.3 Implementation Status**

Settling Tank has been provided.

#### **G.3 NOISE POLLUTION**

##### **G.3.1 Sources of Noise Pollution**

The sources of noise pollution are as under:

- Drilling Operation;
- Blasting Operation;



- Operation of CHP;
- Operation of Shovels and Dumpers;
- Workshop.

### G.3.2 Noise Pollution Control Measures suggested

The measures for reduction of noise level as envisaged in the EMP are as under:

- Selection of mining equipments so as to keep noise level below 85 dB(A);
- Provision of Ear Plugs for operators exposed for long duration of time;
- Provision of green belt around Workshop, CHP and other sensitive areas;
- Limitation of blasting operation between 12.00 Noon to 2.30 PM.

### G.3.3 Implementation Status

Refer to Noise level monitoring reports.

## PART - H

**Additional investment proposal for environmental protection in the area:**

H.1 The project has incurred an expenditure on the followings in connection with environmental management in the area:

| Sl. No. | Particulars                          | Amount (Rs) |
|---------|--------------------------------------|-------------|
| 1.      | Water Cess                           | -           |
| 2.      | Consent Fees                         | -           |
| 3.      | Air, Water, Noise Quality Monitoring | -           |
| 4.      | Water pollution control measures     | -           |
| 5.      | Air pollution control measures       | -           |

### H.2 Future Programme

The project has incurred an expenditure on the following in connection with environmental management in the area.

| Sl. No. | Particulars                          | Amount (Rs)    |
|---------|--------------------------------------|----------------|
| 1.      | Water Cess                           | -              |
| 2.      | Consent Fees                         | -              |
| 3.      | Air, Water, Noise Quality Monitoring | Done by CMPDIL |
| 4.      | Water pollution control measures     | -              |
| 5.      | Air pollution control measures       | -              |

## PART - I

### Miscellaneous

**Any other particulars in respect of environmental protection & abatement of pollution.**

*[Signature]*  
12/09/24.  
Mine Manager  
Mahadeopuri UG Mine

*[Signature]*  
Sub-Area Manager  
Newton Sub-Area

12/07/2024