



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047359

### Submitted Date

25-09-2022

## PART A

### Company Information

#### Company Name

M/s WCL Ballarpur Opencast Mine

#### Application UAN number

9401

#### Address

Ballarpur Opencast Mine, Ballarpur Area, WCL

#### Plot no

284 285 286 287 288 289 290

#### Taluka

Ballarpur

#### Village

-

#### Capital Investment (In lakhs)

5612.9

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442706

#### Person Name

Rajesh Kumar Mishra

#### Designation

Sub Area Manager

#### Telephone Number

8275968299

#### Fax Number

07173230076

#### Email

envbocm@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

BO/JD(APC)/TB-2, UAN no. 9401  
R/CC/1806000238

#### Consent Issue Date

05/06/2018

#### Consent Valid Upto

30/06/2021

#### Establishment Year

1979

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.225

#### Actual Quantity

0.265

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

<b>Water Consumption for Process</b>	<b>Consent Quantity in m3/day</b>	<b>Actual Quantity in m3/day</b>
Cooling	460.00	460.00
Domestic	0.00	0.00
All others	180.00	12.00
<b>Total</b>	<b>640.00</b>	<b>472.00</b>

## **2) Effluent Generation in CMD / MLD**

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Trade effluent	1391.5	620	CMD

## **2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)**

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
coal (CUBIC METER/TONNE)	0.746	0.633	CMD

## **3) Raw Material Consumption (Consumption of raw material per unit of product)**

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
EXPLOSIVES (KG/Tonne)	0.448	1.57	

## **4) Fuel Consumption**

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	0	173	KL/A

## **Part-C**

### **Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)**

#### **[A] Water**

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
Report attached in Part I	0	0	-	-	-

#### **[B] Air (Stack)**

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
NO stack monitoring	0	0	-	-	-

## **Part-D**

### **HAZARDOUS WASTES**

#### **1) From Process**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.2 Wastes or residues containing oil	0	0	Ton/Y

#### **2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
35.3 Chemical sludge from waste water treatment	5.72	0	Ton/Y

## Part-E

### **SOLID WASTES**

#### **1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Overburden	140000	993000	M3/Anum

#### **2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	CMD

#### **3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### **1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.2 Wastes or residues containing oil	0	Ton/Y	-
35.3 Chemical sludge from waste water treatment	0	Ton/Y	-

#### **2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Overburden	993000	M3/Anum	-

## Part-G

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of the pollution Control measures	148	1.15	-316000	734000	0	0

## Part-H

**Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.**  
**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacs)</b>
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Capital Expenditure	For new sedimentation tank	5.26
Capital Expenditure	For new ETP	10

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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Construction of Piezometer and procurement of DWLR with and without telemetry	For ground water monitoring	16
Trolley mounted or fixed Mist/Fogger System	environmental protection abatement of pollution, prevention of pollution	6

**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

Rajesh Mishra, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047359

**Submitted On:**

25-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047352

### Submitted Date

25-09-2022

## PART A

### Company Information

#### Company Name

Ballarpur Colliery 3 &4 pits

#### Application UAN number

09399

#### Address

Ballarpur Colliery 3 & 4 pit , Ballarpur Area,  
WCL

#### Plot no

168 206 207 208 209 268 278 280 282 283 116  
117 94

#### Taluka

Ballarpur

#### Village

Ballarpur

#### Capital Investment (In lakhs)

4306.65

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442701

#### Person Name

Rajesh Kumar Mishra

#### Designation

Sub Area Manager

#### Telephone Number

8275968299

#### Fax Number

07173230098

#### Email

envbc34@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0/APAE Section/UAN no.  
0000116742/CR-2201000543

#### Consent Issue Date

2022-01-13

#### Consent Valid Upto

2022-06-30

#### Establishment Year

1968

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.60

#### Actual Quantity

0.088

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	2253.80	42.00
Domestic	0.00	0.00
All others	1071.35	1500.00
Total	0.00	0.00
	3325.15	1542.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Daily trade effluent	2900	1297	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
coal (CUBIC METER/TONNE)	0.143	0.174	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
EXPLOSIVES (KG/TONNE)	0.261	0.363	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	4	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged (Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
WATER REPORT ATTACHED IN PART I	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged (Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO AIR STACK MONITORING	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0	0	KL/A

## 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	0	0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
OVERBURDEN	0	0	M3/Anum

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	M3/Anum

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	M3/Anum

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	KL/A	0

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
-	0	M3/Anum	0

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures	0	00.0027	-4000	-1090000	0	0

## Part-H

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

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
-	-	0

**Part-I****Any other particulars for improving the quality of the environment.****Particulars**

-

**Name & Designation**

Rajesh Mishra, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047352

**Submitted On:**

25-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047363

### Submitted Date

25-09-2022

## PART A

### Company Information

#### Company Name

Western Coal Fields Ltd Gouri Deep Opencast Mine

#### Application UAN number

-

#### Address

Plot no: 62 110 189 of antargaon, 165 141 of goyegaon etc, Gouri Deep Opencast Mine, WCL, Ballarpur Area, Taluka: Rajura, Dist: Chandrapur: 442706

#### Plot no

62 110 189 of antargaon, 165 141 of goyegaon

#### Taluka

Rajura

#### Village

-

#### Capital Investment (In lakhs)

9536.31

#### Scale

LSI

#### City

Chandrapur

#### Pincode

442706

#### Person Name

GVS Prasad

#### Designation

SUB AREA MANAGER

#### Telephone Number

9552265303

#### Fax Number

07173230076

#### Email

envgourideep@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN no. MPCB CONSENT 0000109251/CR-2204000650

#### Consent Issue Date

2022-04-12

#### Consent Valid Upto

2023-03-31

#### Establishment Year

2012

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

0.60

#### Actual Quantity

0.6

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	222.00	222.00
Domestic	0.00	0.00
All others	10.00	10.00
Total	170.00	30.00
	402.00	262.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
daily trade effluent	1237	1237	CMD
Domestic effluent	6	6	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
coal (CUBIC METER/TONNE)	0.151	0.135	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
EXPLOSIVES (KG/TONNE)	1.16	0.833	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	2983	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
WATER REPORT ATTACHED IN PART I	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO AIR STACK MONITORING	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.2 Wastes or residues containing oil	0	1	Ton/Y
5.1 Used or spent oil	0	0	Ton/Y

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	2.0	2	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
OVERBURDEN	2090000	1675000	M3/Anum

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	KL/A	-

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
OVERBURDEN	1675000	M3/Anum	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures	140	0.97	122000	-428000	0	0

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
CAPITAL EXPENDITURE	VARIOUS AIR, WATER AND NOISE CONTROL MEASURES INCLUDING CESS.	0

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**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Construction of Piezometer and procurement of DWLR with and without telemetry	Ground water monitoring	16
Installation of CAAQMS along with Construction of room with proper electric fittings,air conditioners, furnitures, etc.	Air quality monitoring	87

**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

GVS . Prasad, SUB AREA MANAGER

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047363

**Submitted On:**

25-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047362

### Submitted Date

25-09-2022

## PART A

### Company Information

#### Company Name

Western Coal Fields Ltd Gouri I & II Opencast Mine

#### Application UAN number

-

#### Address

Gouri I & II Opencast Mine, WCL, Ballarpur Area,  
PO: Gouri Taluka: Rajura, Dist: Chandrapur -  
442706

#### Plot no

-

#### Taluka

Rajura

#### Village

-

#### Capital Investment (In lakhs)

17627.37

#### Scale

LSI

#### City

Chandrapur

#### Pincode

442706

#### Person Name

GVS Prasad

#### Designation

Sub Area Manager

#### Telephone Number

9552265303

#### Fax Number

07173230076

#### Email

envgouri12@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN No. MPCB CoSENT  
0000110308/CR-2204000661

#### Consent Issue Date

2022-04-12

#### Consent Valid Upto

2023-03-31

#### Establishment Year

2011

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

2.0

#### Actual Quantity

0.944

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	8.00	8.00
All others	150.00	0.00
Total	832.00	682.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
daily trade effluent	753	618	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
coal (CUBIC METER/TONNE)	0.324	0.26	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
EXPLOSIVES (KG/TONNE)	1.255	0.29	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	1309	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged (Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
WATER REPORT ATTACHED IN PART I	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged (Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO AIR STACK MONITORING	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	24.78	12.62	KL/A

5.2 Wastes or residues containing oil 3.05 1 Ton/Y

**2) From Pollution Control Facilities**

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	3	1	Ton/Y

**Part-E**

**SOLID WASTES**

**1) From Process**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
OVERBURDEN	1677000	1552000	M3/Anum

**2) From Pollution Control Facilities**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

**3) Quantity Recycled or Re-utilized within the unit**

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

**Part-F**

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

**1) Hazardous Waste**

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	0	Ton/Y	-
5.2 Wastes or residues containing oil	0	Ton/Y	-

**2) Solid Waste**

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
OVERBURDEN	1552000	M3/Anum	-

**Part-G**

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures	0	2.10	675000	-663000	0	0

**Part-H**

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
CAPITAL EXPENDITURE	FOR VARIOUS AIR, WATER AND NOISE CONTROL MEASURES INCLUDING CESS.	0

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**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Construction of Piezometer and procurement of DWLR with and without telemetry	Ground water monitoring	16
Modular STP	FOR WATER POLLUTION CONTROL MEASURES	5

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**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

GVS Prasad, SUB AREA MANAGER

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047362

**Submitted On:**

25-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047366

### Submitted Date

25-09-2022

## PART A

### Company Information

#### Company Name

Western Coalfields Limited Pauni II Expansion  
OC

#### Application UAN number

-

#### Address

Pauni II Expansion OC mine, WCL Ballarpur  
Area, Rajura, Chandrapur

#### Plot no

-

#### Taluka

Rajura

#### Village

Sakhari

#### Capital Investment (In lakhs)

26214.83

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442706

#### Person Name

J.Eakambaram

#### Designation

Sub Area Manager

#### Telephone Number

8275968501

#### Fax Number

07173230076

#### Email

envpouni2@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN noMPCB CONSENT .  
0000109222/CR-2202001271

#### Consent Issue Date

2022-02-20

#### Consent Valid Upto

2022-03-31

#### Establishment Year

2016

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

3.25

#### Actual Quantity

3.25

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	347.00	300.00
Domestic	0.00	0.00
All others	20.00	50.00
Total	210.00	200.00
	577.00	550.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade effluent	454	104	CMD
Domestic Trade effluent	16	16	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
coal (CUBIC METER/TONNE)	0.045	0.033	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
EXPLOSIVES (KG/TONNE)	1.81	2.25	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	288	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Report attached in Part I	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO stack monitoring	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
----------------------	--------------------------------------	-------------------------------------	-----

5.1 Used or spent oil	0	0	KL/A
5.2 Wastes or residues containing oil	0	0	KL/A

**2) From Pollution Control Facilities**

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	7.94	0	Ton/Y

**Part-E**

**SOLID WASTES**

**1) From Process**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Overburden	15565000	18041000	M3/Anum

**2) From Pollution Control Facilities**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

**3) Quantity Recycled or Re-utilized within the unit**

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

**Part-F**

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

**1) Hazardous Waste**

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	KL/A	-

**2) Solid Waste**

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden	118041000	M3/Anum	-

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures	27	1.1	-2246000	-4182000	0	0

**Part-H**

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Installation of CAAQMS along with Construction of room with proper electric fittings,air conditioners, furnitures, etc.	environmental protection abatement of pollution, prevention of pollution	69.05
Installation of Piezometer	environmental protection abatement of pollution, prevention of pollution	12.05
Installation of Digital Flow meter	environmental protection abatement of pollution, prevention of pollution	2.5

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**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Tyre Wash System	environmental protection abatement of pollution, prevention of pollution	50
Construction of New Sedimentation Tank	environmental protection abatement of pollution, prevention of pollution	15
Trolley mounted or fixed Mist/Fogger System	environmental protection abatement of pollution, prevention of pollution	6

**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

J.Eakambaram, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047366

**Submitted On:**

25-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047365

### Submitted Date

25-09-2022

## PART A

### Company Information

#### Company Name

Western Coal Fields Ltd Pouni Opencast Mine

#### Application UAN number

88154

#### Address

Plot no: 134 150 181 212/1 etc, Pouni Opencast Mine, WCL, Ballarpur Area, Taluka: Rajura, Dist: Chandrapur - 442706

#### Plot no

134 150 181 212/1 etc

#### Taluka

Rajura

#### Village

-

#### Capital Investment (In lakhs)

10270.39

#### Scale

LSI

#### City

Chandrapur

#### Pincode

442706

#### Person Name

GVS Prasad

#### Designation

Sub Area Manager

#### Telephone Number

9552265303

#### Fax Number

07173230076

#### Email

envpouni@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN no.  
0000110573/CR-2111001023

#### Consent Issue Date

2021-11-25

#### Consent Valid Upto

31/03/2021

#### Establishment Year

1998

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	1170.00	318.00
Domestic	0.00	0.00
All others	16.00	16.00
Total	90.00	0.00
	1276.00	334.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
daily trade effluent	967	892	CMD
domestic trade effluent	5	5	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
coal (CUBIC METER/TONNE)	0.283	0	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
EXPLOSIVES (KG/TONNE)	1.605	0	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	3497	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
WATER REPORT ATTACHED	0	0	-	--	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO AIR STACK MONITORING	0	0	--	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
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5.1 Used or spent oil	18	0	KL/A
5.2 Wastes or residues containing oil	0	0	Ton/Y

**2) From Pollution Control Facilities**

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	7.87	0	Ton/Y

**Part-E**

**SOLID WASTES**

**1) From Process**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
OVERBURDEN	1988000	2641000	M3/Anum

**2) From Pollution Control Facilities**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

**3) Quantity Recycled or Re-utilized within the unit**

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

**Part-F**

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

**1) Hazardous Waste**

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.2 Wastes or residues containing oil	0	Ton/Y	-
35.3 Chemical sludge from waste water treatment	0	Ton/Y	-

**2) Solid Waste**

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
overburden	2641000	M3/Anum	onsite captive landfill

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures	0	-1.87	-369000	1934000	0	0

**Part-H**

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
-	-	0

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**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
-	-	0

**Part-I**

---

**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

GVS Prasad, Sub area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047365

**Submitted On:**

25-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047361

### Submitted Date

25-09-2022

## PART A

### Company Information

#### Company Name

Western Coal Fields Ltd Sasti Opencast Mine

#### Application UAN number

88081

#### Address

Sasti Opencast Mine, WCL, Ballarpur Area,  
Taluka: Rajura, Dist: Chandrapur - 442706

#### Plot no

-

#### Taluka

Rajura

#### Village

-

#### Capital Investment (In lakhs)

28134.78

#### Scale

LSI

#### City

Chandrapur

#### Pincode

442706

#### Person Name

B.V.B. Reddy

#### Designation

Sub Area Manager

#### Telephone Number

8275968348

#### Fax Number

07173230076

#### Email

envsocm@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN no.  
0000088081/CR-2009000281

#### Consent Issue Date

07/09/2020

#### Consent Valid Upto

31/03/2021

#### Establishment Year

1985

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

2.0

#### Actual Quantity

1.463

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0	0
Domestic	40	40
All others	210	0
Total	816	606

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
TRADE EFFLUENT	6604	6456	CMD
DOMESTIC EFFLUENT	20	20	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
COAL	0.115	0.141	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
EXPLOSIVE	3.06	1.606	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	4534	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
WATER REPORT ATTACHED IN PART I	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
-	0	0	-	-	NO STACK EMISSION

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	38.43	40	KL/A
5.2 Wastes or residues containing oil	7.16	1	Ton/Y

### **2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
35.3 Chemical sludge from waste water treatment	35.46	8	Ton/Y

## **Part-E**

### **SOLID WASTES**

#### **1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
OVERBURDEN	10451000	4719000	M3/Anum

#### **2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	Ton/Y

#### **3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	Kg
0	0	0	Kg

## **Part-F**

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

#### **1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.2 Wastes or residues containing oil	0	Ton/Y	-
35.3 Chemical sludge from waste water treatment	0	Ton/Y	-
5.1 Used or spent oil	52.5	KL/A	-

#### **2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
-	0	Ton/Y	-

## **Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
IN COMPARISON TO PREVIOUS FINANCIAL YEAR	0	-0.41	3127000	1102000	0	0

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
-	-	0

---

**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Installation of CAAQMS along with room with proper electric fittings,air conditioners, furnitures, etc.	Air quality monitoring	87
Construction of Piezometer and procurement of DWLR with and without telemetry	Ground water monitoring	16

## Part-I

---

**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

B.V.B. Reddy, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047361

**Submitted On:**

25-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047358

### Submitted Date

25-09-2022

## PART A

### Company Information

#### Company Name

Sasti Underground Mine

#### Application UAN number

88029

#### Address

Near Sasti Village on Rajura Ballarpur road

#### Plot no

140, 141, 142

#### Taluka

Rajura

#### Village

-

#### Capital Investment (In lakhs)

2958.87

#### Scale

LSI

#### City

Chandrapur

#### Pincode

442706

#### Person Name

B. V. B. Reddy

#### Designation

Sub Area Manager

#### Telephone Number

8275968348

#### Fax Number

07173230076

#### Email

envballarpur@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0/APAE Section/UAN no.  
0000109045/CR/CC-851

#### Consent Issue Date

2021-12-15

#### Consent Valid Upto

2022-03-31

#### Establishment Year

1916

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

0.36

#### Actual Quantity

0.042

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

<b>Water Consumption for Process</b>	<b>Consent Quantity in m3/day</b>	<b>Actual Quantity in m3/day</b>
	2253.00	2253.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	1071.00	1071.00
<b>All others</b>	0.00	0.00
<b>Total</b>	3324.00	3324.00

## **2) Effluent Generation in CMD / MLD**

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
TRADE EFFLUENT	0	0	CMD

## **2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)**

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
COAL	10.82	19.58	CMD

## **3) Raw Material Consumption (Consumption of raw material per unit of product)**

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
EXPLOSIVE	0.421	0.404	Kg/Annum

## **4) Fuel Consumption**

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
HSD	0	12000	Ltr/A

## **Part-C**

### **Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)**

#### **[A] Water**

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour</b>	<b>Percentage of variation from prescribed standards with reasons</b>	<b>Standard</b>	<b>Reason</b>
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>		
-	0	0	-	-	NO TRADE EFFLUENT

#### **[B] Air (Stack)**

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged(Mg/NM3)</b>	<b>Percentage of variation from prescribed standards with reasons</b>	<b>Standard</b>	<b>Reason</b>
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>		
-	0	0	-	-	NO STACK EMISSION

## **Part-D**

### **HAZARDOUS WASTES**

#### **1) From Process**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	0	0	

35.3 Chemical sludge from waste water treatment 0 0

**2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
35.3 Chemical sludge from waste water treatment	0	0	Ton/Y

**Part-E**

**SOLID WASTES**

**1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
OVERBURDEN	0	0	CMD

**2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	Ton/Y

**3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	Kg
0	0	0	Kg

**Part-F**

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

**1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
0	0	Ton/Y	0

**2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
-	0	Ton/Y	-

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
IN COMPARISON TO PREVIOUS FINANCIAL YEAR	0	-0.021	15000	524000	0	0

**Part-H**

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

**[A] Investment made during the period of Environmental Statement**

**Detail of measures for Environmental Protection**

**Environmental Protection Measures**

**Capital Investment (Lacks)**

-

-

0

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**[B] Investment Proposed for next Year**

**Detail of measures for Environmental Protection**

**Environmental Protection Measures**

**Capital Investment (Lacks)**

-

-

0

---

**Part-I**

---

**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

BVB Reddy, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047358

**Submitted On:**

25-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000046337

### Submitted Date

20-09-2022

## PART A

### Company Information

#### Company Name

M/s. Western Coalfields Limited, Bhatadi Opencast Mine

#### Application UAN number

MPCB-CONSENT-0000088190

#### Address

POST-BHATADI

#### Plot no

Document uploaded

#### Taluka

Chandrapur

#### Village

Bhatadi Village

#### Capital Investment (In lakhs)

26925.84

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442404

#### Person Name

Shri. Laximi Kanta Mohapatra

#### Designation

Sub Area Manager

#### Telephone Number

8275967993

#### Fax Number

07172265270

#### Email

wclchaenv@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000088190

#### Consent Issue Date

08.05.2020

#### Consent Valid Upto

31.03.2021

#### Establishment Year

1995

#### Date of last environment statement submitted

Jul 20 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

1.465

#### Actual Quantity

1.301

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

#### Consent Quantity in m3/day

#### Actual Quantity in m3/day

<b>Process</b>	500.00	500.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	65.00	65.00
<b>All others</b>	0.00	0.00
<b>Total</b>	565.00	565.00

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Daily Trade Effluent	9320	9320	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Coal	148253	140276	

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosive (Kg/Day)	7872.47	8531.11	

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel (KL/Day)	0	12.30	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
Monitoring Report Enclosed in Step-I	0	0	-	-	-

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
No Stack Monitoring	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	28.23	28.81	KL/A

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
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5.2 Wastes or residues containing oil	1.04	2.65	Ton/Y
35.3 Chemical sludge from waste water treatment	23.22	61.43	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Overburden (MM3/Year)	10.775	12.292	M3/Anum

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0	0	KL/A

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used Oil	0.00	KL/A	Auctioned to CPCB authorized recyclers
5.2 Waste or Residues containing oil	5.73	MT/A	Disposed by MEPL
35.3 Chemical Sludge from ETP	70.90	MT/A	Disposed by MEPL

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden (MM3/Year)	12.292	M3/Anum	OB was stored as external OB Dump

## Part-G

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of Pollution Control Measures	-15	-2.25	-1009879	1580118	2.15	0.00

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Capital Investment	Air & Water Pollution Control Measures	100.00

**Part-I****Any other particulars for improving the quality of the environment.****Particulars**

Attachments as required.

**Name & Designation**

Shri. Laxmi Kanta Mohapatra, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000046337

**Submitted On:**

20-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000046129

### Submitted Date

19-09-2022

## PART A

### Company Information

#### Company Name

M/s Western coalfield Limited. Chanda Rayatwari Colliery

#### Application UAN number

MPCB-CONSENT-0000127902

#### Address

Post- Babupeth

#### Plot no

Document attached

#### Taluka

Chandrapur

#### Village

Rayatwari Area

#### Capital Investment (In lakhs)

1939.82

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442401

#### Person Name

Gopichand D Khobragade

#### Designation

Colliery Manager

#### Telephone Number

8275967536

#### Fax Number

07172255287

#### Email

crcchandrapur@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000127902

#### Consent Issue Date

2022-07-22

#### Consent Valid Upto

2022-12-31

#### Establishment Year

1954

#### Date of last environment statement submitted

Jul 17 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.06

#### Actual Quantity

0.00

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

Consent Quantity in m3/day

Actual Quantity in m3/day

<b>Process</b>	170.00	100.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	185.00	170.00
<b>All others</b>	0.00	0.00
<b>Total</b>	355.00	270.00

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Daily Trade Effluent	0.00	0.00	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Coal	0.00	0.00	CMD

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosive	0.00	0.00	Kg/Annum

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	0.0	0.00	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
Water Report Attached in-I	0	0	NA	NA	NA

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
No Stack Monitoring	0	0	NA	NA	NA

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	Ton/Y

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
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**Part-E****SOLID WASTES****1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	M3/Anum

**2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	Ton/Y

**3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	Ton/Y

**Part-F**

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

**1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
NA	0	Ton/Y	NA

**2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
NA	0	Ton/Y	NA

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of Pollution Control Measures	0.00	0.00	0	-228	0.00	0.00

**Part-H**

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Investment	Air & watre Pollution Control Measures	0.00

**[B] Investment Proposed for next Year**

**Detail of measures for Environmental Protection Environmental Protection Measures Capital Investment (Lacks)**

## Part-I

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### Any other particulars for improving the quality of the environment.

#### ***Particulars***

Attachments as required.

#### ***Name & Designation***

Shri. G.D. Khobragade, Colliery Manager

#### ***UAN No:***

MPCB-ENVIRONMENT\_STATEMENT-0000046129

#### ***Submitted On:***

19-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000046347

### Submitted Date

20-09-2022

## PART A

### Company Information

#### Company Name

M/s. WESTERN COALFIELDS LIMITED, Durgapur  
Opencast Mine

#### Application UAN number

MPCB-CONSENT-0000066122

#### Address

POST-DURGAPUR

#### Plot no

Document uploaded

#### Taluka

Chandrapur

#### Village

Durgapur, WCL-Chandrapur Area

#### Capital Investment (In lakhs)

29685.88

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442404

#### Person Name

Shri. Arun M. Lakhe

#### Designation

Sub Area Manager

#### Telephone Number

8275967702

#### Fax Number

07172265784

#### Email

durgapurocwl@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000066122

#### Consent Issue Date

20.05.2020

#### Consent Valid Upto

31.03.2021

#### Establishment Year

1980

#### Date of last environment statement submitted

Jul 20 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

3.00

#### Actual Quantity

1.835

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

<b>Water Consumption for Process</b>	<b>Consent Quantity in m3/day</b>	<b>Actual Quantity in m3/day</b>
	550.00	550.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	1500.00	1500.00
<b>All others</b>	0.00	0.00
<b>Total</b>	2050.00	2050.00

## **2) Effluent Generation in CMD / MLD**

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Daily Trade Effluent	2690	2050	CMD

## **2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)**

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Coal (Kl/Tonne)	0.115	0.109	

## **3) Raw Material Consumption (Consumption of raw material per unit of product)**

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosives (Kg/Tonne)	2.68	2.89	

## **4) Fuel Consumption**

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	0	4723.10	KL/A

## **Part-C**

### **Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)**

#### **[A] Water**

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
Monitoring Report Enclosed in Step-I	0	0	-	-	-

#### **[B] Air (Stack)**

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
No Stack Monitoring	0	0	-	-	-

## **Part-D**

### **HAZARDOUS WASTES**

#### **1) From Process**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	41.58	25.20	KL/A
5.2 Wastes or residues containing oil	5.90	2.90	Ton/Y

**2) From Pollution Control Facilities**

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

**Part-E****SOLID WASTES****1) From Process**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Overburden	26712.33	27397.26	CMD

**2) From Pollution Control Facilities**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

**3) Quantity Recycled or Re-utilized within the unit**

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

**Part-F**

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

**1) Hazardous Waste**

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
Used or Spent Oil	21.00	KL/A	Auction to CPCB Authorized recyclers
5.2 Wastes or residues containing oil	3.95	Ton/Y	Disposed off via MEPL to CHWTSDF
35.3 Chemical sludge from waste water treatment	18.73	Ton/Y	Disposed off via MEPL to CHWTSDF

**2) Solid Waste**

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden	27397.26	CMD	OB Stacked as external dump

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of Pollution Control Measures	0	-200.75	-0.21	-6209409	12.25	0

**Part-H**

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

**[A] Investment made during the period of Environmental Statement**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Capital Expenditure	Air Pollution Control Measures	12.25

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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Capital Investment	Air & Water Pollution Control Measures	65.00

**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

Documents as asked

**Name & Designation**

Shri. Arun M. Lakhe, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000046347

**Submitted On:**

20-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000046157

### Submitted Date

19-09-2022

## PART A

### Company Information

#### Company Name

M/s WESTERN COALFIELDS LIMITED, Durgapur Rayatwari Colliery

#### Application UAN number

MPCB-CONSENT-0000108066

#### Address

Ballarshah Road, Chandrapur Area

#### Plot no

338/7

#### Taluka

Chandrapur

#### Village

Rayatwari Area

#### Capital Investment (In lakhs)

6852.82

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442401

#### Person Name

U. B. Bodhe

#### Designation

Sub Area Manager

#### Telephone Number

07172277929

#### Fax Number

#### Email

agentrsa@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000108066

#### Consent Issue Date

2022-03-01

#### Consent Valid Upto

2024-03-31

#### Establishment Year

1982

#### Date of last environment statement submitted

Jul 17 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.30

#### Actual Quantity

0.108

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

Consent Quantity in m3/day

Actual Quantity in m3/day

<b>Process</b>	20600.00	13600.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	200.00	161.00
<b>All others</b>	120.00	115.00
<b>Total</b>	20920.00	13876.00

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Daily Trade Effluent	3750	3750	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Coal	0.495	38.75	CMD

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosives	0.477	0.455	Kg/Annum

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	0	25.788	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
Water Report attached in Part-I	0	0	NA	NA	NA

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
NA	0	0	NA	NA	NA

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
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## Part-E

### **SOLID WASTES**

#### **1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	CMD

#### **2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	CMD

#### **3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### **1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
NA	0	Ton/Y	NA

#### **2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
NA	0	Ton/Y	NA

## Part-G

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of the Pollution control measures	0.00	0.00	-25238	11835949	0.00	0.00

## Part-H

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

#### **[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Air & Water Pollution Control Measures	0.00

#### **[B] Investment Proposed for next Year**

**Detail of measures for Environmental Protection Environmental Protection Measures Capital Investment (Lacks)**

## Part-I

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**Any other particulars for improving the quality of the environment.**

**Particulars**

Attchments as required.

**Name & Designation**

Shri. U. B. Bodhe, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000046157

**Submitted On:**

19-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047343

### Submitted Date

25-09-2022

## PART A

### Company Information

#### Company Name

M/s Western Coalfields Limited, HLC Railway Siding

#### Application UAN number

MPCB-CONSENT-0000089028

#### Address

POST-HINDUSTAN LALPETH COLLIERY

#### Plot no

NA

#### Taluka

Chandrapur

#### Village

WCL-CHANDRAPUR AREA

#### Capital Investment (In lakhs)

81.56

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442507

#### Person Name

Shri. Prafulla Kumar

#### Designation

Mine Manager

#### Telephone Number

8275967794

#### Fax Number

07172225264

#### Email

managerhlc1@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Green

#### Industry Type

G59 Mineral stack yard / Railway sidings

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000089028

#### Consent Issue Date

26.05.2020

#### Consent Valid Upto

31.03.2025

#### Establishment Year

1924

#### Date of last environment statement submitted

Jul 26 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Loading & Unloading of Coal

#### Consent Quantity

4.00

#### Actual Quantity

0.913

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

#### Consent Quantity in m3/day

#### Actual Quantity in m3/day

<b>Process</b>	0.00	53.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	1.00	0.00
<b>All others</b>	0.00	0.00
<b>Total</b>	1.00	53.00

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Daily Trade Effluent	0.00	0.00	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Loading & Unloading of Coal (Cubic Meter/Tonne)	0.122	0.0212	CMD

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
NA	0	0	

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	0.00	10.585	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
Water Report attached in Step-I	0	0	-	-	-

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
No Air Stack Monitoring	0	0	NA	NA	NA

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	MT/A

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
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## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	MT/A

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	MT/A

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	KL/A

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
NA	0	MT/A	NA

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	0	MT/A	NA

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the Pollution Control Measures	-1	0.221	0	0.00	0.00	0.00

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Capital Expenditure	Air & Water Pollution Control Measures	0.00

#### [B] Investment Proposed for next Year

Detail of measures for Environmental Protection Environmental Protection Measures Capital Investment (Lacks)

## Part-I

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### Any other particulars for improving the quality of the environment.

#### ***Particulars***

Attachments as required.

#### ***Name & Designation***

Shri. Prafulla Kumar, Chief Manager

#### ***UAN No:***

MPCB-ENVIRONMENT\_STATEMENT-0000047343

#### ***Submitted On:***

25-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000046654

### Submitted Date

22-09-2022

## PART A

### Company Information

#### Company Name

Hindusthan Lalpeth Open Cast Project

#### Application UAN number

MPCB-CONSENT-0000108131

#### Address

POST-LALPETH

#### Plot no

Document uploaded

#### Taluka

Chandrapur

#### Village

Chandrapur Area

#### Capital Investment (In lakhs)

6216.75

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442507

#### Person Name

Ghanshyam Prasad

#### Designation

Sub Area Manager

#### Telephone Number

8275967560

#### Fax Number

07172225264

#### Email

hlsubarea@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000108131

#### Consent Issue Date

2022-04-12

#### Consent Valid Upto

2023-03-31

#### Establishment Year

1985

#### Date of last environment statement submitted

Jul 18 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

1.00

#### Actual Quantity

0.00

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0.00

#### Actual Quantity

0.00

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

#### Consent Quantity in m3/day

#### Actual Quantity in m3/day

<b>Process</b>	1190.00	110.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	8.00	6.00
<b>All others</b>	0.00	0.00
<b>Total</b>	1198.00	116.00

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Trade Effluent	1025	4384	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Coal	0.00	0.00	CMD

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosive	0.00	1809789	Kg/Annum

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	0.00	42.705	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour</b>	<b>Percentage of variation from prescribed standards with reasons</b>			
			<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>	<b>Standard</b>
Water Quality Test Report Attached in Part-I	0	0	0	0	0	0

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged(Mg/NM3)</b>	<b>Percentage of variation from prescribed standards with reasons</b>			
			<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>	<b>Standard</b>
NA	0	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	0.00	0.00	KL/A
5.2 Wastes or residues containing oil	0.00	0.00	MT/A

35.3 Chemical sludge from waste water treatment 0.00

0.00

MT/A

**2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0.00	0.00	MT/A

**Part-E****SOLID WASTES****1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Over Burden (Mm3/A)	0.00	7.81	M3/Anum

**2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0.00	0.00	Kg
NA	0.00	0.00	Kg

**3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	0.00	0.00	KL/A

**Part-F**

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

**1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	0.00	KL/A	Auction to CPCB Authorized recyclers
5.2 Wastes or residues containing oil	0.00	MT/A	Disposed off via MEPL to CHWTSDF
35.3 Chemical sludge from waste water treatment	0.00	MT/A	Disposed off via MEPL to CHWTSDF

**2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Over Burden (Mm3/A)	7.81	M3/Anum	Stacked in OB Dumps & used for backfilling

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of Pollution Control Measures	0.00	-0.0398	-4958.33	-1198083	6.61	0.00

**Part-H**

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

**[A] Investment made during the period of Environmental Statement**

**Detail of measures for Environmental Protection**

**Environmental Protection Measures**

**Capital Investment (Lacks)**

Capital Expenditure

For Air, Water & Noise Pollution control

6.61

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**[B] Investment Proposed for next Year**

**Detail of measures for Environmental Protection**

**Environmental Protection Measures**

**Capital Investment (Lacks)**

Capital Investment

Air Pollution Control Measures

133.00

**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

Attachment as required

**Name & Designation**

Shri. Manish Podey, Sub-Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000046654

**Submitted On:**

22-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000046145

### Submitted Date

19-09-2022

## PART A

### Company Information

#### Company Name

MAHAKALI COLLIERY

#### Application UAN number

MPCB-CONSENT-0000064952

#### Address

Post- Babupeth

#### Plot no

423

#### Taluka

Chandrapur

#### Village

Rayatwari Area

#### Capital Investment (In lakhs)

2355.00

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442401

#### Person Name

Santosh Motiram Dhande

#### Designation

MINE MANAGER

#### Telephone Number

9422141462

#### Fax Number

07172251346

#### Email

mahakalicolliery@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000064952

#### Consent Issue Date

2019-12-24

#### Consent Valid Upto

2022-03-31

#### Establishment Year

1922

#### Date of last environment statement submitted

Jul 17 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.40

#### Actual Quantity

0.0287

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

#### Consent Quantity in m3/day

#### Actual Quantity in m3/day

<b>Process</b>	115.00	115.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	250.00	250.00
<b>All others</b>	0.00	0.00
<b>Total</b>	365.00	365.00

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Daily Trade Effluent	4250	3885	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Coal	0.435	1.221	CMD

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosives	0.217	0.349	Kg/Annum

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	16.425	6.588	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
Water Report attached in Part-I	0	0	NA	NA	NA

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
No Air Stack Monitoring	0	0	NA	NA	NA

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	KL/A

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
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**Part-E****SOLID WASTES****1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	CMD

**2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	CMD

**3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

**Part-F**

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

**1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
NA	0	CMD	NA

**2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
NA	0	CMD	NA

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of Pollution Control Measures	0.00	0.0269	7448	-908179	0	0

**Part-H**

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Air & Water Pollution Control Measures	0.00

**[B] Investment Proposed for next Year**

**Detail of measures for Environmental Protection Environmental Protection Measures Capital Investment (Lacks)**

## Part-I

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### Any other particulars for improving the quality of the environment.

#### **Particulars**

Attachment as required.

#### **Name & Designation**

Shri. Santosh Motiram Dhande, Mine Manager

#### **UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000046145

#### **Submitted On:**

19-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000046163

### Submitted Date

19-09-2022

## PART A

### Company Information

#### Company Name

M/s. Western Coalfield Ltd., Manna Incline

#### Application UAN number

MPCB-CONSENT-0000088025

#### Address

Post- Hindustan Lalpeth

#### Plot no

Document uploaded

#### Taluka

Chandrapur

#### Village

Lalpeth Area

#### Capital Investment (In lakhs)

724.62

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442507

#### Person Name

Shri. R. K. Singh

#### Designation

Mine Manager

#### Telephone Number

8275967795

#### Fax Number

07172255158

#### Email

manna.safety@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000088025

#### Consent Issue Date

26.02.2021

#### Consent Valid Upto

31.03.2023

#### Establishment Year

1999

#### Date of last environment statement submitted

Jul 17 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.15

#### Actual Quantity

0.073

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

#### Consent Quantity in m3/day

#### Actual Quantity in m3/day

<b>Process</b>	79.00	13.50
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	4.00	4.00
<b>All others</b>	0.00	0.00
<b>Total</b>	83.00	17.50

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Daily Trade Effluent	68	68	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Mining (Cubic Meter/Tonne)	0.0572	0.0564	CMD

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosive (Kg/Tonne)	0.398	0.354	Kg/Annum

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	0	11227.05	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged (Mg/Lit) Except PH, Temp, Colour</b>	<b>Percentage of variation from prescribed standards with reasons</b>	<b>Standard</b>	<b>Reason</b>
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>		
MONITORING REPORT UPLOADED AT STEP I	0	0	-	-	-

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged (Mg/NM3)</b>	<b>Percentage of variation from prescribed standards with reasons</b>	<b>Standard</b>	<b>Reason</b>
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>		
NO STACK MONITORING	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	Ton/Y

#### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
NA	0	CMD	NA

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	0	CMD	NA

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution control measures	0.00	-30.74	2810.682	761055	0.00	0.00

## Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.  
[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacs)
Capital Expenditure	Air & Water Pollution Control Measures	0.00

[B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Water Pollution Control Measures	3.00

## **Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

Attachments as required.

**Name & Designation**

Shri. R. K. Singh, Mine Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000046163

**Submitted On:**

19-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000046160

### Submitted Date

19-09-2022

## PART A

### Company Information

#### Company Name

Western Coalfields Limited, Nandgaon Incline

#### Application UAN number

MPCB-CONSENT-0000108071

#### Address

Nandgaon (Pode)

#### Plot no

Document uploaded

#### Taluka

Chandrapur

#### Village

Nandgaon (Pode)

#### Capital Investment (In lakhs)

1896.11

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442403

#### Person Name

R. P. Keshwani

#### Designation

Colliery Manager

#### Telephone Number

9422837534

#### Fax Number

#### Email

managernicha@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000108071

#### Consent Issue Date

2021-11-29

#### Consent Valid Upto

2024-03-31

#### Establishment Year

1980

#### Date of last environment statement submitted

Jul 17 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

0.20

#### Actual Quantity

0.07672

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

#### Consent Quantity in m3/day

#### Actual Quantity in m3/day

<b>Process</b>	5440.00	5360.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	90.00	90.00
<b>All others</b>	0.00	0.00
<b>Total</b>	5530.00	5450.00

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Daily Trade Effluent	2180	2180	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Coal (Cubic Meter/Tone)	0.684	21.376	CMD

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosive	0.352	0.336	Kg/Annum

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	0	9.792	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
Water Report attached in Step-I	0	0	NA	NA	NA

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
No Air Stack Monitoring	0	0	NA	NA	NA

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
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## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
NA	0	CMD	NA

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	0	CMD	NA

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of Pollution Control Measures	222	-0.0093	533.573	676157	0.00	0.00

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Capital Expenditure	Air Pollution Control Measures	0.00

#### [B] Investment Proposed for next Year

Detail of measures for Environmental Protection Environmental Protection Measures Capital Investment (Lacks)

## Part-I

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### Any other particulars for improving the quality of the environment.

#### ***Particulars***

Attachment as required.

#### ***Name & Designation***

R. P. Keshwani, Mine Manager

#### ***UAN No:***

MPCB-ENVIRONMENT\_STATEMENT-0000046160

#### ***Submitted On:***

19-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000046660

### Submitted Date

22-09-2022

## PART A

### Company Information

#### Company Name

M/s Western Coal Fields Limited, Padmapur Open Cast Mine

#### Application UAN number

MPCB-CONSENT-0000098267

#### Address

POST-PADMAPUR

#### Plot no

document uploaded

#### Taluka

Chandrapur

#### Village

WCL-CHANDRAPUR AREA

#### Capital Investment (In lakhs)

21404.65

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442404

#### Person Name

Shri. Laxmikanta Mohapatra

#### Designation

Sub Area Manager

#### Telephone Number

8275967993

#### Fax Number

#### Email

sampadmapur@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000098267

#### Consent Issue Date

31.05.2021

#### Consent Valid Upto

31.03.2022

#### Establishment Year

1985

#### Date of last environment statement submitted

Jul 20 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

2.5

#### Actual Quantity

0.454

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

#### Consent Quantity in m3/day

#### Actual Quantity in m3/day

<b>Process</b>	405.00	405.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	10.00	10.00
<b>All others</b>	0.00	0.00
<b>Total</b>	415.00	415.00

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
DAILY TRADE EFFLUENT	6595	6390	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Coal	0.323	0.325	CMD

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosive (Kg/Tonne)	1.90	0.482	

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel (KL/day)	0	9.93	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour</b>	<b>Percentage of variation from prescribed standards with reasons</b>		
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>	<b>Standard</b>	<b>Reason</b>
As per water quality report attached in part I	0	0	--	-	-

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged(Mg/NM3)</b>	<b>Percentage of variation from prescribed standards with reasons</b>		
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>	<b>Standard</b>	<b>Reason</b>
NO STACK MONITORING	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	31.08	16.59	KL/A

## 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.2 Wastes or residues containing oil	3.50	18.00	MT/A
35.3 Chemical sludge from waste water treatment	39.20	9.50	MT/A

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
OVERBURDEN (Mm3/Year)	1231416	1231416	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	39.90	KL/A	Auctioned to CPCB Authorised Recyclers
5.2 Wastes or residues containing oil	8.30	MT/A	Disposed off by MEPL
35.3 Chemical sludge from waste water treatment	9.34	MT/A	Disposed off by MEPL

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
OVERBURDEN (Mm3/Year)	1231416	M3/Anum	External Dumps are stabilised by Plantation and backfilling is carried out if possible.

## Part-G

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of the pollution Control measures	-9	0.45	649472	-5164167	4.18	0.00

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
CAPITAL EXPENDITURE	FOR AIR POLLUTION CONTROL MEASURES	4.18

---

**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
CAPITAL INVESTMENT	FOR AIR & WATER POLLUTION CONTROL MEASURES	18.00

**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

Attachment as per required.

**Name & Designation**

Shri. Laxmikanta Mohapatra, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000046660

**Submitted On:**

22-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044487

### Submitted Date

30-08-2022

## PART A

### Company Information

#### Company Name

New Majri Underground to OC Mine

#### Application UAN number

MPCB-CONSENT-00000101444

#### Address

New Majri UG to OC Mine, At: Majri, PO:  
Shivjinagar, Ta: Bhadrawati, District:  
Chandrapur, Maharashtra

#### Plot no

235-249

#### Taluka

Bhadrawati

#### Village

Shivjinagar

#### Capital Investment (In lakhs)

17314.5

#### Scale

LSI

#### City

Chandrapur

#### Pincode

442503

#### Person Name

Balmiki Prasad

#### Designation

Sub Area Manager

#### Telephone Number

8275967116

#### Fax Number

07175285088

#### Email

newmajriugtooc@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

format1.0/CAC/UAN No.  
0000101444/CO-2102000370

#### Consent Issue Date

05.02.2021

#### Consent Valid Upto

31.03.2022

#### Establishment Year

2015

#### Date of last environment statement submitted

Aug 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

3000000

#### Actual Quantity

1925112

#### UOM

Ton/Y

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	250	50.00
Domestic	0	200.00
All others	5	4.00
Total	140	140.00
	395	394.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Daily Trade Effluent	3973	3800	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
COAL(CUBIC METER/TONNE)	0.009	0.009	

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
EXPLOSIVES (KG/TONNE)	0.001	0.24	Ton/Ton

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
HSD	0	4680.196	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Monitoring report attached	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NA	0	0	0	0	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	10.938	50.72	KL/A

## 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
2.2 Sludge containing oil	13.97	15.97	Ton/Y
5.2 Wastes or residues containing oil	1.66	2.24	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Overburden incl. Top Soil	6668541	7393568	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	98.79	KL/A	Auhorised recycler
5.2 Wastes or residues containing oil	2.24	Ton/Y	CHWTSDF BUTIBORI
2.2 Sludge containing oil	15.97		CHWTSDF BUTIBORI

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
OVERBURDEN incl. TOP SOIL	7393568	M3/Anum	OB Dump, top Soil Dump and Embankment

## Part-G

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of the pollution Control measures	0	0	0	0	39.19	0

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

**Detail of measures for Environmental Protection**

Pollution control measures

Pollution control measures, Statutory Fees, Plantation

**Environmental Protection Measures**

Capital Expenditure

Revenue Expenditure

**Capital Investment (Lacks)**

39.19

147.41

**[B] Investment Proposed for next Year**

**Detail of measures for Environmental Protection**

Capital Investment

**Environmental Protection Measures**

Mist cannon, sweeping machine etc

**Capital Investment (Lacks)**

25

**Part-I**

**Any other particulars for improving the quality of the environment.**

**Particulars**

Environment protection and abatement of pollution

**Name & Designation**

R.B. Verma, Dy.G.M. (Min)/ Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000044487

**Submitted On:**

30-08-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044506

### Submitted Date

30-08-2022

## PART A

### Company Information

#### Company Name

New Majri - II (A) Open Cast Coal Mine  
Expansion Project

#### Application UAN number

MPCB-CONSENT-0000107569

#### Address

New Majri II (A) OC Mine, At: Majri, PO:  
Shivjinagar, Ta: Bhadrawati, District:  
Chandrapur, Maharashtra

#### Plot no

1-10

#### Taluka

Bhadrawati

#### Village

Shivjinagar

#### Capital Investment (In lakhs)

14385.11

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442503

#### Person Name

R.B. Verma

#### Designation

Sub Area Manager

#### Telephone Number

8275967324

#### Fax Number

07175285088

#### Email

newmajrioc@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CC/UAN no.  
0000107569/CR-2111000542

#### Consent Issue Date

2021-11-15

#### Consent Valid Upto

2023-03-31

#### Establishment Year

1975

#### Date of last environment statement submitted

Aug 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

2500000

#### Actual Quantity

1666700

#### UOM

Ton/Y

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

Ton/Y

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	100.00	50.00
Domestic	850.00	800.00
All others	160.00	10.00
Total	50.00	50.00
	1160.00	910.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine discharge	5992	5800	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Mining	0.017	0.011	

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosives	2.226	0.25	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
HSD	0	15806.446	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
AS PER WATER QUALITY REPORT	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
STACK (NA)	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
----------------------	--------------------------------------	-------------------------------------	-----

5.1 Used or spent oil	55.275	45.44	KL/A
-----------------------	--------	-------	------

**2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.2 Wastes or residues containing oil	2	2.12	Ton/Y
2.2 Sludge containing oil	4.96	9.14	Ton/Y

**Part-E**

**SOLID WASTES**

**1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
over burden (OB)	5631520	13595175	M3/Anum

**2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NIL	0	0	M3/Anum

**3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	KL/A

**Part-F**

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

**1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	57.05	KL/A	0
5.2 Wastes or residues containing oil	2.12	Ton/Y	0
2.2 Sludge containing oil	9.14	Ton/Y	0

**2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
OB	13595175	M3/Anum	0

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Pollution control measures	0	0	0	0	26.56	0

**Part-H**

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

**[A] Investment made during the period of Environmental Statement**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
CAPITAL EMP EXPENDITURE	AIR AND WATER POLLUTION CONTROL MEASURES	26.56
REVENUE EMP EXPENDITURE	Statutory, Operation & Maintenance etc	40

**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Works for Air & Water Quality improvement	Monitoring equipment	15

**Part-I**

**Any other particulars for improving the quality of the environment.**

**Particulars**

Upgradation of Operation & Maintenance, Monitoring system, Backfilling of mine void

**Name & Designation**

R.B. Verma, Dy.G.M. (Min)/ Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000044506

**Submitted On:**

30-08-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044482

### Submitted Date

30-08-2022

## PART A

### Company Information

#### Company Name

AMALG. YEKONA I & II OC MINE

#### Application UAN number

MPCB-CONSENT-0000105075

#### Address

Yekona Opencast Coal Mine Project,  
Village: Yekona, Po: Warora, Th:  
Warora, District: Chandrapur

#### Plot no

89-92

#### Taluka

Warora

#### Village

MAJRI AREA

#### Capital Investment (In lakhs)

16732.33

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442907

#### Person Name

Gautam Roy

#### Designation

Sub Area Manager

#### Telephone Number

8275967138

#### Fax Number

07175285088

#### Email

yekonaoc@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN no. MPCB-  
CONSENT-0000105075/CO-210000179

#### Consent Issue Date

2021-10-05

#### Consent Valid Upto

2023-03-31

#### Establishment Year

2021

#### Date of last environment statement submitted

Aug 27 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

2750000

#### Actual Quantity

2417021

#### UOM

Ton/Y

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

Ton/Y

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	100.00	20.00
Domestic	600.00	600.00
All others	10.00	10.00
Total	240.00	200.00
	950.00	830.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine Discharge	4050	4000	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Mining	0.006	0.003	

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosives	0.08	0.27	Ton/Ton

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
HSD	0	7627.37	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
AS PER WATER QUALITY REPORT	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO STACK	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	3.5	37	KL/A

## 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
2.2 Sludge containing oil	9.82	15.33	Ton/Y
5.2 Wastes or residues containing oil	1	2	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
OVERBURDEN	5911038	13848000	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	Ton/Y

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	37	KL/A	-
2.2 Sludge containing oil	15.33	Ton/Y	-
5.2 Wastes or residues containing oil	2	Ton/Y	-

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
OVERBURDEN	13848000	M3/Anum	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of Pollution control measures	0	0	0	0	181.37	0

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
CAPITAL	Fixed Sprinklers, CAAQMS, Mist Cannon, ETP, STP etc	181.37
REVENUE EXPENDITURE	Plantation, Statutory fees, Environment monitoring and Op and Maintenance	61.37

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**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
SPRINKLERS/ Tyre wash system	SPRINKLING THROUGH MIST CANNON, Tyre washing Nozzles	70

**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

ENVIRONMENT PROTECTION

**Name & Designation**

GAUTAM ROY, SUB AREA MANAGER

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000044482

**Submitted On:**

30-08-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044417

### Submitted Date

28-08-2022

## PART A

### Company Information

#### Company Name

M/S WESTERN COALFIELDS LTD. DHORWASA  
OC MINE

#### Application UAN number

-

#### Address

Dhorwasa OC Mine, TELWASA SUB AREA AT -  
TELWASA

#### Plot no

-

#### Taluka

BHADRAWATI

#### Village

CHANDRAPUR

#### Capital Investment (In lakhs)

303.49

#### Scale

L.S.I

#### City

CHANDRAPUR

#### Pincode

442503

#### Person Name

SHRI S.K. BHAIRVA

#### Designation

SUB AREA MANAGER

#### Telephone Number

07175240224

#### Fax Number

07175285088

#### Email

dhorwasaoc@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

BO/JD(APC)/TB-2UAN No.  
28553/R/CC-1902000496

#### Consent Issue Date

12.02.2019

#### Consent Valid Upto

31.03.2020

#### Establishment Year

2002

#### Date of last environment statement submitted

Aug 26 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

Ton/Y

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	100.00	0.00
Domestic	0.00	0.00
All others	50.00	0.00
Total	0.00	0.00
	150.00	0.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
TRADE EFFLUENT	100	0	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
COAL (CUBIC METER/TONNE)	0	0	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
POL (KL/TONNE)	0	0	
EXLOSIVES (KG/TONNE)	0	0	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
DIESEL	0	0	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
AS PER THE WATER QUALITY REPORT ATTACHED IN PART I	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
NO STACK MONITORING	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0	0	KL/A

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	0	0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
OVERBURDEN	0	0	CMD

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	0	KL/A	-

### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
OVERBURDEN	0	CMD	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	0	0	0	0	0	0

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

**Detail of measures for Environmental Protection**

CAPITAL AND REVENUE INVESTMENT

**Environmental Protection Measures**    **Capital Investment (Lacks)**

ENVIRONMENTAL EXPENDITURE

0

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**[B] Investment Proposed for next Year**

**Detail of measures for Environmental Protection**

CAPITAL INVESTMENT

**Environmental Protection Measures**

CAPITAL INVESTMENT PROPOSED

**Capital Investment (Lacks)**

0

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**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

MINE DISCONTINUED SINCE 17.12.2015 AND THERE IS NO MINING ACTIVITY

**Name & Designation**

SRI S.K. Bhairva, Sub Area Manager

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000044417

**Submitted On:**

28-08-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044418

### Submitted Date

28-08-2022

## PART A

### Company Information

#### Company Name

M/S WESTERN COALFIELDS LTD. JUNA KUNADA OC MINE

#### Application UAN number

MPCB-CONSENT-0000001178

#### Address

JUNA KUNADA OC COAL MINE PROJECT, CHARGAON SUB AREA, PO.- KONDA(VIA), SHIVJINAGAR, TA.- BHADRAWATI, DISTRICT: CHANDRAPUR, MAHARASHTRA

#### Plot no

-

#### Taluka

BHADRAWATI

#### Village

SHIVJINAGAR

#### Capital Investment (In lakhs)

1130.93

#### Scale

L.S.I

#### City

CHANDRAPUR

#### Pincode

442503

#### Person Name

SHRI S.K. BHAIKVA

#### Designation

SUB AREA MANAGER

#### Telephone Number

07175230117

#### Fax Number

07175285088

#### Email

envmajri@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

BO/JD(APC)/UAN No.1178/R/CC-647

#### Consent Issue Date

14.03.2017

#### Consent Valid Upto

31.03.2019

#### Establishment Year

2012

#### Date of last environment statement submitted

Aug 26 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

Ton/Y

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

<b>Water Consumption for Process</b>	<b>Consent Quantity in m3/day</b>	<b>Actual Quantity in m3/day</b>
	8456.00	0.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	50.00	0.00
<b>All others</b>	0.00	0.00
<b>Total</b>	8506.00	0.00

## **2) Effluent Generation in CMD / MLD**

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
DAILY TRADE EFFLUENT	8449	0	CMD

## **2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)**

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
COAL (CUBIC METER/TONNE)	0	0	Ton/Ton

## **3) Raw Material Consumption (Consumption of raw material per unit of product)**

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
POL (KL/Ton)	0	0	
EXPLOSIVES (KG/TONNE)	0	0	

## **4) Fuel Consumption**

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
DIESEL	0	0	KL/A

## **Part-C**

### **Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)**

#### **[A] Water**

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged (Mg/Lit) Except PH,Temp,Colour</b>	<b>Percentage of variation from prescribed standards with reasons</b>	<b>Standard</b>	<b>Reason</b>
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>		
AS PER THE AIR & WATER QUALITY REPORT ATTACHED IN PART I	0	0	-	-	-

#### **[B] Air (Stack)**

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day)</b>	<b>Concentration of Pollutants discharged (Mg/NM3)</b>	<b>Percentage of variation from prescribed standards with reasons</b>	<b>Standard</b>	<b>Reason</b>
	<b>Quantity</b>	<b>Concentration</b>	<b>%variation</b>		
no stack monitoring	0	0	-	-	-

## **Part-D**

### **HAZARDOUS WASTES**

#### **1) From Process**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	0	0	Ltr/A

## 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
35.3 Chemical sludge from waste water treatment	0	0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
OVERBURDEN	0	0	CMD

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	0	Ltr/A	-
35.3 Chemical sludge from waste water treatment	0	CMD	-

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
OVERBURDEN	0	CMD	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of the pollution Control measures taken	0	0	0	0	0	0

## Part-H

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

[A] Investment made during the period of Environmental Statement

**Detail of measures for Environmental Protection**

CAPITAL INVESTMENT  
REVENUE INVESTMENT

**Environmental Protection Measures Capital Investment (Lacks)**

ENVIRONEMNT EXPENDITURE 0  
ENVIRONEMNT EXPENDITURE 0

---

**[B] Investment Proposed for next Year****Detail of measures for Environmental Protection**

CAPITAL INVESTMENT

**Environmental Protection Measures**

CAPITAL INVESTMENT PROPOSED

**Capital Investment (Lacks)**

0

**Part-I**

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**Any other particulars for improving the quality of the environment.****Particulars**

MINE IS DISCONTINUED SINCE 15.05.2018 AND THERE IS NO MINING ACTIVITY

**Name & Designation**

SHRI S.K. Bhairva, SUB AREA MANAGER

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000044418

**Submitted On:**

28-08-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044416

### Submitted Date

28-08-2022

## PART A

### Company Information

#### Company Name

M/s WESTERN COALFIELDS LIMITED NAVIN  
KUNADA OCP

#### Application UAN number

MPCB-CONSENT-0000028004

#### Address

Navin Kunada Opencast Coal Mine Expansion  
project, CHARGAON SUB AREA, AT-NAVIN  
KUNADA PO.-KONDA(VIA) SHIVJINAGAR, TA.-  
BHADRAWATI

#### Plot no

10

#### Taluka

Bhadrawati

#### Village

CHANDRAPUR

#### Capital Investment (In lakhs)

826.38

#### Scale

L.S.I

#### City

CHANDRAPUR

#### Pincode

442503

#### Person Name

SHRI S.K.Bairwa

#### Designation

SENIOR MANAGER (MINING)

#### Telephone Number

07175230117

#### Fax Number

07175285088

#### Email

envmajri@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

BO/JD(APC)/TB-2UAN  
No.28004/R/CC-1902000495

#### Consent Issue Date

12.02.2019

#### Consent Valid Upto

31.03.2020

#### Establishment Year

2001

#### Date of last environment statement submitted

Aug 26 2021 12:00:00:00AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

Ton/Y

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	100.00	0.00
Domestic	0.00	0.00
All others	50.00	0.00
Total	0.00	0.00
	150.00	0.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
DAILY TRADE EFFLUENT	100	0	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
COAL (CUBIC METER/MILLION TONNE)	0	0	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
POL (KL/TONNE)	0	0	
EXPLOSIVES (KG/TONNE)	0	0	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
DIESEL	0	0	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
AS PER THE WATER QUALITY REPORT ATTACHED IN PART-I	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
NO STACK MONITORING	0	0	-	-	-

## Part-D

## HAZARDOUS WASTES

### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0	0	KL/A
0	0	0	KL/A

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	0	0	Ton/Y

## Part-E

## SOLID WASTES

### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
OVERBURDEN	0	0	CMD

### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	0	KL/A	-
35.3 Chemical sludge from waste water treatment	0	Ton/Y	-

### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
OVERBURDEN	0	CMD	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	0	0	0	0	0	0

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
CAPITAL AND REVENUE INVESTMENT	ENVIRONMENTAL EXPENDITURE	0

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#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
CAPITAL INVESTMENT	CAPITAL INVESTMENT PROPOSED	0

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## Part-I

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### Any other particulars for improving the quality of the environment.

#### Particulars

MINE IS CLOSED SINCE 16.06.2016 AS THE RESERVES OF THE MINE ARE EXHAUSTED

#### Name & Designation

SHRI S.K.Bairwa, SUB AREA MANAGER (MINING)

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000044416

#### Submitted On:

28-08-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044419

### Submitted Date

28-08-2022

## PART A

### Company Information

#### Company Name

Western Coalfields Limited - Telwasa OC Mine

#### Application UAN number

-

#### Address

Telwasa Open Cast Coal Mine Telwasa OC Sub Area At - Telwasa, Po.+ Ta.-Bhadrawati, Dist.- Chandrapur 442 503 (M.S.)

#### Plot no

-

#### Taluka

Bhadrawati

#### Village

Telwasa

#### Capital Investment (In lakhs)

1651.9

#### Scale

LSI

#### City

Bhadrawati

#### Pincode

442503

#### Person Name

S.K. Bhairva

#### Designation

Sub Area Manager

#### Telephone Number

07175240224

#### Fax Number

07175285088

#### Email

telwasaoc@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN  
No.0000001142/CR/2203001244

#### Consent Issue Date

2022-03-24

#### Consent Valid Upto

2022-03-31

#### Establishment Year

1997

#### Date of last environment statement submitted

Aug 26 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

Ton/Y

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	75.00	0.00
Domestic	220.00	0.00
All others	317.00	0.00
Total	50.00	0.00
	662.00	0.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
TRADE EFFLUENT	8077	0	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
COAL (CUBIC METER/TONNE)	0	0	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosives (Kg/T)	0	0	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
DIESEL	0	0	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
AS PER THE WATER QUALITY REPORT ATTACHED IN PART I	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO STACK MONITORING	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
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5.1 Used or spent oil	0	0	KL/A
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**2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
35.3 Chemical sludge from waste water treatment	0	0	Ton/Y
5.2 Wastes or residues containing oil	0	0	Ton/Y

**Part-E**

**SOLID WASTES**

**1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
OVERBURDEN	0	0	M3/Anum

**2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	CMD

**3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

**Part-F**

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

**1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	0	KL/A	-
5.2 Wastes or residues containing oil	0	Ton/Y	-
35.3 Chemical sludge from waste water treatment	0	Ton/Y	-

**2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
OVERBURDEN	0	M3/Anum	-

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of the pollution Control measures taken	0	0	0	0	0	0

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
REVENUE INVESTMENT	ENVIRONMENT EXPENDITURE	18.85

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#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
CAPITAL INVESTMENT	CAPITAL INVESTMENT PROPOSED	0

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## Part-I

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### Any other particulars for improving the quality of the environment.

#### Particulars

MINE DISCONTINUED SINCE 04.08.2018 AND THERE IS NO MINING ACTIVITY. MINE CLOSURE CTO FEES SUBMITTED FOR PERIOD UPTO 31.03.2022

#### Name & Designation

S.K. Bhairva, Sub Area Manager

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000044419

#### Submitted On:

28-08-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044309

### Submitted Date

25-08-2022

## PART A

### Company Information

#### Company Name

Bellora Naigaon Open Cast Mine

#### Application UAN number

0000130762

#### Address

WCL Wani Area Road,  
PO : Bellora

#### Plot no

-

#### Taluka

Wani

#### Village

-

#### Capital Investment (In lakhs)

16327.44727

#### Scale

LSI

#### City

Yavatmal

#### Pincode

445304

#### Person Name

Shri. Atul Singh

#### Designation

SUB AREA MANAGER

#### Telephone Number

7774074645

#### Fax Number

07722067696

#### Email

waniarea.environtdept@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CC/UAN No. MPCB-  
CONSENT-0000108288/CR/2205000014 dtd. 01/05/2022

#### Consent Issue Date

2022-05-01

#### Consent Valid Upto

2023-03-31

#### Establishment Year

2011

#### Date of last environment statement submitted

Sep 26 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

1.25

#### Actual Quantity

0.94

#### UOM

MT/A

### By-product Information

#### By Product Name

Overburden

#### Consent Quantity

0

#### Actual Quantity

7993995

#### UOM

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	15.00	15.00
All others	350.00	350.00
<b>Total</b>	<b>365.00</b>	<b>365.00</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade effluent	4515	4515	CMD
Domestic effluent	12	12	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	0	0.942	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive	1970755	4275659	Kg/Annum
Diesel	91428	1548210	Ltr/A
Oil and Grease	7495	44636	Ltr/A

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	1548210	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Mine water	11218	28	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO AIR STACK MONITORING	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	1.645	26.13	KL/A
5.2 Wastes or residues containing oil	3	3	Ton/Y

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	8	15	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Over burden	7631134	7993995	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NIL	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	26.13	KL/A	Stock of 28.64 KL/A is properly stored in barrels
5.2 Wastes or residues containing oil	3	Ton/Y	3.0 T/A stock is stored in RCC tank
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	15	KL/A	26.70 T/A disposed off to CHWTSDF site at Butibori

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Over Burden	7993995	M3/Anum	OB dumped is properly stacked at earmarked site

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Conservation of natural resources	0	0	0	0	16327.44	0

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Installation and commissioning of CAAQMS	Air Quality monitoring	66
Plantation of 37500 Nos. of saplings on OB dumps and slopes	Air pollution control and soil conservation	50.00

#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Truck mounted mist spray system	Dust Suppression	40
Plantation of 12500 Nos. of saplings on OB dumps	Air pollution control and soil conservation	16

## Part-I

### Any other particulars for improving the quality of the environment.

#### Particulars

Environmental protection and abatement of pollution

#### Name & Designation

Mr. Atul Singh , Sub Area Manager, Niljai SA

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000044309

#### Submitted On:

25-08-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044840

### Submitted Date

06-09-2022

## PART A

### Company Information

#### Company Name

Ghugus Opencast Mine, Western Coalfields Limited

#### Application UAN number

MPCB-CONSENT-0000130900

#### Address

M/s Western Coalfields Ltd., Ghugus Sub Area, P.O Ghugus

#### Plot no

-

#### Taluka

Ghugus

#### Village

Ghugus

#### Capital Investment (In lakhs)

13696.089

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442505

#### Person Name

Shri. Omprakash Fulare

#### Designation

Ghugus Sub Area

#### Telephone Number

9424666269

#### Fax Number

07172275740

#### Email

waniarea.environdept@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format CAC UAN No.  
0000022317/CR-2006001038 dtd.  
24/06/2020 valid till 31.03.2022

#### Consent Issue Date

24/06/2020

#### Consent Valid Upto

31.03.2022

#### Establishment Year

2005

#### Date of last environment statement submitted

Sep 27 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

### By-product Information

#### By Product Name

Over Burden

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	3000.00	3000.00
All others	700.00	700.00
<b>Total</b>	<b>3700.00</b>	<b>3700.00</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	700	700	CMD
Domestic	2400	2400	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	0	0	Kg/Annum

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive	0	0	Kg/Annum
Diesel	0	0	Ltr/A
Oil and Grease	0	0	Ltr/A

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	0	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Mine water	0.0	0.0	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NA	0	0	0	0	0

## Part-D

## HAZARDOUS WASTES

### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ltr/A

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-E

## SOLID WASTES

### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Over burden	0	0	M3/Anum

### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	0	Ton/Y	NIL

### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Over Burden	0	M3/Anum	NIL

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Conservation of natural resources	0.0	0	0	0	13698.16889	0

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
NIL	NIL	0

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#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Installation of mist canon at Ghugus New Railway Siding	Dust Suppression	100

## Part-I

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### Any other particulars for improving the quality of the environment.

#### Particulars

Environment protection and abatement of pollution

#### Name & Designation

Shri. Omprakash Fulare , Sub Area Manager Ghugus

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000044840

#### Submitted On:

06-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044839

### Submitted Date

06-09-2022

## PART A

### Company Information

#### Company Name

Kolgaon Open Cast Mine, Western Coalfields Limited

#### Application UAN number

-

#### Address

Office of Project Officer, Kolgaon OC Project

#### Plot no

-

#### Taluka

Wani

#### Village

Kolgaon

#### Capital Investment (In lakhs)

6208.35080

#### Scale

LSI

#### City

Yavatmal

#### Pincode

445307

#### Person Name

Shri. Hanumant Salunkhe

#### Designation

Sub Area Manager, Kolgaon

#### Telephone Number

7774055550

#### Fax Number

07239235104

#### Email

waniarea.environdept@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CC/UAN No. MPCB CONSENT-0000100737/CR-2110000937 dtd. 20/10/2021

#### Consent Issue Date

2021-10-20

#### Consent Valid Upto

31.12.2023

#### Establishment Year

2011

#### Date of last environment statement submitted

Sep 26 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.6

#### Actual Quantity

0.59999

#### UOM

MT/A

### By-product Information

#### By Product Name

Over Burden

#### Consent Quantity

0

#### Actual Quantity

4068295

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	21.50	21.50
All others	1212.00	1212.00
<b>Total</b>	<b>1233.50</b>	<b>1233.50</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade effluent - Domestic	17.2	26	CMD
Mine water	1188	1188	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	0	0	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive	446225	808085	Kg/Annum
Diesel	2196	0	Ltr/A
Oil and Grease	0	0	Ltr/A

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	0	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Mine water	1188	0	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO AIR STACK MONITORING	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0.0	0.0	KL/A

#### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0.0	0.0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Over burden	1294304	4068295	M3/Anum

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NIL	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	CMD	-

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden	4068295	CMD	OB is stacked at earmarked site and proper benching & slope angle is maintained

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Conservation of Natural Resources	0.0	0	0	0	6208.35	0.0

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
NIL	NIL	0

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#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Installation of rooftop rainwater harvesting structure at Manager office	Ground water	6.00

## Part-I

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### Any other particulars for improving the quality of the environment.

#### Particulars

Environmental protection and abatement of pollution

#### Name & Designation

Shri. Hanumant Salunkhe, Sub Area Manager, Mungoli

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000044839

#### Submitted On:

06-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044146

### Submitted Date

20-08-2022

## PART A

### Company Information

#### Company Name

Mungoli Nirguda Extension Deep OC,  
Western Coalfields Limited

#### Application UAN number

MPCB-CONSENT-0000129699

#### Address

Mungoli Nirguda Extension Deep Open  
Cast Project, Sakhara

#### Plot no

-

#### Taluka

Wani

#### Village

Sakhara

#### Capital Investment (In lakhs)

45443.07

#### Scale

L.S.I

#### City

Yavatmal

#### Pincode

445307

#### Person Name

Hanumant Salunkhe

#### Designation

Sub Area Manager, Mungoli

#### Telephone Number

8249873646

#### Fax Number

07239235104

#### Email

waniarea.environdept@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CC/UAN No. MPCB CONSENT-  
0000107557/CR-2110000982 dtd.  
21/10/2021 valid till 31/03/2023

#### Consent Issue Date

2021-10-21

#### Consent Valid Upto

31/03/2023

#### Establishment Year

2019

#### Date of last environment statement submitted

Jan 1 1900 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

4.375

#### Actual Quantity

4.167

#### UOM

MT/A

### By-product Information

#### By Product Name

Over burden

#### Consent Quantity

19275000

#### Actual Quantity

14775041

#### UOM

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	356.00	356.00
All others	1330.00	1330.00
<b>Total</b>	<b>1686.00</b>	<b>1686.00</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade effluent	15050	15050	CMD
Domestic effluent	282	282	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	0	0	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive	5731116	7093253	Kg/Annum
Diesel	6246285	5542520	Ltr/A
Oil and Grease	262117	198550	Ltr/A

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	5542520	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Mine water	16380	32	-	--	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO AIR STACK MONITORING	0	0	-	-	--

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	30.45	22.68	KL/A
5.2 Wastes or residues containing oil	6	6	Ton/Y

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	12	12	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Over burden	17413727	1475041	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NIL	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	22.68	KL/A	42 KL got lifted by coprocessor M/s. Meghani Enterprises, Mumbai
5.2 Wastes or residues containing oil	6	Ton/Y	4.02 Tonnes was disposed off to CHWTSDF, Butibori
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	12	Ton/Y	21.74 Tonnes was disposed off to CHWTSDF, Butibori

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Over Burden	14775041	M3/Anum	Overburden is properly stacked at earmarked sites by maintaining proper benching and slope angle.

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Conservation of Natural resource	0.0	1.93	0	0	45443.07	0.0

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Installation of 2 Nos. observational piezometric wells with sensors	Ground Water Quantity Monitoring	17.00
Plantation of 36000 Nos. saplings in Plain land	Air Pollution control and Soil conservation	55.00

#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Truck mounted mist spray system	Dust suppression	40
Plantation of 32000 Nos. saplings in Plain land	Air Pollution control and Soil conservation	41

## Part-I

### Any other particulars for improving the quality of the environment.

#### Particulars

Environmental Protection and Abatement of pollution

#### Name & Designation

Shri. Hanumant Salunkhe

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000044146

#### Submitted On:

20-08-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044149

### Submitted Date

20-08-2022

## PART A

### Company Information

#### Company Name

Niljai Expansion (Deep) OC, Western Coalfields Limited

#### Application UAN number

MPCB-CONSENT-0000107964

#### Address

Post : Bellora, Tah : Wani, Dist : Yavatmal, (MS)

#### Plot no

-

#### Taluka

Wani

#### Village

Bellora

#### Capital Investment (In lakhs)

42993.72

#### Scale

L.S.I

#### City

Yavatmal

#### Pincode

445304

#### Person Name

Shri. Atul Singh

#### Designation

Sub Area Manager, Niljai Sub Area

#### Telephone Number

7774074645

#### Fax Number

07239232338

#### Email

waniarea.environdept@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN No. MPCB- CONSENT 0000107964/CR/2204000651 dtd. 12/04/2022

#### Consent Issue Date

2022-04-12

#### Consent Valid Upto

31.03.2023

#### Establishment Year

2019

#### Date of last environment statement submitted

Jan 1 1900 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

4.5

#### Actual Quantity

3.75

#### UOM

MT/A

### By-product Information

#### By Product Name

Over Burden

#### Consent Quantity

39774444

#### Actual Quantity

26066062

#### UOM

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	330.00	330.00
All others	2786.00	2786.00
<b>Total</b>	<b>3116.00</b>	<b>3116.00</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade effluent	5764	5764	CMD
Domestic Effluent	264	264	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	0	0	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive	7608947	12326945	Kg/Annum
Diesel	4050854	3987061	Ltr/A
Oil and Grease	176034	121466	Ltr/A

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	3987061	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Mine water	8550	48	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/NM3)	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO AIR STACK MONITORING	0	0	-	--	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	29.15	27.28	KL/A
5.2 Wastes or residues containing oil	6	4	Ton/Y

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	25	44	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Over burden	23571407	3751920	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NIL	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	27.28	KL/A	Burnt oil stored in barrels. No successful auction was done in FY 21-22
5.2 Wastes or residues containing oil	4	Ton/Y	1.73 Tonnes stock was disposed off to CHWTSDF, Butibori
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	44	Ton/Y	67.05 Tonnes stock was disposed off to CHWTSDF, Butibori

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Over Burden	26066062	M3/Anum	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Conservation of Natural resource	0	0.17	0	8681	42003.72	0

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Continuous ambient air quality monitoring system	Air quality monitoring	66.00
Plantation of 38000 Nos. of sapling in plain land	Air pollution control and soil conservation	49.00
Installation of 2 Nos. observational piezometer	Ground water monitoring	17.00

#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Truck mounted mist spray system	Dust Suppression	40.00
Plantation of 30000 Nos. of sapling in plain land	Air pollution control and soil conservation	38.00

## Part-I

### Any other particulars for improving the quality of the environment.

#### Particulars

Environmental protection and abatement of pollution

#### Name & Designation

Mr. Atul Singh, Sub Area Manager, Niljai

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000044149

#### Submitted On:

20-08-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000044142

### Submitted Date

20-08-2022

## PART A

### Company Information

#### Company Name

Western Coalfields Ltd., Penganga  
Expansion Opencast Mine

#### Application UAN number

MPCB-CONSENT-0000130559

#### Address

Office of Project Officer, Penganga OC  
Project

#### Plot no

-

#### Taluka

Korpana

#### Village

Virur- Gadegaon

#### Capital Investment (In lakhs)

33922.94

#### Scale

LSI

#### City

CHANDRAPUR

#### Pincode

442917

#### Person Name

Mr. R V Subba Reddy

#### Designation

Sub Area Manager, Penganga Project

#### Telephone Number

6301007414

#### Fax Number

#### Email

waniarea.environdept@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0/CAC/UAN No.  
0000130559/CR/2207001199 dtd.  
24/07/2022

#### Consent Issue Date

27.07.2022

#### Consent Valid Upto

31.03.2023

#### Establishment Year

2019

#### Date of last environment statement submitted

Jan 1 1900 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

6.3

#### Actual Quantity

6.3

#### UOM

MT/A

### By-product Information

#### By Product Name

OVER BURDEN

#### Consent Quantity

22800000

#### Actual Quantity

19006952.00

#### UOM

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	34.00	34.00
All others	1430.00	1430.00
<b>Total</b>	<b>1464.00</b>	<b>1464.00</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	1430	1430	CMD
Domestic	28	10	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	5253071	6300000	Ton/Y

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive	4879864	7330796	Kg/Annum
Diesel	2991625	3304210	Ltr/A
Oil and Grease	141937	112182	Ltr/A

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	3304210	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Mine Water	1430	56	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
No Air Stack Monitoring	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	26.07	20.28	KL/A
5.2 Wastes or residues containing oil	2.5	1.5	Ton/Y

#### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Over Burden	14714623	19006952	M3/Anum

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NIL	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	20.28	KL/A	Burnt oil is stored in barrels and auctioned to co-processor M/s. Ranjana Group of Industries Pvt. Ltd. Nagpur & M/s. Sarvavyapi Petro Chem Pvt. Ltd. Nagpur in FY 20-21
5.2 Wastes or residues containing oil	1.5	Ton/Y	Oil contaminated waste is stored in RCC tanks and disposed off to CHWTSDF M/s. Maharashtra Enviro Private Limited, Butibori

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Over Burden	19006952	M3/Anum	Over burden dumps are stacked at earmarked sites maintaining stable slope

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Conservation of Natural Resources	0	0	0	0	33922.94	0

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Establishment of 2 Nos. piezometer system	Ground water level monitoring	9.35

#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Construction of ETP	Waste Water Treatment	28.00
Truck mounted mist spray system	Dust Suppression	40.00
Tyre wash system	Dust Suppression	40.00

## Part-I

### Any other particulars for improving the quality of the environment.

#### Particulars

Environmental Protection and Abatement of Pollution

#### Name & Designation

Mr. R V Subba Reddy

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000044142

#### Submitted On:

20-08-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000048888

### Submitted Date

29-09-2022

## PART A

### Company Information

#### Company Name

Western Coalfields Limited, Ghonsa  
Opencast Mine

#### Application UAN number

-

#### Address

Office of the Sub Area Manager, Ghonsa-  
Kumbharkhani, Po.- Rasa, Tal.- Wani,  
Distt. - Yavatmal, Maharashtra

#### Plot no

25/1,2,3

#### Taluka

Wani

#### Village

Wani North

#### Capital Investment (In lakhs)

6340.37

#### Scale

L.S.I

#### City

Yavatmal

#### Pincode

445304

#### Person Name

Gautam

#### Designation

Sub Area Manager, Ghonsa Sub  
Area

#### Telephone Number

8380092918

#### Fax Number

07239241357

#### Email

samghonsa@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN  
No.MPCBCONSENT-0000107029/CR/2203000019

#### Consent Issue Date

2022-03-01

#### Consent Valid Upto

2023-03-31

#### Establishment Year

2008

#### Date of last environment statement submitted

Sep 23 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.60

#### Actual Quantity

0.426

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	652.00	652.00
Domestic	0.00	0.00
All others	18.00	18.00
Total	50.00	0.00
	720.00	670.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Daily Trade Effluent (including mine discharge)	4363	3711	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Mining	0.48	0.574	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive	2.2	2.78	Kg/Annum

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	2917.00	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
-	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
-	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	23.5	25	KL/A

**2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	Ton/Y

**Part-E****SOLID WASTES****1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	Ton/Y

**2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	Ton/Y

**3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	Ton/Y

**Part-F**

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

**1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	25	KL/A	-
5.2 Wastes or residues containing oil	1	Ton/Y	-

**2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
-	0	Ton/Y	-

**Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
Impact of the pollution control measures taken	0	0.319	0	40947	0	0

**Part-H**

**Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.**  
**[A] Investment made during the period of Environmental Statement**

**Detail of measures for Environmental Protection****Environmental Protection Measures****Capital Investment (Lacks)**

Operation &amp; Maintenance of existing rainguns (10ms) pipeline &amp; valves of Ghonsa ocm of Ghonsa Sub Area

Operation &amp; Maintenance of existing rainguns (10ms) pipeline &amp; valves of Ghonsa ocm of Ghonsa Sub Area

2.5

Spraying of water by truck mounted water tanker (12 kl capacity) for dust suppression of coal transportation road

Spraying of water by truck mounted water tanker (12 kl capacity) for dust suppression of coal transportation road

2.3

Sprinkler system around coal stock yard

Sprinkler system around coal stock yard

0.12

**[B] Investment Proposed for next Year****Detail of measures for Environmental Protection****Environmental Protection Measures****Capital Investment (Lacks)**

Rain water harvesting system

Rain water harvesting system

4

CAAQMS

CAAQMS

90

**Part-I****Any other particulars for improving the quality of the environment.****Particulars**

-

**Name & Designation**

Gautam Sub Area Manager, Ghonsa Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000048888

**Submitted On:**

29-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000049936

### Submitted Date

30-09-2022

## PART A

### Company Information

#### Company Name

Western Coalfields Limited, Junad Deep Open -  
Cast coal Mine Project

#### Application UAN number

#### Address

Office of the Sub Area Manager, Ukni-Junad  
Sub Area, Po. - Ukni, Tal.- Wani, Distt. -  
Yavatmal

#### Plot no

118,114,115,116,117,123,124

#### Taluka

Wani

#### Village

Ukni

#### Capital Investment (In lakhs)

10243.8

#### Scale

L.S.I.

#### City

WANI

#### Pincode

445304

#### Person Name

G Rajendra Kumar

#### Designation

Sub Area Manager, Ukni-Junad  
Sub Area

#### Telephone Number

9607922288

#### Fax Number

07239241357

#### Email

wclsamujsa@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore  
beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CC/UAN  
No.MPCBCONSENT-0000125726/CO/2204001617

#### Consent Issue Date

2022-04-24

#### Consent Valid Upto

2023-03-31

#### Establishment Year

1998

#### Date of last environment statement submitted

Sep 21 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.9

#### Actual Quantity

0.739

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	400.00	400.00
Domestic	0.00	0.00
All others	14.00	14.00
Total	0.00	0.00
	414.00	414.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
TRADE EFFLUENT (Mine Discharge)	3056	2300	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal (Cubic Meter/Tonne)	0.45	0.20	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosives (Kg/Tonne)	2.34	4.21	Kg/Annum

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
High Speed Diesel	0	986.00	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
-	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
-	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
----------------------	--------------------------------------	-------------------------------------	-----

5.1 Used or spent oil	4.83	8.63	KL/A
5.2 Wastes or residues containing oil	0	2.5	Ton/Y
35.3 Chemical sludge from waste water treatment	0	10	Ton/Y

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	Ton/Y

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	Ton/Y

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	8.63	KL/A	-
5.2 Wastes or residues containing oil	2.5	Ton/Y	-
35.3 Chemical sludge from waste water treatment	10	Ton/Y	-

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
-	0	Ton/Y	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution control measures taken	0	0	0	0	0	0

## Part-H

---

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Revenue expenditure	Operation & maintenance of ETP at Junad Extension ocm under ukni-junad Sub Area	1.8
Revenue expenditure	Making arrangement for dust suppression through operation of rainguns at Junad ocm under Ukni-junad Sub Area	1.7
Revenue expenditure	Annual cleaning of W/B platform & premises of W/B of pimpalgaon under Junad extension ocm & ukni-junad Sub Area	1.8

---

**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Revenue Expenditure	Plantation	150
Capital Expenditure	Truck mounted fogging machine	20

## Part-I

---

**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

G. Rajendra Kumar, Sub Area Manager, Ukni-Junad Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000049936

**Submitted On:**

30-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000049048

### Submitted Date

29-09-2022

## PART A

### Company Information

#### Company Name

WESTERN COALFIELDS LIMITED, Kolar Pimpri Open Cast Mine

#### Application UAN number

-

#### Address

Office of the Sub Area Manager, Kolar PimpriPimpalgaon Sub Area, Po.- Ukni, Tal.- Wani, Distt. - Yavatmal, Maharashtra

#### Plot no

79

#### Taluka

Wani

#### Village

-

#### Capital Investment (In lakhs)

28409.3

#### Scale

L.S.I

#### City

Wani

#### Pincode

445304

#### Person Name

U K Mehta

#### Designation

Sub Area Manager, Kolar pimpri-Pimpalgaon Sub Area

#### Telephone Number

7447434791

#### Fax Number

07239241357

#### Email

wclsamkolarpimpri@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000040280

#### Consent Issue Date

2020-07-22

#### Consent Valid Upto

2021-03-31

#### Establishment Year

1993

#### Date of last environment statement submitted

Sep 23 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

1.5

#### Actual Quantity

0.511

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	590.00	590.00
Domestic	0.00	0.00
All others	130.00	18.00
Total	50.00	50.00
	770.00	658.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine discharge	4148	3718	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Mining	0.21	0.47	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosives	1.88	3.08	Kg/Annum

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	7	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
-	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NA	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0.5	0.2	KL/A

## 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	Ton/Y

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	Ton/Y

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	0.2	KL/A	-

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
-	0	Ton/Y	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	0	0.20	563778	0	0	0

## Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.  
[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Installation of Rainguns	-	7.8

Rain Water Harvesting	-	4.1
Plantation	-	1.5
Dust suppression	-	23.8

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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Tyre washing system	-	20
Truck mounted fogger	-	20

**Part-I**

---

**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

U K Mehta, Sub Area Manager, Kolar pimpri-Pimpalgaon Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000049048

**Submitted On:**

29-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047615

### Submitted Date

26-09-2022

## PART A

### Company Information

#### Company Name

Western Coalfields Limited, Pimpalgaon Open Cast Mine

#### Application UAN number

-

#### Address

Office of the Sub Area Manager, Kolar Pimpri-Pimpalgaon Sub Area, Po. - Ukni, Tal.- Wani, Distt. - Yavatmal

#### Plot no

79

#### Taluka

Wani

#### Village

-

#### Capital Investment (In lakhs)

6368.1

#### Scale

L.S.I.

#### City

WANI

#### Pincode

445304

#### Person Name

U K Mehta

#### Designation

Sub Area Manager, Kolarpimpri-Pimpalgaon Sub Area

#### Telephone Number

7447339316

#### Fax Number

07239241357

#### Email

wnaenv@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN  
No.0000041537/CR/2202001571

#### Consent Issue Date

2022-02-24

#### Consent Valid Upto

2022-03-31

#### Establishment Year

1993

#### Date of last environment statement submitted

Sep 27 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

coal

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

Ton/Y

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	750.00	0.00
All others	0.00	0.00
<b>Total</b>	<b>750.00</b>	<b>0.00</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Daily Trade Effluent (Mine Discharge)	0	0	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal (Cubic Meter/Tonnes)	0	0	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosives (Kg/Tonnes)	0	0	Kg/Annum

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
High Speed diesel (Litre)	0	0	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
-	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
-	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	Ton/Y

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	Ton/Y

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	Ton/Y	-

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
-	0	Ton/Y	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution control measures taken	0	0	0	0	0	0

## Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.  
[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
-	-	0

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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
-	-	0

**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

U K Mehta Sub Area Manager, Kolarpimpri-Pimpalgaon Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047615

**Submitted On:**

26-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047530

### Submitted Date

26-09-2022

## PART A

### Company Information

#### Company Name

M/s Western Coalfields Limited, Rajur  
Underground Coal Mine

#### Application UAN number

-

#### Address

Office of the Sub Area Manager, Rajur Sub  
Area, Po.- Rajur, Tal.- Wani, Distt. -  
Yavatmal, Maharashtra

#### Plot no

168

#### Taluka

Wani

#### Village

Rajur

#### Capital Investment (In lakhs)

4688.69

#### Scale

L.S.I

#### City

Wani

#### Pincode

445304

#### Person Name

Gautam

#### Designation

Sub Area Manager, Ghonsa Sub Area

#### Telephone Number

8380095385

#### Fax Number

07239241357

#### Email

rajursubareawcl@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

BO/JD(APC)/TB-2/UANno89584/R/CC-2012000056

#### Consent Issue Date

2020-12-01

#### Consent Valid Upto

2022-04-30

#### Establishment Year

1973

#### Date of last environment statement submitted

Sep 24 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.21

#### Actual Quantity

0.052

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

Ton/Y

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	200.00	50.00
Domestic	0.00	0.00
All others	1053.00	320.00
Total	0.00	0.00
	1253.00	370.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine Discharge	13956	10630	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	2.41	2.59	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosives	0.33	0.46	Kg/Annum

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	2	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Water quality monitoring reports have been attached	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
NA	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
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**2) From Pollution Control Facilities**

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	MT/A

**Part-E**

**SOLID WASTES**

**1) From Process**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	MT/A

**2) From Pollution Control Facilities**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	MT/A

**3) Quantity Recycled or Re-utilized within the unit**

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	MT/A

**Part-F**

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

**1) Hazardous Waste**

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	MT/A	-

**2) Solid Waste**

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
-	0	MT/A	-

**Part-G**

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	0	0.027	0	601033	0	0

**Part-H**

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

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacs)
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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
-	-	0

**Part-I**

---

**Any other particulars for improving the quality of the environment.****Particulars**

-

**Name & Designation**

Gautam Sub Area Manager, Ghonsa Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047530

**Submitted On:**

26-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000050051

### Submitted Date

30-09-2022

## PART A

### Company Information

#### Company Name

Western Coalfields Limited, Ukni Opencast Mine

#### Application UAN number

-

#### Address

Office of the Sub Area Manager, Ukni - Junad Sub Area, PO. - Ukni, Tal- Wani, Dist - Yavatmal

#### Plot no

669

#### Taluka

Wani

#### Village

Ukni

#### Capital Investment (In lakhs)

31344.6

#### Scale

L.S.I

#### City

Wani

#### Pincode

445304

#### Person Name

G Rajendra Kumar

#### Designation

Sub Area Manager, Ukni-Junad Sub Area

#### Telephone Number

9607922288

#### Fax Number

07239241357

#### Email

wclsamujsa@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000087450/CR- 2001001723

#### Consent Issue Date

2020-07-29

#### Consent Valid Upto

2021-03-31

#### Establishment Year

1993

#### Date of last environment statement submitted

Sep 21 2021 12:00:00:00AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

2.2

#### Actual Quantity

1.5

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	380.00	380.00
Domestic	0.00	0.00
All others	100.00	26.00
Total	100.00	100.00
	580.00	506.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine discharge	4603	4540	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	0.12	0.123	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosives	2.69	2.93	Kg/Annum

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	4540.00	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Water quality monitoring reports have been attached	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
NA	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
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5.1 Used or spent oil	48.86	48.035	KL/A
5.2 Wastes or residues containing oil	5.28	2	Ton/Y

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	36.84	15	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	48.035	KL/A	-
5.2 Wastes or residues containing oil	2	Ton/Y	-
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	15	Ton/Y	-

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
-	0	CMD	-

## Part-G

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	0	1.18	0	0	0	0

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Water Pollution	-	2.6

---

**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
CAAQMS	-	90
Truck mounted fogger	-	20

## Part-I

---

**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

G Rajendra Kumar, Sub Area Manager, Ukni-Junad Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000050051

**Submitted On:**

30-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047774

### Submitted Date

27-09-2022

## PART A

### Company Information

#### Company Name

WESTERN COALFIELDS LIMITED, WANI RAILWAY SIDING

#### Application UAN number

-

#### Address

Office of the Sub Area Manager, Kolar  
PimpriPimpalgaon Sub Area, Po.- Ukni, Tal.- Wani,  
Distt. - Yavatmal, Maharashtra

#### Plot no

-

#### Taluka

Wani

#### Village

-

#### Capital Investment (In lakhs)

28409.3

#### Scale

L.S.I

#### City

Wani

#### Pincode

445304

#### Person Name

U K Mehta

#### Designation

Sub Area Manager, Kolar pimpri-Pimpalgaon Sub Area

#### Telephone Number

7447434791

#### Fax Number

07239241357

#### Email

wclsamkolarpimpri@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-1912000728

#### Consent Issue Date

2019-12-12

#### Consent Valid Upto

2022-09-30

#### Establishment Year

1993

#### Date of last environment statement submitted

Sep 21 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Loading and Unloading of Coal (Coal Stock Yard)

#### Consent Quantity

4.8

#### Actual Quantity

3.1

#### UOM

MT/A

### By-product Information

#### By Product Name

-

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	100.00	100.00
Domestic	0.00	0.00
All others	1.00	1.00
Total	0.00	0.00
	101.00	101.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
-	0	0	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Other	0	0	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
-	0	0	Kg/Annum

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
-	0	0	KL/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
-	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NA	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	KL/A

## 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	Ton/Y

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	0	0	Ton/Y

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Ton/Y

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	KL/A	-

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
-	0	Ton/Y	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	0	0	0	0	0	0

## Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.  
[A] Investment made during the period of Environmental Statement

**Detail of measures for Environmental Protection**

Environmental Protection Measures	Capital Investment (Lacks)
-----------------------------------	----------------------------

A Mobile water tanker (12KL capacity) is being used 8 trips/day in railway siding to keep the floor wet so that there will be no chance of dust emission. - 6

We have installed one green mat -wind breaking wall of 3m height along the boundary of railway siding in order to prevent movement of any dust particles outside the siding premises - 2

---

**[B] Investment Proposed for next Year**

**Detail of measures for Environmental Protection**

Bamboo plantation over remaining area in siding with effective soil work and watering provision to ensure plant survival even in summer -

7

Deployment of 1 No truck mounted fogging machine for effective dust suppression -

35

**Environmental Protection Measures**

**Capital Investment (Lacks)**

**Part-I**

---

**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

U K Mehta, Sub Area Manager, Kolar pimpri-Pimpalgaon Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047774

**Submitted On:**

27-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000048233

### Submitted Date

28-09-2022

## PART A

### Company Information

#### Company Name

M/s. Western Coalfields Limited, Dinesh  
Opencast Mine

#### Application UAN number

MPCB-CONSENT-0000062939

#### Address

Makardhokra Sub Area Manager, WCL,  
Umrer Area, Hevati, Tal: Umred, Dist:  
Nagpur

#### Plot no

Toposheet no. 55 P/5 of Survey of India

#### Taluka

Umred

#### Village

Hevati

#### Capital Investment (In lakhs)

51907.00

#### Scale

L.S.I

#### City

Nagpur

#### Pincode

441204

#### Person Name

D. V. Walke

#### Designation

Sub Area Manager

#### Telephone Number

9881490881

#### Fax Number

07116247374

#### Email

sammkd3umrer@gmail.com

#### Region

SRO-Nagpur II

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0/CAC/UAN  
No.0000062939/CO-2002001040

#### Consent Issue Date

25/02/2020

#### Consent Valid Upto

31/03/2021

#### Establishment Year

2016

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

4.20

#### Actual Quantity

1.131

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

MT/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	1000.00	650.00
Domestic	0.00	0.00
All others	350.00	61.20
Total	0.00	0.00
	1350.00	711.20

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine Discharge	2850	2822	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal (Cubic meter/ tonne)	0.098	0.021	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive (Kg/ tonne)	2.307	2.144	CMD

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
--NA--	0	0	CMD

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Report Enclosed	0	0	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Not Applicable	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	3.709	1.975	KL/A
34.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers	34.90	17.67	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Over Burden	11783870	4266360	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	1.975	KL/A	Sold to authorized recycler
35.3 Chemical sludge from waste water treatment	17.67	Ton/Y	Disposed by MEPL, Butibori

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Over Burden	4266360	M3/Anum	OB Dumps

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
-	0	0	0	0	0	0

## Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution. [A] Investment made during the period of Environmental Statement

**Detail of measures for Environmental Protection**

Capital Expenditure  
Revenue Expenditure

**Environmental Protection Measures**

Environmental Protection Measures  
Plantation, Dust suppression and Monitoring

**Capital Investment (Lacks)**

21.34  
64.61

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**[B] Investment Proposed for next Year****Detail of measures for Environmental Protection**

Proposed Capital Budget  
Proposed Revenue Budget

**Environmental Protection Measures**

Dust suppression and monitoring  
Plantation, Dust suppression and Monitoring

**Capital Investment (Lacks)**

180.5  
97.97

**Part-I**

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**Any other particulars for improving the quality of the environment.****Particulars**

-

**Name & Designation**

D. V. Walke, Sub Area Manager, Makardhokra Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000048233

**Submitted On:**

28-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000048321

### Submitted Date

28-09-2022

## PART A

### Company Information

#### Company Name

Western Coal Fields Ltd, Gokul Opencast Mine

#### Application UAN number

MPCB-CONSENT-0000116639

#### Address

Gokul Opencast Mine, 40 A, Piraya, Tal: Bhiwapur, Dist: Nagpur

#### Plot no

-

#### Taluka

Bhiwapur

#### Village

Piraya

#### Capital Investment (In lakhs)

26560

#### Scale

LSI

#### City

NAGPUR

#### Pincode

441201

#### Person Name

D. D. Kode

#### Designation

Sub Area Manager

#### Telephone Number

8275971057

#### Fax Number

07116247374

#### Email

samgokuloc@gmail.com

#### Region

SRO-Nagpur II

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

FORMAT 1.0/CAC/UAN  
No.0000116639/CR/2204000652

#### Consent Issue Date

2022-04-12

#### Consent Valid Upto

2023-03-31

#### Establishment Year

2015

#### Date of last environment statement submitted

Sep 29 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

1.875

#### Actual Quantity

1.875

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	550.00	550.00
Domestic	0.00	0.00
All others	34.05	34.05
Total	0.00	0.00
	584.05	584.05

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine Discharge	2430	2430	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal (Cubic meter/ tonne)	0.049	0.107	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive (Kg/ tonne)	2.36	3.56	CMD

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
-	0	0	CMD

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged (Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Report Enclosed	0	0	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged (Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Not Applicable	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	6.3	6.5	KL/A
35.3 Chemical sludge from waste water treatment	34.86	16.78	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Over Burden	8351432	11319947	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	6.5	KL/A	Sold to authorized recycler
35.3 Chemical sludge from waste water treatment	16.78	Ton/Y	Disposed by MEPL, Butibori

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Over Burden	11319947	M3/Anum	OB dump site

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
-	0	0	0	0	0	0

## Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.  
[A] Investment made during the period of Environmental Statement

**Detail of measures for Environmental Protection**

Capital Expenditure  
Revenue Expenditure

**Environmental Protection Measures**

Environmental Protection Measures  
Plantation, Dust Suppression and Monitoring

**Capital Investment (Lacks)**

0  
20.81

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**[B] Investment Proposed for next Year****Detail of measures for Environmental Protection**

Proposed Capital Budget  
Proposed Revenue Budget

**Environmental Protection Measures**

Environmental Protection Measures  
Plantation, Dust Suppression and Monitoring

**Capital Investment (Lacks)**

87  
100.5

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**Part-I****Any other particulars for improving the quality of the environment.****Particulars**

-

**Name & Designation**

D. D. Kode, Sub Area Manager, Murpar Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000048321

**Submitted On:**

28-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000049404

### Submitted Date

29-09-2022

## PART A

### Company Information

#### Company Name

M/s. Western Coalfields Limited,  
Makardhokda-I Opencast Mine

#### Application UAN number

MPCB-CONSENT-0000133816

#### Address

Sub Area Manager, MKD-I OC Mine,  
Location: Near Shirpur village,  
Revenue survey No. 22, Topo Sheet  
No. 55-P/1 & 55-P/5, P.O: Umrer  
Project, Tehsil: Umred, Distt: Nagpur,  
Pin 441204, Maharashtra.

#### Plot no

-

#### Taluka

Umred

#### Village

Shirpur

#### Capital Investment (In lakhs)

20468.00

#### Scale

LSI

#### City

Nagpur

#### Pincode

441204

#### Person Name

P. H. Nimbalkar

#### Designation

Sub Area Manager

#### Telephone Number

9421706658

#### Fax Number

07116247374

#### Email

sammkdumrer@gmail.com

#### Region

SRO-Nagpur II

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0/CAC/UAN No.MPCB-  
CONSENT-0000133816/CO/2203001248

#### Consent Issue Date

2022-03-24

#### Consent Valid Upto

2023-03-31

#### Establishment Year

2014

#### Date of last environment statement submitted

Sep 29 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

4.20

#### Actual Quantity

3.72

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	470.00	470.00
Domestic	0.00	0.00
All others	10.00	10.00
Total	0.00	0.00
	480.00	480.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine discharge	2268	2268	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal (Cubic meter/tonne)	0.086	0.046	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive (Kg/tonne)	2.48	1.62	CMD

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
-	0	0	CMD

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Report enclosed	0	0	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Not Applicable	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	8.242	7.76	KL/A
35.3 Chemical sludge from waste water treatment	27.13	17.21	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Over Burden	16174959	18499394	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	7.76	KL/A	Sold to authorized recycler
35.3 Chemical sludge from waste water treatment	17.21	Ton/Y	Disposed by MEPL, Butibori

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Over Burden	18499394	M3/Anum	OB dump

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
-	0	0	0	0	0	0

## Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.  
[A] Investment made during the period of Environmental Statement

**Detail of measures for Environmental Protection****Environmental Protection Measures****Capital Investment (Lacks)**

Capital Expenditure

Environmental Protection Measures

9.71

Revenue Expenditure

Plantation, Dust Suppression and Monitoring 54.33

**[B] Investment Proposed for next Year****Detail of measures for Environmental Protection****Environmental Protection Measures****Capital Investment (Lacks)**

Proposed Capital Budget

Environmental Protection Measures

87

Proposed Revenue budget

Plantation, Dust Suppression and Monitoring 55.5

**Part-I****Any other particulars for improving the quality of the environment.****Particulars**

-

**Name & Designation**

P. H. Nimbalkar, Sub Area Manager, Umrer Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000049404

**Submitted On:**

29-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000047768

### Submitted Date

27-09-2022

## PART A

### Company Information

#### Company Name

M/s Western Coal Fields Ltd., Murpar  
Underground Mine Project

#### Application UAN number

MPCB-CONSENT-0000124453

#### Address

Sub Area Manager, Murpar UG Mine, WCL  
Umrer Area, Post: Khadasangi, Tehsil:  
Chimur, Dist. Chandrapur, Maharashtra

#### Plot no

-

#### Taluka

Chimur

#### Village

Khadasangi

#### Capital Investment (In lakhs)

2746.00

#### Scale

LSI

#### City

Chimur

#### Pincode

442908

#### Person Name

D D KODE

#### Designation

Sub Area Manager

#### Telephone Number

8275971057

#### Fax Number

07116247374

#### Email

sammurparug@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

FORMAT 1.0/APAE SECTION/UAN  
NO:0000124453/CO/2207001172

#### Consent Issue Date

2022-07-22

#### Consent Valid Upto

2024-12-31

#### Establishment Year

1992

#### Date of last environment statement submitted

Sep 27 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.27

#### Actual Quantity

0.07236

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	60.00	60.00
Domestic	0.00	0.00
All others	90.00	90.00
Total	0.00	0.00
	150.00	150.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine Discharge	9214	9214	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal (Cubic meter/tonne)	0.41	0.302	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive(Kg/tonne)	0.54	0.499	CMD

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
NA	0	0	CMD

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Report Enclosed	0	0	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Not Applicable	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	CMD	-

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	0	CMD	-

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
-	0	0	0	0	0	0

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Capital Expenditure	Environmental Protection Measures	0
Revenue Expenditure	Dust Suppression and Monitoring	0.08

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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Proposed Capital Budget	Dust Suppression and Monitoring	20
Proposed Revenue Budget	Plantation, Dust Suppression and Monitoring	19.5

**Part-I**

---

**Any other particulars for improving the quality of the environment.**

**Particulars**

-

**Name & Designation**

D. D. Kode, Sub Area Manager, Murpar Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000047768

**Submitted On:**

27-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000049438

### Submitted Date

29-09-2022

## PART A

### Company Information

#### Company Name

M/s. Western Coalfields Limited, Umrer Opencast Mine

#### Application UAN number

MPCB-CONSENT-0000107261

#### Address

Sub Area Manager, Umrer OC Mine, Near village WayagaonGhoturli, P.O. Umrer Project, Tehsil: Umred, Dist. Nagpur, Pin 441204, Maharashtra.

#### Plot no

-

#### Taluka

Umred

#### Village

Shirpur

#### Capital Investment (In lakhs)

35412.00

#### Scale

LSI

#### City

Nagpur

#### Pincode

441204

#### Person Name

P H Nimbalkar

#### Designation

Sub Area Manager

#### Telephone Number

9421706658

#### Fax Number

07116247374

#### Email

samumreroc@gmail.com

#### Region

SRO-Nagpur II

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0/BO/CAC-Cell/CAC-UAN no.65263/CAC-1910000121

#### Consent Issue Date

03/10/2019

#### Consent Valid Upto

31/03/2021

#### Establishment Year

1963

#### Date of last environment statement submitted

Sep 29 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

4.90

#### Actual Quantity

3.55

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	726.00	726.00
All others	0.00	0.00
<b>Total</b>	<b>1426.00</b>	<b>1426.00</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Mine Discharge	2650	2646	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal(Cubic meter/Tone)	0.075	0.072	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive(Kg/Tonne)	0.332	0.426	CMD

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
-	0	0	CMD

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Report Enclosed	0	0	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Not Applicable	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	17.82	16.90	KL/A
35.3 Chemical sludge from waste water treatment	38.96	18.65	Ton/Y

## Part-E

### SOLID WASTES

#### 1) From Process

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Overburden	3767904	3650576	M3/Anum

#### 2) From Pollution Control Facilities

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
-	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
5.1 Used or spent oil	16.9	KL/A	Sold to authorized recycler
35.3 Chemical sludge from waste water treatment	18.65	Ton/Y	Disposed at CHWTSDf

#### 2) Solid Waste

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Over Burden	3650576	M3/Anum	Onsite OB dump (Back filling)

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
-	0	0	0	0	0	0

## Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution. [A] Investment made during the period of Environmental Statement

**Detail of measures for Environmental Protection**

Capital Expenditure  
Revenue Expenditure

**Environmental Protection Measures**

Environmental Works  
Plantation and Dust suppression

**Capital Investment (Lacks)**

5.79  
69.67

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**[B] Investment Proposed for next Year****Detail of measures for Environmental Protection**

Proposed Capital Budget  
Proposed Revenue Budget

**Environmental Protection Measures**

Environmental works  
Plantation and Dust suppression

**Capital Investment (Lacks)**

0.00  
169.50

**Part-I**

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**Any other particulars for improving the quality of the environment.****Particulars**

-

**Name & Designation**

P. H. Nimbalkar, Sub Area Manager, Umrer Sub Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000049438

**Submitted On:**

29-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000048427

### Submitted Date

28-09-2022

## PART A

### Company Information

#### Company Name

Adasa UG to OC Coal Mine Project of M/s Western Coalfields Ltd. ( A subsidiary of Coal India Ltd, Gol-U/T

#### Application UAN number

MPCB-CONSENT-0000126567 Dated 30.11.2021

#### Address

Office of the Sub Area Manager, Saoner, Adasa UG to OC mine at village Adasa, tehsil Saoner, Nagpur Area of M/s WCL Nagpur

#### Plot no

Village katodi

#### Taluka

Saoner

#### Village

Katodi

#### Capital Investment (In lakhs)

5115.9048081

#### Scale

L.S.I

#### City

Nagpur

#### Pincode

441107

#### Person Name

Shri. Sheshnath Prasad

#### Designation

Mine/Project Manager

#### Telephone Number

9425833779

#### Fax Number

07103268128

#### Email

sheshnath.prasad@rediffmail.com

#### Region

SRO-Nagpur I

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CC/UAN  
No.0000126567/CR/2206000221

#### Consent Issue Date

2022-06-04

#### Consent Valid Upto

2025-12-31

#### Establishment Year

2020

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

1.85

#### Actual Quantity

0.606

#### UOM

MT/A

### By-product Information

#### By Product Name

Overburden (Top and hard soil)

#### Consent Quantity

77942.2469

#### Actual Quantity

11632.8767123288

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	358.00	150.00
Domestic	0.00	0.00
All others	32.00	32.00
Total	2610.00	2818.00
	3000.00	3000.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	2610	160	CMD
Domestic Effluent	32	19.2	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	7373321.296	90346.5346534654	

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive used for blasting purpose	177162.5	946489.1	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	118423	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Air & Water quality monitoring report uploaded	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Not Applicable	0	0	-	-	-

## Part-D

## HAZARDOUS WASTES

### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-E

## SOLID WASTES

### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	CMD	0

### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden	11632.87671	CMD	0

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	208	-0.3244465753	-769326.6	-3739046.95	5115.9048081	16.65

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Capital Expenditure	Implementation of Air and water Pollution Control Measures	70.27

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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Capital Expenditure	Implementation of Air and water Pollution Control Measures	55

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**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

Deployment of Mist canon, effluent treatment plant etc.

**Name & Designation**

Mine/Project Manager, Adasa UG to OC Mine

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000048427

**Submitted On:**

28-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000048405

### Submitted Date

28-09-2022

## PART A

### Company Information

#### Company Name

Amalgamated Inder Kamptee Deep Opencast Coal Mine Project Western Coalfields Limited, Nagpur (A subsidiary of Coal India Ltd, Ministry of Coal, GOI)

#### Application UAN number

MPCB-CONSENT-0000096619 dated 18.08.2020

#### Address

Office of the Mine Manager,- Kamptee, District - Nagpur Pin Code - 441404 (Maharashtra)

#### Plot no

Survey of India toposheet no 550/3, Khasra no 12/1D & 12/2

#### Taluka

Kamptee

#### Village

Tekadi

#### Capital Investment (In lakhs)

18470.8843031

#### Scale

L.S.I

#### City

NAGPUR

#### Pincode

441404

#### Person Name

Shri. Birendra Chaudhari

#### Designation

Manager of the Amalgamated Inder Kamptee Deep Opencast Minene

#### Telephone Number

8275970813

#### Fax Number

07122643547

#### Email

c\_birendra98@yahoo.in

#### Region

SRO-Nagpur I

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0/CAC/UAN no 0000096619/CR-2107000211

#### Consent Issue Date

2021-07-05

#### Consent Valid Upto

2022-03-31

#### Establishment Year

2020

#### Date of last environment statement submitted

Sep 29 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

3.2

#### Actual Quantity

1.635552

#### UOM

MT/A

### By-product Information

#### By Product Name

Overburden

#### Consent Quantity

63292.161

#### Actual Quantity

1842.5013126027

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	1146.00	1388.00
All others	1300.00	42594.73
<b>Total</b>	<b>4896.00</b>	<b>45732.73</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	41479	42593.99	CMD
Domestic Effluent	685	832.8	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	0	1750	CMD

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive used for blasting purpose	0	1757463.87152472	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	2398475	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Not applicable as no manufacturing process is involved	0	0	Nil	Nil	Nil

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Not applicable on coal mining sector	0	0	Nil	Nil	Nil

## Part-D

## HAZARDOUS WASTES

### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	MT/A

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	11.13	18.4	MT/A
5.1 Used or spent oil	0	8	KL/A
5.2 Wastes or residues containing oil	0	9.8	MT/A

## Part-E

## SOLID WASTES

### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Overburden	22571.476712328	1842.5013126027	CMD

### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	Kg
NA	0	0	Kg

### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Kg
0	0	0	Kg

## Part-F

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

### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0		NA

### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden	1842.5013126027	CMD	0

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
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Impact of the pollution Control measures taken 19993.9287671233 0.6871232877 -1070869.25 927967 18470.8843031 -33.54

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of the Air and water pollution Control Measures	0

---

**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of the Air and water pollution Control Measures	212

## Part-I

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**Any other particulars for improving the quality of the environment.**

**Particulars**

Attached

**Name & Designation**

Mine Manager of the Amalgamated Inder Kamptee Deep OCM

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000048405

**Submitted On:**

28-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000049611

### Submitted Date

30-09-2022

## PART A

### Company Information

#### Company Name

Bhanegaon Open Cast Coal Mine Project of Western Coalfields Limited, Nagpur (A subsidiary of Coal India Ltd, Ministry of Coal, GOI)

#### Application UAN number

MPCB-CONSENT-0000099765

#### Address

Office of the Mine Manager, Bhanegaon Open Cast Coal Mine Project, Taluka - Kamptee, District - Nagpur Pin Code - 440026 (Maharashtra)

#### Plot no

Survey of India Toposheet No 550/3, Khasera no 12/1D & 12/2

#### Taluka

Kamptee

#### Village

Bina

#### Capital Investment (In lakhs)

10283.4730915

#### Scale

L.S.I

#### City

NAGPUR

#### Pincode

440026

#### Person Name

Shri. Umesh Chandra

#### Designation

Project Manager- Bhanegaon OC Mine

#### Telephone Number

07122643547

#### Fax Number

07122643547

#### Email

c\_birendra98@yahoo.in

#### Region

SRO-Nagpur I

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0/CAC/UAN  
No.0000099765/CR-2106000686

#### Consent Issue Date

2021-06-15

#### Consent Valid Upto

2022-03-31

#### Establishment Year

2018

#### Date of last environment statement submitted

Sep 30 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

1.15

#### Actual Quantity

0.63342

#### UOM

MT/A

### By-product Information

#### By Product Name

Overburden

#### Consent Quantity

8609

#### Actual Quantity

4488.2191780822

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	9400.00	9400.00
Domestic	0.00	0.00
All others	135.00	135.00
Total	300.00	30549.72
	9835.00	40084.72

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	9400	42593.99	CMD
Domestic Effluent	80	81	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	9339103.925	5416627.19838338	

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive used for blasting purpose	856418.8306	816880.584762085	Kg/Annum

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	408500	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Not Applicable as no manufacturing process is involved-NA- only dust generated during Coal extraction	0	0	Nil	Nil	Nil

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Not Applicable on coal mining sector	0	0	Nil	Nil	Nil

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	MT/A

#### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0	0.49	MT/A

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Overburden	2161827	1638200	M3/Anum

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	Kg
NA	0	0	Kg

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Kg
0	0	0	Kg

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0		NA

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden	1638200	M3/Anum	overburden stacked at earmarked sites

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
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Impact of the pollution Control measures taken	-4782.2794520548	-0.3279452055	-372045.5	-2905002	10283.4730915	30.22
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## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of the Air and water pollution Control Measures	0

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**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of the Air and water pollution Control Measures	148

## Part-I

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**Any other particulars for improving the quality of the environment.**

**Particulars**

Attached

**Name & Designation**

Shri. Umesh Chandra, Project /Mine Manager, Bhanegaon OC Coal Mine Project under Bhanegaon Singhori Sub Area of WCL, Nagpur Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000049611

**Submitted On:**

30-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000048379

### Submitted Date

28-09-2022

## PART A

### Company Information

#### Company Name

Gondegaon Extension Open Cast Mine Project

#### Application UAN number

MPCB-CONSENT-0000102415 dated  
17.11.2020

#### Address

Gondegaon OCM, P.O Gondegaon, Tehsil- Parseoni

#### Plot no

SAM Office, Gondegaon

#### Taluka

Parseoni

#### Village

Gondegaon

#### Capital Investment (In lakhs)

32513.955682

#### Scale

L.S.I

#### City

Nagpur

#### Pincode

441404

#### Person Name

Sub Area Manager

#### Designation

Dy.GM (MIN)/ Sub Area  
Manager, Gondegaon Sub Area

#### Telephone Number

0712640200

#### Fax Number

07122643352

#### Email

wclngpenv@gmail.com

#### Region

SRO-Nagpur I

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format1.0/CAC/UAN  
No.0000102415/CR-2110000184

#### Consent Issue Date

2021-10-05

#### Consent Valid Upto

2022-03-31

#### Establishment Year

1992

#### Date of last environment statement submitted

Sep 26 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

3.5

#### Actual Quantity

3.5

#### UOM

MT/A

### By-product Information

#### By Product Name

Overburden

#### Consent Quantity

1053.843

#### Actual Quantity

11239.9698630137

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	2200.00	6500.00
Domestic	0.00	0.00
All others	670.00	720.00
Total	100.00	9960.00
	2970.00	17180.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	29050	29798	CMD
Domestic Effluent	480	432	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal Mining	0.00019	0.677857143	Ton/Ton

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive used for blasting purpose	0.004	0.0006781589	Ton/Ton

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	57.358	5978922	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
As per monitoring report (Attached)	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Not Applicable	0	0	-	-	-

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
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**2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
3.3 Sludge and filters contaminated with oil	3.3	1.34	MT/A
35.3 Chemical sludge from waste water treatment	0	37	MT/A
33.2 Contaminated cotton rags or other cleaning materials	0	0.312	MT/A
5.1 Used or spent oil	0	19.8	KL/A

**Part-E**

**SOLID WASTES**

**1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
overburden	24457.80	11239.9698630137	CMD

**2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	Ton/Y

**3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	CMD

**Part-F**

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

**1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
3.3 Sludge and filters contaminated with oil	1.34	MT/A	0
35.3 Chemical sludge from waste water treatment	37	MT/A	0
33.2 Contaminated cotton rags or other cleaning materials	0.312	MT/A	0
5.1 Used or spent oil	19.8	KL/A	0

**2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
Overburden	11239.9698630137	CMD	-

**Part-G**

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
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Impact of the pollution Control measures taken 400

1.292169863

1570872.45

3264470

32513.955682

-121.182

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Revenue Expenditure	Revenue Expenditure	223.922
Capital Expenditure	Capital Expenditure	73.53

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**[B] Investment Proposed for next Year**

<b><i>Detail of measures for Environmental Protection</i></b>	<b><i>Environmental Protection Measures</i></b>	<b><i>Capital Investment (Lacks)</i></b>
Work Proposed for FY 2022-23	Expenditure One Environment	178.00

## Part-I

---

**Any other particulars for improving the quality of the environment.**

**Particulars**

Attached

**Name & Designation**

Sub Area Manager (Gondegaon Sub Area), WCL

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000048379

**Submitted On:**

28-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000048296

### Submitted Date

28-09-2022

## PART A

### Company Information

#### Company Name

Patansaoungi Expansion Underground Mine project of M/s Western Coalfields Ltd., Nagpur (A subsidiary of Coal India Ltd, GOI-U/T MINE

#### Application UAN number

UAN No. 90063 dated 29.02.2020

#### Address

Office of the Mine Manager, Patansaoungi Expansion UG Coal Mine project of WCL, Nagpur Area

#### Plot no

47

#### Taluka

Saoner

#### Village

Patansaoungi

#### Capital Investment (In lakhs)

1894.8795613

#### Scale

L.S.I

#### City

Nagpur

#### Pincode

441113

#### Person Name

Shri. Mokkim Siddique

#### Designation

Mine Manager, Patansaoungi Mine, Silewara Sub Area of WCL, Nagpur Area

#### Telephone Number

8275971192

#### Fax Number

07122643547

#### Email

mokimsiddique115@gmail.com

#### Region

SRO-Nagpur I

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

BO/JD(APC) UAN NO 90063/R/CC-142/2020

#### Consent Issue Date

03.09.2020

#### Consent Valid Upto

31.03.2025

#### Establishment Year

1976

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.3

#### Actual Quantity

0.053518

#### UOM

MT/A

### By-product Information

#### By Product Name

Nil

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	450.00	1170.00
Domestic	0.00	0.00
All others	1200.00	1200.00
Total	5000.00	3550.00
	6650.00	5920.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent (Only mine discharged water-no mixing)	5000	4200	CMD
Domestic Effluent	240	720	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	7331751.681	7979558.27945738	

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive used for blasting purpose	588188.533	573475.092492246	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	1838	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
As per the attached Environment Monitoring report	0	0	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Not applicable	0	0	Not applicable	Not applicable	Not applicable

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

#### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	CMD	Not applicable

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	0	CMD	Not applicable

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	-650	0.00377808219178082	6496.98	-499965	1894.8795613	5.76

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Investment	Implementation of the Air and water pollution Control Measures	0

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#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Investment	Implementation of the Air and water pollution Control Measures	6.5

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## Part-I

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### Any other particulars for improving the quality of the environment.

#### Particulars

Mine Manager

#### Name & Designation

Mine Manager, Patansaoungi Mine , Silewara Sub Area,WCL,Nagpur Area

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000048296

#### Submitted On:

28-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000048374

### Submitted Date

28-09-2022

## PART A

### Company Information

#### Company Name

Expansion of Saoner Underground Coal Mine of M/s Western Coal fields Limited ,(A subsidiary of Coal india Limited, GOI-U/T

#### Application UAN number

MPCB-CONSENT - 0000107356

#### Address

Office of the Sub Area Manager, Saoner Underground Coal Mine, Saoner Sub Area, WCL - Nagpur Area

#### Plot no

0105(OLD)/74-75(New) Waghoda Gram Panchayat

#### Taluka

Saoner

#### Village

Borgaon

#### Capital Investment (In lakhs)

10438.1418566

#### Scale

L.S.I

#### City

Nagpur

#### Pincode

441107

#### Person Name

R.B Thakre

#### Designation

Dy. GM (Mining)/SAM

#### Telephone Number

9881010881

#### Fax Number

07122643547

#### Email

saonerugminemanager@yahoo.com

#### Region

SRO-Nagpur I

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Formate1.0/CC/UAN  
NO.0000107356/CR-2108000715 Date:  
03.03.2020

#### Consent Issue Date

2021-08-11

#### Consent Valid Upto

2025-03-31

#### Establishment Year

1986

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

1

#### Actual Quantity

0.454373

#### UOM

MT/A

### By-product Information

#### By Product Name

Nil

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

M3/Anum

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	0.00	0.00
Domestic	368.70	468.70
All others	7109.00	0.00
<b>Total</b>	<b>15677.70</b>	<b>8568.70</b>

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	7108.5	7108.5	CMD
Domestic Effluent	110	281.22	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	5432296.117	6506768.66803265	

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive used for blasting purpose	470592.1414	476445.189304822	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	12663	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Environment Monitoring report uploaded	0	0	uploaded	uploaded	uploaded

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Not applicable	0	0	Not applicable	Not applicable	Not applicable

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

#### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Not applicable	0	0	M3/Anum

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Not applicable	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	CMD	Not applicable

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Not applicable	0	CMD	Not applicable

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the Pollution Control Measures	0	-0.00767671232876712	39633.59	14046734.97	9061.2682777	-47.08

## Part-H

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of the Air and water pollution Control Measures	21.9

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#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of the Air and water pollution Control Measures	269

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## Part-I

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### Any other particulars for improving the quality of the environment.

#### Particulars

Tree Plantation ,1. Construction of DETP for colony 2.Supply & installation of fabricated Biodigester toilet with tank at Eco park.3.Mist spray arrangement along railway track at ECO park.4.Ladies & gents bio-digester toilets to diff. places at Saoner SA

#### Name & Designation

Rajendra B. Thakre, Dy GM (Min)/Sub Area Manager,Saoner Sub Area, WCL-Nagpur Area

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000048374

#### Submitted On:

28-09-2022



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000048345

### Submitted Date

28-09-2022

## PART A

### Company Information

#### Company Name

Silewara Underground Coal Mines Project of M/s Western Coalfields Ltd. ( A subsidiary of Coal India Ltd, Gol-U/T

#### Application UAN number

MPCB-CONSENT-67299 dated 18/02/2019

#### Address

Office of the Sub Area Manager, Silewara UG Coal Mines, Post Silewara, Tehsil Saoner Distt Nagpur

#### Plot no

161

#### Taluka

Saoner

#### Village

Silewara

#### Capital Investment (In lakhs)

1463.0836727

#### Scale

L.S.I

#### City

Nagpur

#### Pincode

441113

#### Person Name

Shri. Sujeet Kumar Sinha

#### Designation

Mine/Project Manager

#### Telephone Number

9425833779

#### Fax Number

07103268128

#### Email

bchoudhury@westerncoal.gov.in

#### Region

SRO-Nagpur I

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

BO/JD(APC) UAN No. 67299/R/CC-1910000011

#### Consent Issue Date

2019-10-01

#### Consent Valid Upto

2022-03-31

#### Establishment Year

1967

#### Date of last environment statement submitted

Sep 28 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

0.55

#### Actual Quantity

0.078

#### UOM

MT/A

### By-product Information

#### By Product Name

No by product generated during coal mining as it is a Underground Coal Mine

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	5450.00	5450.00
Domestic	0.00	0.00
All others	2250.00	2250.00
Total	300.00	299.78
	8000.00	7999.78

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	3320	0	CMD
Domestic Effluent	1350	1350	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Coal	20485556.8714	25503205.1282051	

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive used for blasting purpose	338046.44457031	338307.692307692	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	2541	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Air & Water quality monitoring report uploaded	0	0	-	-	-

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Not Applicable	0	0	-	-	-

## Part-D

## HAZARDOUS WASTES

### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-E

## SOLID WASTES

### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD
NA	0	0	CMD

### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	CMD	0

### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	0	CMD	0

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	299.1780821918	0.0091342466	6438	585020	3412.3325224	3.84

## Part-H

---

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

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of Air and water Pollution Control Measures	0

---

#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of Air and water Pollution Control Measures	116

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## Part-I

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### Any other particulars for improving the quality of the environment.

#### Particulars

Yes, we are going for Supply & installation of fabricated Biodigester toilet with tank at office and Renovation of entire (old) sewerage system of chankapur colony with Biodigester system under Silewara Sub Area

#### Name & Designation

Mine Manager, Silewara UG Mine

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000048345

#### Submitted On:

28-09-2022





# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000049595

### Submitted Date

30-09-2022

## PART A

### Company Information

#### Company Name

Singhori Opencast Coal Mine Expansion Project of M/s Western Coal fields Limited, (A subsidiary of Coal India Ltd. Govt. of India Undertaking

#### Application UAN number

MPCB-CONSENT-0000107465

#### Address

Office of the Sub Area Manager, Bhanegaon Singhori Sub Area, WCL Nagpur Area

#### Plot no

Topo Sheet No 55-O/3, Village Singhori

#### Taluka

Paresoni

#### Village

Coal Mining Area in Maharashtra

#### Capital Investment (In lakhs)

10382.5406304

#### Scale

L.S.I

#### City

Nagpur

#### Pincode

441105

#### Person Name

Shri. Saroj Kumar Srivastava

#### Designation

Mine Manager of the Singhori OC Mine

#### Telephone Number

7122643547

#### Fax Number

07122643547

#### Email

sarojsrivastava20@yahoo.co.in

#### Region

SRO-Nagpur I

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

Format 1.0/CC/UAN  
No.0000107465/CR-2112001542

#### Consent Issue Date

2021-12-27

#### Consent Valid Upto

2023-03-31

#### Establishment Year

2018

#### Date of last environment statement submitted

Sep 30 2021 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

COAL

#### Consent Quantity

1.12

#### Actual Quantity

1.119991

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	296.00	840.00
Domestic	0.00	0.00
All others	40.00	20.00
Total	4044.00	3910.00
	4380.00	4770.00

### 2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade effluent	2964	3720	CMD
domestic effluent	20	12	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Minerals	89621.25589	273752.199794	

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Explosive used for blasting purpose	1390696.8	1122531.34177	

### 4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	105845	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Environment Monitoring reports uploaded	0	0	0	0	0

#### [B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
Not applicable on Coal mines	0	0	Not applicable on Coal mines	Not applicable on Coal mines	Not applicable on Coal mines

## Part-D

## HAZARDOUS WASTES

### 1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

### 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	

## Part-E

## SOLID WASTES

### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Overburden (soil)	3421816	2346900	M3/Anum

### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Not applicable	0	0	MVA

### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-F

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

### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0		0

### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden	2346900	M3/Anum	Soil

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of the pollution Control measures taken	-555	0.0791917808	300342.9	204946	10382.5406304	24.28

## Part-H

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

**[A] Investment made during the period of Environmental Statement**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of the Air and water pollution Control Measures	65.27

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**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Implementation of the Air and water pollution Control Measures	113

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**Part-I**

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**Any other particulars for improving the quality of the environment.**

**Particulars**

Mine Manager of Singhori OC Project

**Name & Designation**

Shri. Saroj Kumar Srivastava, Project /Mine Manager, Singhori OC Expansion project under Bhanegaon Singhori Sub Area of WCL, Nagpur Area

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000049595

**Submitted On:**

30-09-2022

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

**BARKUHI OC MINE**

**FY 2021-22**

**Prepared by:**



**April - 2022**

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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 loses 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 2022.**

**PART – A**

<b>Sr. No.</b>	<b>Particulars</b>	
1.	Name and address of the Mine	Barkui OC Mine Village: Eklehara Tehsil: Parasia Distt: Chhindwara State: Madhya Pradesh
2.	Industry category	Category "A"
3.	Production capacity	0.75 MTY
4.	Year of Establishment	2006
5.	Date of last Environmental Statement Report submitted	25 <sup>th</sup> September, 2021

**PART – B**

**WATER & RAW MATERIALS CONSUMPTION**

Table – A Water consumption on Usage Pattern

<b>Sr.no.</b>	<b>Water Consumption Category</b>	<b>Quantity/usage (in KL/day)</b>
<b>a)</b>	<b>Industrial</b>	
i.	Dust Suppression/recycling for roof support	50
ii.	Fir Fighting	Nil
iii.	Workshop and others	Nil
iv.	Green Belt/Plantation	Nil
v.	CHP Beneficiation	Nil
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	05
ii.	Green Belt/Plantation	Nil
	<b>TOTAL</b>	<b>55</b>

Table – B Water Consumption Against Production (Including Recycled)

<b>Name of Product</b>	<b>Water Consumption per unit of product (including recycled)</b>	
	<b>During the previous FY 2020-21</b>	<b>During the current FY 2021-22</b>
COAL	97.09 liters/ton	125.92 liters/ton

Table – C Raw Material Consumption

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg)	Coal	1.32 Kg/Ton	0.88 kg/ton

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
a)	From Process	1.08076Mm3	0.413769Mm3
b)	From Pollution Control Facilities	Nil	Nil
c)	Quantity recycled or dumped within quarry void	1.080761Mm3	0.413769Mm3
d)	Sold	Nil	Nil
e)	Disposed (as external dumps)	Nil	Nil

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

## PART - F

These 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 contractor)

### **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/ CGWA	20075
2.	Consent Fees	476000
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	-
5.	Air pollution control measures	596030

### H.2 Future Programme

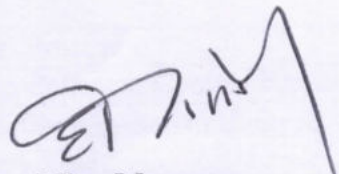
The project has incurred an expenditure on the following in connection with environmental management in the area.


Sl. No.	Particulars	Amount (Rs)
1.	Water Cess/ CGWA	-
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.

  
**Mine Manager**  
**Barkuhi OC Mine**

  
**Sub-Area Manager**  
**Newton Sub-Area**

**ENVIRONMENTAL AUDIT STATEMENT**

**(FORM-V)**

**CENTRAL HOSPITAL BARKUHI**

**FY 2021-22**

**Prepared by-**



**WESTERN COALFIELDS LIMITED**

**Pench Area**

**PO: PARASIA, CHHINDWARA (MP)-480441**

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## EXECUTIVE SUMMARY

E.1.0 This Environment Statement Report has been prepared as per gazette notification no. G.S.R. 329(E) dated 13<sup>th</sup> March, 1992 laid down by Ministry of Environment and Forest. The 'Environment Audit' has been subsequently renamed to '**Environment Statement**' vide MoEF gazette notification No. G.S.R. 386(E) dated 22nd April, 1993.

E.2.0 Barkuhi Central Hospital of Pench Area, Western Coalfields Ltd. is situated in Pench Kanhan Valley Coalfield, which lies in Chhindwara District of Madhya Pradesh State.

E.3.0 Barkuhi Central Hospital, Pench Area is ~~120~~<sup>90</sup> bedded Health Care Facility. It has licence under section 4 of Madhya Pradesh Upcharyagriha tatha Rojupchar Sambandhi Sthapanaye (Registrikaran tatha Anugyapan) Abhiyan, 1973 vide no. LL/0309/MAR-2020 dt. 09.03.2020.

Barkuhi Central Hospital has been granted Consent to Operate from Madhya Pradesh Pollution Control Board, Bhopal- Consent No. BAW- 43153 Dt. 08/03/2017 ; Valid up to 19/07/2020 and is being renewed regularly.

E.4.0 Quarterly environmental monitoring has been carried out by CMPDI for air, water and noise parameters. The results of the four quarter of 2020-21 are enclosed.

E.5.0 Environmental Statement report reveals the following facts regarding environmental aspect of this project:

E.5.1 The concentration of SO<sub>2</sub>, NO<sub>x</sub> in ambient air in core zone is well within the permissible limits.

E.5.2 The noise level in the core and buffer zone is not crossing the threshold value of 85dB.

## FORM-V

### ENVIRONMENT STATEMENT FOR BARKUHI CENTRAL HOSPITAL, PENCH AREA FINANCIAL YEAR ENDING MARCH 2022.

#### PART-A

- i. **Name and address of the Mine-** Barkuhi Central Hospital, WCL  
Pench Area, PO- Parasia, District-Chhindwara, Pin-480441.
- ii. **Industry Category-** Not Applicable
- iii. **Production Capacity-** 90 bedded
- iv. **Date of last Environmental Statement submitted-**

#### PART - B

### WATER AND RAW MATERIAL CONSUMPTION

Table-A Water Consumption on Usage Pattern

Sno.	Water Consumption Category	Quantity/usage (in KL/day)
<b>a)</b>	<b>Industrial</b>	
i.	Dust Suppression/recycling for roof support	Nil
ii.	Fir Fighting	Nil
iii.	Labs and others	5.0
iv.	Green Belt/Plantation	Nil
v.	CHP Beneficiation	Nil
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	33.0
ii.	Green Belt/Plantation	2.80
	TOTAL	40.80 KL/day



**Table-B Water Consumption against Production (including recycled)**

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
Not Applicable		

**Table-C Raw Material Consumption**

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
N.A	Number of Beds	90 nos.	90 nos.

**PART-C**

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

Sno.	Pollutants	Quantity of Pollution generated	Percentage variation from prescribed standards with reasons
a)	Water	Monitoring Reports attached for the year 2021-22.	Value of parameters are well within the permissible limits.
b)	Air		
c)	Noise		

**PART-D**

**HAZARDOUS WASTES**

Sno.	Hazardous Waste	Total Quantity	
		During the previous FY 2020-21	During the current FY 2021-22
a)	From Process	Not Applicable	
b)	From Pollution Control Facilities		

**PART-E**  
**SOLID WASTES**

Sno.	Waste Generation	Total Quantity	
		During the current FY 2020-21	During the current FY 2020-21
a)	From Process (BMW)	YELLOW – 643.8 KG BLUE – 171.2 KG RED – 28.4 KG WHITE – 2.3 KG	YELLOW – 643.8 KG BLUE – 171.2 KG RED – 28.4 KG WHITE – 2.3 KG
b)	From Pollution Control Facilities	N.A.	N.A.
c)	Quantity recycled or dumped within quarry void		
d)	Sold		
e)	Disposed (as external dumps)		

**(It is a non-mining project)**

**PART-F**

**Please Specify the Characteristics (In Terms of Concern And Quantum) of Hazardous as well as Solid Wastes and indicate the Disposal Practice adopted for both these categories of wastes.**

It a HCF unit, the generated Bio-medical Waste is collected and stored in a separate BMW room. After which, the BMW collection agency duly authorized by MPPCB collect and dispose off the waste at its facility.

**PART-G**

**Impact of Pollution Control Measures on Conservation of Natural Resources and subsequently on Cost of Production.**

The following pollution control measures have been implemented at Barkuhi Central Hospital, Pench Area.

**1.0 AIR POLLUTION CONTROL MEASURES**

- Whole premises floor is cover either with RCC/ Paviour Block or Tiles NO KUCHHA space is left, resulting in minimum dust generation.

**2.0 WATER POLLUTION CONTROL MEASURES**

One ETP is installed for treatment of waste water.

**3.0. NOISE POLLUTION CONTROL MEASURES**

Development of green belt, proper partition in between different wards and section to minimize the noise.

**PART-H**

**Additional Investment Proposal for Environmental Protection including abatement of Pollution.**


The project has incurred an expenditure on environmental management, details of which are as under:

Sr. No.	Particulars	Amount
1.	CTO fee	Nil

**PART-I**

**Any other Particulars in respect of Environmental Protection and abatement of Pollution**

The regular monitoring of the ambient air and water quality is being done in and around core zone and the quarterly monitoring report is submitted to the Madhya Pradesh State Pollution Control Board, Bhopal and the Ministry of Environment and Forest Regional Office, Bhopal.

  
22/9/22  
Chief Medical Officer  
Central Hospital, Barkuhi

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

**CHHINDA OC MINE**

**FY 2021-22**

**Prepared by:**



**April - 2022**

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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 2021.**

**PART – A**

<b>Sr. No.</b>	<b>Particulars</b>	
1.	Name and address of the Mine	Chhinda OCM Village: Chhinda Tehsil: Parasia Distt: Chhindwara State: Madhya Pradesh
2.	Industry category	Category "A"
3.	Production capacity	0.65 MTY
4.	Year of Establishment	2006
5.	Date of last Environmental Statement Report submitted	30 <sup>th</sup> September, 2021

**Note:** Mine is not in operation since 18.11.2016

**PART – B**

**WATER & RAW MATERIALS CONSUMPTION**

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

<b>Sr.no.</b>	<b>Water Consumption Category</b>	<b>Quantity/usage (in KL/day)</b>
<b>a)</b>	<b>Industrial</b>	
i.	Dust Suppression	Nil
ii.	Fir Fighting	Nil
iii.	Workshop and others	Nil
iv.	Green Belt/Plantation	Nil
v.	CHP Beneficiation	Nil
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	Nil
ii.	Green Belt/Plantation	Nil
	<b>TOTAL</b>	Nil

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

<b>Name of Product</b>	<b>Water Consumption per unit of product (including recycled)</b>	
	<b>During the previous FY 2020-21</b>	<b>During the current FY 2021-22</b>
COAL	Nil	Nil



Table – C Raw Material Consumption

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	Nil	Nil

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
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**

## 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	214,000
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
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.

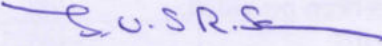
Sl. No.	Particulars	Amount (Rs)
1.	Water Cess	-
2.	Consent Fees	-
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	-
5.	Air pollution control measures	-

## PART - I

### Miscellaneous

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

  
**Mine Manager**  
**Chhinda OC Mine**

  
**Sub-Area Manager**  
**RWA-CDA Sub-Area**

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

**DHANKASA UG MINE**

**FY 2021-22**

**Prepared by:**



**April - 2022**

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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 2022**

**PART – A**

<b>Sr. No.</b>	<b>Particulars</b>	
1.	Name and address of the Mine	Dhankasa UG Mine Po- Dhankasa Tahsil-Amarwara Distt – Chhindwara (M.P) Pin- 480441
2.	Industry category	Category “A”
3.	Production capacity	1.00 MTPA (normative) & 1.25 (Peak)
4.	Year of Establishment	2020
5.	Date of last Environmental Statement Report submitted	<b>25.09.2021</b>

**Note: Coal production is not started yet, Incline drivage work in progress.**

**PART – B**

**WATER & RAW MATERIALS CONSUMPTION**

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

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

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

<b>Name of Product</b>	<b>Water Consumption per unit of product (including recycled)</b>	
	<b>During the previous FY 2020-21</b>	<b>During the current FY 2021-22</b>
COAL	Nil	Nil



Table – C Raw Material Consumption

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	Nil	Nil

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
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 contractor)

### **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	Done by CMPDIL
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.

  
**Mine Manager**  
 Dhankasa UG Mine

  
**Sub-Area Manager**  
 Jamuniya-Dhankasa Sub-Area

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

**JAMUNIYA UG MINE**

**FY 2021-22**

**Prepared by:**



**April - 2022**

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**WESTERN COALFIELDS LIMITED**

**ENVIRONMENT DEPARTMENT**

**PENCH AREA**

**PARASIA - 480441**

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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.

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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 2022**

**PART – A**

<b>Sr. No.</b>	<b>Particulars</b>	
1.	Name and address of the Mine	Jamuniya UG Mine Village: Jamuniya Pathaar Po- Jamuniya Tahsil-Parasia Distt – Chhindwara (M.P) Pin- 480441
2.	Industry category	Category “A”
3.	Production capacity	<b>0.828 MTY</b>
4.	Year of Establishment	2012
5.	Date of last Environmental Statement Report submitted	<b>25<sup>th</sup> September, 2021</b>

**Note:** Coal production is not started yet, Incline drivage work in progress.

**PART – B**

**WATER & RAW MATERIALS CONSUMPTION**

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

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

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

<b>Name of Product</b>	<b>Water Consumption per unit of product (including recycled)</b>	
	<b>During the previous FY 2020-21</b>	<b>During the current FY 2021-22</b>
COAL	Nil	Nil



Table – C Raw Material Consumption

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	Nil	Nil

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2019-20	During the current FY 2020-21
(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 2020-21	During the current FY 2021-22
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	Done by CMPDIL
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.

  
**Mine Manager**  
**Jamuniya UG Mine**

  
**Sub-Area Manager**  
**Jamuniya-Dhankasa Sub-Area**

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

**MAHADEOPURI UG MINE**

**FY 2021-22**

**Prepared by:**



**April - 2022**

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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 2022**

**PART – A**

<b>Sr. No.</b>	<b>Particulars</b>	
1.	Name and address of the Mine	Mahadeopuri UG Mine Village & P.O.: Parasia Tehsil: Parasia Distt: Chhindwara 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	25 <sup>th</sup> September, 2021

**PART – B**

**WATER & RAW MATERIALS CONSUMPTION**

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

<b>Sr.no.</b>	<b>Water Consumption Category</b>	<b>Quantity/usage (in KL/day)</b>
<b>a)</b>	<b>Industrial</b>	
i.	Dust Suppression/recycling for roof support	20
ii.	Fir Fighting	35
iii.	Workshop and others	-
iv.	Green Belt/Plantation	100
v.	CHP Beneficiation	-
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	5
ii.	Green Belt/Plantation	
	<b>TOTAL</b>	<b>160</b>

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

<b>Name of Product</b>	<b>Water Consumption per unit of product (including recycled)</b>	
	<b>During the previous FY 2020-21</b>	<b>During the current FY 2021-22</b>
COAL	719.10 l/t	597.84 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 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	0.54 kg/t	0.42 kg/t

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
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	29200
2.	Consent Fees	Rs. 10,38,000/-
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	-
5.	Air pollution control measures	239472

### 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.

  
**Mine Manager**  
 Mahadeopuri UG Mine

  
**Sub-Area Manager**  
 Newton Sub-Area

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

**NAHERIYA UG MINE**

**FY 2021-22**

**Prepared by:**



**April- 2022**

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***WESTERN COALFIELDS LIMITED***

***ENVIRONMENT DEPARTMENT***

***PENCH AREA***

***PARASIA - 480441***

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## INTRODUCTION

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#### **Unquote**

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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.

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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.

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**FORM – V**

**ENVIRONMENT STATEMENT FOR COAL MINING PROJECT**

**FINANCIAL YEAR ENDING MARCH 2021**

**PART – A**

Sr. No.	Particulars	
1.	Name and address of the Mine	Naheriya UG Mine Village: Naheriya Tehsil: Parasia Distt: Chhindwara State: Madhya Pradesh
2.	Industry category	Category "A"
3.	Production capacity	0.54 MTY
4.	Year of Establishment	2000
5.	Date of last Environmental Statement Report submitted	25 <sup>th</sup> September, 2021

**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	80.00
ii.	Fir Fighting	80.00
iii.	Workshop and others	-
iv.	Green Belt/Plantation	100.00
v.	CHP Beneficiation	30.00
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	8.00
ii.	Green Belt/Plantation	-
	<b>TOTAL</b>	<b>298.00</b>

Table – B Water Consumption Against Production (Including Recycled)

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
COAL	412.937 l/t	360.690 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 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	0.51 kg/t	0.46 kg/t

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
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	Rs. 35,040/-
2.	Consent Fees	Rs. 6,00,000/-
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	-
5.	Air pollution control measures	Rs. 195,856/-

### H.2 Future Programme

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

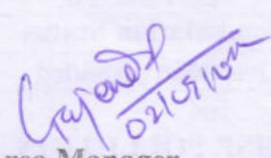
Sl. No.	Particulars	Amount (Rs)
1.	Water Cess	-
2.	Consent Fees	-
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	-
5.	Air pollution control measures	-

## PART - I

### Miscellaneous

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

  
 5/9/22  
**Mine Manager**  
**Nehariya UG Mine**

  
 02/05/22  
**Sub-Area Manager**  
**Nehariya Sub-Area**

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

**NEW SETHIA OC MINE**

**FY 2021-22**

**Prepared by:**



**April - 2022**

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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 2021**

**PART – A**

<b>Sr. No.</b>	<b>Particulars</b>	
1.	Name and address of the Mine	New Sethia OC Mine Village: Sethia Tehsil: Parasia Distt: Chhindwara State: Madhya Pradesh - 480441
2.	Industry category	Category "A"
3.	Production capacity	0.50 MTY
4.	Year of Establishment	2007
5.	Date of last Environmental Statement Report submitted	30 <sup>th</sup> September, 2021

**PART – B**

**WATER & RAW MATERIALS CONSUMPTION**

Table – A Water consumption on Usage Pattern

<b>Sr.no.</b>	<b>Water Consumption Category</b>	<b>Quantity/usage (in KL/day)</b>
<b>a)</b>	<b>Industrial</b>	
i.	Dust Suppression/recycling for roof support	110
ii.	Fir Fighting	35
iii.	Workshop and others	-
iv.	Green Belt/Plantation	20
v.	CHP Beneficiation	-
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	5
ii.	Green Belt/Plantation	-
	<b>TOTAL</b>	<b>170</b>

Table – B Water Consumption Against Production (Including Recycled)

<b>Name of Product</b>	<b>Water Consumption per unit of product (including recycled)</b>	
	<b>During the previous FY 2020-21</b>	<b>During the current FY 2021-22</b>
COAL	381.00 l/t	1100.22 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 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	1.144 kg/t	1.063 kg/t

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
a)	From Process	0.464942 Mm3	0.123384 Mm3
b)	From Pollution Control Facilities	Nil	Nil
c)	Quantity recycled or dumped within quarry void	0.464942 Mm3	0.123384 Mm3
d)	Sold	Nil	Nil
e)	Disposed (as external dumps)	Nil	Nil

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

## 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	124,000
2.	Consent Fees	290,000
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	-
5.	Air pollution control measures	276,396

### H.2 Future Programme

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

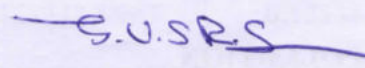
Sl. No.	Particulars	Amount (Rs)
1.	Water Cess	-
2.	Consent Fees	-
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	-
5.	Air pollution control measures	-

## PART - I

### Miscellaneous

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

  
**Mine Manager**  
 New Sethia OC Mine

  
**Sub-Area Manager**  
 RWA-CDA Sub-Area

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

**REGIONAL WORKSHOP,  
CHANDAMETTA**

**FY 2021-22**

**Prepared by:**



**April - 2022**

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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 loses 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 REGIONAL WORKSHOP**  
**FINANCIAL YEAR ENDING MARCH 2022.**

**PART - A**

Sr. No.	Particulars	
1.	Name and address of the Mine	<b>Regional Workshop, Chandametta</b> Tehsil: Parsia Distt: Chhindwara State: Madhya Pradesh
(a)	Place	WCL, Pench Area
(b)	District	Chhindwara
(c)	Telephone No.	6266331231
(d)	FAX No.	-
2.	Date of last Environmental Statement Report submitted	<b>25<sup>th</sup> September, 2021</b>

**PART - B : WATER & RAW MATERIALS CONSUMPTION**

Table – (a) Water consumption on Usage Pattern

Sr. No.	Particulars	
1.	Water Consumption (kl/day) :	
<b>(a)</b>	<b>Process – Industrial :</b>	
(i)	Dust suppression	-
(ii)	Fire fighting	-
(iii)	Workshop and others	-
(iv)	Green Belt	-
(v)	CHP Beneficiation	-
<b>(b)</b>	<b>Domestic Purpose</b>	
(i)	Domestic Use	3.00
(ii)	Green Belt in Township	
	<b>TOTAL</b>	<b>3.00 kl/day</b>



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

Name of the Product	Water Consumption per unit of product (Including recycled)	
	During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
COAL	N.A.	N.A.

**Table – C Raw Material Consumption**

Name of the Raw Material	Name of the Product	Consumption of Raw Material per Unit of Product	
		During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
Explosive	Coal	N.A.	N.A.
POL	Coal	N.A.	N.A.

(It is a non-mining project)

(N. A. = Not Applicable)

**PART - C**

**POLLUTION GENERATED**

(Parameters specified in the consent issued)

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.

**PART - D**

**HAZARDOUS WASTE**

(As specified under Hazardous Waste/  
Management & Handling Rules, 1989)

1.	Hazardous Waste	Total Quantity (kg)	
		During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
(a)	From Process (Oil & Grease)	1070.00 ltr/ yr	950.00 ltr/ yr
(b)	From Pollution Control Facilities (Sludge from ETP)	N.A.	N.A.

**PART - E**

**SOLID WASTES**

Sr. No.	Waste Generation	Total Quantity	
		During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facility	Nil	Nil
(c)	(i) Quantity recycled or re-utilized within the unit dumped on quarry void	Nil	Nil
	(ii) Sold	Nil	Nil
	(iii) Disposed (as external dumps)	Nil	Nil

**(NON-MINING PROJECT)**

### 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 being disposed through:
  - (i) The sludge from ETP through land fill arrangement;
  - (ii) Oil and grease is disposed of through authorized/registered recyclers/refiner.
- Solid wastes generation due to the workshop activities is Nil.

### 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 identified sources of air pollution are as under:

- Exhaust from vehicles/HEMM;
- SPM/Dust Generation due to HEMM movement near workshop.

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

For control of air pollution, measures suggested are:

- Water spraying on open space where HEMM movement is most frequent;
- Workshop boundary along the sides of the road leading to the workshop and also on open land (if available) in and around workshop area.

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

- Water sprinkling is done on open space and also on transportation roads.

## **G.2 WATER POLLUTION**

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

- The workshop effluent coming out of the workshop as a result of washing and other related activities is the main source of water pollution.

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

- Although the quantity of effluent coming out of workshop is very less, the main pollutant responsible for water pollution are oil and grease and suspended solids. Sedimentation pond should be provided to take care of this pollutant;

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

- Water supplied by PHE.

## **G.3 NOISE POLLUTION**

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

The sources of noise pollution are as under :

- Repair and other works with varieties noises related to typical workshop activities;
- Testing of dumpers and other HEMMs.

### **G.3.2 Noise Pollution Control Measures suggested**

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

- Provision of Ear Mufflers for operators exposed for long duration of time;
- Provision of green belt around workshop, CHP and other nearby sensitive areas.

### **G.3.3 Implementation Status**

- Ear Mufflers are being provided to the workers in the workshop.

## **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	nil
2.	Consent Fees	20,000
3.	Air, Water, Noise Quality Monitoring	By CMPDIL
4.	Air Pollution Control Measures	
5.	Water Pollution Control Measures	

## H.2 Future Programme

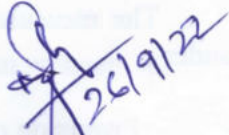
Sl. No.	Particulars	Amount (Rs)
1.	Water Cess	
2.	Consent Fees	
3.	Air, Water, Noise Quality Monitoring	By CMPDIL
4.	Air Pollution Control Measures	
5.	Water Pollution Control Measures	

## PART - I

### MISCELLANEOUS

#### ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION & ABATEMENT OF POLLUTION.

The measures are suggested for Abatement of Pollution and Environmental Protection are regular pollution control measures should be continued.

  
**Officer Incharge  
Regional Workshop  
Chandameta**

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

**SHIVPURI OC MINE**

**FY 2021-22**

**Prepared by:**



**April - 2022**

***WESTERN COALFIELDS LIMITED***

***ENVIRONMENT DEPARTMENT***

***PENCH AREA***

***PARASIA - 480441***

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	<b>PART-E</b>	<b>04</b>
	<b>PART-F</b>	<b>05</b>
	<b>PART-G</b>	<b>05</b>
	<b>PART-H</b>	<b>06</b>
	<b>PART-I</b>	<b>06</b>
<b>3.</b>	<b>Monitoring Reports</b>	<b>07</b>

## 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 2022****PART – A**

Sr. No.	Particulars	
1.	Name and address of the Mine	Shivpuri OC Mine Village: Sirgora Tehsil: Parasia Distt: Chhindwara State: Madhya Pradesh
2.	Industry category	Category "A"
3.	Production capacity	1.00 MTY
4.	Year of Establishment	2001
5.	Date of last Environmental Statement Report submitted	25 <sup>th</sup> September, 2021

NOTE: Mine is not in operation since 04.10.2018

**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	Nil
ii.	Fir Fighting	Nil
iii.	Workshop and others	Nil
iv.	Green Belt/Plantation	Nil
v.	CHP Beneficiation	Nil
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	Nil
ii.	Green Belt/Plantation	Nil
	<b>TOTAL</b>	Nil

Table – B Water Consumption Against Production (Including Recycled)

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
COAL	Nil	Nil

Table – C Raw Material Consumption

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	Nil	Nil

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
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

## 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	Rs. 6,74,000/-
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	Rs. 348,568/-
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	-

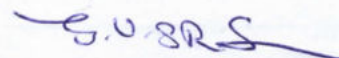
## PART - I

### Miscellaneous

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



**Mine Manager**  
Shivpuri OC Mine



**Sub-Area Manager**  
Shivpuri Sub-Area

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

**THESGORA-MATHANI UG MINE**

**FY 2021-22**

**Prepared by:**



**April – 2022**

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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:
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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 2021**

**PART – A**

Sr. No.	Particulars	
1.	Name and address of the Mine	Thesgora-Mathani UG Mine Village: Mathani Tehsil: Parasia Distt: Chhindwara State: Madhya Pradesh
2.	Industry category	Category "A"
3.	Production capacity	(0.27 + 0.27) MTY
4.	Year of Establishment	1992
5.	Date of last Environmental Statement Report submitted	25 <sup>th</sup> September, 2021

**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	50.00
ii.	Fir Fighting	50.0
iii.	Workshop and others	-
iv.	Green Belt/Plantation	20.00
v.	CHP Beneficiation	-
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	5.00
ii.	Green Belt/Plantation	-
	<b>TOTAL</b>	<b>125.0 0</b>

Table – B Water Consumption Against Production (Including Recycled)

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
COAL	438.87 l/t	519.76 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 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	0.464 kg/t	0.377 kg/t

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
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	45,625
2.	Consent Fees	1,538,000
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	-
5.	Air pollution control measures	585697

### 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.

  
 Mine Manager  
 Thesgora-Mathani Mine  
**MANAGER**  
**MATHANI MINE**

  
 Sub-Area Manager  
 Nehariya Sub-Area

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

**URDHAN OC MINE**

**FY 2021-22**

**Prepared by:**



**April - 2022**

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***WESTERN COALFIELDS LIMITED***

***ENVIRONMENT DEPARTMENT***

***PENCH AREA***

***PARASIA - 480441***

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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.

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#### **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.

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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).

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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.

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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.

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2021-22	During the current FY 2022-23
COAL	1011.6075	147.5275

## FORM – V

### ENVIRONMENT STATEMENT FOR COAL MINING PROJECT

FINANCIAL YEAR ENDING MARCH 2022

#### PART – A

Sr. No.	Particulars	
1.	Name and address of the Mine	Urdhan OC Mine Village: Urdhan Tehsil: Parasia Distt: Chhindwara State: Madhya Pradesh
2.	Industry category	Category "A"
3.	Production capacity	0.70 MTY
4.	Year of Establishment	2010
5.	Date of last Environmental Statement Report submitted	25 <sup>th</sup> September, 2021

#### 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	120
ii.	Fir Fighting	100
iii.	Workshop and others	Nil
iv.	Green Belt/Plantation	40
v.	CHP Beneficiation	35
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	5
ii.	Green Belt/Plantation	Nil
	TOTAL	300

Table – B Water Consumption Against Production (Including Recycled)

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2021-22	During the current FY 2021-22
COAL	3111.60 l/t	182.52 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 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	Nil	2.00 kg/t

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
a)	From Process	0.621291 Mm <sup>3</sup>	1.999168 Mm <sup>3</sup>
b)	From Pollution Control Facilities	Nil	Nil
c)	Quantity recycled or dumped within quarry void	0.621291 Mm <sup>3</sup>	1.999168 Mm <sup>3</sup>
d)	Sold	Nil	Nil
e)	Disposed (as external dumps)	Nil	Nil

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

## 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	310980
2.	Consent Fees	630000
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	195450
5.	Air pollution control measures	1696559

### 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.



**Mine Manager**  
Urdhan OC Mine



**Sub-Area Manager**  
Nehariya Sub-Area

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

**VISHNUPURI NO. II UG MINE**

**FY 2021-22**

**Prepared by:**



**April - 2022**

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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 2022**

**PART – A**

Sr. No.	Particulars	
1.	Name and address of the Mine	Vishnupuri No. II UG Mine Village: Kukurmunda Tehsil: Parasia Distt: Chhindwara State: Madhya Pradesh
2.	Industry category	Category "A"
3.	Production capacity	0.26 MTY
4.	Year of Establishment	1992
5.	Date of last Environmental Statement Report submitted	25 <sup>th</sup> September, 2021

**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	20.00
ii.	Fir Fighting	-
iii.	Workshop and others	-
iv.	Green Belt/Plantation	-
v.	CHP Beneficiation	-
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	05.00
ii.	Green Belt/Plantation	-
	TOTAL	25.00

Table – B Water Consumption Against Production (Including Recycled)

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
COAL	81.55 l/t	102.99 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 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	0.554 Kg/t	0.519 kg/t

**PART - C**

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

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(A)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(B)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of all parameters are within permissible limits.
(C)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	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 2020-21	During the current FY 2021-22
(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 2020-21	During the current FY 2021-22
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	644000
3.	Air, Water, Noise Quality Monitoring	Done by CMPDIL
4.	Water pollution control measures	32251
5.	Air pollution control measures	181248

### 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	-

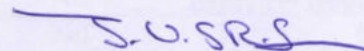
## PART - I

### Miscellaneous

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



**Mine Manager**  
Vishnupuri – II UG Mine



**Sub-Area Manager**  
Shivpuri Sub-Area

**ENVIRONMENTAL AUDIT STATEMENT**  
**(FORM-V)**

**AMBARA OC PATCHES MINE**

**FY 2021-22**

**Prepared by-**



**WESTERN COALFIELDS LIMITED**  
**KANHAN AREA**  
**PO: DUNGARIA, CHHINDWARA (MP)-480553**

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## **EXECUTIVE SUMMARY**

E.1.0 This Environment Statement Report has been prepared as per gazette notification no. G.S.R. 329(E) dated 13<sup>th</sup> March, 1992 laid down by Ministry of Environment and Forest. The 'Environment Audit' has been subsequently renamed to '**Environment Statement**' vide MoEF gazette notification No. G.S.R. 386(E) dated 22nd April, 1993.

E.2.0 Ambara Open Cast Mine of Western Coalfields Ltd. is situated in Pench Kanhan Valley Coalfield, which lies in Chhindwara District of Madhya Pradesh State.

E.3.0 The planned production capacity of Ambara Open Cast Mine is 1.00 MTY. The Ministry of Environment & Forest, Govt. of India vide No. J-11015/252/2007/IA-II(M) dt.19.03.2008 has granted Environmental Clearance to the Underground Mine. **The project produced 0.373 MT of coal during the year 2021-22.**

E.4.0 Environmental monitoring has been carried out by CMPDI for air, water and noise parameters. The results of the FY 2021-22 are enclosed.

E.5.0 Environmental Statement report reveals the following facts regarding environmental aspect of this project:

E.5.1 The concentration of SO<sub>2</sub>, NO<sub>x</sub> in ambient air in core zone is well within the permissible limits.

E.5.2 No hazardous waste material is being produced either from any process or any pollution control facilities.



## FORM-V

### ENVIRONMENT STATEMENT FOR COAL MINING PROJECT FINANCIAL YEAR ENDING MARCH 2022.

#### PART-A

- i. **Name and address of the Mine-** Ambara Opencast patches Mine, WCL Kanhan Area, PO- Ambara, District-Chhindwara, Pin-480449.
- ii. **Industry Category-** Category A
- iii. **Production Capacity-** 1.0 MTY
- iv. **Date of last Environmental Statement submitted-** September 2021.

#### PART - B

### WATER AND RAW MATERIAL CONSUMPTION

**Table-A Water Consumption on Usage Pattern**

Sno.	Water Consumption Category	Quantity/usage (in KL/day)
<b>a)</b>	<b>Industrial</b>	
i.	Dust Suppression	85 KL/day
ii.	Fire Fighting	Nil
iii.	Workshop and others	Nil
iv.	Green Belt/Plantation	Nil
v.	CHP Beneficiation	10 KL/day
vi.	Water discharged to abandoned OC quarry	250 KL/day
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	200 KL/day
ii.	Green Belt/Plantation	Nil
	TOTAL	545 KL/day

**Table-B Water Consumption against Production (including recycled)**

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
COAL	0.930 kl/t of coal produced	0.533 kl/t of coal produced

**Table-C Raw Material Consumption**

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	0.934	1.007

**PART-C**

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

Sno.	Pollutants	Quantity of Pollution generated	Percentage variation from prescribed standards with reasons
a)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.
b)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.
c)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.

**PART-D**  
**HAZARDOUS WASTES**

Sno.	Hazardous Waste	Total Quantity	
		During the previous FY 2020-21	During the current FY 2021-22
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 2020-21	During the current FY 2021-22
a)	From Process (Overburden)	1.683 Mm <sup>3</sup>	1.046 Mm <sup>3</sup>
b)	From Pollution Control Facilities	Nil	Nil
c)	Quantity recycled or dumped within quarry void	1.683 Mm <sup>3</sup>	1.046 Mm <sup>3</sup>
d)	Sold	Nil	Nil
e)	Disposed (as external dumps)	Nil	Nil

**PART-F**

**Please Specify the Characteristics (In Terms of Concern And Quantum) of Hazardous as well as Solid Wastes and indicate the Disposal Practice adopted for both these categories of wastes.**

Hazardous wastes is not being produced either from mining operation or from any pollution control facilities.

Solid Wastes generated from the mine are in form of Overburden comprising of sandstone, sandy and clayey shales which are either backfilled in quarry or deposited on OB dump.

## **PART-G**

### **Impact of Pollution Control Measures on Conservation of Natural Resources and subsequently on Cost of Production.**

In order to carry out mining in an eco-friendly manner, following pollution control measures have been implemented.

#### **1.0 AIR POLLUTION CONTROL MEASURES**

The following measures are being taken to control air pollution:

- (a) Mobile water tankers (Capacity – 4500 Litres and 12000 litres) are used for dust suppression on haul road and coal transport roads.
- (b) Wind breaking wall provided at Palachourai siding (Height – 20 feet, Length -380 m)
- (c) The mine has small open cast patches which operate for short periods only. Hence, fixed sprinklers are not required.
- (d) Road from Maori village to Palachourai siding (Govt. Road) is already black topped. Length – 3.90 km
- (e) All trucks carrying coal out of mine lease area are covered with tarpaulin. Trucks are loaded optimally at the weighbridge before dispatch.

#### **2.0 WATER POLLUTION CONTROL MEASURES**

The following measures are taken to control water pollution from the mine:

- (a) Abandoned OC quarries are being used for supplying water to Ambara colony and Ambara village for domestic purpose. Coagulation and Sedimentation arrangement for mine water is provided prior to supply of water.
- (b) Individual Septic Tank & Soak Pit provided at each quarter of combined township of Ambara UG, Ambara OC and Mohan UG mines.
- (c) Garland drains have been provided around the OB dumps. The drains are de-silted before the onset of monsoon.

(d) There is no departmental HEMM involved and there is no workshop for HEMM.

(e) Quarterly Ground water levels and annually ground water quality in the month of May is monitored through network of existing wells through CMPDIL.

### 3.0. **NOISE POLLUTION CONTROL MEASURES**

Maintenance of transport vehicles, development of green belt in between industrial complex & residential area, ear plugs & helmets are issued to the workers.

## **PART-H**

### **Additional Investment Proposal for Environmental Protection including abatement of Pollution.**

The project has incurred an expenditure on environmental management, details of which are as under:

<b>Sno.</b>	<b>Particulars</b>	<b>Amount</b>
1.	Consent Fees	3.26 lakhs
2.	Groundwater Abstraction Charges	3.97 lakhs
3.	Environmental Monitoring Costs	13.24 lakhs.
4.	Air Pollution Control Measures	13.28 lakhs
5.	Water Conservation Measures	Nil

**Note: Air Pollution Control Measures** = ( i.) Cost of hiring of water tankers for dust suppression on coal transport road near siding and procurement of locking caps for blasting.

### **Future Programme for Environmental management Measures:**

Extension of mine is proposed for which EC, FC, CTE & CTO has to be obtained. Preparation of Mining Plan is under progress.

## **PART-I**

### **Any other Particulars in respect of Environmental Protection and abatement of Pollution**

The regular monitoring of the ambient air and water quality is being done in and around core zone and the monitoring reports are submitted to the Madhya Pradesh State Pollution Control Board, Bhopal and the Ministry of Environment and Forest Regional Office, Bhopal.

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FOR COMPANY USE ONLY

The information given in this report is not to be communicated  
either directly or indirectly to the press or to any person not  
holding an official position in the CIL / Government

## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



APRIL 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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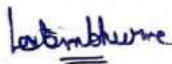
TEST REPORT NO.	RIN/TR/APR-21/68	DATE OF ISSUE	28.05.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE: KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02.04.2021	03.04.2021	342	231	45	17	12	Cloudy/Calm
16.04.2021	17.04.2021	362	242	49	15	11	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE-MOHAN: KAU2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02.04.2021	03.04.2021	370	264	47	13	BDL	Cloudy/Calm
16.04.2021	17.04.2021	352	231	41	15	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER: KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02.04.2021	03.04.2021	136	99	27	10	BDL	Cloudy/Calm
17.04.2021	18.04.2021	120	83	24	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE: KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02.04.2021	03.04.2021	120	89	25	10	BDL	Cloudy/Calm
16.04.2021	17.04.2021	111	78	22	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	



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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016	
SAMPLE DESCRIPTION	Air sample(Fugitive)	
SAMPLING METHOD : LPS 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )			ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
03.04.2021	04.04.2021	389	262	74	Cloudy/Calm

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )			ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
03.04.2021	04.04.2021	412	288	87	Cloudy/Calm



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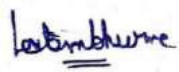


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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
03.04.2021	3.71	48	32	BDL
16.04.2021	3.8	52	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
APR'21	07.04.2021	49.9	45.7
APR'21	20.04.2021	47.6	45.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
APR'21	07.04.2021	45.7	43.9
APR'21	20.04.2021	46.4	44.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MAY 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.		RIN/TR/MAY-21/68	DATE OF ISSUE	29-06-2021
NAME OF CUSTOMER		GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.		WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)			
NAME OF AREA		KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT		AMBARA OC		
SAMPLE DESCRIPTION	Air sample			
SAMPLING METHOD : LSOP 4				

MANAGER OFFICE: KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02-05-2021	03-05-2021	326	216	46	15	12	Cloudy/Calm
16-May-21	17-May-21	310	192	40	12	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

PIT OFFICE-MOHAN: KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02-05-2021	03-05-2021	332	222	49	15	12	Cloudy/Calm
16-May-21	17-May-21	310	199	40	13	10	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY HEALTH CENTER: KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
03-05-2021	04-05-2021	142	98	27	9	BDL	Cloudy/Calm
17-May-21	18-May-21	130	85	24	10	BDL	Cloudy/Calm
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

AMBARA VILLAGE: KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02-05-2021	03-05-2021	131	92	27	10	BDL	Cloudy/Calm
16-May-21	17-May-21	121	84	24	9	BDL	Cloudy/Calm
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
3-May-21	5.43	32	36	BDL
17-May-21	6.92	36	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	48.7	45.2
May-21	21-May-21	47.8	44.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	46.2	44.4
May-21	21-May-21	45.4	43.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JUNE 2021

### Environment Laboratory


NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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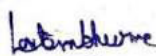
TEST REPORT NO.	RIN/TR/JUNE-21/68	DATE OF ISSUE	24-07-21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-06-21	12-06-21	312	199	42	15	12	Cloudy/Calm
26-06-21	27-06-21	292	171	48	13	10	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE- MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-06-21	12-06-21	317	206	46	13	10	Cloudy/Calm
26-06-21	27-06-21	331	217	50	15	12	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09-06-21	10-06-21	122	91	30	10	BDL	Cloudy/Calm
24-06-21	25-06-21	112	77	24	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-06-21	12-06-21	126	96	25	9	BDL	Cloudy/Calm
26-06-21	27-06-21	110	81	30	10	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
11-06-21	7.01	30	32	BDL
26-06-21	7.23	28	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>		<b>NOISE LEVEL IN dB(A)</b>	
<b>MONTH</b>	<b>DATE OF SAMPLE COLLECTION</b>	<b>DAY TIME</b>	<b>NIGHT TIME</b>
	<b>DETECTION LIMIT</b>	20	20
JUNE'21	10-06-21	53.9	51.3
JUNE'21	25-06-21	52.7	51.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>		<b>NOISE LEVEL IN dB(A)</b>	
<b>MONTH</b>	<b>DATE OF SAMPLE COLLECTION</b>	<b>DAY TIME</b>	<b>NIGHT TIME</b>
	<b>DETECTION LIMIT</b>	20	20
JUNE'21	10-06-21	43.3	41.7
JUNE'21	25-06-21	44.6	42.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JULY 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JULY-21/68	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE: KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
05.7.2021	06.7.2021	256	149	49	16	14	Clear/Lightbreeze
16.7.2021	17.7.2021	270	155	44	14	10	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE-MOHAN: KAU2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
05.7.2021	06.7.2021	265	152	41	15	14	Clear/Lightbreeze
16.7.2021	17.7.2021	271	169	47	13	BDL	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER: KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
12.7.2021	13.7.2021	134	89	28	9	BDL	Clear/Lightbreeze
23.7.2021	24.7.2021	127	70	36	10	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE: KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
12.7.2021	13.7.2021	101	76	24	8	BDL	Clear/Lightbreeze
23.7.2021	24.7.2021	124	86	29	10	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	

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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016	
SAMPLE DESCRIPTION	Air sample(Fugitive)	
SAMPLING METHOD : LPS 4		

MANGER OFFICE CHP		KAUF1			
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
05.7.2021	06.7.2021	5	5	2	Clear/Lightbreeze
		309	179	88	

PALACHURI		KAUF2			
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
16.7.2021	17.7.2021	5	5	2	Clear/Lightbreeze
		322	192	72	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
05.7.2021	7.4	52	40	BDL
16.7.2021	6.12	60	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by



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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	52.8	51.4
JULY'21	24.07.2021	50.6	49.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	44.8	43.1
JULY'21	24.07.2021	45.2	44.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



AUGUST 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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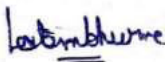
TEST REPORT NO.	RIN/TR/AUGUST-21/68	DATE OF ISSUE	30.09.21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02.08.2021	03.08.2021	245	166	39	12	BDL	Rainy / Lightbreeze
16.08.2021	17.08.2021	257	153	42	13	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE- MOHAN KAU2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02.08.2021	03.08.2021	281	170	42	14	10	Rainy / Lightbreeze
16.08.2021	17.08.2021	269	152	35	12	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.08.2021	12.08.2021	134	86	24	10	BDL	Cloudy / Lightbreeze
25.08.2021	26.08.2021	121	71	29	9	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.08.2021	12.08.2021	125	77	28	9	BDL	Clear / Lightbreeze
25.08.2021	26.08.2021	115	82	32	8	BDL	Rainy / Calm
NAAQS, 2009		-	100	60	80	80	

  
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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
03.08.2021	7.89	44	40	BDL
17.08.2021	7.76	48	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by



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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUGUST'21	09.08.2021	52.6	52.4
AUGUST'21	23.08.2021	52.6	52.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUGUST'21	09.08.2021	43.4	42.6
AUGUST'21	23.08.2021	43.5	42.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



SEPTEMBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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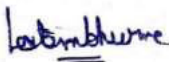
TEST REPORT NO.	RIN/TR/SEPT-21/68	DATE OF ISSUE	30.10.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.09.2021	13.09.2021	269	174	45	14	11	Clear Sky / Lightbreeze
26.09.2021	27.09.2021	288	183	40	12	BDL	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE- MOHAN KAU2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.09.2021	13.09.2021	262	179	44	13	12	Clear Sky / Lightbreeze
26.09.2021	27.09.2021	289	192	37	14	BDL	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.09.2021	13.09.2021	139	90	25	9	BDL	Clear Sky / Lightbreeze
26.09.2021	27.09.2021	147	97	31	10	BDL	Clear Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.09.2021	12.09.2021	120	84	21	8	BDL	Clear Sky / Lightbreeze
25.09.2021	26.09.2021	139	96	27	9	BDL	Clear Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	


  
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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
11.09.2021	7.22	38	40	BDL
26.09.2021	7.23	52	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by



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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'21	09.09.2021	54.6	52.1
SEPT'21	24.09.2021	54.2	52.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'21	09.09.2021	44.8	42.5
SEPT'21	24.09.2021	44.3	42.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



OCTOBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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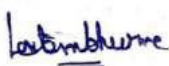
TEST REPORT NO.	RIN/TR/OCT-21/68	DATE OF ISSUE	25.11.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13-10-21	14-10-21	247	155	39	14	12	Clear Sky / Lightbreeze
25-10-21	26-10-21	261	169	34	12	BDL	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE- MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13-10-21	14-10-21	301	199	38	15	12	Clear/Lightbreeze
25-10-21	26-10-21	270	176	33	13	BDL	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13-10-21	14-10-21	122	82	27	9	BDL	Clear/Lightbreeze
25-10-21	26-10-21	130	91	36	10	BDL	Clear/Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13-10-21	14-10-21	131	75	23	10	BDL	Clear/Lightbreeze
25-10-21	26-10-21	119	88	30	9	BDL	Clear/Lightbreeze
NAAQS, 2009		-	100	60	80	80	



Analysed by

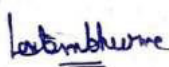


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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
*	*	*	*	*
25-10-21	8.01	34	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by


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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	11-10-21	52.7	52.6
OCT'21	23-10-21	50.1	45.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	11-10-21	43.4	43.2
OCT'21	23-10-21	40.2	34.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



NOVEMBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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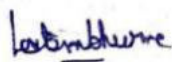
TEST REPORT NO.	RIN/TR/NOV-21/68	DATE OF ISSUE	31-12-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
06-11-2021	07-11-2021	267	169	36	13	BDL	Clear Sky / Lightbreeze
26-11-2021	27-11-2021	241	150	40	14	BDL	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

PIT OFFICE- MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
05-11-2021	06-11-2021	287	190	41	16	BDL	Clear/Lightbreeze
26-11-2021	27-11-2021	262	171	38	15	10	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
05-11-2021	06-11-2021	120	86	23	10	BDL	Clear/Lightbreeze
26-11-2021	27-11-2021	111	93	26	9	BDL	Clear/Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
06-11-2021	07-11-2021	109	73	29	9	BDL	Clear/Lightbreeze
26-11-2021	27-11-2021	129	88	34	10	BDL	Clear/Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	



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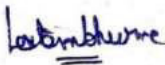
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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance	
SAMPLE DESCRIPTION	Air sample(Fugitive)	
SAMPLING METHOD : LPS 4		

MANGER OFFICE CHP		KAUF1			ENVIRONMENT CONDITIONS (Sky/Wind)
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
05.11.2021	06.11.2021	342	210	55	Cloudy/Light Breeze

PALACHURI		KAUF2			ENVIRONMENT CONDITIONS (Sky/Wind)
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
05.11.2021	06.11.2021	300	292	52	Cloudy/Light Breeze



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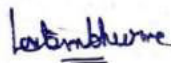


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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
14-11-2021	8.1	46	48	BDL
26-11-2021	8.22	40	44	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
NOV'21	08.11.2021	52.7	52.5
NOV'21	22.11.2021	52.7	52.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
NOV'21	08.11.2021	43.6	43.4
NOV'21	22.11.2021	43.6	42.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

### AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



DECEMBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

### CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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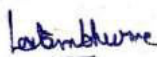
TEST REPORT NO.	RIN/TR/DEC-21/68	DATE OF ISSUE	15.01.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-12-2021	11-12-2021	5	5	2	6	10	Cloudy Sky / Lightbreeze
25-12-2021	26-12-2021	251	146	40	14	12	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE- MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-12-2021	11-12-2021	5	5	2	6	10	Cloudy/Lightbreeze
25-12-2021	26-12-2021	271	187	41	15	10	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-12-2021	11-12-2021	5	5	2	6	10	Cloudy/Lightbreeze
25-12-2021	26-12-2021	112	70	28	10	BDL	Clear/Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-12-2021	11-12-2021	5	5	2	6	10	Cloudy/Lightbreeze
25-12-2021	26-12-2021	120	75	24	9	BDL	Clear/Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
10-12-2021	7.73	36	40	BDL
25-12-2021	7.67	28	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE:</b>		<b>KAON1</b>	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	07.12.2021	52.7	51.7
DEC'21	22.12.2021	52.7	52.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI):</b>		<b>KMUN2</b>	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	07.12.2021	43.5	43.2
DEC'21	22.12.2021	43.6	43.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JANUARY 2022


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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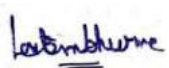
TEST REPORT NO.	RIN/TR/JAN-22/68	DATE OF ISSUE	28.2.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
10.01.2022	11.01.2022	260	164	36	15	10	Cloudy / Calm
24.01.2022	25.01.2022	248	132	32	13	BDL	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

PIT OFFICE- MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
10.01.2022	11.01.2022	255	176	39	16	11	Cloudy / Calm
24.01.2022	25.01.2022	268	161	44	15	10	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
13.01.2022	14.01.2022	124	89	27	9	BDL	Cloudy / Calm
24.01.2022	25.01.2022	115	77	25	10	BDL	Clear Sky / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
13.01.2022	14.01.2022	120	82	23	8	BDL	Cloudy / Calm
24.01.2022	25.01.2022	133	91	27	10	BDL	Clear Sky / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	



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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance	
SAMPLE DESCRIPTION	Air sample(Fugitive)	
SAMPLING METHOD : LPS 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
10.01.2022	11.01.2022	328	218	58	Cloudy/Calm



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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance	
SAMPLE DESCRIPTION	Air sample(Fugitive)	
SAMPLING METHOD : LPS 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
10.01.2022	11.01.2022	374	278	72	Cloudy/Calm



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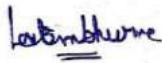


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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
10.01.2022	7.66	34	44	BDL
24.01.2022	7.8	32	48	BDL
STANDARDS FOR COAL	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
JAN'22	10.01.2022	52.7	52.5
JAN'22	28.01.2022	53.8	53.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
JAN'22	10.01.2022	43.6	43.4
JAN'22	28.01.2022	45.2	44.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



FEBRUARY 2022


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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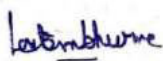
TEST REPORT NO.	RIN/TR/FEB-22/68	DATE OF ISSUE	31.03.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

MANAGER OFFICE KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12-02-2022	13-02-2022	254	162	33	15	BDL	Clear Sky / Lightbreeze
24-02-2022	25-02-2022	244	141	39	16	11	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE- MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12-02-2022	13-02-2022	255	175	34	16	11	Clear Sky / Lightbreeze
24-02-2022	25-02-2022	284	183	38	15	10	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-02-2022	12-02-2022	129	82	27	8	BDL	Clear Sky / Lightbreeze
25-02-2022	26-02-2022	111	76	32	10	BDL	Clear Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-02-2022	12-02-2022	107	79	23	9	BDL	Clear Sky / Lightbreeze
25-02-2022	26-02-2022	122	82	28	10	BDL	Clear Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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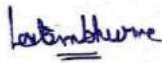


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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
12-02-2022	7.21	38	44	BDL
21-02-2022	7.10	46	48	BDL
STANDARDS FOR COAL	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
FEB'22	11.02.2022	52.7	52.6
FEB'22	21.02.2022	46.7	46.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
FEB'22	11.02.2022	43.6	43.4
FEB'22	21.02.2022	43.6	43.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# AMBARA OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MARCH 2022

### Environment Laboratory


NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY



<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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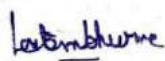
TEST REPORT NO.	RIN/TR/MAR-22/68	DATE OF ISSUE	12.04.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	AMBARA OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

MANAGER OFFICE KAOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13.03.2022	19.03.2022	264	177	42	16	12	Clear Sky / Lightbreeze
26.03.2022	27.03.2022	288	192	39	15	11	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE- MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13.03.2022	19.03.2022	254	162	43	15	BDL	Clear Sky / Lightbreeze
26.03.2022	27.03.2022	273	184	38	16	11	Clear Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.03.2022	11.03.2022	135	90	29	8	BDL	Clear Sky / Lightbreeze
27.03.2022	28.03.2022	123	81	26	9	BDL	Clear Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.03.2022	11.03.2022	127	86	28	9	BDL	Clear Sky / Lightbreeze
27.03.2022	28.03.2022	119	74	24	10	BDL	Clear Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



Analysed by

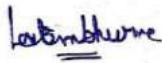


Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KAOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
11.03.2022	7.22	28	40	BDL
28.03.2022	7.11	26	36	BDL
STANDARDS FOR COAL	5.5 - 9.0	100	250	10



Analysed by


Deepanshu sahu  
Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

<b>MANAGER OFFICE: KAON1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
MAR'22	10.03.2022	55.8	53.9
MAR'22	25.03.2022	52.6	52.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(MOHAN/MAORI): KMUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
MAR'22	10.03.2022	42.7	4.17
MAR'22	25.03.2022	43.1	42.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**APRIL 2021 TO JUNE 2021**

**Environment Laboratory**  
NABL Accredited vide Cert. No. TC-7102

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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TEST REPORT NO.	RIN/TR/AUG/HM140	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	AMBARA OC PATCH	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	MANAGER OFFICE	KAOA-1	02.05.21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value	National Ambient Air Quality Standard NAAQS, 2009
				KAOA-1	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	1.0 $\mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	**

BDL: BELOW DETECTION LIMIT



SCIENTIFIC ASSISTANT


DEEPANSHU SAHU  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Ambient Air quality monitoring data for heavy metals	 TC-7102
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TEST REPORT NO.	RIN/TR/AUG/HM143	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	AMBARA OC & GHORAWARI OC	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	CHP (AMBARA OC)	KAOF-1	03.04.21
2	PALACHURI SIDING (AMBARA OC)	KAOF-2	03.04.21
2	WEIGH BRIDGE (GHORAWARI OC)	KGOF-1	03.04.21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value			National Ambient Air Quality Standard NAAQS, 2009
				KAOF-1	KAOF2	KGOF1	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	1.0 $\mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



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**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**OCT 2021 TO DEC 2021**

**Environment Laboratory**  
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**CMPDI**

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TEST REPORT NO.	RIN/TR/MAR /HM140	DATE OF ISSUE	19.03.22
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	AMBARA OC PATCH	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	MANAGER OFFICE	KAOA-1	06-11-21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value	National Ambient Air Quality Standard NAAQS, 2009
				KAOA-1	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	1.0 $\mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	0.0072	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	**

BDL: BELOW DETECTION LIMIT



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Ambient Air quality monitoring data for heavy metals	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR /HM143	DATE OF ISSUE	19.03.22
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	AMBARA OC & GHORAWARI OC	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	CHP (AMBARA OC)	KAOF-1	05-11-21
2	PALACHURI SIDING (AMBARA OC)	KAOF-2	05-11-21
3	WEIGH BRIDGE (GHORAWARI OC)	KGOF-1	07-11-21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value			National Ambient Air Quality Standard NAAQS, 2009
				KAOF-1	KAOF2	KGOF1	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0007 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$0.006 \mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	$7.0 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$1.0 \mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.007 \mu\text{g}/\text{m}^3$	0.0073	0.0071	0.0078	$0.02 \mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0045 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0015 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



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## EFFLUENT WATER MONITORING REPORT

### KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO.4634420035



QE-DECEMBER 2021


Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Effluent water quality monitoring data</b>	
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TEST REPORT NO.	RIN/TR/DEC'21 /MD62a	DATE OF ISSUE	31.12.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/588-615 DATED: 15.06.20		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN AREA	SAMPLING METHOD:	LSOP 5
NAME OF PROJECT	AMBARA OC	SAMPLING PLAN:	LQR 47
NO. OF PAGES	1		

NAME OF LOCATION: MINE WATER DISCHARGE				SAMPLING DATE: 13-10-2021		
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	Standard for Discharge PART A Schedule VI	Analysis result	Remarks
1	pH Value	IS 3025/11:1983 Electrometric	2	5.5 to 9.0	7.96	
2	Temperature (°C)	IS 3025 (Part-9)	4°	Te < Ts + 5OC	27.5	
3	Colour (Hazen)	APHA 23rd Edition Platinum Cobalt	1	*	3	
4	Odour	IS 3025/05: 1983, Physical, Qualitative	Qualitative	Unobjectionable	Unobjectionable	
5	TSS mg/l	IS 3025/17:1984 Gravimetric	10	100	40	
6	Oil & Grease mg/l	IS 3025/39: 1991 Partition Gravimetric	2	10	BDL	
7	C.O.D mg/l	APHA, 23rd Edition Closed Reflux	4	250	44	
8	B.O.D. (3days at 27°C mg/l)	IS 3025 (Part 44) : 1993	2	30	4.8	
9	Residual Chlorine mg/l	APHA, 23rd Edition DPD	0.02	1	BDL	
10	Ammonical Nitrogen mg/l	IS 3025 (Part-34) : 1988	0.02	50	0.42	
11	Total Kjeldahl Nitrogen mg/l	APHA, 23rd Edition Kjeldahl	1	100	5.34	
12	Dissolved Phosphate mg/l	APHA, 23rd Edition Molybdovanadate	0.3	5	0.4	
13	Arsenic (Ar)-mg/l	APHA, 23rd Edition AAS-VGA	0.005	0.2	BDL	
14	Lead as (Pb) -mg/l	APHA, 23rd Edition AAS-GTA	0.005	0.1	BDL	
15	Hexavalent Chromium mg/l	APHA, 23rd Edition 1,5-Diphenylcarbohydrazide	0.01	0.1	BDL	
16	Total Chromium -mg/l	IS-3025 (Part 52) : 2003 AAS Flame	0.06	2	BDL	
17	Copper (as Cu) -mg/l	IS-3025/42 : 1992 AAS-Flame	0.03	3	BDL	
18	Zinc as (Zn) -mg/l	IS-3025/49 : 1994 AAS-Flame	0.01	5	BDL	
19	Selenium (Se) -mg/l	APHA, 23rd Edition AAS-VGA	0.005	0.05	BDL	
20	Nickel-mg/l	IS-3025 (Part 54) : 2003 AAS Flame Method	0.1	3	BDL	
21	Cadmium as (Cd)- mg/l	APHA, 23rd Edition AAS-GTA	0.005	2	BDL	
22	Fluoride (as F-) - mg/l	APHA, 23rd Edition SPADNS	0.02	2	0.91	
23	Sulphide - mg/l	APHA, 23rd Edition Methylene blue	0.1	2	BDL	
24	Iron - mg/l	IS-3025/53 : 2003 AAS Flame	0.06	3	BDL	
25	Manganese as (Mn)- mg/l	IS-3025/59 : 2006 AAS Flame	0.02	2	BDL	
26	Nitrates Nitrogen(as NO3) - mg/l	APHA, 23rd Edition UV - Spectrophotometric	0.5	10	3.91	

BDL: BELOW DETECTION LIMIT

  
SCIENTIFIC ASSISTANT

  
DEEPANSHU SAHU  
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**REPORT ON  
MONITORING OF GROUND WATER LEVEL  
OF**

**KANHAN AREA  
(M.P)**

**WESTERN COALFIELDS LTD.**



**PERIOD- NOV-DEC 2021 (POST-MONSOON)  
& JAN-FEB -2022 (WINTER)**



**M/s Anacon Laboratories Pvt. Ltd., Nagpur**

**MoEF&CC (GOI) and NABL Recognized Laboratory  
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018**

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**Website: [www.anaconlaboratories.com](http://www.anaconlaboratories.com)**

**Report No. ANqr /PD/20A/2022/190**

**2021-22**

## Certificate

The Ground water Level monitoring has been carried out with due diligence and the Monitoring of Ground Water Level of all observation wells Report have been prepared as per the scope of work order no. वेकोलि/मुख्यालय/पर्यावरण/14-L/83 on date: 03.11.2021.

The report encompasses the Monitoring of Ground water level reports of observation wells pertaining to the 10 mines of the Kanhan area of Chhindwara District, M.P.

Anacon Laboratories Pvt. Ltd. gratefully acknowledges the full cooperation rendered by concerned WCL Officials for timely completion of the project.



**Sangharakshit. N. Borkar**  
(Geologist)



**Gyanchand Bohra**  
NABET Accredited EIA Expert  
for Hydrogeology & Geology



**(Dr. D. G. Garway)**  
Head of Organization  
Anacon Laboratories Pvt. Ltd., Nagpur



Nagpur.  
March -2022

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X. A	<b>SHARDAUG</b>	GROUND WATER MONITORING OF WELL DATA FROM NOV-DEC 2021(POST-MONSOON) & JAN-FEB 2022 (WINTER)

<b>PLANS</b>	
<b>FIGURE-I</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF AMBARA OC)
<b>FIGURE-II</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF AMBARA UG)
<b>FIGURE-III</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF DAMUA UG)
<b>FIGURE-IV</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF DAMUA OC)
<b>FIGURE-V</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF DATLA OC)
<b>FIGURE-VI</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF GHORAWARI OC )
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<b>FIGURE-IX</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF TANDSI UG)
<b>FIGURE-X</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF SHARDA UG )



## **INTRODUCTION**

Western Coalfields Limited (WCL) is one of the eight Subsidiary Companies of Coal India Limited (CIL) which is under administrative control of Ministry of Coal. The Company incorporated under the Companies Act, 1956 has its registered office at Coal Estate, Civil Lines, Nagpur-440001. WCL has been conferred "Mini-ratna" status on 15 March 2008. It has mining operation spread over the states of Maharashtra (in Nagpur, Chandrapur & Yeotmal Districts) and Madhya Pradesh (in Betul and Chhindwara Districts). It has been divided into 10 administrative areas. The Company is a major source of supplies of coal to the industries located in Western India in the States of Maharashtra, Madhya Pradesh, Gujarat and also in Southern India in the States of Andhra Pradesh, Tamil Nadu, Karnataka and Kerala. A large numbers of Power Houses under Maharashtra, Madhya Pradesh, Gujarat, Karnataka, Punjab and Uttar Pradesh - Electricity Boards are major consumers of its coal along with cement, steel, chemical, fertilizer, paper and brick Industries in these states.

M/s Anacon Laboratories Pvt. Ltd. has been awarded the Work of "Groundwater level Monitoring ( i.e. bore well / piezometer Water levels ) and Water quality analysis ( as per IS10500 ) for 82 projects / mines of WCL ( situated in the state of Madhya Pradesh – Chhindwara & Betul districts and Maharashtra – Nagpur, Chandrapur & Yeotmal districts) for one year as per condition stipulated in Environmental Clearance letters issued by MoEF & CC & NOC issued by CGWA" vide work order वेकोलि/मुख्यालय/पर्यावरण/14-L/83 on date: 03.11.2021.

This Ground Water Level Monitoring report is prepared for Ambara OC, Ambara UG, Damua UG, Ghorawari OC, Tandsi UG, Jharna UG, Sharda UG, Datla OC, Mohan (Maori) UG. mines of Kanhan area of WCL for 2 seasons i.e. Post-monsoon (Nov- Dec 2021) and Winter (Jan –Feb 2022). These mines are located in Chhindwara district of Madhya Pradesh.

## **GENERAL HYDROGEOLOGICAL CONDITION**

The major part of the district is occupied by Deccan Trap, consisting of different lava flows whose thickness ranges between 7 to 21 m. The recent alluvium deposits are found at places along the Pench and the Kanhan rivers with thickness varying from 5.00 to 20.00 m. Alluvium comprises clayey material with intercalated layers of sand and gravels. Archaeans are exposed in parts of Sausar, Bichhua, Chhindwara, Jamai and Mohkhed blocks whereas the Coal bearing lower Gondwanas in parts of Jamai, Parasia and Jamai blocks. The upper Gondwanas occupy parts of Harrai and Tamia blocks. Ground water occurs under phreatic and semi-confined to confined conditions. Alluvium, weathered granites/gneisses, lower Gondwana sandstones, weathered, fractured and jointed massive basalts and vesicular basalts form the major phreatic aquifers; and weathered, fractured granites are noticed as main water-bearing zones at deeper levels.

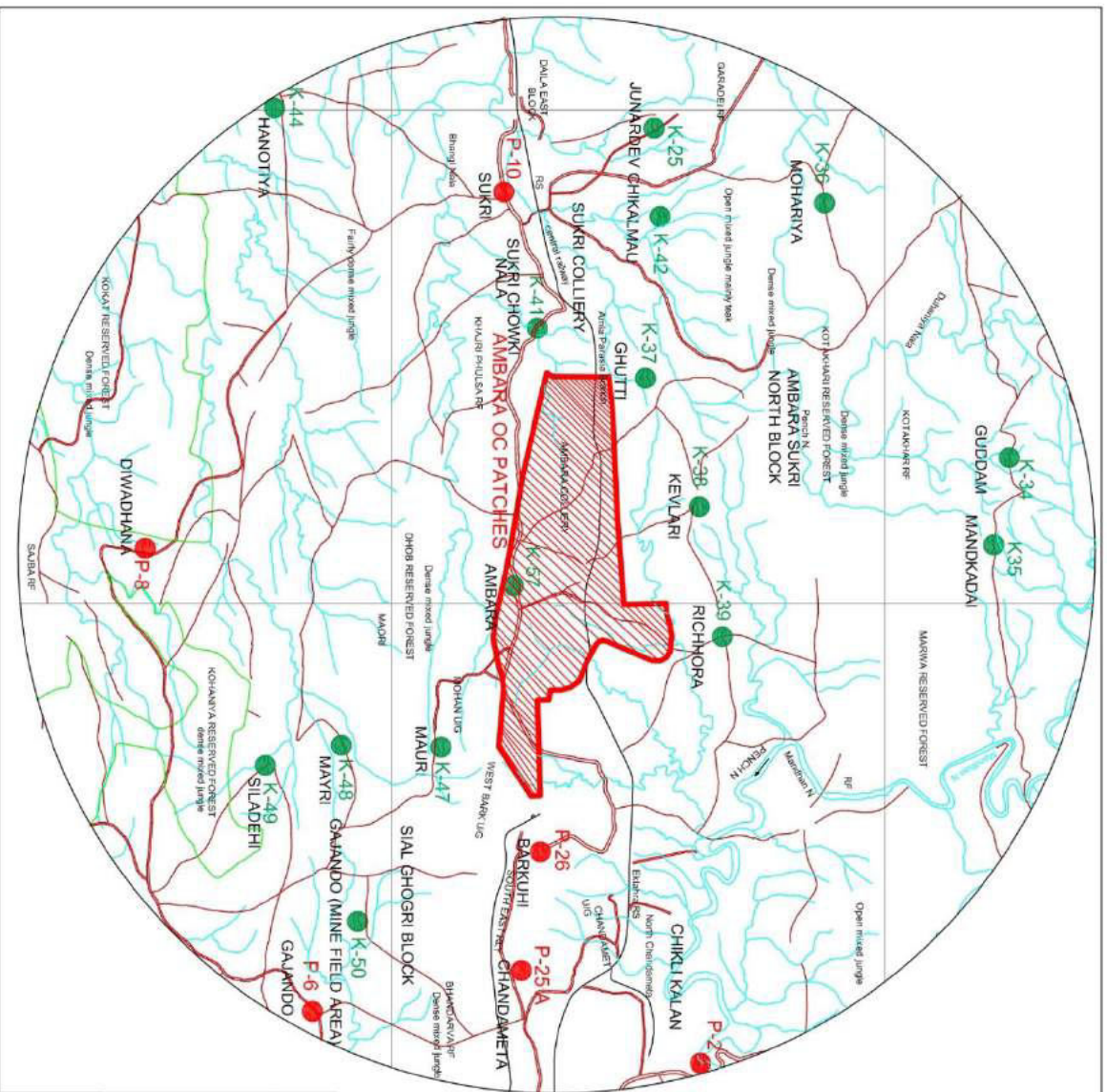
**AMBARAOC MINE,  
KANHAN AREA**

**WESTERN COALFIELDS LTD.**

**PERIOD- NOV-DEC 2021 (POST-MONSOON)  
& JAN-FEB -2022 (WINTER)**

**Table-IA: Ground water level monitoring data of dugwells in buffer zone of Ambara OC Patches, Kanhan Area,****WCL**

Well No.	Name of village	Well location	Owner	Lat			Long			R.L.in m	Utility	Well dia (m)	Height of measuring point (m agl)	Well depth (m bmp)	Depth to Water(BGL-Below Ground Level), m		Formation Tapped
				Deg	Min	Sec	Deg	Min	Sec						NOV-DEC 2021	JAN-FEB 2022	
25	JUNARDEV	Side of Tambia Road near Mandir outer limit of municipality	Deep chan Pawar	22	12	41.14	78	35	6.11	710	Domestic	4.70	0.60.	11.60	9.60	10.10	M/B sandstone
34	GUDDAM	Near G.P. office in low lying near Nala	G.P.	22	16	7.57	78	38	26.02	712	Domestic	2.60	0.85	2.85	1.80	2.25	M/B sandstone
35	MANDKADAI	In the openfield about 300 m away from village	Private	22	16	0.71	78	39	20.17	722	Irrigation No pump	2.80	0.63	10.50	3.60	3.85	M/B sandstone
36	MOHARIYA	In the low lying area North of LP School 100 m from Shivlal hone	G.P.	22	14	19.03	78	35	50.33	735	Domestic	6.00	0.40	8.00	3.90	3.50	Basalt
37	GHUTTI	Near LP school	G.P.	22	12	34.47	78	37	34.33	726	Domestic	6.40	0.60	10.00	4.00	4.79	Basalt
38	KEVLARI	About 100 m NE of G.P office openfield of Shobharam	SOBHARAM	22	13	5.95	78	38	56.71	729	Irrigation	3.50	0.00	10.60	6.10	7.15	Basalt
39	RICHHORA	Near Bajrang Mandir & Phulchand Mistra	G.P.	22	13	22.02	78	40	21.09	690	Domestic	5.50	1.20	9.50	3.50	4.10	Basalt
41	SUKRI CHOWKI NALA	In the openfield Near Nala on Parasis-Jurdeo Road	SANKAR YADUBANSI	22	11	30.11	78	37	8.20	650	Irrigation	5.80	0.00	10.20	9.20	8.75	Basalt
42	CHIKALMAU	In the centre of village Near house HARICHANDRA DHURVE	G.P.	22	12	42.45	78	35	56.08	685	Domestic	3.20	0.70	8.50	2.30	2.00	Basalt/sandston
44	HANOTIYA	In the compound of school Near Hospital	G.P.	22	8	58.88	78	34	41.99	697	Domestic	4.60	0.80	9.50	7.20	8.10	M/B S.stone with Dyke
47	MAURI	About 100 m East of Hingula Mandir near O/C patch Mauri	G.P.	22	10	31.42	78	41	24.37	745	Domestic	6.10	0.75	7.90	1.60	1.95	M/B sandstone
48	MAYRI	Near Milk Dairy Depo. House of Roshan Vishkarma single house	Roshan Vishkarma	22	9	33.39	78	41	22.67	785	Irrigation	4.01	0.80	4.70	2.00	2.60	M/B sandstone
49	SILADEHI	Outside village towards Umreth Road Back of house of Panchu Lal	Panchu Lal	22	8	51.88	78	41	32.93	768	Irrigation	5.20	0.00	10.50	5.40	6.40	M/B sandstone
50	GAJANDO MINE (Field Area)	In the field of Jaipal power 100 m from road to mine	Jaipal Power	22	9	41.74	78	43	5.03	695	Irrigation	6.10	0.10	9.10	8.10	7.90	Talchir
57	AMBARA	Side of Road to Parasia about 100 south in the field of Farukh Bhai	Farukh Bhai	22	11	12.98	78	39	51.73	678	Irrigation	7.50	1.00	12.40	3.10	5.60	Talchir
<b>P</b>	<b>PENCH</b>																
2	CHIKLI KALAN	In the pump house right hand side of the road when moving towards pagara village.	Govt.	22	13	13.48	78	44	29.60	690	Domestic	3.20	0.70	8.50	2.30	2.00	Motur
6	GAJANDO	On south of Mahadeo Puri-Gajando Road in open field of Ram Prasad Pawar	Ram Prasad pawar	22	9	16.61	78	43	57.58	650	Irrigation	4.60	0.80	9.50	7.20	8.10	
8	DIWADHANA	West of Umrath Sukri Road in openfield of Premchand Yadav	Premchand Yadav	22	7	41.73	78	39	22.21	685	Domestic	6.40	0.60	10.00	4.00	4.79	Basalt
10	SUKRI	Back side of Kherapati Mandir	Mandir Trust	22	11	14.80	78	35	46.95	697	Domestic	3.50	0.00	10.60	6.10	7.15	Metamorphics
25A	CHANDAMETA	ON PARASIA - JUNNARDEO ROAD SIDE.BACK SIDE OF PARAM TRADERS								745	Domestic	5.50	1.20	9.50	3.50	4.10	Motur
26	BARKUHI	Back side of officess club Pench Area out side of club boundary	WCL	22	11	31.11	78	42	23.43	645	Domestic	5.80	0.00	10.20	9.20	8.75	Motur










INDEX	
	ROAD
	RAILWAY TRACK
	RIVER/NALA
	P-25 A
	K-37
	OBSERVATION WELLS
	FOREST
	MINE BOUNDARY

FIGURE I

# Western Coalfields Limited.

GROUND WATER MONITORING REPORT FOR AMBARA OC PATCHES

PLAN SHOWING LOCATION OF WELL MONITORING STATIONS

KANHAN AREA, WCL

Prepared by

M/s. Anacon Laboratories Pvt. Ltd.

Scale:- Not to Scale

**ENVIRONMENTAL AUDIT STATEMENT**  
**(FORM-V)**

**GHORAWARI OC PATCHES MINE**

**FY 2021-22**

**Prepared by-**



**WESTERN COALFIELDS LIMITED**  
**KANHAN AREA**  
**PO: DUNGARIA, CHHINDWARA (MP)-480553**

# INDEX

<b>Sno.</b>	<b>Particulars</b>	<b>Page no.</b>
<b>1.</b>	<b>Executive Summary</b>	<b>01</b>
<b>2.</b>	<b>FORM-V</b>	<b>02</b>
	<b>PART-A</b>	<b>02</b>
	<b>PART-B</b>	<b>02</b>
	<b>PART-C</b>	<b>03</b>
	<b>PART-D</b>	<b>04</b>
	<b>PART-E</b>	<b>04</b>
	<b>PART-F</b>	<b>04</b>
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	<b>PART-H</b>	<b>05</b>
	<b>PART-I</b>	<b>05</b>
<b>3.</b>	<b>Monitoring Reports</b>	<b>06</b>

## EXECUTIVE SUMMARY

E.1.0 This Environment Statement Report has been prepared as per gazette notification no. G.S.R. 329(E) dated 13<sup>th</sup> March, 1992 laid down by Ministry of Environment and Forest. The 'Environment Audit' has been subsequently renamed to '**Environment Statement**' vide MoEF gazette notification No. G.S.R. 386(E) dated 22nd April, 1993.

E.2.0 Ghorawari Open Cast Mine of Western Coalfields Ltd. is situated in Pench Kanhan Valley Coalfield, which lies in Chhindwara District of Madhya Pradesh State.

E.3.0 The planned production capacity of Ghorawari Open Cast Mine is 1.50 MTY. The Ministry of Environment & Forest, Govt. of India vide No. J-11015/367/2008/IA-II dt 26.12.2008 has granted Environmental Clearance to the Underground Mine. **Mine currently not operational since May 2020.** Application for Forest Clearance of mine (Bharat OC Phase-III patch of Ghorawari OC patches) is under progress. Mine to continue after obtaining Stage-I & II Forest Clearance.

E.4.0 Environmental monitoring has been carried out by CMPDI for air, water and noise parameters. The results of the FY 2021-22 are enclosed.

E.5.0 Environmental Statement report reveals the following facts regarding environmental aspect of this project:

E.5.1 The concentration of SO<sub>2</sub>, NO<sub>x</sub> in ambient air in core zone is well within the permissible limits.

E.5.2 No hazardous waste material is being produced either from any process or any pollution control facilities.

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## FORM-V

### ENVIRONMENT STATEMENT FOR COAL MINING PROJECT FINANCIAL YEAR ENDING MARCH 2022.

#### PART-A

- i. **Name and address of the Mine-** Ghorawari Opencast patches Mine,  
WCL Kanhan Area, PO- Ghorawari, District-Chhindwara, Pin-4804551.
- ii. **Industry Category-** Category A
- iii. **Production Capacity-** 1.50 MTY
- iv. **Date of last Environmental Statement submitted-** September 2021.

#### PART - B

### WATER AND RAW MATERIAL CONSUMPTION

Table-A Water Consumption on Usage Pattern

Sno.	Water Consumption Category	Quantity/usage (in KL/day)
<b>a)</b>	<b>Industrial</b>	
i.	Dust Suppression	Nil; Mine not in operation since May 2020.
ii.	Fir Fighting	Nil
iii.	Workshop and others	Nil
iv.	Green Belt/Plantation	Nil
v.	CHP Beneficiation	Nil
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	200 KL/day
ii.	Green Belt/Plantation	Nil
	TOTAL	200 KL/day

**Table-B Water Consumption against Production (including recycled)**

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
COAL	Mine not operational since May 2020.	Mine not operational since May 2020.

**Table-C Raw Material Consumption**

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	1.469 Mine not operational since May 2020	Mine not operational since May 2020.

**PART-C**

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

Sno.	Pollutants	Quantity of Pollution generated	Percentage variation from prescribed standards with reasons
a)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.
b)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.
c)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.

**PART-D**  
**HAZARDOUS WASTES**

Sno.	Hazardous Waste	Total Quantity	
		During the previous FY 2020-21	During the current FY 2021-22
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 2020-21	During the current FY 2021-22
a)	From Process (Overburden)	0.131 Mm <sup>3</sup>	Mine not operational since May 2020.
b)	From Pollution Control Facilities	Nil	
c)	Quantity recycled or dumped within quarry void	0.131 Mm <sup>3</sup>	
d)	Sold	Nil	
e)	Disposed (as external dumps)	Nil	

**PART-F**

**Please Specify the Characteristics (In Terms of Concern And Quantum) of Hazardous as well as Solid Wastes and indicate the Disposal Practice adopted for both these categories of wastes.**

Hazardous wastes is not being produced either from mining operation or from any pollution control facilities.

Solid Wastes generated from the mine are in form of Overburden comprising of sandstone, sandy and clayey shales which are either backfilled in quarry or deposited on OB dump.

## **PART-G**

### **Impact of Pollution Control Measures on Conservation of Natural Resources and subsequently on Cost of Production.**

In order to carry out mining in an eco-friendly manner, following pollution control measures have been implemented.

#### **1.0 AIR POLLUTION CONTROL MEASURES**

The following measures are being taken to control air pollution:

- (a) All the Coal transportation trucks are covered with tarpaulin & Trucks are loaded optimally at the weighbridge before dispatch.
- (b) Wind breaking wall (Height – 20 feet, Length 455m) provided at Hirdagarh Railway siding.  
Plantation along the haul road and in other vacant space.
- (d) Mobile water tankers (Capacity – 4500 Litres) are used for dust suppression on coal transport roads. The mine has small open cast patches which operate for short periods only. Hence, fixed sprinklers are not required.
- (e) Road from Ghorawari village to Hirdagarh siding (Govt. Road) is already black topped Length – 15.00 km approx.
- (f) All necessary precautions are taken during drilling, blasting, loading and transporting operations.

#### **2.0 WATER POLLUTION CONTROL MEASURES**

The following measures have been taken to control water pollution from the mine :

- i) The Mine water is utilized to the maximum possible extent for dust suppression at coal face, haul roads and fire fighting etc. In case of rainy season, mine water is first allowed to settle in sump before discharging it to nearby natural drains.
- ii) Garland drains have been provided around the OB dumps. The drains are de-silted before the onset of monsoon.

iii) There is no departmental HEMM involved and there is no workshop for HEMM.

Hence, ETP is not required.

iv) Individual Septic Tank & Soak Pit provided at each quarter in colony. A STP (Capacity – 0.2 MLD) has been constructed and commissioned (Cost – Rs. 70.00 Lakhs) in the year 2016 in the combined colony of Jharna UG and Ghorawari OC mine. Presently STP is not in operation as insufficient quantity of sewage is generated due to the closure of the nearby Jharna UG mine and transfer of employees to other mines.

(v) Quarterly Ground water levels and annually ground water quality in the month of May is monitored through network of existing wells through CMPDIL.

### 3.0. NOISE POLLUTION CONTROL MEASURES

Maintenance of transport vehicles, development of green belt in between industrial complex & residential area, ear plugs & helmets are issued to the workers.

## PART-H

### **Additional Investment Proposal for Environmental Protection including abatement of Pollution.**

The project has incurred an expenditure on environmental management, details of which are as under:

<b>Sno.</b>	<b>Particulars</b>	<b>Amount</b>
1.	Consent Fees	51.88 lakhs Rs. For Consent upto 31/01/24
2.	Groundwater Abstraction Charges	Rs. 8,29,280/-
3.	Environmental Monitoring Costs	Rs. 11,50,042.86/-
4.	Air Pollution Control Measures	Nil; Mine not in operation since May 2020.

**Future Programme for Environmental management Measures:**

- a) Installation of sprinklers at upcoming Bharat OC phase-3 patches of Ghorawari OC mine for which Forest Clearance is awaited.
- b) CAAQMS installation for Ghorawari OC patches mine after commencement of the mine.

**PART-I**

**Any other Particulars in respect of Environmental Protection and abatement of Pollution**

The regular monitoring of the ambient air and water quality is being done in and around core zone and the quarterly monitoring report is submitted to the Madhya Pradesh State Pollution Control Board, Bhopal and the Ministry of Environment and Forest Regional Office, Bhopal.

STRICTLY RESTRICTED  
FOR COMPANY USE ONLY

The information given in this report is not to be communicated  
either directly or indirectly to the press or to any person not  
holding an official position in the CIL / Government

## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



APRIL 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/APR-21/73	DATE OF ISSUE	28.05.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
04.14.2021	05.04.2021	360	241	43	15	11	Cloudy/Calm
17.04.2021	18.04.2021	245	217	40	13	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

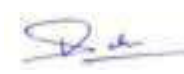
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.04.2021	06.04.2021	344	216	46	13	BDL	Cloudy/Calm
19.04.2021	20.04.2021	310	196	38	12	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
04.14.2021	05.04.2021	134	88	27	9	BDL	Cloudy/Calm
19.04.2021	20.04.2021	119	92	23	10	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
03.04.2021	04.04.2021	120	80	24	10	BDL	Cloudy/Calm
17.04.2021	18.04.2021	108	72	22	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	



Analysed by



Authorised Signatory

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- 2 This report refers to the values related to the items tested.



**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016	
SAMPLE DESCRIPTION	Air sample(Fugitive)	
SAMPLING METHOD : LPS 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
03.04.2021	04.04.2021	399	247	83	Cloudy/Calm



Analysed by



Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
03.04.2021	7.62	28	36	BDL
17.04.2021	7.72	26	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
APR'21	07.04.2021	47.6	44.3
APR'21	20.04.2021	48.6	46.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
APR'21	07.04.2021	45.7	43.6
APR'21	20.04.2021	45.2	42.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA 

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MAY 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.		RIN/TR/MAY-21/73	DATE OF ISSUE	29-06-2021
NAME OF CUSTOMER		GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.		WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)			
NAME OF AREA		KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT		GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample			
SAMPLING METHOD : LSOP 4				

MANAGER OFFICE-OC: KGOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
3-May-21	4-May-21	292	181	42	14	11	Cloudy/Calm
17-May-21	18-May-21	270	159	38	12	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

SAM-OFFICE GHORAWARI: KJUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
5-May-21	6-May-21	273	163	40	12	BDL	Cloudy/Calm
19-May-21	20-May-21	290	189	34	10	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY-HEALTH CENTER JHARNA: KJUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
4-May-21	5-May-21	142	96	32	10	BDL	Cloudy/Calm
18-May-21	19-May-21	130	81	26	9	BDL	Cloudy/Calm
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

PANARA VILLAGE: KJUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
3-May-21	4-May-21	127	84	27	10	BDL	Cloudy/Calm
17-May-21	18-May-21	116	79	23	9	BDL	Cloudy/Calm
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

*labmanthone*

Analysed by

*[Signature]*

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
3-May-21	7.64	36	40	BDL
17-May-21	7.96	32	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	45.7	44.4
May-21	21-May-21	46.7	44.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	44.9	43.2
May-21	21-May-21	45.2	42.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JUNE 2021

**Environment Laboratory**

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/JUNE-21/73	DATE OF ISSUE	24-07-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE-OC   KGOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-06-2021	11-06-2021	281	172	49	13	10	Cloudy/Calm
25-06-2021	26-06-2021	264	159	32	12	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

SAM-OFFICE GHORAWARI   KJUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09-06-2021	10-06-2021	281	190	47	13	BDL	Cloudy/Calm
24-06-2021	25-06-2021	256	149	40	11	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER JHARNA   KJUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08-06-2021	09-06-2021	139	90	30	9	BDL	Cloudy/Calm
23-06-2021	24-06-2021	121	71	28	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

PANARA VILLAGE   KJUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-06-2021	11-06-2021	131	92	30	9	BDL	Cloudy/Calm
25-06-2021	26-06-2021	122	88	24	10	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
10-06-2021	8.07	30	36	BDL
25-06-2021	7.92	32	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'21	10-06-2021	54.3	52.5
JUNE'21	25-06-2021	53.1	51.3
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'21	10-06-2021	44.9	42.3
JUNE'21	25-06-2021	44.8	42.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA 

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JULY 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/JULY-21/73	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.7.2021	12.7.2021	254	166	36	12	BDL	Clear/Lightbreeze
22.7.2021	23.7.2021	249	149	30	10	BDL	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

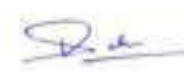
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.7.2021	12.7.2021	244	165	35	12	BDL	Clear/Lightbreeze
22.7.2021	23.7.2021	259	187	28	10	BDL	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.7.2021	13.7.2021	117	88	25	10	BDL	Clear/Lightbreeze
23.7.2021	24.7.2021	131	91	31	11	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.7.2021	12.7.2021	117	80	25	9	BDL	Clear/Lightbreeze
22.7.2021	23.7.2021	108	78	29	11	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	



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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016	
SAMPLE DESCRIPTION	Air sample(Fugitive)	
SAMPLING METHOD : LPS 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
14-Jul-21	15-Jul-21	310	182	74	Clear/L. Breeze



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
11.7.2021	7.99	28	36	BDL
22.7.2021	7.88	24	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	52.8	51.7
JULY'21	24.07.2021	51.6	50.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	45.3	44.5
JULY'21	24.07.2021	44.2	43.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA 

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



AUGUST 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/AUGUST-21/73	DATE OF ISSUE	30.09.31
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.08.2021	09.08.2021	255	161	32	15	10	Cloudy/Lightbreeze
24.08.2021	25.08.2021	230	149	38	14	11	Cloudy/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

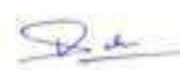
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.08.2021	09.08.2021	239	147	32	12	BDL	Cloudy/Lightbreeze
24.08.2021	25.08.2021	212	165	27	10	BDL	Cloudy/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.08.2021	10.08.2021	127	89	26	10	BDL	Cloudy/Lightbreeze
22.08.2021	23.08.2021	119	93	30	9	BDL	Cloudy/Lightbreeze
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.08.2021	09.08.2021	117	85	24	9	BDL	Cloudy/Lightbreeze
24.08.2021	25.08.2021	109	89	29	10	BDL	Cloudy/Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08.08.2021	7.8	28	32	BDL
22.08.2021	7.92	24	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUGUST'21	09.08.2021	44.5	43.2
AUGUST'21	23.08.2021	43.4	42.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUGUST'21	09.08.2021	42.7	42.3
AUGUST'21	23.08.2021	42.5	42.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA 

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



SEPTEMBER 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/SEPT-21/73	DATE OF ISSUE	30.10.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.09.2021	11.09.2021	214	133	35	13	BDL	Rainy / Lightbreeze
24.09.2021	25.09.2021	247	157	40	12	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

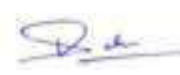
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.09.2021	12.09.2021	265	172	43	13	11	Clear / Lightbreeze
25.09.2021	26.09.2021	273	169	39	12	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.09.2021	12.09.2021	124	90	28	9	BDL	Clear / Lightbreeze
25.09.2021	26.09.2021	134	98	35	8	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.09.2021	12.09.2021	127	92	32	10	BDL	Clear / Lightbreeze
25.09.2021	26.09.2021	135	89	38	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
10.09.2021	8.31	22	32	BDL
24.09.2021	8.41	28	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'21	09.09.2021	48.4	43.3
SEPT'21	24.09.2021	48.9	46.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'21	09.09.2021	44.5	42.8
SEPT'21	24.09.2021	43.4	42.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA 

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



OCTOBER 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/OCT-21/73	DATE OF ISSUE	25.11.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE-OC   KGOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12-10-21	13-10-21	256	144	38	13	11	Clear / Lightbreeze
23-10-21	24-10-21	270	162	31	15	11	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

SAM-OFFICE GHORAWARI   KJUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12-10-21	13-10-21	264	183	29	14	BDL	Clear / Lightbreeze
24-10-21	25-10-21	270	163	35	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER JHARNA   KJUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-10-21	12-10-21	131	82	24	9	BDL	Clear / Lightbreeze
24-10-21	25-10-21	120	91	30	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

PANARA VILLAGE   KJUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-10-21	12-10-21	111	74	23	10	BDL	Clear / Lightbreeze
24-10-21	25-10-21	109	88	29	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
*	*	*	*	*
23-10-21	8.43	26	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	11-10-21	44.5	43.6
OCT'21	23-10-21	50.2	42.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	11-10-21	42.7	42.6
OCT'21	23-10-21	38.7	34.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



NOVEMBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/NOV-21/73	DATE OF ISSUE	31-12-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE-OC   KGOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07-11-2021	08-11-2021	240	148	35	11	BDL	Clear / Lightbreeze
24-11-2021	25-11-2021	252	159	30	14	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

SAM-OFFICE GHORAWARI   KJUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-11-2021	07-11-2021	280	189	40	14	BDL	Clear / Lightbreeze
24-11-2021	25-11-2021	269	171	46	14	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER JHARNA   KJUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07-11-2021	08-11-2021	122	89	24	9	BDL	Clear / Lightbreeze
24-11-2021	25-11-2021	130	92	20	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

PANARA VILLAGE   KJUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-11-2021	07-11-2021	108	82	24	10	BDL	Clear / Lightbreeze
25-11-2021	26-11-2021	101	77	21	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*Latambhure*

Analysed by

*Deepanshu*

Deepanshu sahu  
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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016	
SAMPLE DESCRIPTION	Air sample(Fugitive)	
SAMPLING METHOD : LPS 4		

		W BRIDGE	KAUF1		ENVIRONMENT CONDITIONS (Sky/Wind)
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
07.11.2021	08.11.2021	310	280	49	Cloudy/Light Breeze



Analysed by


Deepanshu sahu  
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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
12-11-2021	8.53	30	36	BDL
24-11-2021	8.39	28	40	BDL
STANDARDS FOR COAL	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
NOV'21	08.11.2021	44.6	43.4
NOV'21	22.11.2021	44.6	43.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
NOV'21	08.11.2021	43.5	43.2
NOV'21	22.11.2021	42.7	42.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



DECEMBER 2021


**Environment Laboratory**

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/DEC-21/73	DATE OF ISSUE	15.01.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE-OC   KGOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
08-12-2021	09-12-2021	259	167	33	13	BDL	Cloudy / Lightbreeze
23-12-2021	24-12-2021	241	154	28	15	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

SAM-OFFICE GHORAWARI   KJUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
09-12-2021	10-12-2021	237	145	30	12	BDL	Cloudy / Lightbreeze
24-12-2021	25-12-2021	247	159	36	15	11	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER JHARNA   KJUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
09-12-2021	10-12-2021	119	78	29	8	BDL	Cloudy / Lightbreeze
24-12-2021	25-12-2021	128	83	35	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

PANARA VILLAGE   KJUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
		5	5	2	6	10	
09-12-2021	10-12-2021	109	77	26	9	BDL	Cloudy / Lightbreeze
24-12-2021	25-12-2021	122	82	30	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08-12-2021	7.62	32	44	BDL
23-12-2021	7.70	26	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	07.12.2021	44.6	43.4
DEC'21	22.12.2021	43.3	43.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	07.12.2021	42.7	42.5
DEC'21	22.12.2021	43.4	42.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA 

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



JANUARY 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/JAN-22/73	DATE OF ISSUE	28.02.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

MANAGER OFFICE-OC   KGOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.01.2022	13.01.2022	268	183	42	15	11	Cloudy / Lightbreeze
23.01.2022	24.01.2022	247	172	37	14	BDL	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

SAM-OFFICE GHORAWARI   KJUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.01.2022	12.01.2022	257	163	30	14	BDL	Cloudy / Lightbreeze
23.01.2022	24.01.2022	271	169	39	16	BDL	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER JHARNA   KJUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.01.2022	12.01.2022	121	84	29	10	BDL	Cloudy / Lightbreeze
24.01.2022	25.01.2022	113	72	24	9	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

PANARA VILLAGE   KJUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.01.2022	13.01.2022	129	75	25	9	BDL	Cloudy / Lightbreeze
23.01.2022	24.01.2022	119	70	27	8	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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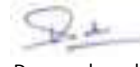
**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016	
SAMPLE DESCRIPTION	Air sample(Fugitive)	
SAMPLING METHOD : LPS 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )			ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	
12.01.2022	13.01.2022	331	225	60	Cloudy/Light Breeze



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
09.01.2022	7.95	26	32	BDL
23.01.2022	8.12	28	36	BDL
STANDARDS FOR COAL	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JAN'22	10.01.2022	46.7	44.7
JAN'22	28.01.2022	47.1	45.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JAN'22	10.01.2022	42.7	42.6
JAN'22	28.01.2022	43.6	43.3
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA 

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



FEBRUARY 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/FEB-22/73	DATE OF ISSUE	31.03.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

MANAGER OFFICE-OC   KGOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.02.2022	11.02.2022	270	173	42	16	11	Clear / Lightbreeze
24.02.2022	25.02.2022	264	158	36	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

SAM-OFFICE GHORAWARI   KJUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.02.2022	11.02.2022	257	166	38	14	BDL	Clear / Lightbreeze
23.02.2022	24.02.2022	281	173	44	12	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY HEALTH CENTER JHARNA   KJUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.02.2022	11.02.2022	115	82	26	10	BDL	Clear / Lightbreeze
24.02.2022	25.02.2022	133	91	29	8	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

PANARA VILLAGE   KJUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.02.2022	11.02.2022	120	77	24	9	BDL	Clear / Lightbreeze
24.02.2022	25.02.2022	112	85	29	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
09.02.2022	7.66	24	32	BDL
24.02.2022	7.74	22	28	BDL
STANDARDS FOR COAL	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
FEB'22	11.02.2022	44.7	43.5
FEB'22	21.02.2022	44.4	43.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
FEB'22	11.02.2022	42.7	42.6
FEB'22	21.02.2022	43.4	43.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# GHORAWARI OC

KANHAN AREA 

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



**MARCH 2022**

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/MAR-22/73	DATE OF ISSUE	12.04.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	GHORAWARI OC		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

MANAGER OFFICE-OC   KGOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.03.2022	10.03.2022	290	196	32	15	BDL	Clear / Calm
26.03.2022	27.03.2022	278	183	39	16	11	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

SAM-OFFICE GHORAWARI   KJUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.03.2022	10.03.2022	270	172	32	14	BDL	Clear / Calm
26.03.2022	27.03.2022	249	157	36	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY HEALTH CENTER JHARNA   KJUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.03.2022	11.03.2022	139	94	27	10	BDL	Clear / Calm
27.03.2022	28.03.2022	125	88	23	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

PANARA VILLAGE   KJUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.03.2022	10.03.2022	138	94	28	9	BDL	Clear / Calm
26.03.2022	27.03.2022	127	86	24	8	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KGOW				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
10.03.2022	7.59	26	40	BDL
26.03.2022	7.67	24	36	BDL
STANDARDS FOR COAL	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

MANAGER OFFICE:		KGON1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MAR'22	10.03.2022	57.7	56.2
MAR'22	25.03.2022	45.3	44.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(JHARNA):		KGON2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MAR'22	10.03.2022	42.2	41.8
MAR'22	25.03.2022	42.2	41.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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**ENVIRONMENTAL MONITORING REPORT  
w.r.t. HEAVY METALS IN AMBIENT AIR**

**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**OCT 2021 TO DEC 2021**

**Environment Laboratory**  
NABL Accredited vide Cert. No. TC-7102

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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TEST REPORT NO.	RIN/TR/MAR /HM138	DATE OF ISSUE	19.03.22
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	GHORAWARI OC	SAMPLING PLAN : LQR 47	
No. of Pages	1		

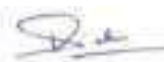
Sl No.	Name of location	Location Code	Date of sampling
1	MANAGER OFFICE OC	KGOA-1	07-11-21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value	National Ambient Air Quality Standard NAAQS, 2009
				KGOA-1	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	1.0 $\mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	**

BDL: BELOW DETECTION LIMIT



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Ambient Air quality monitoring data for heavy metals	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR /HM143	DATE OF ISSUE	19.03.22
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD :	LSOP 4
NAME OF PROJECT	AMBARA OC & GHORAWARI OC	SAMPLING PLAN :	LQR 47
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	CHP (AMBARA OC)	KAOF-1	05-11-21
2	PALACHURI SIDING (AMBARA OC)	KAOF-2	05-11-21
3	WEIGH BRIDGE (GHORAWARI OC)	KGOF-1	07-11-21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value			National Ambient Air Quality Standard NAAQS, 2009
				KAOF-1	KAOF2	KGOF1	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0007 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$0.006 \mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	$7.0 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$1.0 \mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.007 \mu\text{g}/\text{m}^3$	0.0073	0.0071	0.0078	$0.02 \mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0045 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0015 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



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**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**APRIL 2021 TO JUNE 2021**

**Environment Laboratory**  
NABL Accredited vide Cert. No. TC-7102

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Ambient Air quality monitoring data for heavy metals	 TC-7102
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TEST REPORT NO.	RIN/TR/AUG/HM138	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	GHORAWARI OC	SAMPLING PLAN : LQR 47	
No. of Pages	1		

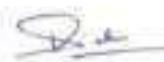
Sl No.	Name of location	Location Code	Date of sampling
1	MANAGER OFFICE OC	KGOA-1	03.05.21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value	National Ambient Air Quality Standard NAAQS, 2009
				KGOA-1	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	1.0 $\mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	**

BDL: BELOW DETECTION LIMIT



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Ambient Air quality monitoring data for heavy metals	 TC-7102
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TEST REPORT NO.	RIN/TR/AUG/HM143	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	AMBARA OC & GHORAWARI OC	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	CHP (AMBARA OC)	KAOF-1	03.04.21
2	PALACHURI SIDING (AMBARA OC)	KAOF-2	03.04.21
2	WEIGH BRIDGE (GHORAWARI OC)	KGOF-1	03.04.21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value			National Ambient Air Quality Standard NAAQS, 2009
				KAOF-1	KAOF2	KGOF1	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	1.0 $\mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**

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## EFFLUENT WATER MONITORING REPORT

### KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO.4634420035



QE-DECEMBER 2021


**Environment Laboratory**

**NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022**

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Effluent water quality monitoring data</b>	
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TEST REPORT NO.	RIN/TR/DEC'21 /MD62	DATE OF ISSUE	31.12.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/588-615 DATED: 15.06.20		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN AREA	SAMPLING METHOD:	LSOP 5
NAME OF PROJECT	GHORAWARI OC	SAMPLING PLAN:	LQR 47
NO. OF PAGES	1		

NAME OF LOCATION: MINE WATER DISCHARGE				SAMPLING DATE: 11-10-2021		
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	Standard for Discharge PART A Schedule VI	Analysis result	Remarks
1	pH Value	IS 3025/11:1983 Electrometric	2	5.5 to 9.0	8.47	
2	Temperature (°C)	IS 3025 (Part-9)	4 <sup>o</sup>	Te < Ts + 5OC	26.6	
3	Colour (Hazen)	APHA 23rd Edition Platinum Cobalt	1	*	1	
4	Odour	IS 3025/05: 1983, Physical, Qualitative	Qualitative	Unobjectionable	Unobjectionable	
5	TSS mg/l	IS 3025/17:1984 Gravimetric	10	100	22	
6	Oil & Grease mg/l	IS 3025/39: 1991 Partition Gravimetric	2	10	BDL	
7	C.O.D mg/l	APHA, 23rd Edition Closed Reflux	4	250	32	
8	B.O.D. (3days at 27°C mg/l)	IS 3025 (Part 44) : 1993	2	30	4.8	
9	Residual Chlorine mg/l	APHA, 23rd Edition DPD	0.02	1	BDL	
10	Ammonical Nitrogen mg/l	IS 3025 (Part-34) : 1988	0.02	50	0.2	
11	Total Kjeldahl Nitrogen mg/l	APHA, 23rd Edition Kjeldahl	1	100	2.12	
12	Dissolved Phosphate mg/l	APHA, 23rd Edition Molybdovanadate	0.3	5	BDL	
13	Arsenic (Ar)-mg/l	APHA, 23rd Edition AAS-VGA	0.005	0.2	BDL	
14	Lead as (Pb) -mg/l	APHA, 23rd Edition AAS-GTA	0.005	0.1	BDL	
15	Hexavalent Chromium mg/l	APHA, 23rd Edition 1,5-Diphenylcarbohydrazide	0.01	0.1	BDL	
16	Total Chromium -mg/l	IS-3025 (Part 52) : 2003 AAS Flame	0.06	2	BDL	
17	Copper (as Cu) -mg/l	IS-3025/42 : 1992 AAS-Flame	0.03	3	BDL	
18	Zinc as (Zn) -mg/l	IS-3025/49 : 1994 AAS-Flame	0.01	5	BDL	
19	Selenium (Se) -mg/l	APHA, 23rd Edition AAS-VGA	0.005	0.05	BDL	
20	Nickel-mg/l	IS-3025 (Part 54) : 2003 AAS Flame Method	0.1	3	BDL	
21	Cadmium as (Cd)- mg/l	APHA, 23rd Edition AAS-GTA	0.005	2	BDL	
22	Fluoride (as F-) - mg/l	APHA, 23rd Edition SPADNS	0.02	2	0.58	
23	Sulphide - mg/l	APHA, 23rd Edition Methylene blue	0.1	2	BDL	
24	Iron - mg/l	IS-3025/53 : 2003 AAS Flame	0.06	3	BDL	
25	Manganese as (Mn)- mg/l	IS-3025/59 : 2006 AAS Flame	0.02	2	BDL	
26	Nitrates Nitrogen(as NO3) - mg/l	APHA, 23rd Edition UV - Spectrophotometric	0.5	10	3.01	

BDL: BELOW DETECTION LIMIT

  
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**REPORT ON  
MONITORING OF GROUND WATER LEVEL  
OF**

**KANHAN AREA  
(M.P)**

**WESTERN COALFIELDS LTD.**



**PERIOD- NOV-DEC 2021 (POST-MONSOON)  
& JAN-FEB -2022 (WINTER)**



**M/s Anacon Laboratories Pvt. Ltd., Nagpur**

**MoEF&CC (GOI) and NABL Recognized Laboratory  
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018**

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**Website: [www.anaconlaboratories.com](http://www.anaconlaboratories.com)**

**Report No. ANqr /PD/20A/2022/190**

**2021-22**

## Certificate

The Ground water Level monitoring has been carried out with due diligence and the Monitoring of Ground Water Level of all observation wells Report have been prepared as per the scope of work order no. वेकोलि/मुख्यालय/पर्यावरण/14-L/83 on date: 03.11.2021.

The report encompasses the Monitoring of Ground water level reports of observation wells pertaining to the 10 mines of the Kanhan area of Chhindwara District, M.P.

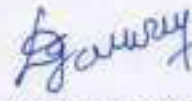
Anacon Laboratories Pvt. Ltd. gratefully acknowledges the full cooperation rendered by concerned WCL Officials for timely completion of the project.



**Sangharakshit N. Borkar**  
(Geologist)



**Gyanchand Bohra**  
NABET Accredited EIA Expert  
for Hydrogeology & Geology



**(Dr. D. G. Garway)**  
Head of Organization  
Anacon Laboratories Pvt. Ltd., Nagpur



Nagpur,  
March -2022.

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VII. A	<b>JHARNAUG</b>	GROUND WATER MONITORING OF WELL DATA FROM NOV-DEC 2021(POST-MONSOON) & JAN-FEB 2022 (WINTER)
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## **INTRODUCTION**

Western Coalfields Limited (WCL) is one of the eight Subsidiary Companies of Coal India Limited (CIL) which is under administrative control of Ministry of Coal. The Company incorporated under the Companies Act, 1956 has its registered office at Coal Estate, Civil Lines, Nagpur-440001. WCL has been conferred "Mini-ratna" status on 15 March 2008. It has mining operation spread over the states of Maharashtra (in Nagpur, Chandrapur & Yeotmal Districts) and Madhya Pradesh (in Betul and Chhindwara Districts). It has been divided into 10 administrative areas. The Company is a major source of supplies of coal to the industries located in Western India in the States of Maharashtra, Madhya Pradesh, Gujarat and also in Southern India in the States of Andhra Pradesh, Tamil Nadu, Karnataka and Kerala. A large numbers of Power Houses under Maharashtra, Madhya Pradesh, Gujarat, Karnataka, Punjab and Uttar Pradesh - Electricity Boards are major consumers of its coal along with cement, steel, chemical, fertilizer, paper and brick Industries in these states.

M/s Anacon Laboratories Pvt. Ltd. has been awarded the Work of "Groundwater level Monitoring ( i.e. bore well / piezometer Water levels ) and Water quality analysis ( as per IS10500 ) for 82 projects / mines of WCL ( situated in the state of Madhya Pradesh – Chhindwara & Betul districts and Maharashtra – Nagpur, Chandrapur & Yeotmal districts) for one year as per condition stipulated in Environmental Clearance letters issued by MoEF & CC & NOC issued by CGWA" vide work order वेकोलि/मुख्यालय/पर्यावरण/14-L/83 on date: 03.11.2021.

This Ground Water Level Monitoring report is prepared for Ambara OC, Ambara UG, Damua UG, Ghorawari OC, Tandsi UG, Jharna UG, Sharda UG, Datla OC, Mohan (Maori) UG. mines of Kanhan area of WCL for 2 seasons i.e. Post-monsoon (Nov- Dec 2021) and Winter (Jan –Feb 2022). These mines are located in Chhindwara district of Madhya Pradesh.



## **GENERAL HYDROGEOLOGICAL CONDITION**

The major part of the district is occupied by Deccan Trap, consisting of different lava flows whose thickness ranges between 7 to 21 m. The recent alluvium deposits are found at places along the Pench and the Kanhan rivers with thickness varying from 5.00 to 20.00 m. Alluvium comprises clayey material with intercalated layers of sand and gravels. Archaeans are exposed in parts of Sausar, Bichhua, Chhindwara, Jamai and Mohkhed blocks whereas the Coal bearing lower Gondwanas in parts of Jamai, Parasia and Jamai blocks. The upper Gondwanas occupy parts of Harrai and Tamia blocks. Ground water occurs under phreatic and semi-confined to confined conditions. Alluvium, weathered granites/gneisses, lower Gondwana sandstones, weathered, fractured and jointed massive basalts and vesicular basalts form the major phreatic aquifers; and weathered, fractured granites are noticed as main water-bearing zones at deeper levels.

**GHORAWARI OC MINE,  
KANHAN AREA**

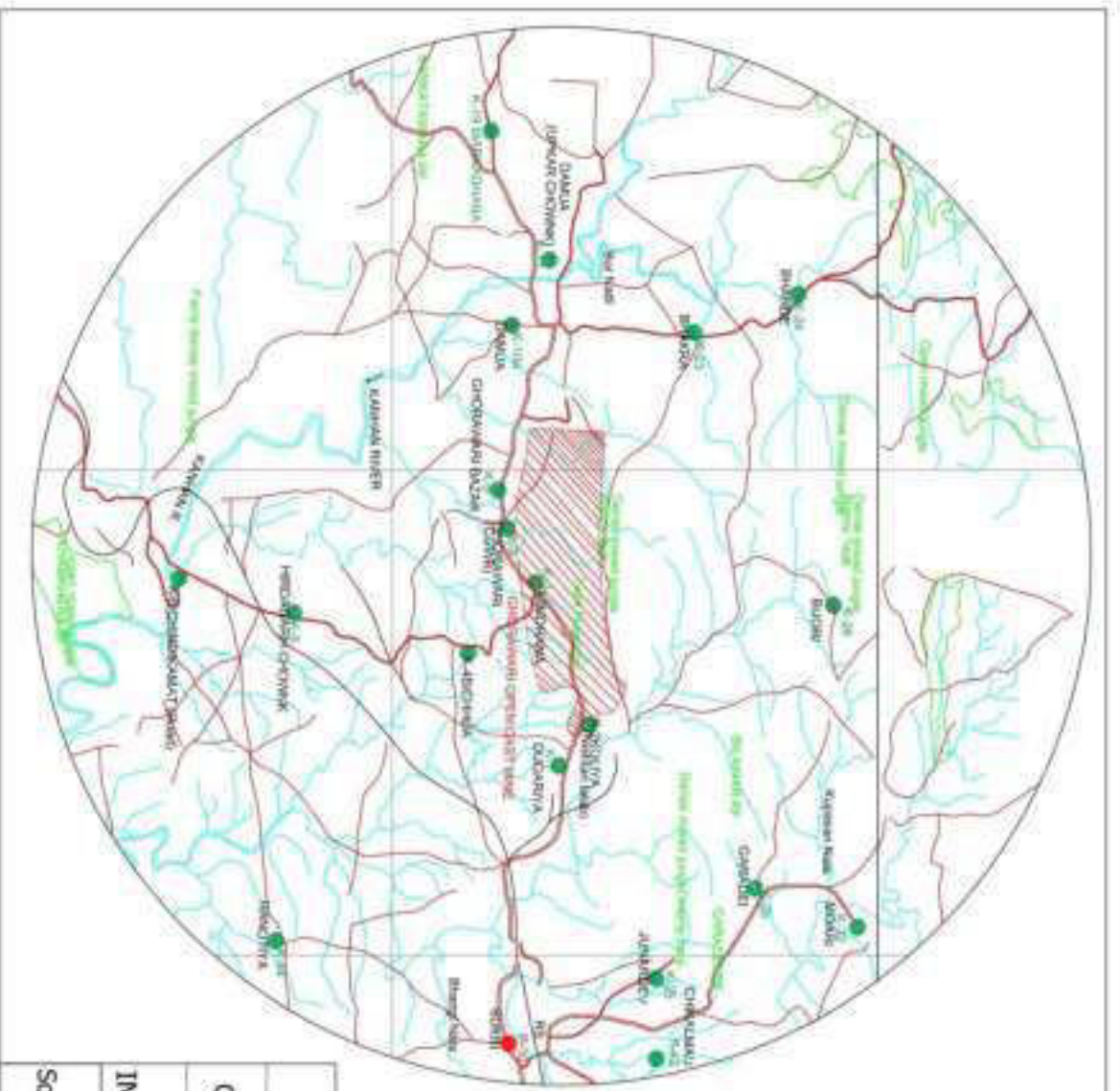
**WESTERN COALFIELDS LTD.**

**PERIOD - NOV-DEC 2021 (POST-MONSOON)  
& JAN-FEB -2022 (WINTER)**

**Table-VIA: Ground water level monitoring data from dugwells in buffer zone of Ghorawari OC Mine, Kanhan Area,****WCL**

Well No.	Name of village	Well location	Owner	Lat			Long			R.L. in m	Utility	Well dia (m)	Height of measuring point (m agl)	Well depth (m bmp)	Depth to Water(BGL-Below Ground Level), m		Formation Tapped
				Deg	Min	Sec	Deg	Min	Sec						NOV-DEC 2021	JAN-FEB 2022	
K 1	DUGARIA	In the compound of Mr. B.S. Rajput South of Road	G.P.	22	11	44.26	78	32	52.73	750	Domestic	3.70	0.75	10.10	3.30	4.45	M/B sandstone
K 2	KOLIYA (Nishtari talab)	Back side of H/O ASHARUNARE Near small Dam	G.P.	22	12	1.94	78	32	27.07	754	Domestic	3.70	0.65	9.20	1.65	2.90	M/B sandstone
K 3	NIMDHANA	North of junction of Damua & Nayagaon Road (Hirdagarh Rly. Siding)	G.P.	22	11	30.39	78	30	58.68	785	Domestic	3.20	0.40	7.80	1.20	2.75	M/B sandstone
K 4	BICHHUA	In the openfield of Mr Budhu Near G.P. office	Private	22	10	51.06	78	31	42.48	699	Domestic	3.50	0.35	4.10	1.15	1.90	Talchir
K 5	HIRDAGARH CHOWK	Near chowk in the compound of Mr. Binod kumar Vayas	Private	22	9	9.43	78	31	16.79	678	Irrigation	7.50	0.50	7.50	3.80	4.10	Talchir
K 6	CHINDIKAMAT (Road)	About 200 m North of Kanhan bridge centre of small village	Mr.Shewak Ram	22	8	2.28	78	30	54.87	725	Domestic	6.20	0.50	10.20	7.20	7.10	Talchir
K 8	GHORAWARI (CGWB)	In the openfield near School side of road Jamai KM/11	GP	22	9	44.90	78	30	10.30	750	Domestic	3.80	0.80	10.30	2.35	3.40	MB Sandstone
K 9	GHORAWARI BAZAR	Opposite CHANIPAN PALACE	Rakesh Suryabansi	22	11	8.63	78	30	0.48	745	Domestic	CLOSED	CLOSED	CLOSED	NA	NA	M/B sandstone
K 10a	DAMUA	On the road side Junnardeo-sarni near telephone tower	....	22	11	35.58	78	28	0.10	718	Domestic	7.20	0.00	8.60	4.20	5.00	M/B sandstone
K 11	DAMUA (UPKARCHOWK)	About 100 m North of Khan Niwas	G.P.	22	11	38.06	78	27	36.33	719	Domestic	2.90	0.70	9.20	1.00	2.90	M/B sandstone
K 19	MARKA DHANA	On Road to Rakhikol in the openfield	Private	22	10	58.67	78	26	5.72	669	Irrigation	6.60	0.00	5.50	2.50	1.90	Taalchir
K 23	BHAKRA	In the house of Dilip Behari	Private	22	13	2.18	78	28	21.45	719	Domestic	5.40	0.60	9.80	3.40	4.10	Taalchir
K 24	BHARDE	In the house of Munibai	Shymlal	22	14	2.44	78	27	57.52	720	Domestic	5.60	0.40	8.15	6.95	6.40	Talchir
K 25	JUNARDEV	Side of Tambia Road near Mandir outer limit of municipality	Deep chan Pawar	22	12	41.14	78	35	6.11	710	Domestic	4.70	0.60	11.60	9.60	10.10	Talchir
K 26	GARADEI	Near Mandir on junction of Tambia & Umrai Road	G.P.	22	13	38.94	78	34	9.36	715	Domestic	3.70	0.40	7.20	2.10	3.15	M/B sandstone
K 28	BIJORI	Centre of village in the field of Montilal	G.P.	22	14	24.25	78	31	11.25	692	Domestic	4.70	0.65	12.08	9.10	8.50	M/B sandstone
K 32	MOARI	Back side of Budhanlal & near BHUDAMANSA	G.P.	22	14	39.62	78	34	33.28	780	Domestic	4.60	0.50	6.00	1.50	2.40	M/B sandstone
K 42	CHIKALMAU	In the centre of village near house HARICHANDRA	G.P.	22	12	42.45	78	35	56.08	685	Domestic	3.20	0.70	8.50	2.30	2.00	M/B sandstone
K 44	HANOTIYA	In the compound of school Near Hospital	G.P.	22	8	58.88	78	34	41.99	697	Domestic	4.60	0.80	9.50	7.20	8.10	M/B sandstone
P	<b>PENCH</b>																
P 10	SUKRI	Back side of Kherapati Mandir	Mandir Trust	22	11	14.80	78	35	46.95	767	D	4.00	0.45	16.45	3.85	0.45	Motur

Note :- m.bmp - metre below measuring point, m.agl -metre above ground level, m.bgl - metre below ground level , GP - Gram Panchyat, ABDN.- Abandoned









INDEX	
	ROAD
	RIVER/NALA
	OBSERVATION WELLS
	
	FOREST
	MINE BOUNDARY

FIGURE VI

## Western Coalfields Limited.

GROUND WATER MONITORING REPORT FOR GHORAWARI OC MINE  
 PLAN SHOWING LOCATION OF WELL MONITORING STATIONS  
 IN BUFFER ZONE OF GHORAWARI OC MINE, KANHAN AREA, WCL

Prepared by

M/s. Anacon Laboratories Pvt. Ltd.

Scale:- Not to Scale

**ENVIRONMENTAL AUDIT STATEMENT**  
**(FORM-V)**

**MOHAN (MAORI) UG MINE**

**FY 2021-22**

**Prepared by-**



**WESTERN COALFIELDS LIMITED**  
**KANHAN AREA**  
**PO: DUNGARIA, CHHINDWARA (MP)-480553**

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	<b>PART-B</b>	<b>02</b>
	<b>PART-C</b>	<b>03</b>
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## **EXECUTIVE SUMMARY**

E.1.0 This Environment Statement Report has been prepared as per gazette notification no. G.S.R. 329(E) dated 13<sup>th</sup> March, 1992 laid down by Ministry of Environment and Forest. The 'Environment Audit' has been subsequently renamed to '**Environment Statement**' vide MoEF gazette notification No. G.S.R. 386(E) dated 22nd April, 1993.

E.2.0 Mohan (Maori) Underground Mine of Western Coalfields Ltd. is situated in PENCH Kanhan Valley Coalfield, which lies in Chhindwara District of Madhya Pradesh State.

E.3.0 The planned production capacity of Mohan Underground Mine is 1.00 MTY. The Ministry of Environment & Forest, Govt. of India vide No. J-11015/123/2008-IA-II(M) Dated 02.02.2009 has granted Environmental Clearance to the Underground Mine. **The project produced 171001 Tonnes of coal during the year 2021-22.**

E.4.0 Environmental monitoring has been carried out by CMPDI for air, water and noise parameters. The monitoring reports for the FY 2021-22 are enclosed. Environmental Statement report reveals the following facts regarding environmental aspect of this project:

- The concentration of SO<sub>2</sub>, NO<sub>x</sub> in ambient air in core zone is well within the permissible limits.
- No hazardous waste material is being produced either from any process or any pollution control facilities.

## **FORM-V**

### **ENVIRONMENT STATEMENT FOR COAL MINING PROJECT FINANCIAL YEAR ENDING MARCH 2022.**

#### **PART-A**

- i. **Name and address of the Mine-** Mohan (Maori) Underground Mine, WCL Kanhan Area, PO- Ambara, District-Chhindwara, Pin-480449.
- ii. **Industry Category-** Category A
- iii. **Production Capacity-** 1.00 MTY
- iv. **Date of last Environmental Statement submitted-** September 2021.

#### **PART - B**

### **WATER AND RAW MATERIAL CONSUMPTION**

There was no mine water discharge from the mine in the FY 2021-22.

**Table-A Water Consumption on Usage Pattern**

<b>Sno.</b>	<b>Particulars</b>	<b>Water Consumption Average (kL/Day)</b>
a)	Industrial	
i.	Dust Suppression/Recycling for roof support	50 KL/day
ii.	Fire Fighting	Nil
iii.	Workshop and Others	10 KL/day
iv.	Green Belt /Plantation	Nil
v .	CHP/Beneficiation	Nil
b)	Domestic	
i.	Domestic Use	Nil
ii.	Green belt/Plantation	Nil
c)	Discharge into adjacent nallah after treatment	Nil
	<b>Total</b>	<b>60 KL/DAY</b>



**Table-B Water Consumption against Production (including recycled)**

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
COAL	1.718 KL/tonne of Coal produced.	0.128 KL/tonne of Coal produced.

**Table-C Raw Material Consumption**

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	0.245	0.239

**PART-C**

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

Sno.	Pollutants	Quantity of Pollution generated	Percentage variation from prescribed standards with reasons
a)	Water	There was no mine water discharge from the mine in the FY 2021-22	
b)	Air	Air Quality Monitoring reports attached for FY 2021-22	Values of parameters are well within the prescribed limits.
c)	Noise	Noise Quality Monitoring reports attached for FY 2021-22	Values of parameters are well within the prescribed limits.

**PART-D**  
**HAZARDOUS WASTES**

Sno.	Hazardous Waste	Total Quantity	
		During the previous FY 2020-21	During the current FY 2021-22
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 2020-21	During the current FY 2021-22
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

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

**PART-F**

**Please Specify the Characteristics (In Terms of Concern And Quantum) of Hazardous as well as Solid Wastes and indicate the Disposal Practice adopted for both these categories of wastes.**

Hazardous wastes is not being produced either from mining operation or from any pollution control facilities.

It is an Underground mine, only coal is extracted by Board and Pillar Continuous method and no solid waste material is generated during mining operation.

## **PART-G**

### **Impact of Pollution Control Measures on Conservation of Natural Resources and subsequently on Cost of Production.**

In order to carry out mining in an eco-friendly manner, following pollution control measures have been implemented.

#### **1. Air Pollution Control Measures-**

The following measures are being taken to control air pollution:

- (a) All the Coal transportation trucks are covered with tarpaulin. Coal transport trucks are loaded optimally at weighbridge before dispatch.
- (b) 03 nos. of fixed sprinklers installed at conveyor belt.  
1 nos. of mobile water tanker (Capacity 4.5kL) is also used for dust suppression.
- (d) Metal-topped internal road has already been provided from pit-office to check-post.  
Length -100 m.  
Main PWD Road from check-post to siding already black-topped, Length – 3.90 km
- (e) Till date 81500 no. of Plants have been planted over an area of 32.6 Ha within the mine lease hold area.

#### **2. Water Pollution Control Measures-**

The following measures are taken to control water pollution from the mine:

Presently there is no mine water discharge from the mine since January 2021, However arrangements are in place for treatment of mine water.

- i) Three nos. of sedimentation tanks already constructed for treatment of mine water Discharge.
  - Brick work tank (Capacity 30.69 KL): Dimensions -4.65m x 2.75m x 2.40m
  - Circular RCC tank (Capacity 100 KL): Diameter – 6.94 m, Height – 2.9 m
  - RCC Sedimentation Tank (Capacity 300 m<sup>3</sup>)
  - Part of the mine water is recycled from UG sump for Hydraulic roof bolting and dust suppression at mine working face.
  - Mine water also utilized for spraying on belts and for mobile water tankers.
  - Arrangement made for lime dosing of mine water for maintaining the pH.
- ii) Individual Septic Tank & Soak Pit provided at each quarter of combined township of Ambara UG, Ambara OC and Mohan UG mines.

- iii) Quarterly Ground water levels and Annually ground water quality in the month of May is monitored through network of existing wells through CMPDIL. The monitoring reports are communicated to MOEF and CGWB.
- iv) Installation of 2 nos. of water meter.

### **3. Noise Pollution Control Measures-**

Maintenance of transport vehicles, development of green belt in between industrial complex & residential area, ear plugs & helmets are issued to the workers.

## **PART-H**

### **Additional Investment Proposal for Environmental Protection including abatement of Pollution.**

The project has incurred an expenditure on environmental management, details of which are as under:

<b>Sno.</b>	<b>Particulars</b>	<b>Amount</b>
1.	Consent Fees	Rs 16.00lakhs
2.	Groundwater abstraction charges	Rs.16.49 lakhs
3.	Environmental Monitoring Costs	Rs. 20.76 lakhs
4.	Air Pollution Control Measures	Rs 1.00 lakhs
5.	Water Pollution Control Measures	Nil

### **Future Program for Environmental Management Measures-**

- Installation of Piezometer for monitoring of groundwater level.
- Procurement of trolley mounted fogger cannon machine.

## **PART-I**

### **Any other Particulars in respect of Environmental Protection and abatement of Pollution**

The regular monitoring of the ambient air and water quality is being done in and around core zone and the quarterly monitoring report is submitted to the Madhya Pradesh State Pollution Control Board, Bhopal and the Ministry of Environment and Forest Regional Office, Bhopal.

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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



APRIL 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/APR-21/75	DATE OF ISSUE	28.05.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE: KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02.04.2021	03.04.2021	312	202	50	15	11	Cloudy/Calm
16.04.2021	17.04.2021	296	178	45	13	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN: KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02.04.2021	03.04.2021	370	264	47	13	BDL	Cloudy/Calm
16.04.2021	17.04.2021	352	231	41	15	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER: KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02.04.2021	03.04.2021	136	99	27	10	BDL	Cloudy/Calm
17.04.2021	18.04.2021	120	83	24	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE: KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02.04.2021	03.04.2021	120	89	25	10	BDL	Cloudy/Calm
16.04.2021	17.04.2021	111	78	22	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

*Labimbhume*  
Analysed by

*Deepanshu sahu*  
Deepanshu sahu  
Authorised Signatory

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- 2 This report refers to the values related to the items tested.

**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
			20
APR'21	07.04.2021	66.8	65.2
APR'21	20.04.2021	68.7	67.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
			20
APR'21	07.04.2021	45.7	43.9
APR'21	20.04.2021	46.4	44.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA 

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



MAY 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAY-21/75	DATE OF ISSUE	29-06-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

SAM OFFICE: KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02-05-2021	03-05-2021	299	182	43	13	BDL	Cloudy/Calm
16-May-21	17-May-21	306	197	49	15	12	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN: KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02-05-2021	03-05-2021	332	222	49	15	12	Cloudy/Calm
16-May-21	17-May-21	310	199	40	13	10	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER: KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
03-05-2021	04-05-2021	142	98	27	9	BDL	Cloudy/Calm
17-May-21	18-May-21	130	85	24	10	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE: KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02-05-2021	03-05-2021	131	92	27	10	BDL	Cloudy/Calm
16-May-21	17-May-21	121	84	24	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

*labimbhume*

Analysed by

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Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	65.7	63.9
May-21	21-May-21	68.8	66.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	46.2	44.4
May-21	21-May-21	45.4	43.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

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KANHAN AREA

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JUNE 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

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REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JUNE-21/75	DATE OF ISSUE	24-07-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			


SAM OFFICE KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-06-2021	12-06-2021	281	174	48	14	BDL	Cloudy/Calm
26-06-2021	27-06-2021	259	163	42	11	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-06-2021	12-06-2021	317	206	46	13	10	Cloudy/Calm
26-06-2021	27-06-2021	331	217	50	15	12	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09-06-2021	10-06-2021	122	91	30	10	BDL	Cloudy/Calm
24-06-2021	25-06-2021	112	77	24	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11-06-2021	12-06-2021	126	96	25	9	BDL	Cloudy/Calm
26-06-2021	27-06-2021	110	81	30	10	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

  
Analysed by

  
Deepanshu sahu  
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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'21	10-06-2021	65.7	63.9
JUNE'21	25-06-2021	66.2	63.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'21	10-06-2021	43.3	41.7
JUNE'21	25-06-2021	44.6	42.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA 

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JULY 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JULY-21/75	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE: KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
05.7.2021	06.7.2021	244	165	38	14	10	Clear/Lightbreeze
16.7.2021	17.7.2021	221	149	49	16	13	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN: KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
05.7.2021	06.7.2021	265	152	41	15	14	Clear/Lightbreeze
16.7.2021	17.7.2021	271	169	47	13	BDL	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER: KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
12.7.2021	13.7.2021	134	89	28	9	BDL	Clear/Lightbreeze
23.7.2021	24.7.2021	127	70	36	10	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE: KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
12.7.2021	13.7.2021	101	76	24	8	BDL	Clear/Lightbreeze
23.7.2021	24.7.2021	124	86	29	10	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	

*Katambhume*  
Analysed by

*Deepanshu sahu*  
Deepanshu sahu  
Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	54.5	53.8
JULY'21	24.07.2021	50.2	49.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	44.8	43.1
JULY'21	24.07.2021	45.2	44.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA 

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



AUGUST 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/AUGUST-21/75	DATE OF ISSUE	30-09-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02.08.2021	03.08.2021	222	147	31	13	10	Clear / Lightbreeze
16.08.2021	17.08.2021	269	152	35	12	BDL	Rainy / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
02.08.2021	03.08.2021	281	170	42	14	10	Rainy / Light Breeze
16.08.2021	17.08.2021	269	152	35	12	BDL	Clear / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
11.08.2021	12.08.2021	134	80	24	10	BDL	Cloudy / Lightbreeze
25.08.2021	26.08.2021	121	71	29	9	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
11.08.2021	12.08.2021	125	77	28	9	BDL	Clear / Lightbreeze
25.08.2021	26.08.2021	115	82	32	8	BDL	Rainy / Calm
NAAQS, 2009		-	100	60	80	80	

*Labimbhume*  
Analysed by

*Deepanshu sahu*  
Deepanshu sahu  
Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
			20
AUGUST'21	09.08.2021	64.6	63.7
AUGUST'21	23.08.2021	59.7	58.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
			20
AUGUST'21	09.08.2021	43.4	42.6
AUGUST'21	23.08.2021	43.5	42.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA 

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



SEPTEMBER 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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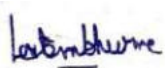
TEST REPORT NO.	RIN/TR/SEPT-21/75	DATE OF ISSUE	30.10.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			


SAM OFFICE KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.09.2021	13.09.2021	259	167	40	13	BDL	Clear / Light breeze
26.09.2021	27.09.2021	279	188	46	14	BDL	Clear / Light breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.09.2021	13.09.2021	262	179	44	13	12	Clear / Light Breeze
26.09.2021	27.09.2021	289	192	37	14	BDL	Clear / Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.09.2021	13.09.2021	139	90	25	9	BDL	Clear / Light Breeze
26.09.2021	27.09.2021	147	97	31	10	BDL	Clear / Light Breeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.09.2021	12.09.2021	120	84	21	8	BDL	Clear / Light Breeze
25.09.2021	26.09.2021	139	96	27	9	BDL	Clear / Light Breeze
NAAQS, 2009		-	100	60	80	80	

  
Analysed by

  
Deepanshu sahu  
Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'21	09.09.2021	68.2	66.3
SEPT'21	24.09.2021	58.7	57.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'21	09.09.2021	44.8	42.5
SEPT'21	24.09.2021	44.3	42.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA □

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



OCTOBER 2021

### Environment Laboratory


NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.		RIN/TR/OCT-21/75	DATE OF ISSUE	25.11.2021
NAME OF CUSTOMER		GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.		WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)			
NAME OF AREA		KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT		MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample			
SAMPLING METHOD : LSOP 4				

SAM OFFICE KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
13-10-21	14-10-21	254	166	40	13	BDL	Clear/Lightbreeze
25-10-21	26-10-21	280	187	46	14	BDL	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

PIT-OFFICE-MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
13-10-21	14-10-21	301	199	38	15	12	Clear/Lightbreeze
25-10-21	26-10-21	270	176	33	13	BDL	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
13-10-21	14-10-21	122	82	27	9	BDL	Clear/Lightbreeze
25-10-21	26-10-21	130	91	36	10	BDL	Clear/Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
13-10-21	14-10-21	131	75	23	10	BDL	Clear/Lightbreeze
25-10-21	26-10-21	119	88	30	9	BDL	Clear/Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

*Labhandhane*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	11-10-21	56.6	56.4
OCT'21	23-10-21	66.2	61.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	11-10-21	43.4	43.2
OCT'21	23-10-21	40.2	34.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



NOVEMBER 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/NOV-21/75	DATE OF ISSUE	31-12-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
05-11-2021	06-11-2021	250	152	30	14	BDL	Clear/Lightbreeze
26-11-2021	27-11-2021	269	168	35	15	12	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

PIT-OFFICE-MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
05-11-2021	06-11-2021	287	190	41	16	BDL	Clear/Lightbreeze
26-11-2021	27-11-2021	262	171	38	15	10	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
05-11-2021	06-11-2021	120	86	23	10	BDL	Clear/Lightbreeze
26-11-2021	27-11-2021	111	93	26	9	BDL	Clear/Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
06-11-2021	07-11-2021	109	73	29	9	BDL	Clear/Lightbreeze
26-11-2021	27-11-2021	129	88	34	10	BDL	Clear/Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

*Labimbhure*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
NOV'21	08.11.2021	69.7	68.7
NOV'21	22.11.2021	69.7	69.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
		DETECTION LIMIT	20
NOV'21	08.11.2021	43.6	43.4
NOV'21	22.11.2021	43.6	42.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



DECEMBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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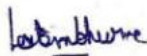
TEST REPORT NO.	RIN/TR/DEC-21/75	DATE OF ISSUE	15.01.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-12-2021	11-12-2021	230	133	34	13	BDL	Cloudy/Lightbreeze
25-12-2021	26-12-2021	259	160	30	12	BDL	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-12-2021	11-12-2021	271	187	41	15	10	Cloudy/Lightbreeze
25-12-2021	26-12-2021	248	158	46	14	11	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-12-2021	11-12-2021	112	70	28	10	BDL	Cloudy/Lightbreeze
25-12-2021	26-12-2021	122	89	24	9	BDL	Clear/Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-12-2021	11-12-2021	120	75	24	9	BDL	Cloudy/Lightbreeze
25-12-2021	26-12-2021	130	81	30	8	BDL	Clear/Lightbreeze
NAAQS, 2009		-	100	60	80	80	



Analysed by


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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	07.12.2021	69.7	68.6
DEC'21	22.12.2021	68.7	68.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	07.12.2021	43.5	43.2
DEC'21	22.12.2021	43.6	43.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA 

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



JANUARY 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JAN-22/75	DATE OF ISSUE	28.02.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

SAM OFFICE KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.01.2022	11.01.2022	266	155	31	14	BDL	Cloudy /Lightbreeze
24.01.2022	25.01.2022	257	143	38	13	BDL	Cloudy /Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.01.2022	11.01.2022	255	176	39	16	11	Cloudy /Lightbreeze
24.01.2022	25.01.2022	268	161	44	15	10	Cloudy /Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13.01.2022	14.01.2022	124	89	27	9	BDL	Cloudy /Lightbreeze
24.01.2022	25.01.2022	115	77	25	10	BDL	Cloudy /Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13.01.2022	14.01.2022	120	82	23	8	BDL	Cloudy /Lightbreeze
24.01.2022	25.01.2022	133	91	27	10	BDL	Cloudy /Lightbreeze
NAAQS, 2009		-	100	60	80	80	



Analysed by



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
			20
JAN'22	10.01.2022	69.7	69.6
JAN'22	28.01.2022	70.8	70.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
			20
JAN'22	10.01.2022	43.6	43.4
JAN'22	28.01.2022	45.2	44.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA 

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



FEBRUARY 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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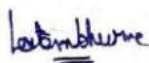
TEST REPORT NO.	RIN/TR/FEB-22/75	DATE OF ISSUE	31.03.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.02.2022	13.02.2022	267	171	36	15	11	Clear /Lightbreeze
24.02.2022	25.02.2022	278	184	42	13	BDL	Clear /Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12.02.2022	13.02.2022	255	175	34	16	11	Clear /Lightbreeze
24.02.2022	25.02.2022	284	183	38	15	10	Clear /Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.02.2022	12.02.2022	129	82	27	8	BDL	Clear /Lightbreeze
25.02.2022	26.02.2022	111	76	32	10	BDL	Clear /Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.02.2022	12.02.2022	107	79	23	9	BDL	Clear /Lightbreeze
25.02.2022	26.02.2022	122	82	28	10	BDL	Clear /Lightbreeze
NAAQS, 2009		-	100	60	80	80	



Analysed by



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
FEB'22	11.02.2022	69.7	69.5
FEB'22	21.02.2022	69.7	69.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
FEB'22	11.02.2022	43.6	43.4
FEB'22	21.02.2022	43.6	43.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# MOHAN/ MAORI UG

KANHAN AREA 

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



MARCH 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR-22/75	DATE OF ISSUE	12.04.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	MOHAN/MAORI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

SAM OFFICE KAUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13.03.2022	14.03.2022	282	182	40	15	BDL	Clear /Lightbreeze
26.03.2022	27.03.2022	261	166	36	14	BDL	Clear /Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT-OFFICE-MOHAN KAUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13.03.2022	14.03.2022	254	162	43	15	BDL	Clear/Lightbreeze
26.03.2022	27.03.2022	273	184	38	16	11	Clear/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY HEALTH CENTER KMUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.03.2022	11.03.2022	135	90	29	8	BDL	Clear/Lightbreeze
27.03.2022	28.03.2022	123	81	26	9	BDL	Clear/Lightbreeze
NAAQS, 2009		-	100	60	80	80	

AMBARA VILLAGE KMUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.03.2022	11.03.2022	127	86	28	9	BDL	Clear/Lightbreeze
27.03.2022	28.03.2022	119	74	24	10	BDL	Clear/Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*Analysed by*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KMUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MAR'22	10.03.2022	70.2	69.5
MAR'22	25.03.2022	69.5	69.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(MOHAN MAORI):		KMUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MAR'22	10.03.2022	42.7	4.17
MAR'22	25.03.2022	43.1	42.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**APRIL 2021 TO JUNE 2021**

**Environment Laboratory**  
NABL Accredited vide Cert. No. TC-7102

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

# INDEX

Sl. No.	PARTICULARS	PAGE NO.
1	HEAVY METAL ANALYSIS REPORT	1 TO 15

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Ambient Air quality monitoring data for heavy metals	 TC-7102
---	---	--

TEST REPORT NO.	RIN/TR/AUG/HM139	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	MOHAN/MAORI UG	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	COLONY HEALTH CENTRE	KMUA-3	03.05.21
2	AMBARA VILLAGE	KMUA-4	02.05.21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value		National Ambient Air Quality Standard NAAQS, 2009
				KMUA-3	KMVA-2	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	BDL	1.0 $\mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	BDL	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



SCIENTIFIC ASSISTANT


DEEPANSHU SAHU  
AUTHORIZED SIGNATORY

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3	** This parameter not regulated as per NAAQS

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**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**OCT 2021 TO DEC 2021**

**Environment Laboratory**  
NABL Accredited vide Cert. No. TC-7102

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

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Sl. No.	PARTICULARS	PAGE NO.
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Ambient Air quality monitoring data for heavy metals	 TC-7102
---	---	--

TEST REPORT NO.	RIN/TR/MAR /HM139	DATE OF ISSUE	19.03.22
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	MOHAN/MAORI UG	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	COLONY HEALTH CENTRE	KMUA-3	05-11-21
2	AMBARA VILLAGE	KMUA-4	06-11-21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value		National Ambient Air Quality Standard NAAQS, 2009
				KMUA-3	KMVA-2	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0007 \mu\text{g}/\text{m}^3$	BDL	BDL	$0.006 \mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	$7.0 \mu\text{g}/\text{m}^3$	BDL	BDL	$1.0 \mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.007 \mu\text{g}/\text{m}^3$	BDL	BDL	$0.02 \mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0045 \mu\text{g}/\text{m}^3$	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0015 \mu\text{g}/\text{m}^3$	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



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**REPORT ON  
MONITORING OF GROUND WATER LEVEL  
OF**

**KANHAN AREA  
(M.P)**

**WESTERN COALFIELDS LTD.**



**PERIOD- NOV-DEC 2021 (POST-MONSOON)  
& JAN-FEB -2022 (WINTER)**



**M/s Anacon Laboratories Pvt. Ltd., Nagpur**

**MoEF&CC (GOI) and NABL Recognized Laboratory  
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018**

**Lab. & Consultancy: FP-34, 35, Food Park,  
MIDC, Butibori, Nagpur – 441122**

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**Email: [ngp@anacon.in](mailto:ngp@anacon.in)**

**Website: [www.anaconlaboratories.com](http://www.anaconlaboratories.com)**

**Report No. ANqr /PD/20A/2022/190**

**2021-22**

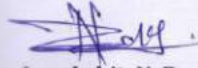


## Certificate

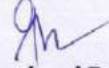
The Ground water Level monitoring has been carried out with due diligence and the Monitoring of Ground Water Level of all observation wells Report have been prepared as per the scope of work order no. वेकोलि/मुख्यालय/पर्यावरण/14-L/83 on date: 03.11.2021.

The report encompasses the Monitoring of Ground water level reports of observation wells pertaining to the 10 mines of the Kanhan area of Chhindwara District, M.P.

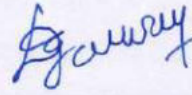
Anacon Laboratories Pvt. Ltd. gratefully acknowledges the full cooperation rendered by concerned WCL Officials for timely completion of the project.



**Sangharakshit. N. Borkar**  
(Geologist)



**Gyanchand Bohra**  
NABET Accredited EIA Expert  
for Hydrogeology & Geology



**(Dr. D. G. Garway)**  
Head of Organization  
Anacon Laboratories Pvt. Ltd., Nagpur



Nagpur.  
March -2022

<b>CONTENTS</b>		
<b>TABLE</b>	<b>NAME OF SUB MINE PROJECT</b>	<b>GROUND WATER MONITORING DETAILS OF WELL</b>
I. A	<b>AMBARAOC</b>	GROUND WATER MONITORING OF WELL DATA FROM NOV-DEC 2021(POST-MONSOON) & JAN-FEB 2022 (WINTER)
II. A	<b>AMBARAUG</b>	GROUND WATER MONITORING OF WELL DATA FROM NOV-DEC 2021(POST-MONSOON) & JAN-FEB 2022 (WINTER)
III. A	<b>DAMUAUG</b>	GROUND WATER MONITORING OF WELL DATA FROM NOV-DEC 2021(POST-MONSOON) & JAN-FEB 2022 (WINTER)
IV. A	<b>DAMUAOC</b>	GROUND WATER MONITORING OF WELL DATA FROM NOV-DEC 2021(POST-MONSOON) & JAN-FEB 2022 (WINTER)
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<b>PLANS</b>	
<b>FIGURE-I</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF AMBARA OC)
<b>FIGURE-II</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF AMBARA UG)
<b>FIGURE-III</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF DAMUA UG)
<b>FIGURE-IV</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF DAMUA OC)
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<b>FIGURE-VI</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF GHORAWARI OC )
<b>FIGURE-VII</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF JHARNA UG)
<b>FIGURE-VIII</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF MOHAN (MAORI) UG)
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<b>FIGURE-X</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF SHARDA UG )

## **INTRODUCTION**

Western Coalfields Limited (WCL) is one of the eight Subsidiary Companies of Coal India Limited (CIL) which is under administrative control of Ministry of Coal. The Company incorporated under the Companies Act, 1956 has its registered office at Coal Estate, Civil Lines, Nagpur-440001. WCL has been conferred "Mini-ratna" status on 15 March 2008. It has mining operation spread over the states of Maharashtra (in Nagpur, Chandrapur & Yeotmal Districts) and Madhya Pradesh (in Betul and Chhindwara Districts). It has been divided into 10 administrative areas. The Company is a major source of supplies of coal to the industries located in Western India in the States of Maharashtra, Madhya Pradesh, Gujarat and also in Southern India in the States of Andhra Pradesh, Tamil Nadu, Karnataka and Kerala. A large numbers of Power Houses under Maharashtra, Madhya Pradesh, Gujarat, Karnataka, Punjab and Uttar Pradesh - Electricity Boards are major consumers of its coal along with cement, steel, chemical, fertilizer, paper and brick Industries in these states.

M/s Anacon Laboratories Pvt. Ltd. has been awarded the Work of "Groundwater level Monitoring ( i.e. bore well / piezometer Water levels ) and Water quality analysis ( as per IS10500 ) for 82 projects / mines of WCL ( situated in the state of Madhya Pradesh – Chhindwara & Betul districts and Maharashtra – Nagpur, Chandrapur & Yeotmal districts) for one year as per condition stipulated in Environmental Clearance letters issued by MoEF & CC & NOC issued by CGWA" vide work order वेकोलि/मुख्यालय/पर्यावरण/14-L/83 on date: 03.11.2021.

This Ground Water Level Monitoring report is prepared for Ambara OC, Ambara UG, Damua UG, Ghorawari OC, Tandsi UG, Jharna UG, Sharda UG, Datla OC, Mohan (Maori) UG. mines of Kanhan area of WCL for 2 seasons i.e. Post-monsoon (Nov- Dec 2021) and Winter (Jan –Feb 2022). These mines are located in Chhindwara district of Madhya Pradesh.

## **GENERAL HYDROGEOLOGICAL CONDITION**

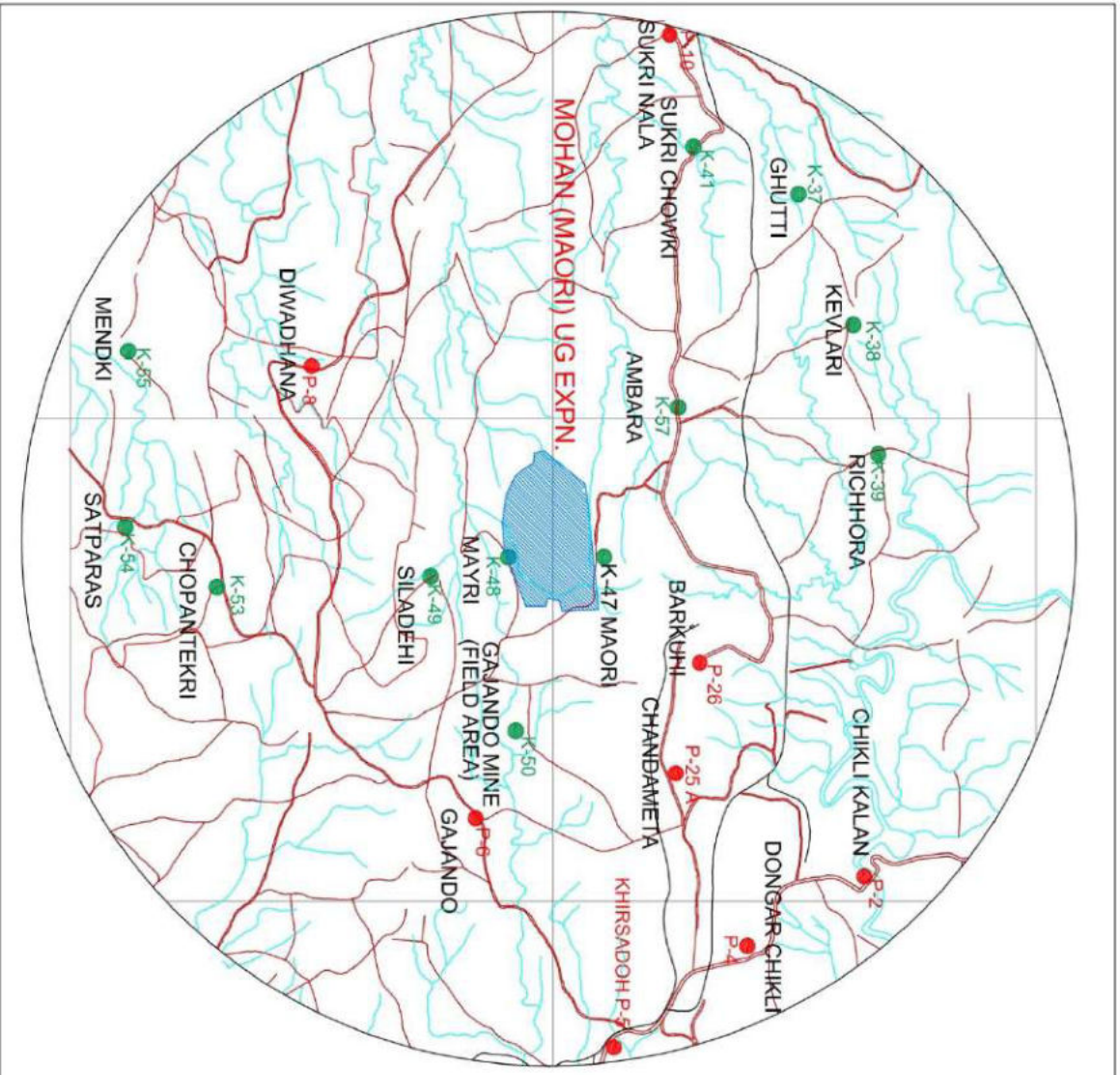
The major part of the district is occupied by Deccan Trap, consisting of different lava flows whose thickness ranges between 7 to 21 m. The recent alluvium deposits are found at places along the Pench and the Kanhan rivers with thickness varying from 5.00 to 20.00 m. Alluvium comprises clayey material with intercalated layers of sand and gravels. Archaeans are exposed in parts of Sausar, Bichhua, Chhindwara, Jamai and Mohkhed blocks whereas the Coal bearing lower Gondwanas in parts of Jamai, Parasia and Jamai blocks. The upper Gondwanas occupy parts of Harrai and Tamia blocks. Ground water occurs under phreatic and semi-confined to confined conditions. Alluvium, weathered granites/gneisses, lower Gondwana sandstones, weathered, fractured and jointed massive basalts and vesicular basalts form the major phreatic aquifers; and weathered, fractured granites are noticed as main water-bearing zones at deeper levels.

**MOHAN (MAORI) UG MINE,  
KANHAN AREA**

**WESTERN COALFIELDS LTD.**

**PERIOD - NOV-DEC 2021 (POST-MONSOON)  
& JAN-FEB -2022 (WINTER)**

<b>Table-VIII: Ground water level monitoring data from dugwells in buffer zone of Mohan(Maori) UG Expn., Kanhan Area.</b>																	
<b>WCL</b>																	
Well No.	Name of village	Well location	Owner	Lat			Long			R.L. in m	Utility	Well dia (m)	Height of measuring point (m agl)	Well depth (m bmp)	Depth to Water(BGL-Below Ground Level), m		
				Deg	Min	Sec	Deg	Min	Sec						NOV-DEC 2021	JAN-FEB 2022	Formation
K 37	GHUTTI	Near LP school	G.P.	22	12	34.47	78	37	34.33	726	Domestic	6.40	0.60	10.00	4.00	4.79	Motur
K 38	KEVLARI	About 100 m NE of G.P office openfield of Shobharam	SOBHARAM	22	13	5.95	78	38	56.71	729	Irrigation	3.50	GL	10.60	6.10	7.15	Motur
K 39	RICHHORA	Near Bajrang Mandir & Phulchand Mistra	G.P.	22	13	22.02	78	40	21.09	690	Domestic	5.50	1.20	9.50	3.50	4.10	Motur
K 41	SUKRI CHOWKI NALA	In the openfield Near Nala on Parasis-Jurdeo Road	SANKAR YADUBANSI	22	11	30.11	78	37	8.20	650	Irrigation	5.80	GL	10.20	9.20	8.75	Motur
K 47	MAURI	About 100 m East of Hingula Mandir near O/C patch Mauri	G.P.	22	10	31.42	78	41	24.37	745	Domestic	6.10	0.75	7.90	1.60	1.95	Metamorphics
K 48	MAYRI	Near Milk Dairy Depo. House of Roshan Vishkarma single house	Roshan Vishkarma	22	9	33.39	78	41	22.67	785	Irrigation	4.01	0.80	4.70	2.00	2.60	Motur
K 49	SILADEHI	Outside village towards Umreth Road Back of house of Panchu Lal	Panchu Lal	22	8	51.88	78	41	32.93	768	Irrigation	5.20	GL	10.50	5.40	6.40	Motur
K 50	GAJANDO MINE (Field Area)	In the field of Jaipal power 100 m from road to mine	Jaipal Power	22	9	41.74	78	43	5.03	695	Irrigation	6.10	0.10	9.10	8.10	7.90	Motur
K 53	CHOPAN TEKRI	Near Temple on side of Road & nala PWS well	PWS	22	6	47.25	78	41	38.64	706	Domestic	5.10	GL	17.00	1.30	6.70	Motur
K 54	SATPARAS	Outside village km/6 Umreth Near House of Budh Lal Bhai	Budhlal Bhai	22	5	52.76	78	41	0.98	705	Irrigation	5.80	0.35	14.10	13.05	12.65	Metamorphics
K 55	MENDKI	Out side village Back of house of Bargu Maskole	Bargu Maskole	22	5	55.75	78	39	10.44	778	Irrigation	5.00	0.50	13.60	10.40	9.90	Motur
K 57	AMBARA	Side of Road to Parasia about 100 south in the field of Farukh Bhai	Farukh Bhai	22	11	12.98	78	39	51.73	745	Irrigation	7.50	1.00	12.40	3.10	5.60	...
<b>P</b>																	
<b>PENCH</b>																	
P 2	CHIKLI KALAN	In the pump house right hand side of the road when moving towards pagara village.	Govt.	22	13	13.48	78	44	29.60	690	Domestic	3.20	0.70	8.50	2.30	2.00	Motur
P 4	DONGAR CHIKLI	West of Parasia pipariya Road in the low lying field opp. Bhimsen Majar	Shyamlal Durbe	22	11	57.28	78	45	16.55		Domestic	4.60	0.80	9.50	7.20	8.10	
P 5	KHIRSADOH	On East of chindwara Parasia Road in the Bunflow of Mr Mehta	S.R. Mehta	22	10	41.11	78	46	20.96		Domestic	6.40	0.60	10.00	4.00	4.79	Basalt
P 6	GAJANDO	On south of Mahadeo Puri-Gajando Road in open field of Ram Prasad Pawar	Ram Prasad pawar	22	9	16.61	78	43	57.58	650	Irrigation	4.60	0.80	9.50	7.20	8.10	Metamorphics
P 8	DIWADHANA	West of Umreth Sukri Road in openfield of Premchand Yadav	Premchand Yadav	22	7	41.73	78	39	22.21	685	Domestic	6.40	0.60	10.00	4.00	4.79	Motur
P 10	SUKRI	Back side of Kherapati Mandir	Mandir Trust	22	11	14.80	78	35	46.95	697	Domestic	3.50	0.00	10.60	6.10	7.15	Motur
P 25A	CHANDAMETA	ON PARASIA - JUNNARDEO ROAD SIDE.BACK SIDE OF PARAM TRADERS	..	..	..	..	..	..	..	745	Domestic	5.50	1.20	9.50	3.50	4.10	Metamorphics
P 26	BARKUHI	Back side of officess club PENCH Area out side of club boundary	WCL	22	11	31.11	78	42	23.43	645	Domestic	5.80	0.00	10.20	9.20	8.75	Motur



INDEX	
	ROAD
	RAILWAY TRACK
	RIVER/NALA
	P-25
	K-48
	OBSERVATION WELLS
	FOREST
	MINE BOUNDARY

FIGURE - VIII

## Western Coalfields Limited.

GROUND WATER MONITORING REPORT FOR MOHAN (MAORI) UG EXPN.

PLAN SHOWING LOCATION OF WELL MONITORING STATIONS IN BUFFER ZONE OF MOHAN (MAORI) UG EXPN., KANHAN AREA, WCL

Prepared by

M/s. Anacon Laboratories Pvt. Ltd.

Scale:- Not to Scale

**ENVIRONMENTAL AUDIT STATEMENT**  
**(FORM-V)**

**NANDAN UG MINE**

**FY 2021-22**

**Prepared by-**



**WESTERN COALFIELDS LIMITED**  
**KANHAN AREA**  
**PO: DUNGARIA, CHHINDWARA (MP)-480553**



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<b>2.</b>	<b>FORM-V</b>	<b>02</b>
	<b>PART-A</b>	<b>02</b>
	<b>PART-B</b>	<b>02</b>
	<b>PART-C</b>	<b>03</b>
	<b>PART-D</b>	<b>04</b>
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	<b>PART-I</b>	<b>06</b>
<b>3.</b>	<b>Environmental Monitoring Reports</b>	<b>07</b>

## **EXECUTIVE SUMMARY**

E.1.0 This Environment Statement Report has been prepared as per gazette notification no. G.S.R. 329(E) dated 13<sup>th</sup> March, 1992 laid down by Ministry of Environment and Forest. The 'Environment Audit' has been subsequently renamed to '**Environment Statement**' vide MoEF gazette notification No. G.S.R. 386(E) dated 22nd April, 1993.

E.2.0 Nandan Underground Mine of Western Coalfields Ltd. is situated in Pench Kanhan Valley Coalfield, which lies in Chhindwara District of Madhya Pradesh State.

E.3.0 The planned production capacity of Nandan Underground Mine is 0.405 MTY. The Ministry of Environment & Forest, Govt. of India vide No. J-11015/237/2005-IA-II(M) Dated 17.10.2006 has granted Environmental Clearance to the Underground Mine. **The project has been temporarily discontinued since 01/07/2013.**

E.4.0 Quarterly environmental monitoring has been carried out by CMPDI for air, water and noise parameters. The results of the FY 2021-22 are enclosed.

E.5.0 Environmental Statement report reveals the following facts regarding environmental aspect of this project:

E.5.1 The concentration of SO<sub>x</sub>, NO<sub>x</sub> in ambient air in core zone is well within the permissible limits.

E.5.2 The quality of mine water discharge meets the standards prescribed vide GSR 742 (E) dated 25.09.2000 with respect to all parameters.

E.5.3 No hazardous waste material is being produced either from any process or any pollution control facilities.

## FORM-V

### ENVIRONMENT STATEMENT FOR COAL MINING PROJECT FINANCIAL YEAR ENDING MARCH 2022.

#### PART-A

- i. **Name and address of the Mine-** Nandan Underground Mine, WCL  
Kanhana Area, PO- Damua, District-Chhindwara, Pin-480555.
- ii. **Industry Category-** Category A
- iii. **Production Capacity-** 0.405 MTY
- iv. **Date of last Environmental Statement submitted-** September 2021.

#### PART - B

### WATER AND RAW MATERIAL CONSUMPTION

**Table-A Water Consumption on Usage Pattern**

Sno.	Water Consumption Category	Quantity/usage (in KL/day)
<b>a)</b>	<b>Industrial</b>	
i.	Dust Suppression/recycling for roof support	Nil
ii.	Fir Fighting	Nil
iii.	Workshop and others	Nil
iv.	Green Belt/Plantation	Nil
v.	CHP Beneficiation	Nil
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	600 KL/day
ii.	Green Belt/Plantation	Nil
	TOTAL	600 KL/day

**Table-B Water Consumption against Production (including recycled)**

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
COAL	Mine is not in operation since 01/07/2013	

**Table-C Raw Material Consumption**

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	Mine is not in operation since 01/07/2013	

**PART-C**

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

Sno.	Pollutants	Quantity of Pollution generated	Percentage variation from prescribed standards with reasons
a)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.
b)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.
c)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.

**PART-D**  
**HAZARDOUS WASTES**

Sno.	Hazardous Waste	Total Quantity	
		During the previous FY 2020-21	During the current FY 2021-22
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 2020-21	During the current FY 2021-22
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

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

**PART-F**

**Please Specify the Characteristics (In Terms of Concern and Quantum) of Hazardous as well as Solid Wastes and indicate the Disposal Practice adopted for both these categories of wastes.**

Hazardous wastes is not being produced either from mining operation or from any pollution control facilities.

It is an Underground mine, only coal is extracted by Board and Pillar Continuous method and no solid waste material is generated during mining operation.

## **PART-G**

### **Impact of Pollution Control Measures on Conservation of Natural Resources and subsequently on Cost of Production.**

Mine is not in operation since 01/07/2013.

**1. Air Pollution Control Measures-**

Mine is not in operation since 01/07/2013.

**2. Water Pollution Control Measures-**

Mine is not in operation since 01/07/2013.

**3. Noise Pollution Control Measures-**

Mine is not in operation since 01/07/2013.

## **PART-H**

### **Additional Investment Proposal for Environmental Protection including abatement of Pollution.**

The project has incurred an expenditure on environmental management, details of which are as under:

<b>Sno.</b>	<b>Particulars</b>	<b>Amount</b>
1.	Consent Fees	10.88 lakhs
2.	Water Cess	Nil
3.	Environmental Monitoring Costs	28.58 lakhs
4.	Pollution Control Measures	Nil, Mine is not in operation since 01/07/2013.

### **Future Program for Environmental Management Measures-**

Forestry Clearance for proposed extension of mine in Dhau North Block is under process with MoEF&CC. Environment Clearance of Nandan-II UG (Extension in Dhau North Block) mine has been recommended by MoEF&CC subjected to Stage-I Forestry Clearance.

Mine to start operation after obtaining all the statutory clearances.

## **PART-I**

### **Any other Particulars in respect of Environmental Protection and abatement of Pollution**

The regular monitoring of the ambient air and water quality is being done in and around core zone and the monitoring reports along with six monthly EC compliance report is submitted to the Madhya Pradesh State Pollution Control Board, Bhopal and the Ministry of Environment and Forest Regional Office, Bhopal.

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



APRIL 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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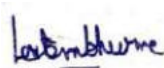
TEST REPORT NO.	RIN/TR/APR-21/76	DATE OF ISSUE	28.05.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		


DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06.04.2021	07.04.2021	290	182	42	15	12	Cloudy/Calm
22.04.2021	23.04.2021	318	202	36	13	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.04.2021	06.04.2021	340	321	40	17	13	Cloudy/Calm
20.04.2021	21.04.2021	318	208	35	15	11	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.04.2021	06.04.2021	121	79	27	9	BDL	Cloudy/Calm
19.04.2021	20.04.2021	136	91	30	11	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.04.2021	08.04.2021	127	88	30	12	BDL	Cloudy/Calm
20.04.2021	21.04.2021	139	97	36	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

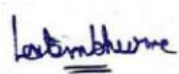
  
Analysed by

  
Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
05.04.2021	7.73	26	36	BDL
20.04.2021	7.81	28	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
APR'21	07.04.2021	64.2	60.1
APR'21	20.04.2021	67.4	65.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
APR'21	07.04.2021	44.4	42.9
APR'21	20.04.2021	45.2	43.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MAY 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.		RIN/TR/MAY-21/76	DATE OF ISSUE	29-06-2021
NAME OF CUSTOMER		GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.		WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)			
NAME OF AREA		KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT		NANDAN UG		
SAMPLE DESCRIPTION		Air sample		
SAMPLING METHOD : LSOP 4				

SAM OFFICE-NANDAN I UG: KNUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
05-07-21	05-08-21	299	196	45	14	11	Cloudy/Calm
05-21-21	05-22-21	281	174	34	12	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

PIT OFFICE NANADAN II UG: KNUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
05-06-21	05-07-21	310	206	46	16	12	Cloudy/Calm
05-20-21	05-21-21	291	186	32	14	11	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

HEALTH CENTER-NANADAN UG: KNUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
05-05-21	05-06-21	136	94	32	10	BDL	Cloudy/Calm
05-19-21	05-20-21	119	86	28	9	BDL	Cloudy/Calm
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

NANDAN WATER FILTER PLANT: KNWA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
06-05-2021	07-05-2021	136	96	38	12	BDL	Cloudy/Calm
20-05-2021	21-05-2021	121	82	27	9	BDL	Cloudy/Calm
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

*Labimkhume*

Analysed by

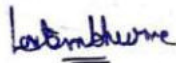
*Deepanshu sahu*

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
6-May-21	7.64	28	32	BDL
19-May-21	7.92	30	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	60.2	59.4
May-21	21-May-21	60.7	57.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	45.5	43.7
May-21	21-May-21	45.5	43.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JUNE 2021

### Environment Laboratory


NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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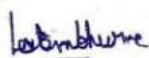
TEST REPORT NO.	RIN/TR/JUNE-21/76	DATE OF ISSUE	24-07-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07-06-2021	08-06-2021	242	155	49	12	10	Cloudy/Calm
22-06-2021	23-06-2021	228	137	38	10	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07-06-2021	08-06-2021	256	162	44	14	11	Cloudy/Calm
22-06-2021	23-06-2021	239	151	39	12	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08-06-2021	09-06-2021	117	70	27	9	BDL	Cloudy/Calm
23-06-2021	24-06-2021	129	88	32	10	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07-06-2021	08-06-2021	120	74	24	9	BDL	Cloudy/Calm
22-06-2021	23-06-2021	139	92	28	10	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1		ANALYSIS RESULTS		
DATE OF SAMPLE COLLECTION	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07-06-2021	8.2	32	36	BDL
22-06-2021	8.1	28	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'21	10-06-2021	62.9	59.5
JUNE'21	25-06-2021	66.8	64.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'21	10-06-2021	44.5	42.7
JUNE'21	25-06-2021	45.1	43.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JULY 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JULY-21/76	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13-07-2021	14-07-2021	258	165	47	14	12	Clear/L.Breeze
24-07-2021	25-07-2021	237	155	42	15	11	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13-07-2021	14-07-2021	229	149	31	13	10	Clear/L.Breeze
24-07-2021	25-07-2021	247	163	28	11	BDL	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
12-07-2021	13-07-2021	137	76	22	10	BDL	Clear/L.Breeze
23-07-2021	24-07-2021	101	62	28	12	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
14-07-2021	15-07-2021	137	80	27	9	BDL	Clear/L.Breeze
25-07-2021	26-07-2021	119	71	29	11	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	

*Labimbhurne*

Analysed by


*Deepanshu sahu*


Deepanshu sahu  
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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
13-07-2021	7.83	32	36	BDL
24-07-2021	8.11	30	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

  
Analysed by

  
Deepanshu sahu  
Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	54.8	52.9
JULY'21	24.07.2021	52.8	51.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	45.4	44.2
JULY'21	24.07.2021	44.2	43.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



AUGUST 2021

### Environment Laboratory


NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY



<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/AUGUST-21/76	DATE OF ISSUE	30.09.21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.08.2021	10.08.2021	261	169	37	15	11	Cloudy/Lightbreeze
23.08.2021	24.08.2021	231	142	31	14	11	Cloudy/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.08.2021	10.08.2021	257	174	33	16	11	Cloudy/Lightbreeze
22.08.2021	23.08.2021	241	159	27	15	12	Cloudy/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.08.2021	10.08.2021	132	88	23	10	BDL	Cloudy/Lightbreeze
22.08.2021	23.08.2021	116	70	30	8	BDL	Cloudy/Lightbreeze
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.08.2021	11.08.2021	126	72	27	8	BDL	Cloudy/Lightbreeze
23.08.2021	24.08.2021	115	84	31	9	BDL	Cloudy/Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*Labimbhume*

Analysed by

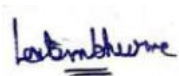
*Deepanshu*


Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
10.08.2021	7.89	30	36	BDL
24.08.2021	8.01	26	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

  
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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUGUST'21	09.08.2021	72.6	72.4
AUGUST'21	23.08.2021	70.7	70.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUGUST'21	09.08.2021	43.4	42.6
AUGUST'21	23.08.2021	43.5	42.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



SEPTEMBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/SEPT-21/76	DATE OF ISSUE	30.10.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		


SAM OFFICE- NANDAN I UG   KNUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.09.2021	10.09.2021	239	147	35	14	BDL	Rainy / Lightbreeze
23.09.2021	24.09.2021	270	171	40	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE NANADAN II UG   KNUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.09.2021	10.09.2021	231	149	30	14	BDL	Rainy / Lightbreeze
23.09.2021	24.09.2021	255	164	38	15	11	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

HEALTH CENTER-NANADAN UG   KNUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.09.2021	09.09.2021	110	72	22	8	BDL	Rainy / Lightbreeze
22.09.2021	23.09.2021	127	88	30	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

NANDAN WATER FILTER PLANT   KNWA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.09.2021	09.09.2021	109	70	24	9	BDL	Rainy / Lightbreeze
22.09.2021	23.09.2021	119	83	28	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	


  
Analysed by


  
Deepanshu sahu  
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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
09.09.2021	8.61	24	32	BDL
23.09.2021	8.75	26	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

  
Analysed by

  
Deepanshu sahu  
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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'21	09.09.2021	58.7	57.1
SEPT'21	24.09.2021	57.9	55.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'21	09.09.2021	43.9	42.4
SEPT'21	24.09.2021	43.5	42.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



OCTOBER 2021

### Environment Laboratory


NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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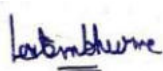
TEST REPORT NO.	RIN/TR/OCT-21/76	DATE OF ISSUE	25.11.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE- NANDAN I UG   KNUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-10-21	11-10-21	248	165	35	15	11	Clear / Lightbreeze
22-10-21	23-10-21	271	182	41	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

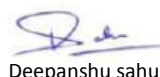
PIT OFFICE NANADAN II UG   KNUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10-10-21	11-10-21	302	190	37	13	BDL	Clear / Lightbreeze
22-10-21	23-10-21	275	174	42	11	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

HEALTH CENTER-NANADAN UG   KNUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09-10-21	10-10-21	124	78	24	10	BDL	Clear / Lightbreeze
21-10-21	22-10-21	130	88	29	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

NANDAN WATER FILTER PLANT   KNWA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09-10-21	10-10-21	109	70	23	10	BDL	Clear / Lightbreeze
21-10-21	22-10-21	123	82	28	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	



Analysed by



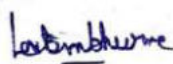
Deepanshu sahu

Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
*	*	*	*	*
22-10-21	8.31	30	44	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by


Deepanshu sahu  
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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	11-10-21	71.7	71.5
OCT'21	23-10-21	65.1	60.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	11-10-21	43.6	43.4
OCT'21	23-10-21	37.6	32.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



NOVEMBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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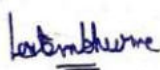
TEST REPORT NO.	RIN/TR/NOV-21/76	DATE OF ISSUE	31-12-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09-11-2021	10-11-2021	245	165	40	13	BDL	Clear / Lightbreeze
23-11-2021	24-11-2021	269	172	45	16	11	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

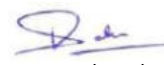
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08-11-2021	09-11-2021	270	188	34	14	11	Clear / Lightbreeze
23-11-2021	24-11-2021	250	166	39	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09-11-2021	10-11-2021	120	80	26	9	BDL	Clear / Lightbreeze
23-11-2021	24-11-2021	110	72	21	10	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09-11-2021	10-11-2021	119	76	22	9	BDL	Clear / Lightbreeze
22-11-2021	23-11-2021	109	80	28	8	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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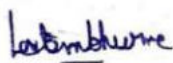
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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
11-11-2021	8.44	32	40	BDL
23-11-2021	8.38	26	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
NOV'21	08.11.2021	69.7	69.5
NOV'21	22.11.2021	71.6	70.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
NOV'21	08.11.2021	42.7	42.5
NOV'21	22.11.2021	43.5	43.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



DECEMBER 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY



<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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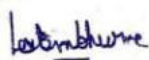
TEST REPORT NO.	RIN/TR/DEC-21/76	DATE OF ISSUE	15.01.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07-12-2021	08-12-2021	222	145	36	11	BDL	Cloudy / Lightbreeze
22-12-2021	23-12-2021	258	172	40	14	11	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07-12-2021	08-12-2021	267	174	33	12	BDL	Cloudy / Lightbreeze
22-12-2021	23-12-2021	251	166	39	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-12-2021	07-12-2021	132	91	29	10	BDL	Cloudy / Lightbreeze
21-12-2021	22-12-2021	120	88	33	11	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-12-2021	07-12-2021	131	82	24	9	BDL	Cloudy / Lightbreeze
21-12-2021	22-12-2021	121	91	29	8	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1		ANALYSIS RESULTS		
DATE OF SAMPLE COLLECTION	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07-12-2021	7.23	28	40	BDL
22-12-2021	7.60	24	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	07.12.2021	69.5	68.7
DEC'21	22.12.2021	70.7	70.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	07.12.2021	43.6	42.7
DEC'21	22.12.2021	43.5	43.3
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JANUARY 2022


**Environment Laboratory**

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JAN-21/76	DATE OF ISSUE	28.02.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE- NANDAN I UG   KNUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.01.2022	10.01.2022	259	164	30	15	11	Cloudy / Lightbreeze
27.01.2022	28.01.2022	266	152	37	14	BDL	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

PIT OFFICE NANADAN II UG   KNUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.01.2022	10.01.2022	270	187	36	16	10	Cloudy / Lightbreeze
27.01.2022	28.01.2022	258	150	29	14	11	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

HEALTH CENTER-NANADAN UG   KNUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.01.2022	11.01.2022	110	73	21	8	BDL	Cloudy / Lightbreeze
24.01.2022	25.01.2022	123	84	26	9	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

NANDAN WATER FILTER PLANT   KNWA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.01.2022	11.01.2022	127	89	26	9	BDL	Cloudy / Lightbreeze
28.01.2022	29.01.2022	117	74	22	8	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
11.01.2022	7.8	22	32	BDL
25.01.2022	8.16	26	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JAN'22	10.01.2022	70.6	70.4
JAN'22	28.01.2022	71.7	71.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JAN'22	10.01.2022	43.5	42.7
JAN'22	28.01.2022	44.7	44.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



FEBRUARY 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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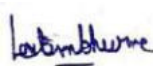
TEST REPORT NO.	RIN/TR/FEB-21/76	DATE OF ISSUE	31.03.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE- NANDAN I UG   KNUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.02.2022	09.02.2022	250	159	37	14	BDL	Clear / Lightbreeze
22.02.2022	23.02.2022	272	163	44	15	12	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

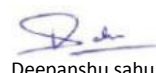
PIT OFFICE NANADAN II UG   KNUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.02.2022	09.02.2022	257	167	41	13	BDL	Clear / Lightbreeze
22.02.2022	23.02.2022	241	153	39	14	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

HEALTH CENTER-NANADAN UG   KNUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.02.2022	08.02.2022	137	88	30	9	BDL	Clear / Lightbreeze
21.02.2022	22.02.2022	109	73	38	8	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

NANDAN WATER FILTER PLANT   KNWA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.02.2022	08.02.2022	116	78	29	9	BDL	Clear / Lightbreeze
21.02.2022	22.02.2022	129	84	32	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08.02.2022	7.7	24	40	BDL
24.02.2022	7.84	26	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
FEB'22	11.02.2022	72.6	69.8
FEB'22	21.02.2022	71.7	69.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
FEB'22	11.02.2022	42.5	42.4
FEB'22	21.02.2022	42.7	42.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# NANDAN UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MARCH 2022


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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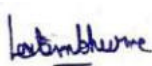
TEST REPORT NO.	RIN/TR/MAR-21/76	DATE OF ISSUE	12.04.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	NANDAN UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD	: LSOP 4		

SAM OFFICE- NANDAN I UG   KNUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.03.2022	12.03.2022	283	182	42	14	BDL	Clear / Calm
24.03.2022	25.03.2022	270	163	37	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

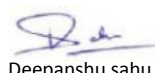
PIT OFFICE NANADAN II UG   KNUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.03.2022	12.03.2022	266	173	37	15	11	Clear / Calm
24.03.2022	25.03.2022	288	191	41	14	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

HEALTH CENTER-NANADAN UG   KNUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.03.2022	11.03.2022	121	81	30	9	BDL	Clear / Calm
24.03.2022	25.03.2022	132	92	29	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

NANDAN WATER FILTER PLANT   KNWA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
11.03.2022	12.03.2022	123	92	29	10	BDL	Clear / Calm
25.03.2022	26.03.2022	130	83	24	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



Analysed by



Deepanshu sahu  
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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KNUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
09.03.2022	7.64	22	32	BDL
24.03.2022	7.72	26	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by



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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE UG II: KNUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MAR'22	10.03.2022	69.4	68.9
MAR'22	25.03.2022	72.6	41.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY: KNUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MAR'22	10.03.2022	42.2	41.7
MAR'22	25.03.2022	42.7	41.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## DRINKING WATER MONITORING REPORT

### KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



QE-JUNE 2021

Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014  
AN ISO 9001:2015 COMPANY



**Environment Laboratory  
CMPDI RI-IV, NAGPUR**

**Test Report  
Drinking water quality monitoring data**



TEST REPORT NO.	RIN/TR/JULY-21/DW45	DATE OF ISSUE	31-07-21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	NANDAN UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION: FILTER PLANT		SAMPLING DATE: 06-04-21		IS 10500:2012		
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	3	5	15
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	3	1	5
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.88	6.5 to 8.5	No relaxation
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	880	200	600
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	90.6	250	1000
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	0.03	0.2	1
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	1.28	1	1.5
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	1340	500	2000
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	260.8	75	200
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	55.40	30	100
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	0.042	0.05	1.5
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	120	200	400
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	24.8	45	No relaxation
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation

19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	0.014	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	116	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**



SCIENTIFIC ASSISTANT



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## DRINKING WATER MONITORING REPORT

### KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035




QE-SEPT 2021

Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	 IC-7102
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TEST REPORT NO.	RIN/TR/SEPT-21/DW45	DATE OF ISSUE	24-09-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	NANDAN UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		FILTER PLANT		SAMPLING DATE:		13-07-2021	
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.98	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	344	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	76	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	0.02	0.2	1	
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.9	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	810	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	142.4	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	39	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3	
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	52	200	400	
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	16.2	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	

19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	0.023	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	140	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**



SCIENTIFIC ASSISTANT



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## DRINKING WATER MONITORING REPORT

# KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035




QE-DEC 2021

Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/DEC-21/DW45	DATE OF ISSUE	31-12-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	NANDAN UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION: FILTER PLANT		SAMPLING DATE: 10-10-2021				
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012	
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.39	6.5 to 8.5	No relaxation
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	580	200	600
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	50	250	1000
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	0.02	0.2	1
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.62	1	1.5
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	740	500	2000
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	177.6	75	200
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	33	30	100
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	0.022	0.1	0.3
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	62	200	400
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	13.4	45	No relaxation
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation

19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	132	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**



SCIENTIFIC ASSISTANT



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## DRINKING WATER MONITORING REPORT

# KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035




QE-MAR 2022

Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014  
AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR-22/DW45	DATE OF ISSUE	31-03-2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	NANDAN UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		FILTER PLANT		SAMPLING DATE:		11-01-2022	
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.82	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	636	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	44	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	0.02	0.2	1	
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.84	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	890	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	164.8	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	54.43	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	0.026	0.1	0.3	
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	135.37	200	400	
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	9.2	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	

19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	68	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**



SCIENTIFIC ASSISTANT



DEEPANSHU SAHU  
AUTHORIZED SIGNATORY

- |   |  |
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**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**APRIL 2021 TO JUNE 2021**

**Environment Laboratory**  
NABL Accredited vide Cert. No. TC-7102

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Ambient Air quality monitoring data for heavy metals	 TC-7102
---	---	--

TEST REPORT NO.	RIN/TR/AUG/HM134	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	NANDAN UG	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	SAM OFFICE -NANDAN UG	KNUA-1	07.05.21
2	PIT OFFICE -NANDAN UG	KNUA-2	05.05.21
3	HEALTH CENTRE NANDAN UG	KNUA-3	05.05.21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value			National Ambient Air Quality Standard NAAQS, 2009
				KNUA-1	KNUA-2	KNUA-3	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0007 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$0.006 \mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	$7.0 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$1.0 \mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.007 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$0.02 \mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0045 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0015 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



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**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**OCT 2021 TO DEC 2021**

**Environment Laboratory**  
NABL Accredited vide Cert. No. TC-7102

**CMPDI**

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Ambient Air quality monitoring data for heavy metals	 TC-7102
---	---	--

TEST REPORT NO.	RIN/TR/MAR /HM134	DATE OF ISSUE	19.03.22
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	NANDAN UG	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	SAM OFFICE -NANDAN UG	KNUA-1	09-11-21
2	PIT OFFICE -NANDAN UG	KNUA-2	08-11-21
3	HEALTH CENTRE NANDAN UG	KNUA-3	09-11-21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value			National Ambient Air Quality Standard NAAQS, 2009
				KNUA-1	KNUA-2	KNUA-3	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0007 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$0.006 \mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	$7.0 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$1.0 \mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.007 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	$0.02 \mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0045 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	$0.0015 \mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



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## EFFLUENT WATER MONITORING REPORT

### KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO.4634420035



QE-DECEMBER 2021


**Environment Laboratory**

**NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022**

**CMPDI**

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Effluent water quality monitoring data</b>	
---	---	---

TEST REPORT NO.	RIN/TR/DEC'21 /MD61	DATE OF ISSUE	31.12.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/588-615 DATED: 15.06.20		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN AREA	SAMPLING METHOD:	LSOP 5
NAME OF PROJECT	NANDAN UG	SAMPLING PLAN:	LQR 47
NO. OF PAGES	1		

NAME OF LOCATION: MINE WATER DISCHARGE				SAMPLING DATE: 10-10-2021		
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	Standard for Discharge PARTA Schedule VI	Analysis result	Remarks
1	pH Value	IS 3025/11:1983 Electrometric	2	5.5 to 9.0	8.39	
2	Temperature (°C)	IS 3025 (Part-9)	4 <sup>o</sup>	Te < Ts + 5OC	26.4	
3	Colour (Hazen)	APHA 23rd Edition Platinum Cobalt	1	*	1	
4	Odour	IS 3025/05: 1983, Physical, Qualitative	Qualitative	Unobjectionable	Unobjectionable	
5	TSS mg/l	IS 3025/17:1984 Gravimetric	10	100	26	
6	Oil & Grease mg/l	IS 3025/39: 1991 Partition Gravimetric	2	10	BDL	
7	C.O.D mg/l	APHA, 23rd Edition Closed Reflux	4	250	36	
8	B.O.D. (3days at 27°C mg/l)	IS 3025 (Part 44) : 1993	2	30	4.2	
9	Residual Chlorine mg/l	APHA, 23rd Edition DPD	0.02	1	BDL	
10	Ammonical Nitrogen mg/l	IS 3025 (Part-34) : 1988	0.02	50	0.26	
11	Total Kjeldahl Nitrogen mg/l	APHA, 23rd Edition Kjeldahl	1	100	2.2	
12	Dissolved Phosphate mg/l	APHA, 23rd Edition Molybdovanadate	0.3	5	0.36	
13	Arsenic (Ar)-mg/l	APHA, 23rd Edition AAS-VGA	0.005	0.2	BDL	
14	Lead as (Pb) -mg/l	APHA, 23rd Edition AAS-GTA	0.005	0.1	BDL	
15	Hexavalent Chromium mg/l	APHA, 23rd Edition 1,5-Diphenylcarbohydrazide	0.01	0.1	BDL	
16	Total Chromium -mg/l	IS-3025 (Part 52) : 2003 AAS Flame	0.06	2	BDL	
17	Copper (as Cu) -mg/l	IS-3025/42 : 1992 AAS-Flame	0.03	3	BDL	
18	Zinc as (Zn) -mg/l	IS-3025/49 : 1994 AAS-Flame	0.01	5	BDL	
19	Selenium (Se) -mg/l	APHA, 23rd Edition AAS-VGA	0.005	0.05	BDL	
20	Nickel-mg/l	IS-3025 (Part 54) : 2003 AAS Flame Method	0.1	3	BDL	
21	Cadmium as (Cd)- mg/l	APHA, 23rd Edition AAS-GTA	0.005	2	BDL	
22	Fluoride (as F-) - mg/l	APHA, 23rd Edition SPADNS	0.02	2	0.42	
23	Sulphide - mg/l	APHA, 23rd Edition Methylene blue	0.1	2	BDL	
24	Iron - mg/l	IS-3025/53 : 2003 AAS Flame	0.06	3	BDL	
25	Manganese as (Mn)- mg/l	IS-3025/59 : 2006 AAS Flame	0.02	2	BDL	
26	Nitrates Nitrogen(as NO3) - mg/l	APHA, 23rd Edition UV - Spectrophotometric	0.5	10	2.83	

BDL: BELOW DETECTION LIMIT

  
SCIENTIFIC ASSISTANT

  
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**ENVIRONMENTAL AUDIT STATEMENT**  
**(FORM-V)**

**TANDSI UG MINE**

**FY 2021-22**

**Prepared by-**



**WESTERN COALFIELDS LIMITED**  
**KANHAN AREA**  
**PO: DUNGARIA, CHHINDWARA (MP)-480553**

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<b>2.</b>	<b>FORM-V</b>	<b>02</b>
	<b>PART-A</b>	<b>02</b>
	<b>PART-B</b>	<b>02</b>
	<b>PART-C</b>	<b>03</b>
	<b>PART-D</b>	<b>04</b>
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<b>3.</b>	<b>Monitoring Reports</b>	<b>07</b>

## EXECUTIVE SUMMARY

E.1.0 This Environment Statement Report has been prepared as per gazette notification no. G.S.R. 329(E) dated 13<sup>th</sup> March, 1992 laid down by Ministry of Environment and Forest. The 'Environment Audit' has been subsequently renamed to '**Environment Statement**' vide MoEF gazette notification No. G.S.R. 386(E) dated 22nd April, 1993.

E.2.0 Tandsi Underground Mine of Western Coalfields Ltd. is situated in PENCH Kanhan Valley Coalfield, which lies in Chhindwara District of Madhya Pradesh State.

E.3.0 The planned production capacity of Tandsi Underground Mine is 0.90 MTY. The Ministry of Environment & Forest, Govt. of India vide No. J-11015/64/82/IA-II dt.11.12.1991 has granted Environmental Clearance to the Underground Mine. **The project produced 0.1575 MT of coal during the year 2021-22.**

E.4.0 Environmental monitoring has been carried out by CMPDI for air, water and noise parameters. The results of the FY 2021-22 are enclosed.

E.5.0 Environmental Statement report reveals the following facts regarding environmental aspect of this project:

E.5.1 The concentration of SO<sub>x</sub>, NO<sub>x</sub> in ambient air in core zone is well within the permissible limits.

E.5.2 The quality of mine water discharge meets the standards prescribed vide GSR 742 (E) dated 25.09.2000 with respect to all parameters.

E.5.3 No hazardous waste material is being produced either from any process or any pollution control facilities.

## FORM-V

### ENVIRONMENT STATEMENT FOR COAL MINING PROJECT FINANCIAL YEAR ENDING MARCH 2022.

#### PART-A

- i. **Name and address of the Mine-** Tandsi Underground Mine, WCL  
Kanhana Area, PO- Rampur, District-Chhindwara, Pin-480555.
- ii. **Industry Category-** Category A
- iii. **Production Capacity-** 0.90 MTY
- iv. **Date of last Environmental Statement submitted-** September 2021.

#### PART - B

### WATER AND RAW MATERIAL CONSUMPTION

**Table-A Water Consumption on Usage Pattern**

<b>Sno.</b>	<b>Water Consumption Category</b>	<b>Quantity/usage (in KL/day)</b>
<b>a)</b>	<b>Industrial</b>	
i.	Dust Suppression/recycling for roof support	700
ii.	Fir Fighting	10
iii.	Workshop and others	Nil
iv.	Green Belt/Plantation/Agriculture fields	20
v.	CHP Beneficiation	05
<b>b)</b>	<b>Domestic</b>	
i.	Domestic use	400
	<b>TOTAL</b>	<b>1135 KL/day</b>

**Table-B Water Consumption against Production (including recycled)**

Name of Product	Water Consumption per unit of product (including recycled)	
	During the previous FY 2020-21	During the current FY 2021-22
COAL	2.74 KL/tonne of Coal produced.	2.63 KL/tonne of Coal produced.

**Table-C Raw Material Consumption**

Name of raw material	Name of product	Consumption of raw material per unit of product	
		During the previous FY 2020-21	During the current FY 2021-22
Explosive (Kg/ton)	Coal	0.343	0.336

**PART-C**

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

Sno.	Pollutants	Quantity of Pollution generated	Percentage variation from prescribed standards with reasons
a)	Water	Water Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.
b)	Air	Air Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.
c)	Noise	Noise Quality Monitoring reports attached for the year 2021-22	Values of parameters are well within the prescribed limits.



**PART-D**  
**HAZARDOUS WASTES**

Sno.	Hazardous Waste	Total Quantity	
		During the previous FY 2020-21	During the current FY 2021-22
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 2020-21	During the current FY 2021-22
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

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

**PART-F**

**Please Specify the Characteristics (In Terms of Concern and Quantum) of Hazardous as well as Solid Wastes and indicate the Disposal Practice adopted for both these categories of wastes.**

Hazardous wastes is not being produced either from mining operation or from any pollution control facilities.

It is an Underground mine, only coal is extracted by Board and Pillar Continuous method and no solid waste material is generated during mining operation.

## **PART-G**

### **Impact of Pollution Control Measures on Conservation of Natural Resources and subsequently on Cost of Production.**

In order to carry out mining in an eco-friendly manner, following pollution control measures have been implemented.

#### **1. Air Pollution Control Measures-**

The following measures are being taken to control air pollution:

- i. Water is sprinkled on coal faces before drilling and transportation and on coal stocks.
- ii. 35 Nos. of fixed type sprinklers are provided in and around coal stockyard, weigh bridge and coal transport road.
- iii. Till date 85900 no. of Plants have been planted over an area of 34.36 Ha within the mine lease hold area.

#### **2. Water Pollution Control Measures-**

The following measures are taken to control water pollution from the mine:

- i. Water is retained in the mine sump before discharge to the nearby surface water settling tank. Water is reused for roof-bolting in UG works and dust suppression by sprinklers.
- ii. Sedimentation tank of Capacity 300 KL has been provided for settling of mine water.
- iii. Each house in the colony has been provided with a septic - tank with soak pit arrangement.
- iv. For Conservation of water, Roof Top Rainwater harvesting structure has been constructed at Sub-Area office Building and Tandsi Workshop.

#### **3. Noise Pollution Control Measures-**

Maintenance of transport vehicles, development of green belt in between industrial complex & residential area, ear plugs & helmets are issued to the workers.

## **PART-H**

### **Additional Investment Proposal for Environmental Protection including abatement of Pollution.**

The project has incurred an expenditure on environmental management, details of which are as under:

<b>Sno.</b>	<b>Particulars</b>	<b>Amount</b>
1.	Consent Fees	Rs 12.24 lakhs
2.	Groundwater abstraction charges	Rs 16.49 lakhs upto 31/10/24
3.	Environmental Monitoring Costs	Rs. 3638852.4
4.	Air Pollution Control Measures	Rs. 0.80 lakhs
5.	Water Conservation Measures	Nil

### **Future Program for Environmental Management Measures-**

- i. Renewal of CTO of Tandsi UG for two years.
- ii. Installation of Piezometer with DWLR for groundwater monitoring.
- iii. Procurement of trolley mounted fogger cannon machine

## **PART-I**

### **Any other Particulars in respect of Environmental Protection and abatement of Pollution**

The regular monitoring of the ambient air and water quality is being done in and around core zone and the monitoring reports along with six monthly EC compliance reports are submitted to the Madhya Pradesh State Pollution Control Board, Bhopal and the Ministry of Environment and Forest Regional Office, Bhopal.

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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



APRIL 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

### CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/APR-21/78	DATE OF ISSUE	28.05.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD	LSOP 4		

WORKSHOP: KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.04.2021	08.04.2021	336	216	42	13	11	Cloudy/Calm
21.04.2021	22.04.2021	302	197	34	10	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

LAMP ROOM: KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.04.2021	08.04.2021	346	231	36	17	13	Cloudy/Calm
21.04.2021	22.04.2021	322	214	29	14	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER: KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.04.2021	08.04.2021	132	98	28	10	BDL	Cloudy/Calm
21.04.2021	22.04.2021	117	81	22	11	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

JET HOSTEL: KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.04.2021	08.04.2021	141	99	32	9	BDL	Cloudy/Calm
21.04.2021	22.04.2021	129	87	28	11	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

*Latimburne*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08.04.2021	7.88	26	36	BDL
22.04.2021	7.94	28	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by



Deepanshu sahu  
 Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
	APR'21	07.04.2021	69.7
APR'21	20.04.2021	69.4	67.2
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
	APR'21	07.04.2021	45.2
APR'21	20.04.2021	45.6	44.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MAY 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

### CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY



<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAY-21/78	DATE OF ISSUE	29-06-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD	LSOP 4		

WORKSHOP: KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
7-May-21	8-May-21	276	170	46	14	11	Cloudy/Calm
21-May-21	22-May-21	296	182	35	11	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

LAMP ROOM: KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
7-May-21	8-May-21	282	188	40	15	12	Cloudy/Calm
21-May-21	22-May-21	266	161	34	13	10	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER: KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
7-May-21	8-May-21	141	99	27	10	BDL	Cloudy/Calm
21-May-21	22-May-21	123	82	32	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

JET HOSTEL: KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
7-May-21	8-May-21	132	81	27	9	BDL	Cloudy/Calm
21-May-21	22-May-21	146	97	32	10	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

*Latimburne*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
7-May-21	7.88	34	36	BDL
21-May-21	7.99	36	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	69.7	67.7
May-21	21-May-21	69.7	67.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
May-21	7-May-21	45.4	43.8
May-21	21-May-21	45.6	43.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# TANDSI UG

KANHAN AREA

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



JUNE 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JUNE-21/78	DATE OF ISSUE	24-07-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-06-2021	07-06-2021	252	164	45	13	10	Cloudy/Calm
21-06-2021	22-06-2021	231	129	40	10	BDL	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	


DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-06-2021	07-06-2021	282	194	46	14	11	Cloudy/Calm
21-06-2021	22-06-2021	269	174	39	12	10	Cloudy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-06-2021	07-06-2021	129	84	30	10	BDL	Cloudy/Calm
21-06-2021	22-06-2021	102	71	24	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-06-2021	07-06-2021	138	86	29	10	BDL	Cloudy/Calm
21-06-2021	22-06-2021	122	79	25	9	BDL	Cloudy/Calm
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
06-06-2021	8.12	34	36	BDL
21-06-2021	8.18	40	44	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
JUNE'21	10-06-2021	67.8	65.6
JUNE'21	25-06-2021	67.4	65.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
JUNE'21	10-06-2021	44.4	42.7
JUNE'21	25-06-2021	44.8	42.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JULY 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JULY-21/78	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD	LSOP 4		

WORKSHOP: KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.7.2021	10.7.2021	233	140	38	12	BDL	Clear/Lightbreeze
20.7.2021	21.7.2021	265	155	27	9	BDL	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

LAMP ROOM: KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.7.2021	10.7.2021	269	188	42	14	10	Clear/Lightbreeze
20.7.2021	21.7.2021	245	65	34	12	10	Rainy/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER: KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.7.2021	10.7.2021	99	65	21	8	BDL	Clear/Lightbreeze
20.7.2021	21.7.2021	112	78	26	9	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	

JET HOSTEL: KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
09.7.2021	10.7.2021	117	81	22	9	BDL	Clear/Lightbreeze
20.7.2021	21.7.2021	108	70	29	10	BDL	Rainy/Calm
NAAQS, 2009		-	100	60	80	80	

*Latimburne*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08.7.2021	8.22	34	40	BDL
20.7.2021	7.7	28	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	53.3	52.6
JULY'21	24.07.2021	52.1	50.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'21	12.07.2021	45.1	44.3
JULY'21	24.07.2021	44.2	43.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



AUGUST 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/AUGUST-21/78	DATE OF ISSUE	30.09.21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
06.08.2021	07.08.2021	199	122	31	11	BDL	Rainy / Lightbreeze
20.08.2021	21.08.2021	201	142	36	10	BDL	Rainy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
06.08.2021	07.08.2021	187	132	29	13	BDL	Rainy / Lightbreeze
20.08.2021	21.08.2021	199	151	33	14	10	Rainy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
06.08.2021	07.08.2021	124	88	27	9	BDL	Rainy / Lightbreeze
20.08.2021	21.08.2021	117	93	29	10	BDL	Rainy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
06.08.2021	07.08.2021	118	79	25	10	BDL	Rainy / Lightbreeze
20.08.2021	21.08.2021	123	88	29	9	BDL	Rainy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*Latimburne*

Analysed by


*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
05.08.2021	8.34	34	40	BDL
19.08.2021	8.22	30	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUGUST'21	06.08.2021	72.7	72.5
AUGUST'21	20.08.2021	72.7	72.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUGUST'21	06.08.2021	43.6	42.7
AUGUST'21	20.08.2021	43.6	42.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



SEPTEMBER 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

### CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY



<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/SEPT-21/78	DATE OF ISSUE	30.10.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD	LSOP 4		

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
07.09.2021	08.09.2021	231	155	40	12	BDL	Clear / Lightbreeze
21.09.2021	22.09.2021	263	174	33	13	11	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
07.09.2021	08.09.2021	249	158	36	15	11	Clear / Lightbreeze
21.09.2021	22.09.2021	255	169	42	14	10	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
07.09.2021	08.09.2021	121	80	25	10	BDL	Clear / Lightbreeze
21.09.2021	22.09.2021	132	92	29	12	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
07.09.2021	08.09.2021	109	92	29	9	BDL	Clear / Lightbreeze
21.09.2021	22.09.2021	121	88	34	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*Latimburne*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07.09.2021	8.21	26	36	BDL
21.09.2021	8.29	32	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
	SEPT'21	09.09.2021	69.7
SEPT'21	24.09.2021	69.5	67.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
	SEPT'21	09.09.2021	45.4
SEPT'21	24.09.2021	45.1	43.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



OCTOBER 2021

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

### CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/OCT-21/78	DATE OF ISSUE	25.11.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
08-10-21	09-10-21	276	184	45	14	11	Clear / Lightbreeze
20-10-21	21-10-21	267	165	40	13	11	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
08-10-21	09-10-21	288	178	42	15	11	Clear / Lightbreeze
20-10-21	21-10-21	274	155	39	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
08-10-21	09-10-21	130	88	27	10	BDL	Clear / Lightbreeze
20-10-21	21-10-21	125	72	25	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
08-10-21	09-10-21	121	80	30	9	BDL	Clear / Lightbreeze
20-10-21	21-10-21	130	91	33	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*Latimkhurme*

Analysed by

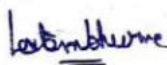
*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
*	*	*	*	*
20-10-21	8.3	26	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
OCT'21	08-10-21	72.7	72.5
OCT'21	23-10-21	70.5	65.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
OCT'21	08-10-21	43.6	43.4
OCT'21	23-10-21	45.8	40.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



NOVEMBER 2021

### Environment Laboratory


NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/NOV-21/78	DATE OF ISSUE	31-12-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
10-11-2021	11-11-2021	265	173	39	13	BDL	Clear / Lightbreeze
21-11-2021	22-11-2021	247	164	42	14	BDL	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
10-11-2021	11-11-2021	260	161	34	11	BDL	Clear / Lightbreeze
21-11-2021	22-11-2021	257	172	39	15	10	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
10-11-2021	11-11-2021	132	92	27	9	BDL	Clear / Lightbreeze
21-11-2021	22-11-2021	121	87	24	8	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
10-11-2021	11-11-2021	128	88	22	10	BDL	Clear / Lightbreeze
21-11-2021	22-11-2021	119	80	26	9	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

*Signature*

Analysed by

*Signature*

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
09-11-2021	8.52	28	40	BDL
21-11-2021	8.6	32	44	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
NOV'21	08.11.2021	72.5	71.6
NOV'21	22.11.2021	72.6	72.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
NOV'21	08.11.2021	43.4	42.5
NOV'21	22.11.2021	43.5	43.3
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

# TANDSI UG

KANHAN AREA

**WESTERN COALFIELDS LTD.**

JOB NO. 4634420035



DECEMBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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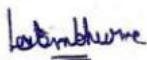
TEST REPORT NO.	RIN/TR/DEC-21/78	DATE OF ISSUE	15.01.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05-12-2021	06-12-2021	271	185	45	15	11	Cloudy / Lightbreeze
20-12-2021	21-12-2021	255	162	40	14	10	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05-12-2021	06-12-2021	254	164	37	14	11	Cloudy / Lightbreeze
20-12-2021	21-12-2021	239	149	32	13	BDL	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05-12-2021	06-12-2021	127	88	25	8	BDL	Cloudy / Lightbreeze
20-12-2021	21-12-2021	119	92	29	7	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05-12-2021	06-12-2021	119	77	22	9	BDL	Cloudy / Lightbreeze
20-12-2021	21-12-2021	129	92	28	10	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



Analysed by




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Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
05-12-2021	7.87	36	44	BDL
20-12-2021	7.66	28	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	05.12.2021	71.7	71.5
DEC'21	20.12.2021	73.3	72.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
DEC'21	05.12.2021	43.6	43.4
DEC'21	20.12.2021	43.6	43.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



JANUARY 2022

#### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

#### CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JAN-22/78	DATE OF ISSUE	28.02.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD	LSOP 4		

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.01.2022	09.01.2022	240	147	32	15	11	Cloudy / Lightbreeze
21.01.2022	22.01.2022	265	151	38	14	10	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.01.2022	09.01.2022	257	162	32	16	11	Cloudy / Lightbreeze
21.01.2022	22.01.2022	241	153	39	15	BDL	Cloudy / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.01.2022	09.01.2022	120	88	26	8	BDL	Cloudy / Lightbreeze
21.01.2022	22.01.2022	133	93	29	8	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.01.2022	09.01.2022	108	78	25	9	BDL	Cloudy / Lightbreeze
21.01.2022	22.01.2022	115	84	27	8	BDL	Cloudy / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*Leetimbhume*

Analysed by

*Deepanshu sahu*

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Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
06.01.2022	7.9	36	40	BDL
21.01.2022	8.1	28	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JAN'22	08.01.2022	72.5	72.6
JAN'22	21.01.2022	73.4	73.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JAN'22	08.01.2022	43.6	43.4
JAN'22	21.01.2022	43.9	43.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



FEBRUARY 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

### CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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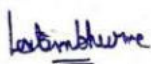
TEST REPORT NO.	RIN/TR/FEB-22/78	DATE OF ISSUE	31.03.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06.02.2022	07.02.2022	268	177	37	13	BDL	Clear / Lightbreeze
20.02.2022	21.02.2022	251	141	42	14	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06.02.2022	07.02.2022	278	183	38	15	11	Clear / Lightbreeze
20.02.2022	21.02.2022	255	142	44	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06.02.2022	07.02.2022	122	92	24	8	BDL	Clear / Lightbreeze
20.02.2022	21.02.2022	132	86	29	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06.02.2022	07.02.2022	117	73	26	9	BDL	Clear / Lightbreeze
20.02.2022	21.02.2022	130	88	28	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07.02.2022	7.82	24	28	BDL
21.02.2022	7.9	26	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
FEB'22	06.02.2022	72.7	69.6
Feb-22	21.02.2022	71.7	68.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
FEB'22	06.02.2022	42.9	41.9
Feb-22	21.02.2022	43.6	42.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MARCH 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

### CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR-22/78	DATE OF ISSUE	12.04.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	KANHAN	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TANDSI UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD	LSOP 4		

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.03.2022	08.03.2022	259	155	31	13	BDL	Clear / Cal;m
23.03.2022	24.03.2022	274	163	40	14	10	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.03.2022	08.03.2022	263	188	38	16	11	Clear / Cal;m
23.03.2022	24.03.2022	281	172	43	15	10	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.03.2022	08.03.2022	119	74	29	8	BDL	Clear / Cal;m
23.03.2022	24.03.2022	134	82	26	9	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
07.03.2022	08.03.2022	123	81	26	8	BDL	Clear / Cal;m
23.03.2022	24.03.2022	140	92	29	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*Leetimbhume*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: KTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
07.03.2022	7.59	30	32	BDL
23.03.2022	7.64	26	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
MAR'22	10.03.2022	69.8	68.8
MAR'22	25.03.2022	71.8	71.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
MAR'22	10.03.2022	42.5	41.5
MAR'22	25.03.2022	42.3	41.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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## DRINKING WATER MONITORING REPORT

### KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



QE-JUNE 2021

Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014  
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**Environment Laboratory  
CMPDI RI-IV, NAGPUR**

**Test Report  
Drinking water quality monitoring data**



TEST REPORT NO.	RIN/TR/JULY-21/DW49	DATE OF ISSUE	31-07-21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION: FILTER PLANT				SAMPLING DATE: 08-04-21		
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012	
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	8	6.5 to 8.5	No relaxation
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	270	200	600
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	36	250	1000
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	BDL	0.2	1
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.8	1	1.5
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	560	500	2000
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	43.2	75	200
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	39.36	30	100
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	88	200	400
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	8.4	45	No relaxation
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation
19	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation

20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	138	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**




SCIENTIFIC ASSISTANT



DEEPANSHU SAHU  
AUTHORIZED SIGNATORY

- |   |  |
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JULY-21/DW50	DATE OF ISSUE	31-07-21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		CANTEEN		SAMPLING DATE:		08-04-21	
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	8.01	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	260	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	34	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	BDL	0.2	1	
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.82	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	540	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	41.6	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	37.9	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3	
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	84	200	400	
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	8.2	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	
19	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation	

20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	132	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**



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## DRINKING WATER MONITORING REPORT

# KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035




QE-SEPT 2021

Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014  
AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/SEPT-21/DW49	DATE OF ISSUE	24-09-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		FILTER PLANT		SAMPLING DATE:		08-07-2021	
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	8.21	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	188	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	50	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	BDL	0.2	1	
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.54	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	330	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	54.4	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	12.63	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3	
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	40	200	400	
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	6.6	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	
19	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation	

20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	210	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**




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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/SEPT-21/DW50	DATE OF ISSUE	24-09-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		CANTEEN		SAMPLING DATE:		08-07-2021	
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	1	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	8.1	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	168	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	38	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	BDL	0.2	1	
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.52	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	330	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	49.6	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	10.69	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3	
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	36	200	400	
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	8.2	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	
19	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation	

20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	208	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**



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## DRINKING WATER MONITORING REPORT

# KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035




QE-DEC 2021

Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

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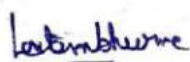
<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/DEC-21/DW49	DATE OF ISSUE	31-12-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION: FILTER PLANT		SAMPLING DATE: 08-10-2021				
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012	
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	1	5	15
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.67	6.5 to 8.5	No relaxation
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	80	200	600
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	22	250	1000
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	BDL	0.2	1
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.56	1	1.5
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	340	500	2000
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	24	75	200
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	4.86	30	100
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	36	200	400
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	5.4	45	No relaxation
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation
19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation

20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	224	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**




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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/DEC-21/DW50	DATE OF ISSUE	31-12-2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		CANTEEN		SAMPLING DATE:		08-10-2021	
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	1	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	1	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.67	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	156	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	18	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	BDL	0.2	1	
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.52	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	280	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	46.4	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	9.72	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3	
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	28	200	400	
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	4.8	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	
19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation	

20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	212	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**



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## DRINKING WATER MONITORING REPORT

### KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035




QE-MAR 2022

Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014  
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR-22/DW49	DATE OF ISSUE	31-03-2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		FILTER PLANT		SAMPLING DATE:		06-01-2022	
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	1	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	8.06	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	96	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	20	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	BDL	0.2	1	
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.41	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	340	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	25.6	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	7.77	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3	
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	15.25	200	400	
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	4.4	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	
19	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation	

20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	0.014	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	220	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**




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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Drinking water quality monitoring data</b>	
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TEST REPORT NO.	RIN/TR/MAR-22/DW50	DATE OF ISSUE	31-03-2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		CANTEEN		SAMPLING DATE:		06-01-2022	
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	1	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	8.22	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO <sub>3</sub> ) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	128	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	18	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	BDL	0.2	1	
9	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.38	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	280	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	38.4	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	7.77	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3	
15	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	16.12	200	400	
16	Nitrates (as NO <sub>3</sub> ) - mg/l	APHA (23rd Edition) 4500-NO <sub>3</sub> -B UV	0.5	4.6	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	
19	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation	

20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	176	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

**BDL: BELOW DETECTION LIMIT**



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**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**APRIL 2021 TO JUNE 2021**

**Environment Laboratory**  
NABL Accredited vide Cert. No. TC-7102

**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
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---	---	--

TEST REPORT NO.	RIN/TR/AUG/HM132	DATE OF ISSUE	31.08.21
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	WORKSHOP	KTUA-1	07.05.21
2	LAMP ROOM	KTUA-2	07.05.21
3	COLONY NEAR HELATH CENTRE	KTUA-3	07.05.21
4	JET HOSTEL	KYUA-4	07.05.21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value				National Ambient Air Quality Standard NAAQS, 2009
				KTUA-1	KTUA-2	KTUA-3	KYUA-4	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	1.0 $\mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	BDL	0.0023	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



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**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**KANHAN AREA**

**WESTERN COALFIELDS LTD.**



**OCT 2021 TO DEC 2021**

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---	---	--

TEST REPORT NO.	RIN/TR/MAR /HM132	DATE OF ISSUE	19.03.22
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	KANHAN	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN : LQR 47	
No. of Pages	1		

Sl No.	Name of location	Location Code	Date of sampling
1	WORKSHOP	KTUA-1	10-11-21
2	LAMP ROOM	KTUA-2	10-11-21
3	COLONY NEAR HELATH CENTRE	KTUA-3	10-11-21
4	JET HOSTEL	KYUA-4	10-11-21

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value				National Ambient Air Quality Standard NAAQS, 2009
				KTUA-1	KTUA-2	KTUA-3	KYUA-4	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	1.0 $\mu\text{g}/\text{m}^3$ <sup>(24)</sup> Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



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## EFFLUENT WATER MONITORING REPORT

### KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO.4634420035



QE-DECEMBER 2021


Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Effluent water quality monitoring data</b>	
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TEST REPORT NO.	RIN/TR/DEC'21 /MD60	DATE OF ISSUE	31.12.2021
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/588-615 DATED: 15.06.20		
TEST REQUIRED	IS 10500:2012		
NAME OF AREA	KANHAN AREA	SAMPLING METHOD:	LSOP 5
NAME OF PROJECT	TANDSI UG	SAMPLING PLAN:	LQR 47
NO. OF PAGES	1		

NAME OF LOCATION: MINE WATER DISCHARGE				SAMPLING DATE: 08-10-2021		
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	Standard for Discharge PARTA Schedule VI	Analysis result	Remarks
1	pH Value	IS 3025/11:1983 Electrometric	2	5.5 to 9.0	8.38	
2	Temperature (°C)	IS 3025 (Part-9)	4°	Te < Ts + 5OC	26.3	
3	Colour (Hazen)	APHA 23rd Edition Platinum Cobalt	1	*	1	
4	Odour	IS 3025/05: 1983, Physical,	Qualitative	Unobjectionable	Unobjectionable	
5	TSS mg/l	IS 3025/17:1984 Gravimetric	10	100	30	
6	Oil & Grease mg/l	IS 3025/39: 1991 Partition Gravimetric	2	10	BDL	
7	C.O.D mg/l	APHA, 23rd Edition Closed Reflux	4	250	40	
8	B.O.D. (3days at 27°C mg/l)	IS 3025 (Part 44) : 1993	2	30	3.6	
9	Residual Chlorine mg/l	APHA, 23rd Edition DPD	0.02	1	BDL	
10	Ammonical Nitrogen mg/l	IS 3025 (Part-34) : 1988	0.02	50	0.28	
11	Total Kjeldahl Nitrogen mg/l	APHA, 23rd Edition Kjeldahl	1	100	3.83	
12	Dissolved Phosphate mg/l	APHA, 23rd Edition Molybdovanadate	0.3	5	0.38	
13	Arsenic (Ar)-mg/l	APHA, 23rd Edition AAS-VGA	0.005	0.2	BDL	
14	Lead as (Pb) -mg/l	APHA, 23rd Edition AAS-GTA	0.005	0.1	BDL	
15	Hexavalent Chromium mg/l	APHA, 23rd Edition 1,5-Diphenylcarbohydrazide	0.01	0.1	BDL	
16	Total Chromium -mg/l	IS-3025 (Part 52) : 2003 AAS Flame	0.06	2	BDL	
17	Copper (as Cu) -mg/l	IS-3025/42 : 1992 AAS-Flame	0.03	3	BDL	
18	Zinc as (Zn) -mg/l	IS-3025/49 : 1994 AAS-Flame	0.01	5	BDL	
19	Selenium (Se) -mg/l	APHA, 23rd Edition AAS-VGA	0.005	0.05	BDL	
20	Nickel-mg/l	IS-3025 (Part 54) : 2003 AAS Flame Method	0.1	3	BDL	
21	Cadmium as (Cd)- mg/l	APHA, 23rd Edition AAS-GTA	0.005	2	BDL	
22	Fluoride (as F-) -mg/l	APHA, 23rd Edition SPADNS	0.02	2	0.66	
23	Sulphide - mg/l	APHA, 23rd Edition Methylene blue	0.1	2	BDL	
24	Iron - mg/l	IS-3025/53 : 2003 AAS Flame	0.06	3	BDL	
25	Manganese as (Mn)- mg/l	IS-3025/59 : 2006 AAS Flame	0.02	2	BDL	
26	Nitrates Nitrogen(as NO3) - mg/l	APHA, 23rd Edition UV - Spectrophotometric	0.5	10	2.2	

BDL: BELOW DETECTION LIMIT

  
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**REPORT ON  
MONITORING OF GROUND WATER LEVEL  
OF**

**KANHAN AREA  
(M.P)**

**WESTERN COALFIELDS LTD.**



**PERIOD- NOV-DEC 2021 (POST-MONSOON)  
& JAN-FEB -2022 (WINTER)**



**M/s Anacon Laboratories Pvt. Ltd., Nagpur**

**MoEF&CC (GOI) and NABL Recognized Laboratory  
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018**

**Lab. & Consultancy: FP-34, 35, Food Park,  
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**Website: [www.anaconlaboratories.com](http://www.anaconlaboratories.com)**

**Report No. ANqr /PD/20A/2022/190**

**2021-22**

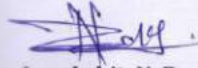


## Certificate

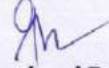
The Ground water Level monitoring has been carried out with due diligence and the Monitoring of Ground Water Level of all observation wells Report have been prepared as per the scope of work order no. वेकोलि/मुख्यालय/पर्यावरण/14-L/83 on date: 03.11.2021.

The report encompasses the Monitoring of Ground water level reports of observation wells pertaining to the 10 mines of the Kanhan area of Chhindwara District, M.P.

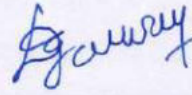
Anacon Laboratories Pvt. Ltd. gratefully acknowledges the full cooperation rendered by concerned WCL Officials for timely completion of the project.



**Sangharakshit. N. Borkar**  
(Geologist)



**Gyanchand Bohra**  
NABET Accredited EIA Expert  
for Hydrogeology & Geology



**(Dr. D. G. Garway)**  
Head of Organization  
Anacon Laboratories Pvt. Ltd., Nagpur



Nagpur.  
March -2022

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<b>FIGURE-VII</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF JHARNA UG)
<b>FIGURE-VIII</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF MOHAN (MAORI) UG)
<b>FIGURE-IX</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF TANDSI UG)
<b>FIGURE-X</b>	GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF SHARDA UG )

## **INTRODUCTION**

Western Coalfields Limited (WCL) is one of the eight Subsidiary Companies of Coal India Limited (CIL) which is under administrative control of Ministry of Coal. The Company incorporated under the Companies Act, 1956 has its registered office at Coal Estate, Civil Lines, Nagpur-440001. WCL has been conferred "Mini-ratna" status on 15 March 2008. It has mining operation spread over the states of Maharashtra (in Nagpur, Chandrapur & Yeotmal Districts) and Madhya Pradesh (in Betul and Chhindwara Districts). It has been divided into 10 administrative areas. The Company is a major source of supplies of coal to the industries located in Western India in the States of Maharashtra, Madhya Pradesh, Gujarat and also in Southern India in the States of Andhra Pradesh, Tamil Nadu, Karnataka and Kerala. A large numbers of Power Houses under Maharashtra, Madhya Pradesh, Gujarat, Karnataka, Punjab and Uttar Pradesh - Electricity Boards are major consumers of its coal along with cement, steel, chemical, fertilizer, paper and brick Industries in these states.

M/s Anacon Laboratories Pvt. Ltd. has been awarded the Work of "Groundwater level Monitoring ( i.e. bore well / piezometer Water levels ) and Water quality analysis ( as per IS10500 ) for 82 projects / mines of WCL ( situated in the state of Madhya Pradesh – Chhindwara & Betul districts and Maharashtra – Nagpur, Chandrapur & Yeotmal districts) for one year as per condition stipulated in Environmental Clearance letters issued by MoEF & CC & NOC issued by CGWA" vide work order वेकोलि/मुख्यालय/पर्यावरण/14-L/83 on date: 03.11.2021.

This Ground Water Level Monitoring report is prepared for Ambara OC, Ambara UG, Damua UG, Ghorawari OC, Tandsi UG, Jharna UG, Sharda UG, Datla OC, Mohan (Maori) UG. mines of Kanhan area of WCL for 2 seasons i.e. Post-monsoon (Nov- Dec 2021) and Winter (Jan –Feb 2022). These mines are located in Chhindwara district of Madhya Pradesh.

## **GENERAL HYDROGEOLOGICAL CONDITION**

The major part of the district is occupied by Deccan Trap, consisting of different lava flows whose thickness ranges between 7 to 21 m. The recent alluvium deposits are found at places along the Pench and the Kanhan rivers with thickness varying from 5.00 to 20.00 m. Alluvium comprises clayey material with intercalated layers of sand and gravels. Archaeans are exposed in parts of Sausar, Bichhua, Chhindwara, Jamai and Mohkhed blocks whereas the Coal bearing lower Gondwanas in parts of Jamai, Parasia and Jamai blocks. The upper Gondwanas occupy parts of Harrai and Tamia blocks. Ground water occurs under phreatic and semi-confined to confined conditions. Alluvium, weathered granites/gneisses, lower Gondwana sandstones, weathered, fractured and jointed massive basalts and vesicular basalts form the major phreatic aquifers; and weathered, fractured granites are noticed as main water-bearing zones at deeper levels.

**TANDSI UG MINE,  
KANHAN AREA**

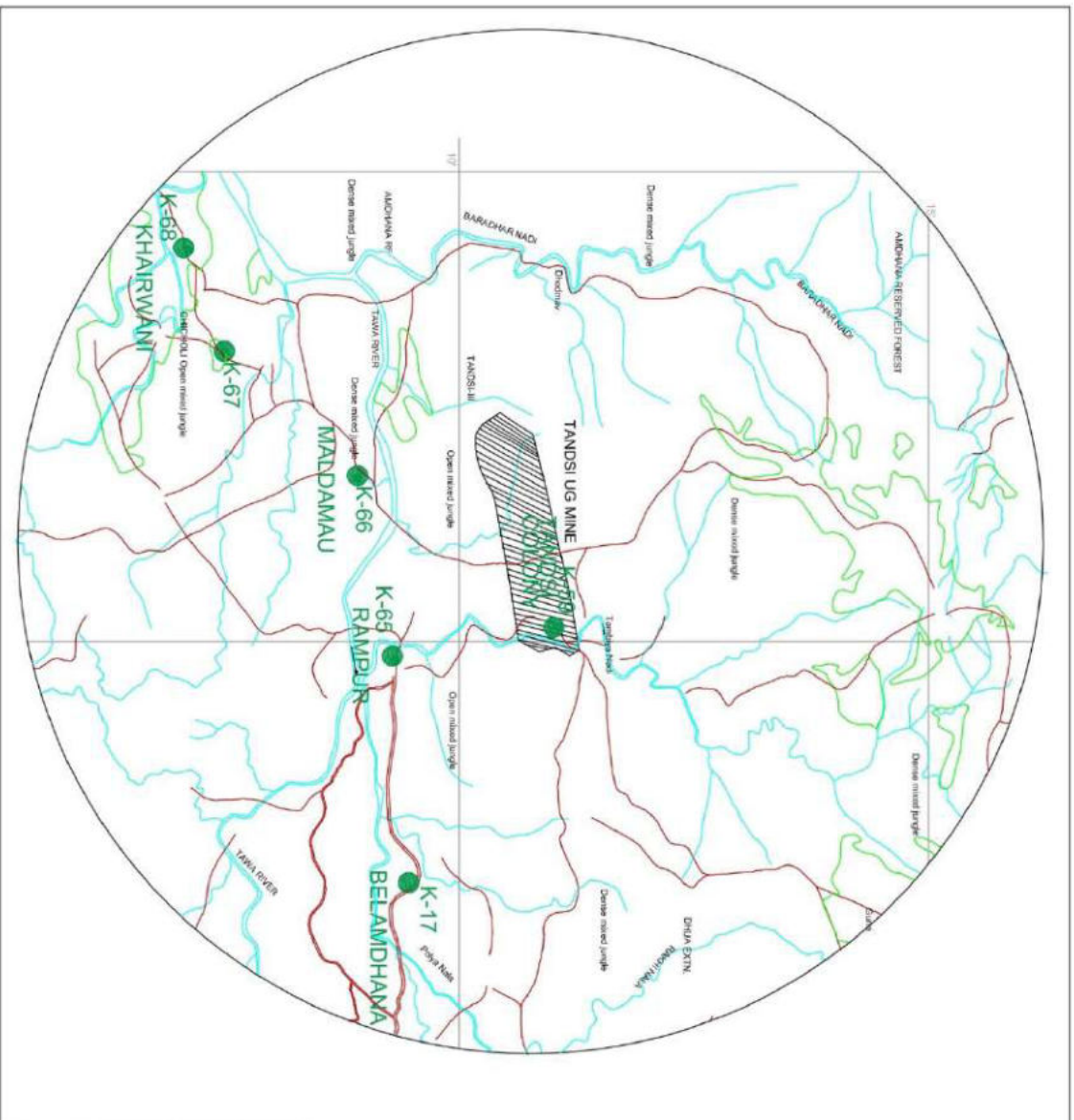
**WESTERN COALFIELDS LTD.**

**PERIOD - NOV-DEC 2021 (POST-MONSOON)  
& JAN-FEB -2022 (WINTER)**

**Table-IXA: Ground water level monitoring data from dugwells in buffer zone of Tandsi UG Mine, Kanhan Area,**  
**WCL**

Well No.	Name of village	Well location	Owner	Lat			Long			R.L.in m	Utility	Well dia (m)	Height of measuring point (m agl)	Well depth (m bmp)	Depth to Water(BGL-Below Ground Level), m		Formation Tapped
				Deg	Min	Sec	Deg	Min	Sec						NOV-DEC 2021	JAN-FEB 2022	
K 17	BELAMDHANA	In the compound of premlal yadubansi	Premalal Yadubansi	22	9	30.71	78	22	19.01	665	Domestic	4.60	0.80	9.50	7.20	6.00	Talchir
K 59	TANDSI COLONY	Opp. Tel. Exch. lowl----	WCL	22	9	45.11	78	20	20.15	711	Domestic	4.10	0.60	3.10	0.80	1.10	Talchir
K 65	RAMPUR	Near house of parteh sir opp. Govt LP school	Pvt	22	9	26.78	78	19	52.41	716	Domestic	2.30	0.80	6.20	3.05	2.53	Talchir
K 66	MALDAMAU	Out side village on Junction of village Road and main road	Pvt	22	9	3.51	78	17	53.98	738	D/I	4.30	0.40	11.80	1.60	3.45	Talchir
K 67	CHICHOLI	On Distt boundary of Chindwara & Betul Wireless Tower	Pvt	22	7	43.1667	78	16	32.438	735	Irrigation	4.80	0.00	11.20	5.80	6.25	Talchir
K 68	KHAIRWANI	West of village on Sarni Road old well opp Ramnath Yadav	Pvt	22	7	21.0397	78	15	26.553	745	Irrigation	4.70	0.45	6.80	0.40	1.60	Talchir

Note :- m.bmp - metre below measuring point, m.agl -metre above ground level, m.bgl - metre below ground level , GP - Gram Panchyat



INDEX	
	ROAD
	RIVER/NALA
	OBSERVATION WELLS LOCATIONS
	FOREST
	MINE BOUNDARY

FIGURE IX

# Western Coalfields Limited.

GROUND WATER MONITORING REPORT FOR TANDSI UG MINE

PLAN SHOWING LOCATION OF WELL MONITORING STATIONS IN BUFFER ZONE OF TANDSI UG MINE, KANHAN AREA, WCL

Prepared by

M/s. Anacon Laboratories Pvt. Ltd.

Scale:- Not to Scale

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# **ENVIRONMENT STATEMENT**

**APRIL 2021 - MARCH 2022**



**SEPTEMBER 2022**

## **AREA HOSPITAL**

**PATHAKHERA AREA**

## **WESTERN COALFIELDS LTD.**



***ENVIRONMENT STATEMENT***

***FOR THE YEAR***

***APRIL 2021 – MARCH 2022***

**AREA HOSPITAL,  
PATHAKHERA AREA,  
WCL**

<b>I</b>	<b>INTRODUCTION</b>
<b>1.1</b>	<b>GENESIS</b>
<b>1.2</b>	<b>NEED OF ENVIRONMENTAL STATEMENT</b>
<b>II</b>	<b>SALIENT FEATURES OF THE PROJECT</b>
<b>III</b>	<b>BASIS FOR ENVIRONMENTAL STATEMENT</b>
<b>3.1</b>	<b>BIOMEDICAL WASTE MANAGEMENT</b>
<b>IV</b>	<b>FORM-V</b>
	Part-A
	Part-B
	Part-C
	Part-D
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	Part-F
	Part-G
	Part-H
	Part-I
	Annexure
<b>A1</b>	<b>BIO MEDICAL WASTE RETURN 2020</b>

## CHAPTER-I 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
- iii) Those who require authorization under Hazardous wastes (Management & Handling) Rules, 1989.

Vide Gazette Notification No. G.S.R.3289(E) dated 13th March, 1992, the Ministry of Environment & Forests, Govt. of India have made provisions for Mandatory Environmental Statement as follows :

“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 30<sup>th</sup> September every year beginning 1993”.

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.

**CHAPTER-II**  
**SALIENT FEATURES OF THE PROJECT**

1.	Name of the Project	Area Hospital
2.	Location	WCL, Pathakhera Area, Distt : Baitul State : Madhya Pradesh
3.	Bed capacity	60 Beds
4.	Water Consumption	23.52 KLD

**CHAPTER – III****BASIS FOR ENVIRONMENTAL STATEMENT****3.1 Water Quality**

Water is being used in Domestic purpose and Flushing purpose. Adequate facilities for treatment of used water from hospital has been made. There are provision of septic tank & soak pit arrangement to deal with domestic effluent, This is 02 stage Sewage treatment as per IS 2470 part I&II - 1985. The preliminary treatment is being given through septic tank and the secondary treatment is being given through soil absorption system. Hence, this is the standard practice and we are following the system. The arrangement does not allow any sewage to get mixed into any natural water course without treatment.

**3.2. Air Quality**

No Activity in the Hospital Services made any kind of air emission.

**CHAPTER – IV****FORM – V  
PART - “A”**

Sl. No.	Particulars	
1.	Name and address of the Unit	<b>AREA HOSPITAL</b>
(a)	Place	WCL, Pathakhera Area
(b)	District	Betul
(c)	Telephone No.	6263751057
2	Industry category	Category “Orange”
3	Bed Capacity	60 Bed
4	Year of Establishment	1979
5	Date of Last Report Submission	30/09/2021
6	Details of Authorization	Consent No. AWHB-93639 for Air , Water Hazardous & BMW CTO Valid up to 17.06.2026

**PART - “B”****WATER & RAW MATERIALS CONSUMPTION  
Table – (a) Water consumption on Usage Pattern**

Sl.No.	Particulars	
1.	Water Consumption (kl/day) :	
(a)	<b>Health care Service Unit :</b>	
(i)	Flushing	8.200 KLD
(ii)	Fire fighting	-
(b)	<b>Domestic Purpose</b>	
(i)	Domestic Use	12.500 KLD
(ii)	Green Belt / Plantation	2.800 KLD
	<b>TOTAL</b>	<b>23.520 KLD</b>

**Table – (b) WATER CONSUMPTION AGAINST PRODUCTION (INCLUDING RECYCLED)**

Name of the Product	Water Consumption per unit of product (including recycled)	
	During the Financial Year 2020-21	During the Financial Year 2021-22
Not Applicable as it not a Production Unit, but a <b>Health care Service Unit</b>	-	-

**RAW MATERIAL CONSUMPTION AGAINST PRODUCTION**

Name of the Raw Material	Name of the Product	Consumption of Raw Material per Unit of Product	
		During the Financial Year 2020-21	During the Financial Year 2021-22
-	Not Applicable as it not a Production Unit, but a <b>Health care Service Unit</b>	-	-



**PART - "C"**  
**POLLUTION GENERATED**

(Parameters specified in the consent issued)

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(a)	Water	17 KLD	Adequate Sewage Treatment has been Provided.
(b)	Air	N.A	No Activity in the Hospital Services made any kind of air emission.

**PART - "D-1"**  
**HAZARDOUS WASTE**

(As specified under Hazardous Waste/ Management & Handling Rules, 2016)

1.	Hazardous Waste	Total Quantity (kg)	
		<b>During the Financial Year 2020-21</b>	<b>During the Financial Year 2021-22</b>
(a)	From Process	Nil	06 litre

(b)	From Pollution Control Facilities	Nil	Nil
-----	-----------------------------------	-----	-----

**PART - "D-2"**  
**BIO MEDICAL WASTE**

(As specified under Bio Medical Waste (Management & Handling) Rules, 2016)

1.	Bio Medical Waste Category	Total Quantity (kg)		Remark
		During the Previous Financial Year 2020	During the Current Financial Year 2021	
(a)	Yellow Category	3009.93 kg	3028.20 kg	All category of Bio medical waste has been handed over to Authorized BMW Operator. i.e. M/s. Environment Protection Corporation
(b)	Red Category	1231.34 kg	648.90 kg	
(c)	White	492.53 kg	259.56 kg	
(d)	Blue Category	738.80 kg	389.34 kg	

**PART - "E"**  
**SOLID WASTES**

		Total Quantity	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facility	Nil	Nil
(c)	(i) Quantity recycled or re-utilized within the unit dumped on quarry void	Nil	Nil
	(ii) Sold	Nil	Nil
	(iii) Disposed (as external dumps)	Nil	Nil

**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.**

Not Applicable As No Hazardous waste has been generated from Hospital

**PART - "G"****IMPACTS OF POLLUTION CONTROL MEASURES**

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

- G.1** Energy Efficient LED lights have been installed in Hospital.
- G.2** Adequate facilities for treatment of used water from Hospital has been made. There are provision of septic tank & soak pit arrangement to deal with domestic effluent, This is 02 stage Sewage treatment as per IS 2470 part I&II - 1985. The preliminary treatment is being given through septic tank and the secondary treatment is being given through soil absorption system. Hence, this is the standard practice and we are following the system. The arrangement does not allow any sewage to get mixed into any natural water course without treatment.
- G.3** NOISE POLLUTION CONTROL: Strict implémentation of The Noise Pollution (Regulation and Control) Rules, 2000 has been carried out.

**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:

S.No	ACCOUNT HEAD	CURRENT YEAR	PROGRESSIVE
<b>A</b>	<b><u>ENVIRONMENT CAPITAL HEAD</u></b>		
1	Air Pollution Control	Nil	Nil
2	Water Pollution Control	Nil	Rs 2.50 Lacs (up to 31.03.2022)
<b>B</b>	<b><u>ENVIRONMENT REVENUE HEAD</u></b>		
1	Garden Maintenance	Rs. 1.45 Lacs	Rs. 2.85 Lacs ( up to 31.03. 2022)
2	Legal Expenses consent fees Paid	Nil	Rs4.40 Lacs (up to 17/06/2026)

**H.2 Future Programme**

- Regular pollution control measures will continue to be followed.

Sl. No.	Particulars	Amount (Rs)
1.	Air pollution control measure	-
2.	Water Pollution control measures	-
3.	Consent Fees	As Per MPPCB Rate Notification
7	Any Other Expenditure	Nil

**PART - "I"****MISCELLANEOUS****ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION  
& ABATEMENT OF POLLUTION.****AUDITOR'S COMMENT**

1. All Provisions of Biomedical Waste (Management & Handling) Rules 2016 shall be followed.

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# **ENVIRONMENT STATEMENT**

**APRIL 2021 - MARCH 2022**



**SEPTEMBER 2022**

## **CHATTARPUR I & II UG MINE**

**PATHAKHEDA AREA**

**WESTERN COALFIELDS LTD.**

# ***ENVIRONMENT STATEMENT***

***FOR THE YEAR***

***APRIL 2021 – MARCH 2022***

## **CHHATARPUR - I & II U/G MINE, WCL**

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## **CHAPTER-I 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 loses 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.

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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.

### **WCL, PATHAKHERA AREA**

**CHAPTER-II - SALIENT FEATURES OF THE PROJECT**

1.	Name of the Project	<b>Chhatarpur I &amp; II UG Mine</b>
2.	Location	WCL, Pathakhera Area, Distt : Betul State : Madhya Pradesh
3.	Production	0.405 MTPA
4.	Water Consumption	250 KLD
5.	Raw Material Consumption :	
(a)	Explosive	1,99,650 kg
(b)	Detonator	3,80,777 Nos.
(c)	Electricity	72,15,400 kWh

**WCL, PATHAKHERA AREA**

## **CHAPTER – III**

### **BASIS FOR ENVIRONMENTAL STATEMENT**

#### **3.1 WATER QUALITY**

Water is not directly used during mining for coal production except for dust suppression and firefighting. It percolates into working area during mining operation. However, water is consumed for other purposes; mainly for domestic supply, dust suppression, green belt development. Part “B” of the proforma contains detailed break-up of water consumption. 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. Chhatarpur - I & II UG does not contain HEMM, Hence no Effluent from Workshop is being generated.

#### **3.2. AIR QUALITY**

Ambient air quality is monitored to study the level of air pollution.

#### **3.3 MINING**

Mining activity produces less quantity of any hazardous waste; and it is shown in Part “D” of Form – V.

#### **3.4 POLLUTION CONTROL METHODS**

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

Dust suppression by water spray;

Asphalted Road to prevent fugitive emission

Afforestation;

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.

### **WCL, PATHAKHERA AREA**

**A. Environment Statement (Form-V) Uploaded in XGN on 27/09/2022 18:02:45 from IP No: 202.43.120.237.**

**B. 23926-Chattarpur I & II U.G Coal Mine Project(825.338 Hect.),Betul accepts the LEGAL responsibility and undertakes that the furnished information is CORRECT & ACCURATE.**

**CHAPTER – IV**

**FORM – V**

**PART - “A”**

Sl. No.	Particulars	
1.	Name and address of the Mine	<b>Chhatarpur I &amp; II UG Mine</b>
(a)	Place	WCL, Pathakhera Area
(b)	District	Betul
(c)	Telephone No.	07146-290026
(d)	FAX No.	07146-270566
2.	Date of last Environmental Statement Report submitted	23 <sup>rd</sup> September, 2021
3.	Industry category Primary-(STC Code) Secondary-(STC Code)	Category “A”
4	Approved Production Capacity	1.0 MTY
5.	Year of Establishment	1992

**PART - “B”**

**WATER & RAW MATERIALS CONSUMPTION**  
**Table – (a) Water consumption on Usage Pattern**

Sl.No.	Particulars	
1.	Water Consumption (kl/day) :	
(a)	<b>Process – Industrial :</b>	
(i)	Dust suppression	160 KLD
(ii)	Fire fighting	
(iii)	Workshop and others	
(iv)	CHP Beneficiation	
(b)	<b>Domestic Purpose</b>	
(i)	Domestic Use (from other source)	40 KLD
(ii)	Plantation	50 KLD
	<b>TOTAL</b>	<b>250 KLD</b>

**WCL, PATHAKHERA AREA**

**Table – (b)  
WATER CONSUMPTION AGAINST PRODUCTION (INCLUDING RECYCLED)**

Name of the Product	Water Consumption per unit of product (including recycled)	
	During the Financial Year 2020-21	During the Financial Year 2021-22
COAL	554.317 l/t of coal produced	188.27166 l/t of coal produced

**RAW MATERIAL CONSUMPTION AGAINST PRODUCTION (INCLUDING RECYCLED)**

Name of the Raw Material	Name of the Product	Consumption of Raw Material per Unit of Product	
		During the Financial Year 2020-21	During the Financial Year 2021-22
<b>Explosive</b>	<b>Coal</b>	0.5000 kg/t	0.4929 kg/t
<b>Detonator</b>	<b>Coal</b>	0.967 No/t	0.940 No/t
<b>Electricity (Industrial)</b>	<b>Coal</b>	18.29 kWh/t	17.81 kWh/t

**PART - "C"**  
**POLLUTION GENERATED**  
(Parameters specified in the consent issued)

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(a)	Water	See Annexure-A2	Values of parameters are within permissible limits.
(b)	Air	See Annexure-A1	Levels of air pollutants are within permissible limits.

**WCL, PATHAKHERA AREA**

**PART - "D"**

**HAZARDOUS WASTE**

(As specified under Hazardous Waste/ Management & Handling Rules, 1989)

1.	Hazardous Waste	Total Quantity (kg)	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facilities	Nil	Nil

**PART - "E"**

**SOLID WASTES**

		Total Quantity	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facility	Nil	Nil
(c)	(i) Quantity recycled or re-utilised within the unit dumped on quarry void	Nil	Nil
	(ii) Sold	Nil	Nil
	(iii) Disposed (as external dumps)	Nil	Nil

**(It is an underground mine)**

**WCL, PATHAKHERA AREA**

**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:

- i. Oil and grease is disposed off through authorized/registered recyclers/re-refiner if any.
- ii. Total quantity of solid wastes generated in the case of underground mine is very less, almost negligible.

**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 implemented to keep them within permissible limits.

**G.1 SOURCES OF AIR POLLUTION**

The likely sources of air pollution are as under:

- Loading and transportation of Coal;
- Coal Stockyard

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

Air Pollution Control Measures :

- Unit shall maintain pollution control facilities properly to avoid discharge of Pollutants in the environment.
- Separate officer should be posted at unit level to look after the matters related to environment.

**G.1.2 Implementation Status**

- This is an underground mine. All the mining activities i.e. Drilling, Blasting, Loading, unloading, transportation of coal from district to surface has been carried out in the closed condition w.r.t. an open cast mine where all the activities are being carried out in exposed circumstances.
- Pollution Control facilities established and maintained properly.
- Separate Environment Management Cell has been established.

**WCL, PATHAKHERA AREA**

- Spray points have been provided in conveyor belt to prevent emission due to transportation.
- CHHATARPUR - I & II UG mine does not contain Coal Crushing facility which automatically prevent addition of pollution load to atmosphere.
- All the internal roads have been black topped and regularly maintained to prevent fugitive emission.
- Total **29,231 Nos** of trees have been planted in the Mine Campus to check the emission and leading towards compensate the carbon emission through natural process.

## **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**

Mine water is retained in the mine sump / Sedimentation Tank of 1.89 MLD capacity before discharged to nearby surface water / nullah or used internally.

Water Treatment Plant is provided with 1.7 MGD Capacity.

## **G.3 NOISE POLLUTION**

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

The sources of noise pollution are as under:

- Drilling Operation;
- Ventilation System (Fan);

### **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 green belt around Workshop, CHP and other sensitive areas.

### **G.3.3 Implementation Status**

Mining equipment are kept in good condition to reduce noise level.

Refer Annexure-A3 for Noise level monitoring reports.

## **WCL, PATHAKHERA AREA**



**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	Heads	Chhatarpur – I & II	
		Current Year 2021-22	Progressive
<b>A</b>	<b>Capital Account Head</b>		
1	Reclamation	Nil	-----
2	Air Pollution control	Rs. 19.36 Lakhs (RCC Road)	Rs 87.86 Lakhs (Up to 31.03. 2022)
3	Water pollution control	Rs. 27.13 Lakhs	Rs 38.23 Lakhs (Up to 31.03. 2022)
4	CAAQMS Charges	Rs. 22.94 Lakhs	Rs. 22.94 Lakhs (upto 31.03. 2022)
5	Other (Water Meter)	Nil	Rs 0.89 Lakhs (Up to 31.03. 2022)
<b>B</b>	<b>Revenue Account Head</b>		
1	Afforestation	Nil	From 1997-98 Rs 5.91 Lakhs (upto 31.03. 2022)
2	Monitoring (Air + Water +Noise)	Rs. 41.07 Lakhs	From 01.04.2010 Rs 221.26 Lakhs (upto 31.03. 2022)
3	Ground Water Abstraction Charges / Water Cess	Rs. 16.64 Lakhs	From 01.04.2010 Rs 19.47 Lakhs (upto 31.03. 2022)
5	Consent renewal fees, Air & Water)	Rs. 33.04 Lakhs	From 31.03.2011 Rs. 121.12 Lakhs upto 31.10.2024
6	Repair of Road	Rs. 61.24 Lakhs	Rs. 193.53 Lakhs Upto 31.03.2022
7	Ground Water Monitoring Charges	Rs. 0.60 Lakhs	From 01.04.2015 Rs. 14.40 Lakhs Upto 31.03.2022
8	Environment statement/ Audit.	Nil	From 01.04.2010 Rs 8,25,418.00 Upto 31.03.2022
9	Installation of Dust Suppression System	Rs. 18.82 Lakhs	From 01.04.2021 Rs. 18.82 Lakhs Upto 31.03.2022

**WCL, PATHAKHERA AREA**

## **H.2 Future Programme**

Regular pollution control measures will continue to be followed.

Sl. No.	Particulars	Amount (Rs)
1.	Air pollution control measure	Rs 6,61,000
2.	Water Cess	-
3.	Consent Fees	As per MPPCB Rate Notification
4.	Air, Water, Noise Quality Monitoring, etc.	Rs 30,00,000.00
5.	Plantation	-
7	Any Other Expenditure if any	Nil

### **PART - "I"**

#### **MISCELLANEOUS**

**ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION & ABATEMENT OF POLLUTION.**

#### **AUDITOR'S COMMENT**

1. Good Housekeeping Practices shall be adopted.
2. Desilting of Siltation Pond and Garland Drain shall be carried out.
3. Installation of Dust Suppression Measures shall be carried out.

#### **WCL, PATHAKHERA AREA**

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holding an official position in the CIL / Government

## ENVIRONMENTAL MONITORING REPORT

# CHATTARPUR I & II UG

PATHAKHERA AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



OCTOBER 2021


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
---	--------------------	---

TEST REPORT NO.	RIN/TR/OCT-21/79	DATE OF ISSUE	25-11-21
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	PATHARKHERA	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	CHATTARPUR I & II UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SUBSTATION- CHATTARPUR I UG   PKCUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
04-10-21	05-10-21	270	188	39	14	10	Clear/Lightbreeze
16-10-21	17-10-21	261	171	46	13	BDL	Cloudy/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

SAM OFFICE   PKCUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
04-10-21	05-10-21	258	165	34	13	BDL	Clear/Lightbreeze
16-10-21	17-10-21	270	178	42	15	11	Cloudy/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

SUBSTATION-CHATTARPUR II UG   PKCUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
04-10-21	05-10-21	251	158	35	14	11	Clear/Lightbreeze
16-10-21	17-10-21	278	170	47	12	BDL	Cloudy/Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

CHATTARPUR VILLAGE   PKCUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
04-10-21	05-10-21	112	81	25	10	BDL	Clear/Lightbreeze
16-10-21	17-10-21	120	92	22	9	BDL	Cloudy/Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*labhandone*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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- 2 This report refers to the values related to the items tested.

SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE-I UG: PKCUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
*	*	*	*	*
24-10-21	8.42	26	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

MINE WATER DISCHARGE II UG: PKCUW2				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
*	*	*	*	*
24-10-21	8.11	32	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by


Deepanshu sahu  
Authorised Signatory

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- 2 This report refers to the values related to the items tested.

**NOISE LEVEL MONITORING DATA**

FAN HOUSE-I UG:		PKCUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	05-10-21	71.7	71.5
OCT'21	19-10-21	69.6	68.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

FAN HOUSE-II UG:		PKCUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	05-10-21	72.5	72.3
OCT'21	19-10-21	70.2	69.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY:		PKCUN3	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
OCT'21	05-10-21	44.6	43.6
OCT'21	19-10-21	38.7	35.3
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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# **ENVIRONMENT STATEMENT**

**APRIL 2021 - MARCH 2022**



**SEPTEMBER 2022**

## **REGIONAL WORKSHOP**

**PATHAKHERA AREA**

**WESTERN COALFIELDS LTD.**

***ENVIRONMENT STATEMENT***

***FOR THE YEAR***

***APRIL 2021 – MARCH 2022***

**REGIONAL WORKSHOP,  
WCL**



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- I INTRODUCTION**
  - 1.1 Genesis**
  - 1.2 Need of Environmental Statement**
- II SALIENT FEATURES OF THE PROJECT**
- III BASIS FOR ENVIRONMENTAL STATEMENT**
  - 3.1 Water Quality**
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  - 3.3 Pollution Control Methods**
- IV FORM-V**
  - Part-A**
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  - Part-G**
  - Part-H**
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## CHAPTER-I 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
- iii) Those who require authorization under Hazardous wastes (Management & Handling) Rules, 1989.

Vide Gazette Notification No. G.S.R.3289(E) dated 13th March, 1992, the Ministry of Environment & Forests, Govt. of India have made provisions for Mandatory Environmental Statement as follows :

“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”.

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.

**CHAPTER-II**  
**SALIENT FEATURES OF THE PROJECT**

1.	Name of the Project	REGIONAL WORKSHOP
2.	Location	WCL, Pathakhera Area, Distt : Baitul State : Madhya Pradesh
3.	Production	
(a)	Roof Bolt	1,32,400 Nos
(b)	Bearing Plate	1,33,450 Nos
4.	Water Consumption	8.28 KLD
5.	Raw Material Consumption :	
(a)	TMT Bar (20mm dia.)	,6,75,984 kg
(b)	M.S. PLATE (8 mm thickness)	2,42,809 kg
(c)	Electricity	12,08,000 kWh
6.	Consent & Authorization Details	
(a)	Consent to Operate under Air & Water Act	Consent To Operate No.: AW-58275, dated 06/10/2018 Valid upto : 24/09/2023
(b)	Consent to Operate under Hazardous Waste Rules	Consent To Operate No.: H-57240, dated 25/08/2018 Valid upto : 10/07/2023

**CHAPTER – III****BASIS FOR ENVIRONMENTAL STATEMENT****3.1 Water Quality**

Water is not directly used during production. Hence, No Effluent has been generated due to Production. Water is being used in Domestic purpose and Flushing purpose. Adequate facilities for treatment of used water from RWS has been made. There are provision of septic tank & soak pit arrangement to deal with domestic effluent. This is 02 stage Sewage treatment as per IS 2470 part I&II - 1985. The preliminary treatment is being given through septic tank and the secondary treatment is being given through soil absorption system. Hence, this is the standard practice and we are following the system. The arrangement does not allow any sewage to get mixed into any natural water course without treatment.

**3.2. Air Quality**

The only Air Pollution source is the fugitive emission.

Following are the Pollution Control Measures:

1. Adequate greenbelt has been developed to control the fugitive emission.
2. Asphaltting of Road has been carried out to check the fugitive emission.
3. All the Operations have been carried out under the properly covered industrial shed.

**3.3 Hazardous Waste:**

Welding Machine produces very less quantity of any hazardous waste i.e. Burnt Oil; and it is shown in Part "D" of Form – V.

## CHAPTER – IV

FORM – V  
PART - “A”

Sl. No.	Particulars	
1.	Name and address of the Unit	<b>Regional Workshop</b>
(a)	Place	WCL, Pathakheda Area
(b)	District	Baitul
(c)	Telephone No.	6263751057
2	Industry category Secondary-(STC Code)	Small Scale Industry As the Capital Investment is below Rs. 10 Crore
3	Year of Establishment	1987
4	Date of last report Submission	30/09/2021

## PART - “B”

WATER & RAW MATERIALS CONSUMPTION  
Table – (a) Water consumption on Usage Pattern

Sl.No.	Particulars	
1.	Water Consumption (kl/day) :	
(a)	<b>Operation – Industrial :</b>	
(ii)	Fire fighting	-
(b)	<b>Domestic Purpose</b>	
(i)	Domestic Use	4.89 KLD
(ii)	Flushing	2.39 KLD
(iii)	Green Belt / Plantation	1.0 KLD
	<b>TOTAL</b>	<b>8.28 KLD</b>

**Table – (b) WATER CONSUMPTION AGAINST PRODUCTION  
(INCLUDING RECYCLED)**

Name of the Product	Water Consumption per unit of product (including recycled)	
	During the Financial Year 2020-21	During the Financial Year 2021-22
Roof Bolt	Nil	Nil
Bearing Plate	Nil	Nil

**RAW MATERIAL CONSUMPTION AGAINST PRODUCTION**

Name of the Raw Material	Name of the Product	Consumption of Raw Material per Unit of Product	
		During the Financial Year 2020-21	During the Financial Year 2021-22
TMT Bar (20mm dia.)	Roof Bolt	5.08 kg / Piece	5.10 kg / Piece
M.S. PLATE (8 mm thickness)	Bearing Plate	1.80 kg / Piece	1.82 kg / Piece

**PART - "C"**  
**POLLUTION GENERATED**

(Parameters specified in the consent issued)

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(a)	Water (Domestic Sewage)	7.038 KLD	Adequate Sewage Treatment has been Provided.
(b)	Air	N.A	Only Fugitive Emission.

**PART - "D"**  
**HAZARDOUS WASTE**

(As specified under Hazardous Waste/ Management & Handling Rules, 1989)

1.	Hazardous Waste (Burnt Oil)	Total Quantity (kg)	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Operation of Welding Machine	90 Liters	80 Liters
(b)	From Pollution Control Facilities	Nil	Nil



**PART - "E"**  
**SOLID WASTES**

		Total Quantity	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Operation	Nil	Nil
(b)	From Pollution Control Facility	Nil	Nil
(c)	(i) Quantity recycled or re-utilized within the unit dumped on quarry void	Nil	Nil
	(ii) Sold	Nil	Nil
	(iii) Disposed (as external dumps)	Nil	Nil

**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:

- (i) Used Oil is disposed off through authorized/registered recyclers/re-refiner if any.
- (ii) Total quantity of solid wastes generated in the case of Regional Workshop is negligible.

**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 are as under:

**G.0** In order to carry out 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:

- Loading and transportation of Products ;

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

For control of air pollution, measures suggested are:

1. Adequate greenbelt shall be developed to control the fugitive emission.
2. Asphaltting of Road shall be carried out to check the fugitive emission.
3. All the Operations shall be carried out under the properly covered industrial shed.

**G.1.2 Implementation Status**

1. Adequate greenbelt has been developed to control the fugitive emission.
2. Asphaltting of Road has been carried out to check the fugitive emission.
3. All the Operations have been carried out under the properly covered industrial shed.
- 4.

**G.2 WATER POLLUTION****G.2.1 Sources of Water Pollution**

Water is not directly used during production. Hence, No Effluent has been generated due to Production. Water is being used in Domestic purpose and Flushing purpose.

**G.2.2 Water Pollution Control Measures**

Adequate facilities for treatment of used water from RWS has been made. There are provision of septic tank & soak pit arrangement to deal with domestic effluent. This is 02 stage Sewage treatment as per IS 2470 part I&II - 1985. The preliminary treatment is being given through septic tank and the secondary treatment is being given through soil absorption system. Hence, this is the standard practice and we are following the system. The arrangement does not allow any sewage to get mixed into any natural water course without treatment.

**G.2.3 Implementation Status**

Adequate facilities for treatment of used water from RWS has been made. There are provision of septic tank & soak pit arrangement to deal with domestic effluent. This is 02 stage Sewage treatment as per IS 2470 part I&II - 1985. The preliminary treatment is being given through septic tank and the secondary treatment is being given through soil absorption system. Hence, this is the standard practice and we are following the system. The arrangement does not allow any sewage to get mixed into any natural water course without treatment.

**G.3 NOISE POLLUTION****G.3.1 Sources of Noise Pollution**

The sources of noise pollution are as under:

- Drilling Operation;

**G.3.2 Noise Pollution Control Measures suggested**

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

- Proper maintenance of equipments so as to keep noise level below 75 dB(A);
- Development of green belt around Workshop.
- Provision of PPEs like Ear Plug

**G.3.3 Implementation Status**

- Proper maintenance of equipments have been carried out so as to keep noise level below 75 dB(A);
- Development of green belt around Workshop.
- PPEs like Ear Plug have been provided to Employees, wherever required.

**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:

S.No	ACCOUNT HEAD	CURRENT YEAR	PROGRESSIVE
<b>A</b>	<b>ENVIRONMENT CAPITAL HEAD</b>		
1	Air Pollution Control	Nil	Nil
2	Water Pollution Control	Nil	Rs 2.50 Lacs (up to 31.03.2022)
<b>B</b>	<b>ENVIRONMENT REVENUE HEAD</b>		
1	Green Belt Development	Nil	Rs. 1.45 Lacs ( up to 31.03.2022)
2	Legal Expenses consent fees Paid	Nil	Rs 1.07 Lacs (up to 31-08-2022)
3	Repair of road	Nil	From 2011-12 Rs 1.21 Lacs (Up to 31.03.2022)

**H.2 Future Programme**

- Regular pollution control measures will continue to be followed.

Sl. No.	Particulars	Amount (Rs)
1.	Air pollution control measure	-
2.	Water Pollution control measures	-
3.	Consent Fees	As Per MPPCB Rate Notification
4	Any Other Expenditure	Nil

**PART - "I"****MISCELLANEOUS**

**ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION & ABATEMENT OF POLLUTION.**

**AUDITOR'S COMMENT**

1. Proper housekeeping shall be maintained.

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# **ENVIRONMENT STATEMENT**

**APRIL 2021 - MARCH 2022**



**SEPTEMBER 2022**

# **SHOBHAPUR UG MINE**

## **PATHAKHERA AREA**

## **WESTERN COALFIELDS LTD.**

***ENVIRONMENT STATEMENT***

***FOR THE YEAR***

***APRIL 2021 – MARCH 2022***

**SHOBHAPUR U/G MINE,  
WCL**

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## **CHAPTER-I 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
- iii) Those who require authorization under Hazardous wastes (Management & Handling) Rules, 1989.

**ENV. STATEMENT  
SHOBHAPUR UG**

Vide Gazette Notification No. G.S.R.3289(E) dated 13th March, 1992, the Ministry of Environment & Forests, Govt. of India have made provisions for Mandatory Environmental Statement as follows :

“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 authorisation 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”.

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.

**CHAPTER-II**  
**SALIENT FEATURES OF THE PROJECT**

1.	Name of the Project	Shobhapur UG Mine
2.	Location	WCL, Pathakhera Area, Distt : Baitul State : Madhya Pradesh
3.	Production	13,317 Te for FY 2021-22
4.	Water Consumption	74.000 KLD
5.	Raw Material Consumption :	
(a)	Explosive	5,180 kg
(b)	Detonator	13,532 Nos.
(c)	Electricity	10,51,000 kWh
6.	Environmental Clearance Details	EC Letter No:- J- 11015/ 236/2005/- IA. II(M) Date:- 04.10.2006

## **CHAPTER – III**

### **BASIS FOR ENVIRONMENTAL STATEMENT**

#### **3.1 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.

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.

#### **3.2. Air Quality**

Ambient air quality is monitored to study the level of air pollution.

#### **3.3 Mining**

Mining activity produces less quantity of any hazardous waste; and it is shown in Part “D” of Form – V.

#### **3.4 Pollution Control Methods**

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

- (i) Dust suppression by water spray;
- (ii) Afforestation;
- (iii) Water Settling

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.

**CHAPTER – IV**

**FORM – V**

**PART - “A”**

Sl. No.	Particulars	
1.	Name and address of the Mine	<b>Shobhapur UG Mine</b>
(a)	Place	WCL, Pathakhera Area
(b)	District	Baitul
(c)	Telephone No.	07146-270064, 270566
(d)	FAX No.	07146-270566
2	Industry category Primary-(STC Code) Secondary-(STC Code)	Category “A”
3	Approved Production Capacity	0.600 MTPA
4	Year of Establishment	1975
5	Date of last Environmental Statement Report submitted	23/09/2021

**PART - “B”**

**WATER & RAW MATERIALS CONSUMPTION**

**Table – (a) Water consumption on Usage Pattern**

Sl.No.	Particulars	
1.	Water Consumption (kl/day) :	
<b>(a)</b>	<b>Process – Industrial :</b>	
(i)	Dust suppression	58.000 KLD
(ii)	Fire fighting	-
(iii)	Workshop and others	-
(iv)	CHP Beneficiation	-
<b>(b)</b>	<b>Domestic Purpose</b>	
(i)	Domestic Use	11.000 KLD
(ii)	Green Belt / Plantation	5.000 KLD
	<b>TOTAL</b>	<b>74.000 KLD</b>

**Table – (b) WATER CONSUMPTION AGAINST PRODUCTION (INCLUDING RECYCLED)**

Name of the Product	Water Consumption per unit of product (including recycled)	
	During the Financial Year 2020-21	During the Financial Year 2021-22
COAL	147.134 l/t of coal produced	422.317 l/t of coal produced

**RAW MATERIAL CONSUMPTION**

Name of the Raw Material	Name of the Product	Consumption of Raw Material per Unit of Product	
		During the Financial Year 2020-21	During the Financial Year 2021-22
<b>Explosive</b>	<b>Coal</b>	0.3438 kg/t	0.3889 kg/t
<b>Detonator</b>	<b>Coal</b>	0.9210 No/t	1.0161 No/t
<b>Electricity (Industrial)</b>	<b>Coal</b>	18.91 kWh/t	78.92 kWh/t

**PART - "C"**

**POLLUTION GENERATED**

(Parameters specified in the consent issued)

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(a)	Water	See Annexure-A2	Values of parameters are within permissible limits.
(b)	Air	See Annexure-A1	Levels of air pollutants are within permissible limits.

**PART - "D"**

**HAZARDOUS WASTE**

(As specified under Hazardous Waste/ Management & Handling Rules, 1989)

1.	Hazardous Waste	Total Quantity (kg)	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facilities	Nil	Nil

**PART - "E"  
SOLID WASTES**

		Total Quantity	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facility	Nil	Nil
(c)	(i) Quantity recycled or re-utilised within the unit dumped on quarry void	Nil	Nil
	(ii) Sold	Nil	Nil
	(iii) Disposed (as external dumps)	Nil	Nil

**(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:

- (i) Oil and grease is disposed off through authorized/registered recyclers/re-refiner if any.
- (ii) Total quantity of solid wastes generated in the case of underground mine is very less, almost negligible.

**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;

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

For control of air pollution, measures suggested are:

- Water sprinkling should be done before drilling holes and on coal faces.
- Sprinkling of water on coal before transportation;
- Spraying of water on coal stocks.
- Regular cleaning of coal transportation road.
- Black topping of Roads

**G.1.2 Implementation Status**

- Water is sprinkled on coal faces before drilling and transportation and on coal stocks.
- Regular water sprinkling is done before drilling and on coal faces.
- 6 nos. fixed sprinklers have been provided to cover 210 m length of road and 2 nos. fixed sprinklers are proposed to be provided to cover 100 m length of road
- Coal Transport by belt conveyor directly to TPS, MPEB Sarni.

**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**

- Mine water is retained in the mine sump / Sedimentation Tank before discharged to nearby surface water / nullah or used internally.
- Water Treatment Plant (Sedimentation and Chlorination) is provided with 1.848 MGD Capacity.

**G.3 NOISE POLLUTION**

**G.3.1 Sources of Noise Pollution**

The sources of noise pollution are as under:

- Drilling Operation;
- Ventilation System (Fan);

**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 green belt around SAM Office , Workshop, CHP and other sensitive areas.

-

**G.3.3 Implementation Status**

- Mining equipment are kept in good condition to reduce noise level.
- Refer Annexure-A3 for 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:

<b>Sl. Particulars</b>	<b>Current Year (2021-22)</b>	<b>Progressive</b>
<b><u>CAPITAL HEAD</u></b>		
1. Reclamation	Nil	NIL
2. Air pollution	Nil	Rs 0.60 Lakhs (upto 31.03.2022)
3. Water pollution control	Nil	Rs 6.72 Lakhs (upto 31.03.2022)
4. Others (Water meter )	Nil	Rs. 0.53 Lakhs (upto 31.03.2022)
<b><u>REVENUE HEAD</u></b>		
1-Affore station	Nil	Rs. 0.30 Lakhs (upto 31.03.2022)
2- Legal expenses (consent fees)	Nil	Rs. 42.20 Lakhs (Upto 31.12.2022)
3- Ground Water Abstraction Charges Others / water cess	Nil	From 01.08.2009 Rs 1,95,126.00 (Upto 31.03.2022)
4 - Environment audit statement	Nil	From 2007-08 Rs 6,11,898.00 (Upto 31.03.22)
5. Air Water Noise, quality Monitoring	Rs. 36.55 Lakhs	From 2007-08 Rs 179.40 Lakhs (upto 31.03.22)
6. Ground Water Monitoring	Nil	From 2015-16 Rs. 6.84 Lakhs (upto 31.03.22)
6- Repair of roads	Nil	From 2011-12 Rs 16.44 Lakhs (upto 31.03.22)

## **H.2 Future Programme**

- Regular pollution control measures will continue to be followed.

Sl. No.	Particulars	Amount (Rs)
1.	Air pollution control measure	-
2.	Water Cess	-
3.	Consent Fees	As per MPPCB Rate Notification
4.	Air, Water, Noise Quality Monitoring, etc.	7,00,000.00
5.	Plantation	-
6.	Ground water Monitoring	76,000.00

### **PART - "I"**

#### **MISCELLANEOUS**

**ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION & ABATEMENT OF POLLUTION.**

#### **AUDITOR'S COMMENT**

Mine has been abandoned since 30/0/2021. Production stopped due to exhaustion of Extractable Coal Reserves.

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## ENVIRONMENTAL MONITORING REPORT

# SHOBHAPUR UG

PATHAKHERA AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MARCH 2022


### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR-22/81	DATE OF ISSUE	12.04.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	PATHARKHERA	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	SHOBHAPUR UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
04.03.2022	05.03.2022	260	169	33	13	BDL	Clear / Lightbreeze
20.03.2022	21.03.2022	277	187	38	15	11	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
04.03.2022	05.03.2022	274	187	36	15	11	Clear / Lightbreeze
20.03.2022	21.03.2022	289	171	32	13	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
04.03.2022	05.03.2022	116	70	24	9	BDL	Clear / Lightbreeze
20.03.2022	21.03.2022	133	88	29	8	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
04.03.2022	05.03.2022	109	73	29	8	BDL	Clear / Lightbreeze
20.03.2022	21.03.2022	123	84	33	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	



Analysed by



Deepanshu sahu  
Authorised Signatory

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- This report refers to the values related to the items tested.

**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		PKSUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
MARCH'22	05.03.2022	40.3	40.1
MARCH'22	21.03.2022	52.7	51.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(SHOBHAPUR):		PKSUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIHT TIME
MARCH'22	05.03.2022	42	40.7
MARCH'22	21.03.2022	44.6	43.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

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# **ENVIRONMENT STATEMENT**

**APRIL 2021 - MARCH 2022**



**SEPTEMBER 2022**

## **TAWA - II UG MINE**

**(PATHAKHEDA AREA)**

**WESTERN COALFIELDS LTD.**



***ENVIRONMENT STATEMENT***

***FOR THE YEAR***

***APRIL 2021 – MARCH 2022***

**TAWA-II UG MINE, WCL**

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## **CHAPTER-I 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
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**ENV. STATEMENT  
TAWA II U/G**

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“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”.

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.

**CHAPTER-II  
SALIENT FEATURES OF THE PROJECT**

1.	Name of the Project	Tawa II UG Mine
2.	Location	WCL, Pathakhera Area, Distt : Baitul State : Madhya Pradesh
3.	Production	3,52,806 Te for the year 2021-22
4.	Water Consumption	262 KLD
5.	Raw Material Consumption :	
(a)	Explosive	1,18,663 kg
(b)	Detonator	2,83,155 Nos.
(c)	Electricity	45,42,000 kWh
6.	Environmental Clearance Details	<ul style="list-style-type: none"><li>• EC Letter No:- J- 11015/53/2006/-IA. II(M) Date:- 02.08.2006</li><li>• EC Letter No:- J- 11015/53/2006/-IA. II(M) Date:- 15.01.2021</li></ul>

## **CHAPTER – III**

### **BASIS FOR ENVIRONMENTAL STATEMENT**

#### **3.1 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.

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.

#### **3.2. Air Quality**

Ambient air quality is monitored to study the level of air pollution.

#### **3.3 Mining**

Mining activity produces less quantity of any hazardous waste; and it is shown in Part “D” of Form – V.

#### **3.4 Pollution Control Methods**

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

- (i) Dust suppression by water spray;
- (ii) Afforestation;
- (iii) Water Settling

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.

## CHAPTER – IV

### FORM – V

#### PART - “A”

Sl. No.	Particulars	
1.	Name and address of the Mine	<b>Tawa II UG Mine</b>
(a)	Place	WCL, Pathakhera Area
(b)	District	Baitul
(c)	Telephone No.	07146-271363-271433
(d)	FAX No.	-
2	Industry category Primary-(STC Code) Secondary-(STC Code)	Category “A”
3	Approved Production Capacity	0.60 MTY
4	Year of Establishment	2006
5	Date of last Environmental Statement Report submitted	23 <sup>rd</sup> May, 2022

#### PART - “B”

### WATER & RAW MATERIALS CONSUMPTION

**Table – (a) Water consumption on Usage Pattern**

Sl.No.	Particulars	
1.	Water Consumption (kl/day) :	
<b>(a)</b>	<b>Process – Industrial :</b>	
(i)	Dust suppression	230 KLD
(ii)	Fire fighting	NIL
(iii)	Workshop and others	NIL
(iv)	Green Belt / Plantation	NIL
(v)	CHP Beneficiation	NIL
<b>(b)</b>	<b>Domestic Purpose</b>	
(i)	Domestic Use	30 KLD
(ii)	Plantation	2 KLD
	<b>TOTAL</b>	<b>262 KLD</b>

**Table – (b) WATER CONSUMPTION AGAINST PRODUCTION (INCLUDING RECYCLED)**

Name of the Product	Water Consumption per unit of product (including recycled)	
	During the Financial Year 2020-21	During the Financial Year 2021-22
COAL	372.708 l/t of coal produced	226.498 l/t of coal produced

**RAW MATERIAL CONSUMPTION AGAINST PRODUCTION**

Name of the Raw Material	Name of the Product	Consumption of Raw Material per Unit of Product	
		During the Financial Year 2020-21	During the Financial Year 2021-22
<b>Explosive</b>	<b>Coal</b>	0.5298 kg/t	0.3363 kg/t
<b>Detonator</b>	<b>Coal</b>	1.0597 No/t	0.8025 No/t
<b>Electricity (Industrial)</b>	<b>Coal</b>	14.5681 kWh/t	12.8739 kWh/t



**PART - "C"  
POLLUTION GENERATED**

(Parameters specified in the consent issued)

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(a)	Water	See Annexure-A2	Values of parameters are within permissible limits.
(b)	Air	See Annexure-A1	Levels of air pollutants are within permissible limits.

**PART - "D"  
HAZARDOUS WASTE**

(As specified under Hazardous Waste/ Management & Handling Rules, 1989)

1.	Hazardous Waste	Total Quantity (kg)	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facilities	Nil	Nil

**PART - "E"  
SOLID WASTES**

		Total Quantity	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facility	Nil	Nil
(c)	(i) Quantity recycled or re-utilised within the unit dumped on quarry void	Nil	Nil
	(ii) Sold	Nil	Nil
	(iii) Disposed (as external dumps)	Nil	Nil

**(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:

- (i) Oil and grease is disposed off through authorized/registered recyclers/re-refiner if any.
- (ii) Total quantity of solid wastes generated in the case of underground mine is very less, almost negligible.

**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;

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

For control of air pollution, measures suggested are:

- Water sprinkling should be done before drilling holes and on coal faces.
- Sprinkling of water on coal before transportation;
- Spraying of water on coal stocks.
- Regular cleaning of coal transportation road.
- Construction of RCC road to avoid fugitive emission
- Ventilation System (Fan);

**G.1.2 Implementation Status**

- Water is sprinkled on coal faces before drilling and transportation and on coal stocks.
- Regular water sprinkling is done before drilling and on coal faces.
- RCC ROAD constructed from Way Bridge to Bunker (length 220 m)
- Asphaltting of Approach road has been carried out (length 5.2 km)

**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**

- Mine water is retained in the mine sump / Sedimentation Tank and
- ADDITIONAL 5000 GPH PRESSURE FILTER has been installed in mine.
- Water Treatment Plant is provided with 1.7 MGD Capacity.

**G.3 NOISE POLLUTION**

**G.3.1 Sources of Noise Pollution**

The sources of noise pollution are as under:

- Drilling Operation;
- Ventilation System (Fan);

**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 green belt around Workshop, CHP and other sensitive areas.

**G.3.3 Implementation Status**

- Mining equipment are kept in good condition to reduce noise level.
- Refer Annexure-A3 for 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:

<b>CAPITAL:</b>			
	<b>ACCOUNT HEAD</b>	<b>CURRENT YEAR</b>	<b>PROGRESSIVE</b>
1	Reclamation (HEMM)	Nil	Nil
2	Air Pollution Control	Rs. 14.61 Lakhs	Rs 24.08 Lakhs Upto 31.03.2022
3	Water Pollution Control	Rs. 129.87 Lakhs	Rs. 139.87 Lakhs Up to 31.03. 2022
4	CAAQMS Charges	Rs. 22.94 Lakhs	Rs. 22.94 Lakhs (upto 31.03. 2022)
5	Other (WATER METER)	Nil	Rs. 19,026 /- Up to 31.03. 2022
<b>REVENUE:</b>			
1	Afforestation	Nil	Nil
2	Air, Water & Noise Monitoring	Rs. 12.19 Lakhs	From 2007-08 Rs 78.31 Lakhs (upto 31.03. 2022)
3	EIA / EMP Preparation	Rs. 139.83 Lakhs	From 2020-21 Rs 139.83 Lakhs (upto 31.03. 2022)
4	Legal Expenses consent fees	Rs. 20.80 Lakhs	Rs 84.04 Lakhs (upto 31.08.2024)
5	Ground Water Abstraction Charges	Rs. 7.15 Lakhs	From 2021-22 Rs 7.15 Lakhs (upto 31.03.2022)
6.	Environment Audit statement	Nil	From 2007-08 Rs. 4,52,439.00 (upto 31.03.2022)
7	Ground Water Monitoring Charges	Rs. 0.60 Lakhs	From 2015-16 Rs 6.55 Lakhs (upto 31.03.2022)
8	CAAQMS Charges	Rs. 22.94 Lakhs	From 2021-22 Rs. 22.94 Lakhs (upto 31.03.2022)
9	Road Repairing	Rs. 8.46 Lakhs	Rs. 50.05 Lakhs Upto 31.03.2022
10	Compensation paid for land acquisition	Nil	Rs. 3.81 Lakhs ( For Compensatory Afforestation ) Upto 31.03.2021

## **H.2 Future Programme**

- Regular pollution control measures will continue to be followed.

Sl. No.	Particulars	Amount (Rs)
1.	Air pollution control measure	7,00,000.00
2.	Water Cess	-
3.	Consent Fees	As per MPPCB Rate Notification
4.	Air, Water, Noise Quality Monitoring, etc.	23,00,000.00
5.	Water Pollution Control	-
6.	Any Other Expenditure	Nil

### **PART - "I"**

#### **MISCELLANEOUS**

**ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION & ABATEMENT OF POLLUTION.**

#### **AUDITOR'S COMMENT**

1. Unit shall maintain pollution control facilities properly to avoid discharge of Pollutants in the environment.
2. Dust Suppression mechanism shall be established in the mine.

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## ENVIRONMENTAL MONITORING REPORT

### TAWA-II UG

PATHAKHERA AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MARCH 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

### CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR-22/82	DATE OF ISSUE	12.04.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001(RA 2017)		
NAME OF AREA	PATHARKHERA	SAMPLING PLAN :	LQR 47
NAME OF PROJECT	TAWA-II UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD :	LSOP 4		

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.03.2022	06.03.2022	267	176	33	14	11	Clear / Calm
21.03.2022	22.03.2022	281	191	36	15	10	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.03.2022	06.03.2022	263	170	38	13	BDL	Clear / Calm
21.03.2022	22.03.2022	282	189	31	15	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.03.2022	06.03.2022	119	89	27	8	BDL	Clear / Calm
21.03.2022	22.03.2022	129	94	30	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.03.2022	06.03.2022	110	74	26	10	BDL	Clear / Calm
21.03.2022	22.03.2022	129	89	30	8	BDL	Clear / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

*batimbhume*

Analysed by

*Deepanshu*

Deepanshu sahu  
Authorised Signatory

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- 2 This report refers to the values related to the items tested.



SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: PKTUW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
05.03.2022	7.6	28	40	BDL
21.03.2022	7.71	34	44	BDL
STANDARDS FOR COAL	5.5 - 9.0	100	250	10



Analysed by


Deepanshu sahu  
Authorised Signatory

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- 2 This report refers to the values related to the items tested.

**NOISE LEVEL MONITORING DATA**

FAN HOUSE:		PKTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MARCH'22	05.03.2022	69.8	67.9
MARCH'22	21.03.2022	70.9	69.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

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# **ENVIRONMENT STATEMENT**

**APRIL 2021 - MARCH 2022**



**SEPTEMBER 2022**

## **TAWA UG MINE (PATHAKHERA AREA) WESTERN COALFIELDS LTD.**

# ENVIRONMENT STATEMENT

FOR THE YEAR

APRIL, 2021 – MARCH, 2022

## **TAWA U/G MINE, WCL**

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## **CHAPTER-I 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 loses 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
- iii) Those who require authorization under Hazardous wastes (Management & Handling) Rules, 1989.

**ENV. STATEMENT  
TAWA U/G**

Vide Gazette Notification No. G.S.R.3289(E) dated 13th March, 1992, the Ministry of Environment & Forests, Govt. of India have made provisions for Mandatory Environmental Statement as follows :

“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 authorisation 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”.

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.

**CHAPTER-II  
SALIENT FEATURES OF THE PROJECT**

1.	Name of the Project	Tawa UG Mine
2.	Location	WCL, Pathakhera Area, Distt : Baitul State : Madhya Pradesh
3.	Approved Production Capacity	0.80 MTPA
4.	Production in current FY	3,28,000 Te in FY 2021-22
5.	Water Consumption	140 KLD
6.	Raw Material Consumption :	
(a)	Explosive	1,64,695 kg
(b)	Detonator	3,72,731 Nos
(c)	Electricity	67,80,000 kWh
7.	Environmental Clearance Details	EC vide MoEF&CC Letter No. J-11015/30/89-IA.II(M) Dated 4 <sup>th</sup> Feb.94



**CHAPTER – III  
BASIS FOR ENVIRONMENTAL STATEMENT**

**3.1 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.

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.

**3.2. Air Quality**

Ambient air quality is monitored to study the level of air pollution.

**3.3 Mining**

Mining activity produces less quantity of any hazardous waste; and it is shown in Part “D” of Form – V.

**3.4 Pollution Control Methods**

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

- Dust suppression by water sprinkling;
- Afforestation;
- Transportation of Coal in tarpaulin covered vehicle
- Water settling

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.

**CHAPTER – IV**

**FORM – V**

**PART - “A”**

Sl. No.	Particulars	
1.	Name and address of the Mine	<b>Tawa UG Mine</b>
(a)	Place	WCL, Pathakhera Area
(b)	District	Baitul
(c)	Telephone No.	07146-290083
(d)	FAX No.	07146-270566
2	Industry category Primary-(STC Code) Secondary-(STC Code)	Category “A”
3	Approved Production Capacity	0.80 MTY
4	Year of Establishment	1992
5	Date of last Environmental Statement Report submitted	23 <sup>rd</sup> September, 2021

**PART - “B”**

**WATER & RAW MATERIALS CONSUMPTION**

Table – (a) Water consumption on Usage Pattern

Sl.No.	Particulars	
1.	Water Consumption (kl/day) :	
<b>(a)</b>	<b>Process – Industrial :</b>	
(i)	Dust suppression	96 KLD
(ii)	Fire fighting	-
(iii)	Workshop and others	-
(iv)	Green Belt / Plantation	-
(v)	CHP Beneficiation	-
<b>(b)</b>	<b>Domestic Purpose</b>	
(i)	Domestic Use	35 KLD
(ii)	Plantation	9 KLD
	<b>TOTAL</b>	<b>140 KLD</b>

Table – (b) WATER CONSUMPTION AGAINST PRODUCTION (INCLUDING RECYCLED)

Name of the Product	Water Consumption per unit of product (including recycled)	
	During the Financial Year 2020-21	During the Financial Year 2021-22
COAL	110.22 l/t of coal produced	130.18 l/t of coal produced

**RAW MATERIAL CONSUMPTION AGAINST PRODUCTION**

Name of the Raw Material	Name of the Product	Consumption of Raw Material per Unit of Product	
		During the Financial Year 2020-21	During the Financial Year 2021-22
Explosive	Coal	0.4393 kg/t	0.5021 kg/t
Detonator	Coal	1.0280 No/t	1.1363 No/t
Electricity (Industrial)	Coal	16.1336 kWh/t	20.6707 kWh/t

**PART - "C"  
POLLUTION GENERATED**

(Parameters specified in the consent issued)

1.	Pollutants	Quantity of Pollution Generated	Percentage variation from prescribed standards with reasons
(a)	Water	See Annexure-A2	Values of parameters are within permissible limits.
(b)	Air	See Annexure-A1	Levels of air pollutants are within permissible limits mostly.

**PART - "D"  
HAZARDOUS WASTE**

(As specified under Hazardous Waste/ Management & Handling Rules, 1989)

1.	Hazardous Waste	Total Quantity (kg)	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facilities	Nil	Nil

**PART - "E"**

**SOLID WASTES**

		Total Quantity	
		During the Financial Year 2020-21	During the Financial Year 2021-22
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facility	Nil	Nil
(c)	(i) Quantity recycled or re-utilised within the unit dumped on quarry void	Nil	Nil
	(ii) Sold	Nil	Nil
	(iii) Disposed (as external dumps)	Nil	Nil

**(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.**

Total quantity of solid wastes generated in the case of underground mine is very less, almost negligible.

**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:

- Loading and transportation of Coal
- Vehicular Movement
- Loading & Unloading of Coal

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

For control of air pollution, measures suggested are:

- Water sprinkling should be done before drilling holes and on coal faces.
- Sprinkling of water on coal before transportation.
- Spraying of water on coal stocks.
- Regular cleaning of coal transportation road.

**G.1.2 Implementation Status**

- Water is sprinkled on coal faces before drilling and transportation and on coal stocks.
- Regular water sprinkling is done before drilling and on coal faces.
- 12 nos. fixed sprinklers have been provided in Mine premise as Air pollution control measures.

## **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**

Mine water is retained in the mine sump / Sedimentation Tank before discharged to nearby surface water / nullah or used internally.

Water Treatment Plant is provided with 1.7 MGD Capacity.

## **G.3 NOISE POLLUTION**

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

The sources of noise pollution are as under:

Drilling Operation;

Ventilation System (Fan);

### **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 green belt around SAM Office, Workshop, CHP and other sensitive areas.

### **G.3.3 Implementation Status**

Mining equipment are kept in good condition to reduce noise level.

Refer Annexure-A3 for 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:

Sr.	ACCOUNT HEAD	CURRENT YEAR	PROGRESSIVE
<b><u>CAPITAL HEAD</u></b>			
1	Reclamation	Nil	NIL
2	Air Pollution control	Nil	Rs. 9,98,000/- (up to 31.03.2022)
3	Water pollution control	Nil	Rs. 10.29 Lakhs (up to 31.03. 2022)
4	Compensation against damage of forest growth and afforestation measures including compensatory afforestation.	Nil	Rs. 23.37 Lakhs (up to 31.03. 2022)
5	Data generation for EMP	Nil	NIL
6	Other (water meter )	Nil	Rs. 0.52 Lakhs (up to 31.03. 2022)
7	CAAQMS Charges	Rs. 22.94 Lakhs	Rs. 22.94 Lakhs (upto 31.03. 2022)
<b><u>REVENUE HEAD</u></b>			
1	Afforestation	Nil	Rs. 2000/- (upto 31.03. 2022)
2	Air , Water, & Noise Monitoring	Rs. 28.64 Lakhs	( From 2007-08 ) Rs. 130.01 Lakhs (upto 31.03. 2022)
3	Legal Expenses consent fees	Rs. 19.76 Lakhs	Rs. 89.48 Lakhs upto 31.12.2024
4	Ground water Abstraction Charges / water Cess	Rs. 4.87 Lakhs	From 01.10.09 Rs 6.89 Lakhs (up to 31.03.2022)
5	Environment audit statement	Nil	( From 2007 – 08 ) Rs 5,90,406.00 (up to 31.03. 2022)
6	Ground Water Monitoring	0.60 Lakhs	From 01.04.2015 Rs. 3.71 Lakhs (up to 31.03. 2022)
7	Repair of Road	Nil	Rs 121 Lakhs upto 31.03. 2022
8	Water pollution control	Rs. 1.32 Lakhs (Pressure Filter repairing)	Rs. 1.32 Lakhs upto 31.03. 2022

**H.2 Future Programme**

**ENV. STATEMENT  
TAWA U/G**

Regular pollution control measures will continue to be followed.

Sl. No.	Particulars	Amount (in Rs)
1.	Air pollution control measure	7,00,000.00
2.	Water Cess	-
3.	Consent Fees	As per MPPCB Rate Notification
4.	Air, Water, Noise Quality Monitoring, etc.	30,00,000.00
5.	Ground water Monitoring	80,000.00
6.	Water Pollution control measures	-
7.	Any other expenditure	Nil

**PART - "I"**

**MISCELLANEOUS**

**ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION & ABATEMENT OF POLLUTION.**

**AUDITOR'S COMMENT**

1. Unit shall maintain pollution control facilities properly to avoid discharge of pollutants in the environment.
2. Desilting of Drain and Settling Pond Shall be carried out.



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## ENVIRONMENTAL MONITORING REPORT

# TAWA UG

PATHAKHERA AREA

WESTERN COALFIELDS LTD.

JOB NO. 4634420035



MARCH 2022

### Environment Laboratory

NABL ACCREDITED VIDE NO TC-7102 UP TO 28.06.2022

## CMPDI

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

A. Environment Statement (Form-V) Uploaded in XGN on 27/09/2022 20:11:40 from IP No: 202.43.120.237.

B. 22953-Tawa Mine No.1, Wcl Pathakhera, Betul accepts the LEGAL responsibility  
and undertakes that the furnished information is CORRECT & ACCURATE.

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR-22/83	DATE OF ISSUE	12.04.2022
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
CUSTOMER LETTER REFERENCE NO.	WCL/HQ/ENV/14-I/178-193 DATED: 23.04.2021		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO <sub>2</sub> : IS 5182 Part-06:2006(2017), SO <sub>2</sub> :IS 5182 Part-2:2001 (RA 2017)		
NAME OF AREA	PATHERKHERA	SAMPLING PLAN : LQR 47	
NAME OF PROJECT	TAWA UG		
SAMPLE DESCRIPTION	Air sample		
SAMPLING METHOD : LSOP 4			

SAM OFFICE PKTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.03.2022	06.03.2022	263	170	38	13	BDL	Clear / Calm
21.03.2022	22.03.2022	282	189	31	15	BDL	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

MANAGER OFFICE- TAWA II PKT2UA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.03.2022	06.03.2022	267	176	33	14	11	Clear / Calm
21.03.2022	22.03.2022	281	191	36	15	10	Clear / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

MPEB COLONY PKTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.03.2022	06.03.2022	119	89	27	8	BDL	Clear / Calm
21.03.2022	22.03.2022	129	94	30	10	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

HIRA PALLA/BHAGAIKHAPA VILLAGE PKT2UA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m <sup>3</sup> )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
05.03.2022	06.03.2022	110	74	26	10	BDL	Clear / Calm
21.03.2022	22.03.2022	129	89	30	8	BDL	Clear / Lightbreeze
NAAQS, 2009		-	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	

*Latimkhure*

Analysed by

*Deepanshu sahu*

Deepanshu sahu  
Authorised Signatory

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SAMPLE DESCRIPTION	Water sample
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C:2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)
SAMPLING METHOD	LSOP 5

MINE WATER DISCHARGE: PKTUW1		ANALYSIS RESULTS		
DATE OF SAMPLE COLLECTION	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
05.03.2022	7.8	28	44	BDL
21.03.2022	7.74	22	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



Analysed by


Deepanshu sahu  
Authorised Signatory

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**NOISE LEVEL MONITORING DATA**

<b>FAN HOUSE: PKTUN1</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MARCH'22	05.03.2022	72.4	71.8
MARCH'22	21.03.2022	70.2	68.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

<b>COLONY(TAWA): PKTUN2</b>			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MARCH'22	05.03.2022	42.7	41.3
MARCH'22	21.03.2022	42.8	41.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>