



# ENVIRONMENTAL AUDIT STATEMENT

2022-23

For

**NAWAPARA UG MINE**

Under

**(BHATGAON AREA)**

**South Eastern Coalfields Limited**

*(A Mini Ratna Company)*

Year of establishment – 1996

Capacity of Mine - 0.18 MTPA

Project Area - 451.40 Ha.

**Central Mine Planning & Design Institute Limited  
Regional Institute – V, CMPDI Complex, Seepat Road,  
BILASPUR (C.G.)**

# ENVIRONMENTAL AUDIT STATEMENT (2022 – 23)

## NAWAPARA UG MINE

### CHAPTER-I

TABLE-1.1

<b>1.0</b>	<b>General Information</b>	:	Nawapara UG Mine
<b>a)</b>	<b>Extractable Reserves (as on 01.04.2023)</b>	:	4.85939 MT
<b>b)</b>	<b>Target output &amp; grade of coal (2023-24)</b>	:	120000 Te./G 07
<b>c)</b>	<b>Seams Worked</b>	:	Passang Seam
<b>d)</b>	<b>Thickness of Seam Worked (in metres.)</b>	:	1.7 M to 2.0 M
<b>e)</b>	<b>Depth of Seams from the surface</b>  Minimum : Maximum:	:	94.50 M 169.96 M
<b>f)</b>	<b>Av. Stripping ratio mining purpose</b>	:	N A
<b>g)</b>	<b>No. of villages/ families</b>	:	04 Villages/ 09 Families on acquired land
<b>h)</b>	<b>(i) Mining area (in Ha.)</b>	:	442.14 Ha
	<b>(ii) Leasehold area other than mining purpose (in Ha.)</b>	:	9.26 Ha
	<b>(iii) Total Leasehold Area (in Ha.)</b>	:	451.40 Ha

<b>1.1</b>	<b>Brief Geology of Mine</b>	:	Coal deposit of Nawapara underground mine is mostly covered by blanket of soil whose thickness varies from 1.00 m to 8.60 m. Only one fault down throw easterly has been deciphered in the western part. Amount of throw is 2.00 m to 40.00 m.																		
<b>1.2</b>	<b>Mining Method Description</b>	:	Mechanized Board and Pillar method with LHD and SDL loading into pony belt conveyor and subsequently to trunk belt conveyor to surface.																		
<b>1.3</b>	<b>Present Status of the mine</b>	:	Operational																		
<b>1.</b>	<b>Production Figures</b>	:																			
			<table border="1"> <thead> <tr> <th><b>Year</b></th> <th><b>Coal Production (in Tonnes/ MT)</b></th> </tr> </thead> <tbody> <tr> <td>2016-17</td> <td>122746 Te</td> </tr> <tr> <td>2017-18</td> <td>125313 Te</td> </tr> <tr> <td>2018-19</td> <td>131800 Te</td> </tr> <tr> <td>2019-20</td> <td>153345 Te</td> </tr> <tr> <td>2020-21</td> <td>98400 Te</td> </tr> <tr> <td>2021-22</td> <td>104163 Te</td> </tr> <tr> <td>2022-23</td> <td>76210 Te</td> </tr> <tr> <td><b>2023-24 (Target)</b></td> <td><b>120000 Te</b></td> </tr> </tbody> </table>	<b>Year</b>	<b>Coal Production (in Tonnes/ MT)</b>	2016-17	122746 Te	2017-18	125313 Te	2018-19	131800 Te	2019-20	153345 Te	2020-21	98400 Te	2021-22	104163 Te	2022-23	76210 Te	<b>2023-24 (Target)</b>	<b>120000 Te</b>
<b>Year</b>	<b>Coal Production (in Tonnes/ MT)</b>																				
2016-17	122746 Te																				
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2020-21	98400 Te																				
2021-22	104163 Te																				
2022-23	76210 Te																				
<b>2023-24 (Target)</b>	<b>120000 Te</b>																				
<b>2.</b>	<b>No. of Inclines (Running)</b>	:	02																		
<b>3.</b>	<b>Shafts</b>	:	01 (Ventilation Shaft)																		
<b>4.</b>	<b>No. of quarries</b>	:	NA																		
<b>5.</b>	<b>Overburden</b>	:	NA																		
<b>6.</b>	<b>Main Consumers</b>	:	Thermal power plant and Cement industry																		
<b>7.</b>	<b>Mode of dispatch</b>	:	Transportation of coal from Nawapara mine surface bunker to Bhatgaon CHP through contractual tippers.																		

## CHAPTER-II

### FORM-V (See rule 14)

Environmental Statement for the Financial Year ending  
31<sup>st</sup> March 2023

#### PART-A

(i)	<b>Name and address of the mine</b>	:	Nawapara UG Mine M/s. SECL Bhatgaon Area PO – Latori Distt.- Surajpur (C.G.), 497001
(ii)	<b>Industry category Primary (SIC Code) or Secondary (SIC Code)</b>	:	Primary (RED)
(iii)	<b>Production capacity units</b>	:	0.18 MTY
(iv)	<b>Year of establishment</b>	:	1996 ( Production from May 2006)
(v)	<b>Date of the last environmental Statement Submitted</b>	:	September 2022

## PART-B

### Water and Raw Materials Consumption

#### (i) Water Consumption (KLD)

**Industrial consumption: 500 KLD**

**Domestic consumption: 100 KLD**

Name of Products	Process water consumption per product output	
	During the previous financial year 2021-22	During the current financial year 2022-23
Coal	No processing of coal is done.	No processing of coal is done.

#### (ii) Raw materials consumption

*Name of raw materials	Name of products	Consumption of raw material per unit of output	
		During the previous financial year 2021-22	During the current financial year 2022-23
Explosive	Coal	0.76 kg/tonne	0.862 kg/tonne
P.O.L	Coal	0.132 lit/tonne	0.210 lit/tonne

\*Industry may use codes if disclosing details of raw materials would violate contractual obligations, otherwise all industries have to name the raw materials used.

## PART-C

### POLLUTANT DISCHARGED TO ENVIRONMENT/ UNIT OF OUTPUT (Parameters as specified in the consent issued)

Pollutants (Including mine & colony discharge of water)	Quantity of pollutants discharged (mass/day)	Concentrations of pollutants in discharges (mass/ volume)	Percentage of variation from prescribed standards with reasons
(a) Air	Environmental Monitoring report enclosed.		
(b) Water			
(i) Mine water pumped out			
(ii) Industrial water discharged			
(iii) Colony water discharged			
(c) Noise			

**PART-D**

**HAZARDOUS WASTES**

**(As specified under Hazardous Wastes/ Management Handling Rule, 1989)**

<b>Hazardous Wastes</b>	<b>Total quantity</b>	
	<b>During the previous financial year 2021-22</b>	<b>During the current financial year 2022-23</b>
<b>From Process</b>	Cat 5.1 – 0.80 KL Cat 5.2 – 0.14 Te	Cat 5.1 – 0.79 KL Cat 5.2 – 0.13 Te
<b>From Pollution control facilities</b>	NIL	NIL

Neither liquid nor solid hazardous wastes are generated during underground coal mining.

**PART-E**

**SOLID WASTES**

<b>Removal of overburden</b>	<b>Total quantity</b>	
	<b>During the previous financial year 2021-22</b>	<b>During the current financial year 2022-23</b>
<b>Total O.B.</b>	Not applicable for UG Mine.	
<b>Total O.B. For back filling</b>		
<b>Total O.B. disposed</b>		

**PART-F**

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

<b>Description</b>	<b>Qty. MT / Year 2022-23</b>	<b>Collection Method</b>
<b>Steel Scrap</b>	NIL	NIL
<b>Copper Scrap</b>	NIL	NIL
<b>Aluminum Scrap</b>	NIL	NIL
<b>Used Oil</b>	0.465 KL	Collected in MS drums and stored in shed with concrete flooring.

## **PART-G**

### **Impact of the pollution abatement measure taken on conservation of natural resources and on the cost of production.**

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Various pollution control measures are adopted for mining coal by underground mining method in eco-friendly manner. Mine water is utilized for domestic water supply after treatment in settling tanks. Mine water is also utilized for dust suppression in mine premise and watering plants. Plantation has also been carried out in mine campus.

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## **PART-H**

### **Additional measures/ investment proposals for environmental protection including abatement of pollution, prevention of pollution.**

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Additional majors taken for prevention of pollution – Rain Water Harvesting structure in the administrative buildings of the mine. Fixed water sprinklers installed. Plantation has been done in mine premises. Settling tanks for treatment of water is provided.

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## **PART-I**

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

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Under community development various works like pond, hand pump etc are done. LPG gas cylinders in lieu to all workers.

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# **ENVIRONMENTAL MONITORING REPORT**



**CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED**

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A Mini Ratna Company

**AIR QUALITY REPORT**

Month	JANUARY	Area	Bhatgaon	Report No	HSD/BHT/2023/01
Name of the Customer	South Eastern Coalfields Ltd, Bilaspur		Date of Issue	22.02.2023	
Name of the Project	NAWAPARA U/G		Sample Reference No.	17-18	

Parameter					SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	Remarks	
Limit (in µg/m <sup>3</sup> )-24 hrs.	Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)				A-O	600	300	-	120		120
					A-N	500	250	-	120		120
	Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), April 02, 1996)				B	200	100	60	80		80
Method of Testing					IS-5182 PART 4	IS-5182 PART 23	USEPA CFR 40,Appendix L to Part 50	IS-5182 PART 2	IS-5182 PART 6		
Station Name	St. Code	St. cat.	Date of sampling	Date of Testing	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>		
LATORI VILLAGE	17	B	07.01.23	13.01.23	119	62	25	11	20	-	
			14.01.23	20.01.23	-	-	27	-	-	-	
			21.01.23	28.01.23	128	69	28	13	24	-	
			28.01.23	03.02.23			26			-	
MAHESHPUR VILLAGE	18	B	07.01.23	13.01.23	115	60	25	12	26	-	
			14.01.23	20.01.23	-	-	27	-	-	-	
			21.01.23	28.01.23	132	71	29	14	27	-	
			28.01.23	03.02.23			26			-	

Hemant Kumar

Tested by

(Jr. Scientific Asst.)

vasudeva

Checked by

Officer In-charge

Note: 1) The results above relate to the samples tested.

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**AIR QUALITY REPORT**

Month	JANUARY	Area	Bhatgaon	Report No	HSD/BHT/2023/01
Name of the Customer	South Eastern Coalfields Ltd, Bilaspur		Date of Issue	22.02.2023	
Name of the Project	NAWAPARA U/G		Sample Reference No.	19-20	

Parameter					SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	Remarks
Limit (in µg/m <sup>3</sup> )-24 hrs.	Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)		A-O	600	300	-	120	120		
			A-N	500	250	-	120	120		
	Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), April 02, 1996)		B	200	100	60	80	80		
Method of Testing					IS-5182 PART 4	IS-5182 PART 23	USEPA CFR 40,Appendix L to Part 50	IS-5182 PART 2	IS-5182 PART 6	
Station Name	St. Code	St. cat.	Date of sampling	Date of Testing	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	
MINE SITE OFFICE	19	A-N	07.01.23	13.01.23	225	118	26	12	25	-
			14.01.23	20.01.23	-	-	29	-	-	-
			21.01.23	28.01.23	189	202	32	14	27	-
			28.01.23	03.02.23			25			-
GANGAPUR VILLAGE	20	B	07.01.23	13.01.23	123	65	25	11	23	-
			14.01.23	20.01.23	-	-	28	-	-	-
			21.01.23	28.01.23	119	62	26	13	25	-
			28.01.23	03.02.23			25			-

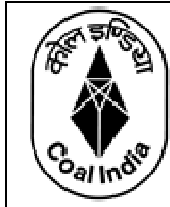
Hemant Kumar  
Tested by  
(Jr. Scientific Asst.)

*vasudeo*  
Checked by

*[Signature]*  
Officer In-charge

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A Mini Ratna Company

**NOISE QUALITY REPORT**

Month	JANUARY	Area	Bhatgaon	Report No	HSD/BHT/2023/01
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Name of the Customer	South Eastern Coalfields Ltd, Bilaspur	Date of Issue	22.02.2023
Name of the Project	NAWAPARA U/G	Sample Reference No.	17-20

Parameter				The Noise Pollution (R & C) rules, 2000		Remarks
				Day Time	Night Time	
Limit in dB(a) Leq	Industrial area	A	75	70		
	Commercial area	B	65	55		
	Residential Area	C	55	45		
	Silence Zone	D	50	40		
Method of Testing	CPCB Protocol For Ambient Level Noise Monitoring					
Station Name	Station Code	Station category	Date of measurement	Value in dB(a)	Value in dB(a)	
LATORI VILLAGE	17	C	11.01.2023	51.7	46.6	-
			23.01.2023	49.8	47.6	-
MAHESHPUR VILLAGE	18	C	11.01.2023	47.1	45.7	-
			23.01.2023	45.5	43.5	-
MINE SITE OFFICE	19	A	11.01.2023	65.6	55.2	-
			23.01.2023	66.4	57.4	-
GANGAPUR VILLAGE	20	C	11.01.2023	49.2	41.1	-
			23.01.2023	46.7	40.7	-

*Hemant Kumar*  
Monitored by  
(Jr. Scientific Asst.)

*vasudeo*  
Checked by

*[Signature]*  
Officer In-charge

Note: 1) The results above relate to the samples tested.

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**EFFLUENT WATER QUALITY REPORT**

Month	JANUARY	Area	Bhatgaon	Report No	HSD/BHT/2023/01
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Name of the Customer	South Eastern Coalfields Ltd, Bilaspur	Date of Issue	22.02.2023
Name of the Project	NAWAPARA U/G	Sample reference No.	13

Parameter	pH Value, LDL	Total suspended Solids, mg/l, max	C.O.D, mg/l, max	Oil & Grease, mg/l, max	B.O.D. (3 days 27°C)mg/l, max			
Lower Detection Limit	0.01	25.0	4.0	2.0	2.0			
General Standards for Discharge of Environmental Pollution (Part A: Effluent) as per Schedule VI, Environment (Protection) Rules	5.5 to 9.0	100.0	250.0	10.0	30.0			
Station name	St. Code	Date of Sampling	Date of Testing					
MINE DISCHARGE (After settling tank)	13	14.01.23	14.01.23 to 23.01.23	6.33	44	04	<2.0	-
		25.01.23	25.01.23 to 05.02.23	6.31	46	04	<2.0	-

Hemant Kumar

Tested by  
(Jr. Scientific Asst.)

*vasudeo*  
Checked by

*[Signature]*  
Officer In-charge

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**AIR QUALITY REPORT**

Month	FEBRUARY	Area	Bhatgaon	Report No	HSD/BHT/2023/02
Name of the Customer	South Eastern Coalfields Ltd, Bilaspur		Date of Issue	17.03.2023	
Name of the Project	NAWAPARA U/G		Sample Reference No.	17-18	

Parameter					SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	Remarks	
Limit (in µg/m <sup>3</sup> )-24 hrs.	Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)				A-O	600	300	-	120		120
					A-N	500	250	-	120		120
	Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), April 02, 1996)				B	200	100	60	80		80
Method of Testing					IS-5182 PART 4	IS-5182 PART 23	USEPA CFR 40,Appendix L to Part 50	IS-5182 PART 2	IS-5182 PART 6		
Station Name	St. Code	St. cat.	Date of sampling	Date of Testing	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>		
LATORI VILLAGE	17	B	04.02.23	16.02.23	134	71	29	13	26	-	
			11.02.23	23.02.23	-	-	25	-	-	-	
			18.02.23	02.03.23	118	63	24	11	22	-	
			25.02.23	10.03.23			27			-	
MAHESHPUR VILLAGE	18	B	04.02.23	16.02.23	126	66	28	13	25	-	
			11.02.23	23.02.23	-	-	26	-	-	-	
			18.02.23	02.03.23	122	63	25	11	22	-	
			25.02.23	10.03.23			27			-	

Hemant Kumar

Tested by

(Jr. Scientific Asst.)

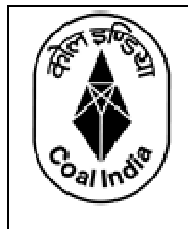
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**AIR QUALITY REPORT**

Month	FEBRUARY	Area	Bhatgaon	Report No	HSD/BHT/2023/02
Name of the Customer	South Eastern Coalfields Ltd, Bilaspur		Date of Issue	17.03.2023	
Name of the Project	NAWAPARA U/G		Sample Reference No.	19-20	

Parameter					SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	Remarks
Limit (in µg/m <sup>3</sup> )-24 hrs.	Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)		A-O	600	300	-	120	120		
			A-N	500	250	-	120	120		
	Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), April 02, 1996)		B	200	100	60	80	80		
Method of Testing					IS-5182 PART 4	IS-5182 PART 23	USEPA CFR 40,Appendix L to Part 50	IS-5182 PART 2	IS-5182 PART 6	
Station Name	St. Code	St. cat.	Date of sampling	Date of Testing	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	
MINE SITE OFFICE	19	A-N	04.02.23	16.02.23	204	107	30	13	24	-
			11.02.23	23.02.23	-	-	26	-	-	-
			18.02.23	02.03.23	239	124	34	15	26	-
			25.02.23	10.03.23			27			-
GANGAPUR VILLAGE	20	B	04.02.23	16.02.23	114	61	26	11	22	-
			11.02.23	23.02.23	-	-	27	-	-	-
			18.02.23	02.03.23	129	69	29	12	24	-
			25.02.23	10.03.23			26			-

*Hemant Kumar*

Tested by  
(Jr. Scientific Asst.)

*vasudeo*

Checked by

*[Signature]*

Officer In-charge

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A Mini Ratna Company

### NOISE QUALITY REPORT

Month	FEBRUARY	Area	Bhatgaon	Report No	HSD/BHT/2023/02
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Name of the Customer	South Eastern Coalfields Ltd, Bilaspur	Date of Issue	17.03.2023
Name of the Project	NAWAPARA U/G	Sample Reference No.	17-20

Parameter				The Noise Pollution (R & C) rules, 2000		Remarks
				Day Time	Night Time	
Limit in dB(a) Leq	Industrial area	A	75	70		
	Commercial area	B	65	55		
	Residential Area	C	55	45		
	Silence Zone	D	50	40		
Method of Testing	CPCB Protocol For Ambient Level Noise Monitoring					
Station Name	Station Code	Station category	Date of measurement	Value in dB(a)	Value in dB(a)	
LATORI VILLAGE	17	C	13.02.2023	52.6	45.4	-
			23.02.2023	54.4	46.3	-
MAHESHPUR VILLAGE	18	C	13.02.2023	46.5	42.8	-
			23.02.2023	48.3	44.3	-
MINE SITE OFFICE	19	A	13.02.2023	67.2	56.5	-
			23.02.2023	64.6	53.6	-
GANGAPUR VILLAGE	20	C	13.02.2023	45.4	42.4	-
			23.02.2023	47.2	43.2	-

Hemant Kumar

Monitored by  
(Jr. Scientific Asst.)

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Checked by

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Officer In-charge

Note: 1) The results above relate to the samples tested.

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**CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED**

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**EFFLUENT WATER QUALITY REPORT**

Month	FEBRUARY	Area	Bhatgaon	Report No	HSD/BHT/2023/02
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Name of the Customer	South Eastern Coalfields Ltd, Bilaspur	Date of Issue	17.03.2023
Name of the Project	NAWAPARA U/G	Sample reference No.	13

Parameter	pH Value, LDL	Total suspended Solids, mg/l, max	C.O.D, mg/l, max	Oil & Grease, mg/l, max	B.O.D. (3 days 27°C)mg/l, max			
Lower Detection Limit	0.01	25.0	4.0	2.0	2.0			
General Standards for Discharge of Environmental Pollution (Part A: Effluent) as per Schedule VI, Environment (Protection) Rules	5.5 to 9.0	100.0	250.0	10.0	30.0			
Station name	St. Code	Date of Sampling	Date of Testing					
MINE DISCHARGE (After settling tank)	13	15.02.23	15.02.23 to 22.02.23	6.29	44	04	<2.0	-
		25.02.23	25.02.23 to 14.03.23	6.37	42	04	<2.0	-

*Hemant Kumar*  
Tested by  
(Jr. Scientific Asst.)

*vasudeo*  
Checked by

*[Signature]*  
Officer In-charge

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**AIR QUALITY REPORT**

Month	MARCH	Area	Bhatgaon	Report No	HSD/BHT/2023/03
Name of the Customer	South Eastern Coalfields Ltd, Bilaspur		Date of Issue	31.03.2023	
Name of the Project	NAWAPARA U/G		Sample Reference No.	17-18	

Parameter					SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	Remarks	
Limit (in µg/m <sup>3</sup> )-24 hrs.	Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)				A-O	600	300	-	120		120
					A-N	500	250	-	120		120
	Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), April 02, 1996)				B	200	100	60	80		80
Method of Testing					IS-5182 PART 4	IS-5182 PART 23	USEPA CFR 40,Appendix L to Part 50	IS-5182 PART 2	IS-5182 PART 6		
Station Name	St. Code	St. cat.	Date of sampling	Date of Testing	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>		
LATORI VILLAGE	17	B	04.03.23	13.03.23	123	64	27	12	24	-	
			11.03.23	17.03.23	-	-	26	-	-	-	
			18.03.23	24.03.23	132	69	28	13	26	-	
			25.03.23	27.03.23	-	-	29	-	-	-	
MAHESHPUR VILLAGE	18	B	04.03.23	13.03.23	118	67	26	11	22	-	
			11.03.23	17.03.23	-	-	27	-	-	-	
			18.03.23	24.03.23	136	72	30	13	25	-	
			25.03.23	27.03.23	-	-	28	-	-	-	

Hemant Kumar

Tested by

(Jr. Scientific Asst.)

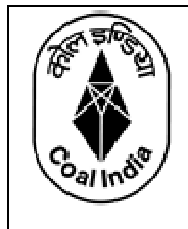
vasudeo

Checked by

Officer In-charge

Note: 1) The results above relate to the samples tested.

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### AIR QUALITY REPORT

Month	MARCH	Area	Bhatgaon	Report No	HSD/BHT/2023/03
Name of the Customer	South Eastern Coalfields Ltd, Bilaspur		Date of Issue	31.03.2023	
Name of the Project	NAWAPARA U/G		Sample Reference No.	19-20	

Parameter					SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	Remarks
Limit (in µg/m <sup>3</sup> )-24 hrs.	Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)		A-O	600	300	-	120	120		
			A-N	500	250	-	120	120		
	Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), April 02, 1996)		B	200	100	60	80	80		
Method of Testing					IS-5182 PART 4	IS-5182 PART 23	USEPA CFR 40,Appendix L to Part 50	IS-5182 PART 2	IS-5182 PART 6	
Station Name	St. Code	St. cat.	Date of sampling	Date of Testing	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	
MINE SITE OFFICE	19	A-N	04.03.23	13.03.23	235	120	32	14	27	-
			11.03.23	17.03.23	-	-	28	-	-	-
			18.03.23	24.03.23	218	112	31	13	25	-
			25.03.23	27.03.23	-	-	26	-	-	-
GANGAPUR VILLAGE	20	B	04.03.23	13.03.23	138	75	29	12	24	-
			11.03.23	17.03.23	-	-	26	-	-	-
			18.03.23	24.03.23	115	59	25	11	22	-
			25.03.23	27.03.23	-	-	27	-	-	-

Hemant Kumar  
Tested by  
(Jr. Scientific Asst.)

*vasudeo*  
Checked by

*[Signature]*  
Officer In-charge

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**NOISE QUALITY REPORT**

Month	MARCH	Area	Bhatgaon	Report No	HSD/BHT/2023/03
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Name of the Customer	South Eastern Coalfields Ltd, Bilaspur	Date of Issue	31.03.2023
Name of the Project	NAWAPARA U/G	Sample Reference No.	17-20

Parameter				The Noise Pollution (R & C) rules, 2000		Remarks
				Day Time	Night Time	
Limit in dB(a) Leq	Industrial area	A	75	70		
	Commercial area	B	65	55		
	Residential Area	C	55	45		
	Silence Zone	D	50	40		
Method of Testing	CPCB Protocol For Ambient Level Noise Monitoring					
Station Name	Station Code	Station category	Date of measurement	Value in dB(a)	Value in dB(a)	
LATORI VILLAGE	17	C	01.03.2023	50.7	43.8	-
			16.03.2023	51.2	44.5	-
MAHESHPUR VILLAGE	18	C	01.03.2023	49.6	42.7	-
			16.03.2023	47.4	41.4	-
MINE SITE OFFICE	19	A	01.03.2023	68.5	57.2	-
			16.03.2023	65.3	55.3	-
GANGAPUR VILLAGE	20	C	01.03.2023	49.8	40.8	-
			16.03.2023	46.1	39.9	-

Hemant Kumar

Monitored by  
(Jr. Scientific Asst.)

*vasudeo*  
Checked by

*[Signature]*  
Officer In-charge

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**EFFLUENT WATER QUALITY REPORT**

Month	MARCH	Area	Bhatgaon	Report No	HSD/BHT/2023/03
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Name of the Customer	South Eastern Coalfields Ltd, Bilaspur	Date of Issue	31.03.2023
Name of the Project	NAWAPARA U/G	Sample reference No.	13

Parameter	pH Value, LDL	Total suspended Solids, mg/l, max	C.O.D, mg/l, max	Oil & Grease, mg/l, max	B.O.D. (3 days 27°C)mg/l, max			
Lower Detection Limit	0.01	25.0	4.0	2.0	2.0			
General Standards for Discharge of Environmental Pollution (Part A: Effluent) as per Schedule VI, Environment (Protection) Rules	5.5 to 9.0	100.0	250.0	10.0	30.0			
Station name	St. Code	Date of Sampling	Date of Testing					
MINE DISCHARGE (After settling tank)	13	04.03.23	04.03.23 to 07.03.23	6.42	40	04	<2.0	-
		18.03.23	18.03.23 to 21.03.23	6.27	46	04	<2.0	-

Hemant Kumar

Tested by  
(Jr. Scientific Asst.)

*vasudeo*  
Checked by

*[Signature]*  
Officer In-charge

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

<b>Unique Report No.</b>	21929	<b>Report Issue Date</b>		
<b>Customer Name</b>	South Estern Coal Field Ltd Bilaspur	<b>Address &amp; Contact Details</b>		SEEPAT ROAD BILASPUR 7752241927
<b>Sampling By</b>	G R sarode	<b>Date of Sampling</b>	14-01-2023	<b>Sample ID</b> 15601
<b>Sampling Location</b>	Latori village bore hole water Nawapara U/G	<b>Sampling Plan</b>	MONTHLY	<b>Sampling Method</b> CMPDI/BSP/LSOP
<b>Sample Condition</b>	APPROPRIATE	<b>Date of Receipt of Sample</b>	17-01-2023	<b>Date of Analysis</b> From 16-01-2023 To 20-02-2023

Sr. No	Parameter	Test At	Method of Analysis	Range of Testing	IS 10500:2012		Observed Value	UOM (at 95% C.L&K=1.96)
					Acceptable Limit	Permissible Limit		
1	Alkalinity mg/l as CaCO3	Main	IS 3025(Part 23):1986,R 2003	5.0 - 1000.0	200	1000	105.00	±0.19696@10.0
2	Arsenic mg/l	Main	IS 3025 (Part 37):1988,R 2003	0.002 - 0.040	0.01	0.05	BDL	±0.0081@0.018
3	Boron mg/l	Main	APHA, 23rd Edition,2017, 4500-B	0.5 - 14.0	0.5	1	BDL	±0.310@5.16
4	Calcium mg/l	Main	IS 3025 (Part 40): 1991, R : 2009	5.0 - 500.0	75	200	BDL	±2.512@99.8
5	Chlorides mg/l	Main	IS 3025(Part 32):1988 , R : 2007	5.0 - 1000.0	250	1000	11.57	±6.551@253.5
6	Colour Hazen	Main	APHA, 23rd Edition,2017, 2120. C	1.0 - 500	5	15	14.92	±1.05@ 49.86
7	Copper mg/l	Main	IS 3025 (Part 42) : 1992 R : 2009	0.03 - 10.0	0.05	1.5	BDL	±0.13@4.90
8	Fluoride mg/l	Main	APHA, 23rd Edition,2017, 4500, F- D	0.1 - 5.0	1.0	1.5	1.07	±0.014@0.98
9	Iron mg/l	Main	IS 3025 (Part 53) :2003, R:2009	0.05 - 15.0	0.3	No Relaxation	BDL	±0.0782@7.95
10	Lead mg/l	Main	APHA, 23rd Edition,2017, 3113B	0.0050 - 0.1000	0.01	No relaxation	BDL	±0.000266@0.005
11	Manganese mg/l	Main	IS 3025 (Part 59) : 2006	0.05 - 5.0	0.1	0.3	BDL	±0.026@2.44
12	Nitrate mg/l	Main	APHA, 23rd Edition,2017, 4500, B	0.5 - 45	45	No Relaxation	22.68	±0.528@20.41
13	Odour none	Site	IS 3025 (Part 5):1983	-	Agreeable	Agreeable	Agreeable	Not applicable
14	pH Value none	Main	IS 3025 (Part 11):1983, R : 2012	4.00 - 10.00	6.5 - 8.5	No Relaxation	6.61	±0.127@7.01
15	Phenolic compounds mg/l	Main	APHA, 23rd Edition,2017, 5530. C	0.001 - 0.2	0.001	0.002	BDL	±0.0204 at 0.1004
16	Residual Free Chlorine mg/l	Main	APHA, 23rd Edition,2017, 4500G	0.1 - 10.0	0.2	1	nil	±0.0082@0.1
17	Selenium mg/l	Main	IS 3025 (Part 56):2003	0.001 - 0.040	0.01	No Relaxation	BDL	±0.000938@0.001
18	Sulphate mg/l	Main	APHA, 23rd Edition,2017, 4500-SO42- E	2.0 - 40.0	200	400	5.47	±0.640@19.88
19	Total Chromium mg/l	Main	IS 3025 ( Part 52 ) : 2003	0.05 - 15.0	0.05	No relaxation	BDL	±0.004@0.05
20	Total Coliform MPN/100 ml	Main	APHA, 23rd Edition, 9221 B	-	Nil	No Relaxation	BDL	Not specified
21	Total Dissolved Solids mg/l	Main	IS 3025 (Part 16):1984 R : 2006	30.0 - 2000.0	500	2000	105.00	±4.473@592.0
22	Total Hardness mg/l as CaCO3	Main	IS 3025 (Part 21):2009	4.0 - 2000.0	200	600	40.16	±11.545@612.8
23	Turbidity NTU	Main	IS 3025 (Part 10):1984, R : 2006	1.0 - 100.0	1	5	BDL	±0.855@41.58
24	Zinc mg/l	Main	IS 3025 ( Part 49 ) : 1994, R : 2009	0.01 - 2.0	5	15	0.06	±0.0013@0.01

----- END OF THE REPORT -----

Reported By  
D.Dayakar      Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

JSA

Note:

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

<b>Unique Report No.</b>	21932	<b>Report Issue Date</b>		
<b>Customer Name</b>	South Estern Coal Field Ltd Bilaspur	<b>Address &amp; Contact Details</b>		SEEPAT ROAD BILASPUR 7752241927
<b>Sampling By</b>	G R sarode	<b>Date of Sampling</b>	14-01-2023	<b>Sample ID</b> 15602
<b>Sampling Location</b>	Maheshpur Village Bore Hole Water Nawapara U/G	<b>Sampling Plan</b>	MONTHLY	<b>Sampling Method</b> CMPDI/BSP/LSOP
<b>Sample Condition</b>	APPROPRIATE	<b>Date of Receipt of Sample</b>	17-01-2023	<b>Date of Analysis</b> From 16-01-2023 To 20-02-2023

Sr. No	Parameter	Test At	Method of Analysis	Range of Testing	IS 10500:2012		Observed Value	UOM (at 95% C.L&K=1.96)
					Acceptable Limit	Permissible Limit		
1	Alkalinity mg/l as CaCO3	Main	IS 3025(Part 23):1986,R 2003	5.0 - 1000.0	200	1000	135.00	±0.19696@10.0
2	Arsenic mg/l	Main	IS 3025 (Part 37):1988,R 2003	0.002 - 0.040	0.01	0.05	BDL	±0.0081@0.018
3	Boron mg/l	Main	APHA, 23rd Edition,2017, 4500-B	0.5 - 14.0	0.5	1	BDL	±0.310@5.16
4	Calcium mg/l	Main	IS 3025 (Part 40): 1991, R : 2009	5.0 - 500.0	75	200	5.523	±2.512@99.8
5	Chlorides mg/l	Main	IS 3025(Part 32):1988 , R : 2007	5.0 - 1000.0	250	1000	23.14	±6.551@253.5
6	Colour Hazen	Main	APHA, 23rd Edition,2017, 2120. C	1.0 - 500	5	15	11.08	±1.05@ 49.86
7	Copper mg/l	Main	IS 3025 (Part 42) : 1992 R : 2009	0.03 - 10.0	0.05	1.5	BDL	±0.13@4.90
8	Fluoride mg/l	Main	APHA, 23rd Edition,2017, 4500, F- D	0.1 - 5.0	1.0	1.5	0.97	±0.014@0.98
9	Iron mg/l	Main	IS 3025 (Part 53) :2003, R:2009	0.05 - 15.0	0.3	No Relaxation	BDL	±0.0782@7.95
10	Lead mg/l	Main	APHA, 23rd Edition,2017, 3113B	0.0050 - 0.1000	0.01	No relaxation	BDL	±0.000266@0.005
11	Manganese mg/l	Main	IS 3025 (Part 59) : 2006	0.05 - 5.0	0.1	0.3	0.06	±0.026@2.44
12	Nitrate mg/l	Main	APHA, 23rd Edition,2017, 4500, B	0.5 - 45	45	No Relaxation	14.41	±0.528@20.41
13	Odour none	Site	IS 3025 (Part 5):1983	-	Agreeable	Agreeable	Agreeable	Not applicable
14	pH Value none	Main	IS 3025 (Part 11):1983, R : 2012	4.00 - 10.00	6.5 - 8.5	No Relaxation	6.66	±0.127@7.01
15	Phenolic compounds mg/l	Main	APHA, 23rd Edition,2017, 5530. C	0.001 - 0.2	0.001	0.002	BDL	±0.0204 at 0.1004
16	Residual Free Chlorine mg/l	Main	APHA, 23rd Edition,2017, 4500G	0.1 - 10.0	0.2	1	nil	±0.0082@0.1
17	Selenium mg/l	Main	IS 3025 (Part 56):2003	0.001 - 0.040	0.01	No Relaxation	BDL	±0.000938@0.001
18	Sulphate mg/l	Main	APHA, 23rd Edition,2017, 4500-SO42- E	2.0 - 40.0	200	400	8.22	±0.640@19.88
19	Total Chromium mg/l	Main	IS 3025 ( Part 52 ) : 2003	0.05 - 15.0	0.05	No relaxation	BDL	±0.004@0.05
20	Total Coliform MPN/100 ml	Main	APHA, 23rd Edition, 9221 B	-	Nil	No Relaxation	BDL	Not specified
21	Total Dissolved Solids mg/l	Main	IS 3025 (Part 16):1984 R : 2006	30.0 - 2000.0	500	2000	141.00	±4.473@592.0
22	Total Hardness mg/l as CaCO3	Main	IS 3025 (Part 21):2009	4.0 - 2000.0	200	600	52.21	±11.545@612.8
23	Turbidity NTU	Main	IS 3025 (Part 10):1984, R : 2006	1.0 - 100.0	1	5	BDL	±0.855@41.58
24	Zinc mg/l	Main	IS 3025 ( Part 49 ) : 1994, R : 2009	0.01 - 2.0	5	15	BDL	±0.0013@0.01

----- END OF THE REPORT -----

Reported By  
D.Dayakar      Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

JSA

Note:

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

<b>Unique Report No.</b>	21926	<b>Report Issue Date</b>		
<b>Customer Name</b>	South Eastern Coal Field Ltd Bilaspur	<b>Address &amp; Contact Details</b>		SEEPAT ROAD BILASPUR 7752241927
<b>Sampling By</b>	G R sarode	<b>Date of Sampling</b>	14-01-2023	<b>Sample ID</b> 15600
<b>Sampling Location</b>	Gajadharpur Village Bore Hole Water Nawapara U/G	<b>Sampling Plan</b>	MONTHLY	<b>Sampling Method</b> CMPDI/BSP/LSOP
<b>Sample Condition</b>	APPROPRIATE	<b>Date of Receipt of Sample</b>	17-01-2023	<b>Date of Analysis</b> From 16-01-2023 To 20-02-2023

Sr. No	Parameter	Test At	Method of Analysis	Range of Testing	IS 10500:2012		Observed Value	UOM (at 95% C.L&K=1.96)
					Acceptable Limit	Permissible Limit		
1	Alkalinity mg/l as CaCO3	Main	IS 3025(Part 23):1986,R 2003	5.0 - 1000.0	200	1000	105.00	±0.19696@10.0
2	Arsenic mg/l	Main	IS 3025 (Part 37):1988,R 2003	0.002 - 0.040	0.01	0.05	BDL	±0.0081@0.018
3	Boron mg/l	Main	APHA, 23rd Edition,2017, 4500-B	0.5 - 14.0	0.5	1	BDL	±0.310@5.16
4	Calcium mg/l	Main	IS 3025 (Part 40): 1991, R : 2009	5.0 - 500.0	75	200	7.890	±2.512@99.8
5	Chlorides mg/l	Main	IS 3025(Part 32):1988 , R : 2007	5.0 - 1000.0	250	1000	10.12	±6.551@253.5
6	Colour Hazen	Main	APHA, 23rd Edition,2017, 2120. C	1.0 - 500	5	15	11.08	±1.05@ 49.86
7	Copper mg/l	Main	IS 3025 (Part 42) : 1992 R : 2009	0.03 - 10.0	0.05	1.5	BDL	±0.13@4.90
8	Fluoride mg/l	Main	APHA, 23rd Edition,2017, 4500, F- D	0.1 - 5.0	1.0	1.5	1.32	±0.014@0.98
9	Iron mg/l	Main	IS 3025 (Part 53) :2003, R:2009	0.05 - 15.0	0.3	No Relaxation	0.07	±0.0782@7.95
10	Lead mg/l	Main	APHA, 23rd Edition,2017, 3113B	0.0050 - 0.1000	0.01	No relaxation	BDL	±0.000266@0.005
11	Manganese mg/l	Main	IS 3025 (Part 59) : 2006	0.05 - 5.0	0.1	0.3	BDL	±0.026@2.44
12	Nitrate mg/l	Main	APHA, 23rd Edition,2017, 4500, B	0.5 - 45	45	No Relaxation	11.13	±0.528@20.41
13	Odour none	Site	IS 3025 (Part 5):1983	-	Agreeable	Agreeable	Agreeable	Not applicable
14	pH Value none	Main	IS 3025 (Part 11):1983, R : 2012	4.00 - 10.00	6.5 - 8.5	No Relaxation	6.68	±0.127@7.01
15	Phenolic compounds mg/l	Main	APHA, 23rd Edition,2017, 5530. C	0.001 - 0.2	0.001	0.002	BDL	±0.0204 at 0.1004
16	Residual Free Chlorine mg/l	Main	APHA, 23rd Edition,2017, 4500G	0.1 - 10.0	0.2	1	nil	±0.0082@0.1
17	Selenium mg/l	Main	IS 3025 (Part 56):2003	0.001 - 0.040	0.01	No Relaxation	BDL	±0.000938@0.001
18	Sulphate mg/l	Main	APHA, 23rd Edition,2017, 4500-SO42- E	2.0 - 40.0	200	400	6.27	±0.640@19.88
19	Total Chromium mg/l	Main	IS 3025 ( Part 52 ) : 2003	0.05 - 15.0	0.05	No relaxation	BDL	±0.004@0.05
20	Total Coliform MPN/100 ml	Main	APHA, 23rd Edition, 9221 B	-	Nil	No Relaxation	BDL	Not specified
21	Total Dissolved Solids mg/l	Main	IS 3025 (Part 16):1984 R : 2006	30.0 - 2000.0	500	2000	80.00	±4.473@592.0
22	Total Hardness mg/l as CaCO3	Main	IS 3025 (Part 21):2009	4.0 - 2000.0	200	600	40.16	±11.545@612.8
23	Turbidity NTU	Main	IS 3025 (Part 10):1984, R : 2006	1.0 - 100.0	1	5	BDL	±0.855@41.58
24	Zinc mg/l	Main	IS 3025 ( Part 49 ) : 1994, R : 2009	0.01 - 2.0	5	15	BDL	±0.0013@0.01

----- END OF THE REPORT -----

Reported By  
D.Dayakar      Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

<b>Unique Report No.</b>	24412	<b>Report Issue Date</b>	10-03-2023
<b>Customer Name</b>	South Estern Coal Field Ltd Bilaspur	<b>Address &amp; Contact Details</b>	SEEPAT ROAD BILASPUR 7752241927
<b>Sampling By</b>	G R Sarode	<b>Date of Sampling</b>	16-02-2023
<b>Sampling Location</b>	Latori village bore hole water Nawapara U/G	<b>Sampling Plan</b>	As per monthly plan
<b>Sample Condition</b>	APPROPRIATE	<b>Date of Receipt of Sample</b>	17-02-2023
		<b>Sample ID</b>	15896
		<b>Sampling Method</b>	CMPDI/BSP/LSOP
		<b>Date of Analysis</b>	From 17-02-2023 To 10-03-2023

Sr. No	Parameter	Test At	Method of Analysis	Range of Testing	IS 10500:2012		Observed Value	UOM (at 95% C.L&K=1.96)
					Acceptable Limit	Permissible Limit		
1	Alkalinity mg/l as CaCO3	Main	IS 3025(Part 23):1986,R 2003	5.0 - 1000.0	200	1000	20.00	±0.19696@10.0
2	Arsenic mg/l	Main	IS 3025 (Part 37):1988,R 2003	0.002 - 0.040	0.01	0.05	BDL	±0.0081@0.018
3	Boron mg/l	Main	APHA, 23rd Edition,2017, 4500-B	0.5 - 14.0	0.5	1	BDL	±0.310@5.16
4	Calcium mg/l	Main	IS 3025 (Part 40): 1991, R : 2009	5.0 - 500.0	75	200	9.619	±2.512@99.8
5	Chlorides mg/l	Main	IS 3025(Part 32):1988 , R : 2007	5.0 - 1000.0	250	1000	14.00	±6.551@253.5
6	Colour Hazen	Main	APHA, 23rd Edition,2017, 2120. C	1.0 - 500	5	15	4.92	±1.05@ 49.86
7	Copper mg/l	Main	IS 3025 (Part 42) : 1992 R : 2009	0.03 - 10.0	0.05	1.5	BDL	±0.13@4.90
8	Fluoride mg/l	Main	APHA, 23rd Edition,2017, 4500, F- D	0.1 - 5.0	1.0	1.5	0.16	±0.014@0.98
9	Iron mg/l	Main	IS 3025 (Part 53) :2003, R:2009	0.05 - 15.0	0.3	No Relaxation	BDL	±0.0782@7.95
10	Lead mg/l	Main	APHA, 23rd Edition,2017, 3113B	0.0050 - 0.1000	0.01	No relaxation	BDL	±0.000266@0.005
11	Manganese mg/l	Main	IS 3025 (Part 59) : 2006	0.05 - 5.0	0.1	0.3	0.08	±0.026@2.44
12	Nitrate mg/l	Main	APHA, 23rd Edition,2017, 4500, B	0.5 - 45	45	No Relaxation	26.40	±0.528@20.41
13	Odour none	Main	IS 3025 (Part 5):1983	-	Agreeable	Agreeable	Agreeable	Not applicable
14	pH Value none	Main	IS 3025 (Part 11):1983, R : 2012	4.00 - 10.00	6.5 - 8.5	No Relaxation	7.16	±0.127@7.01
15	Phenolic compounds mg/l	Main	APHA, 23rd Edition,2017, 5530. C	0.001 - 0.2	0.001	0.002	BDL	±0.0204 at 0.1004
16	Residual Free Chlorine mg/l	Main	APHA, 23rd Edition,2017, 4500G	0.1 - 10.0	0.2	1	BDL	±0.0082@0.1
17	Selenium mg/l	Main	IS 3025 (Part 56):2003	0.001 - 0.040	0.01	No Relaxation	BDL	±0.000938@0.001
18	Sulphate mg/l	Main	APHA, 23rd Edition,2017, 4500-SO42- E	2.0 - 40.0	200	400	BDL	±0.640@19.88
19	Total Chromium mg/l	Main	IS 3025 ( Part 52 ) : 2003	0.05 - 15.0	0.05	No relaxation	BDL	±0.004@0.05
20	Total Coliform MPN/100 ml	Main	APHA, 23rd Edition, 9221 B	-	Nil	No Relaxation	BDL	Not specified
21	Total Dissolved Solids mg/l	Main	IS 3025 (Part 16):1984 R : 2006	30.0 - 2000.0	500	2000	170.00	±4.473@592.0
22	Total Hardness mg/l as CaCO3	Main	IS 3025 (Part 21):2009	4.0 - 2000.0	200	600	28.81	±11.545@612.8
23	Turbidity NTU	Main	IS 3025 (Part 10):1984, R : 2006	1.0 - 100.0	1	5	2.42	±0.855@41.58
24	Zinc mg/l	Main	IS 3025 ( Part 49 ) : 1994, R : 2009	0.01 - 2.0	5	15	0.07	±0.0013@0.01

----- END OF THE REPORT -----

Reported By  
Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

<b>Unique Report No.</b>	24420	<b>Report Issue Date</b>	10-03-2023
<b>Customer Name</b>	South Eastern Coal Field Ltd Bilaspur	<b>Address &amp; Contact Details</b>	SEEPAT ROAD BILASPUR 7752241927
<b>Sampling By</b>	G R Sarode	<b>Date of Sampling</b>	16-02-2023
<b>Sampling Location</b>	Maheshpur Village Bore Hole Water Nawapara U/G	<b>Sampling Plan</b>	As per monthly plan
<b>Sample Condition</b>	APPROPRIATE	<b>Date of Receipt of Sample</b>	17-02-2023
		<b>Sample ID</b>	15897
		<b>Sampling Method</b>	CMPDI/BSP/LSOP
		<b>Date of Analysis</b>	From 17-02-2023 To 10-03-2023

Sr. No	Parameter	Test At	Method of Analysis	Range of Testing	IS 10500:2012		Observed Value	UOM (at 95% C.L&K=1.96)
					Acceptable Limit	Permissible Limit		
1	Alkalinity mg/l as CaCO3	Main	IS 3025(Part 23):1986,R 2003	5.0 - 1000.0	200	1000	20.00	±0.19696@10.0
2	Arsenic mg/l	Main	IS 3025 (Part 37):1988,R 2003	0.002 - 0.040	0.01	0.05	BDL	±0.0081@0.018
3	Boron mg/l	Main	APHA, 23rd Edition,2017, 4500-B	0.5 - 14.0	0.5	1	BDL	±0.310@5.16
4	Calcium mg/l	Main	IS 3025 (Part 40): 1991, R : 2009	5.0 - 500.0	75	200	24.048	±2.512@99.8
5	Chlorides mg/l	Main	IS 3025(Part 32):1988 , R : 2007	5.0 - 1000.0	250	1000	24.49	±6.551@253.5
6	Colour Hazen	Main	APHA, 23rd Edition,2017, 2120. C	1.0 - 500	5	15	3.38	±1.05@ 49.86
7	Copper mg/l	Main	IS 3025 (Part 42) : 1992 R : 2009	0.03 - 10.0	0.05	1.5	BDL	±0.13@4.90
8	Fluoride mg/l	Main	APHA, 23rd Edition,2017, 4500, F- D	0.1 - 5.0	1.0	1.5	0.14	±0.014@0.98
9	Iron mg/l	Main	IS 3025 (Part 53) :2003, R:2009	0.05 - 15.0	0.3	No Relaxation	BDL	±0.0782@7.95
10	Lead mg/l	Main	APHA, 23rd Edition,2017, 3113B	0.0050 - 0.1000	0.01	No relaxation	BDL	±0.000266@0.005
11	Manganese mg/l	Main	IS 3025 (Part 59) : 2006	0.05 - 5.0	0.1	0.3	BDL	±0.026@2.44
12	Nitrate mg/l	Main	APHA, 23rd Edition,2017, 4500, B	0.5 - 45	45	No Relaxation	17.99	±0.528@20.41
13	Odour none	Main	IS 3025 (Part 5):1983	-	Agreeable	Agreeable	Agreeable	Not applicable
14	pH Value none	Main	IS 3025 (Part 11):1983, R : 2012	4.00 - 10.00	6.5 - 8.5	No Relaxation	7.14	±0.127@7.01
15	Phenolic compounds mg/l	Main	APHA, 23rd Edition,2017, 5530. C	0.001 - 0.2	0.001	0.002	BDL	±0.0204 at 0.1004
16	Residual Free Chlorine mg/l	Main	APHA, 23rd Edition,2017, 4500G	0.1 - 10.0	0.2	1	BDL	±0.0082@0.1
17	Selenium mg/l	Main	IS 3025 (Part 56):2003	0.001 - 0.040	0.01	No Relaxation	BDL	±0.000938@0.001
18	Sulphate mg/l	Main	APHA, 23rd Edition,2017, 4500-SO42- E	2.0 - 40.0	200	400	BDL	±0.640@19.88
19	Total Chromium mg/l	Main	IS 3025 ( Part 52 ) : 2003	0.05 - 15.0	0.05	No relaxation	BDL	±0.004@0.05
20	Total Coliform MPN/100 ml	Main	APHA, 23rd Edition, 9221 B	-	Nil	No Relaxation	BDL	Not specified
21	Total Dissolved Solids mg/l	Main	IS 3025 (Part 16):1984 R : 2006	30.0 - 2000.0	500	2000	186.00	±4.473@592.0
22	Total Hardness mg/l as CaCO3	Main	IS 3025 (Part 21):2009	4.0 - 2000.0	200	600	43.22	±11.545@612.8
23	Turbidity NTU	Main	IS 3025 (Part 10):1984, R : 2006	1.0 - 100.0	1	5	3.22	±0.855@41.58
24	Zinc mg/l	Main	IS 3025 ( Part 49 ) : 1994, R : 2009	0.01 - 2.0	5	15	0.11	±0.0013@0.01

----- END OF THE REPORT -----

Reported By  
Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

<b>Unique Report No.</b>	24404	<b>Report Issue Date</b>	10-03-2023
<b>Customer Name</b>	South Estern Coal Field Ltd Bilaspur	<b>Address &amp; Contact Details</b>	SEEPAT ROAD BILASPUR 7752241927
<b>Sampling By</b>	G R Sarode	<b>Date of Sampling</b>	16-02-2023
<b>Sampling Location</b>	Gajadharpur Village Bore Hole Water Nawapara U/G	<b>Sampling Plan</b>	As per monthly plan
<b>Sample Condition</b>	APPROPRIATE	<b>Date of Receipt of Sample</b>	17-02-2023
		<b>Sample ID</b>	15895
		<b>Sampling Method</b>	CMPDI/BSP/LSOP
		<b>Date of Analysis</b>	From 17-02-2023 To 10-03-2023

Sr. No	Parameter	Test At	Method of Analysis	Range of Testing	IS 10500:2012		Observed Value	UOM (at 95% C.L&K=1.96)
					Acceptable Limit	Permissible Limit		
1	Alkalinity mg/l as CaCO3	Main	IS 3025(Part 23):1986,R 2003	5.0 - 1000.0	200	1000	10.00	±0.19696@10.0
2	Arsenic mg/l	Main	IS 3025 (Part 37):1988,R 2003	0.002 - 0.040	0.01	0.05	BDL	±0.0081@0.018
3	Boron mg/l	Main	APHA, 23rd Edition,2017, 4500-B	0.5 - 14.0	0.5	1	BDL	±0.310@5.16
4	Calcium mg/l	Main	IS 3025 (Part 40): 1991, R : 2009	5.0 - 500.0	75	200	5.611	±2.512@99.8
5	Chlorides mg/l	Main	IS 3025(Part 32):1988 , R : 2007	5.0 - 1000.0	250	1000	8.50	±6.551@253.5
6	Colour Hazen	Main	APHA, 23rd Edition,2017, 2120. C	1.0 - 500	5	15	1.85	±1.05@ 49.86
7	Copper mg/l	Main	IS 3025 (Part 42) : 1992 R : 2009	0.03 - 10.0	0.05	1.5	BDL	±0.13@4.90
8	Fluoride mg/l	Main	APHA, 23rd Edition,2017, 4500, F- D	0.1 - 5.0	1.0	1.5	0.18	±0.014@0.98
9	Iron mg/l	Main	IS 3025 (Part 53) :2003, R:2009	0.05 - 15.0	0.3	No Relaxation	0.06	±0.0782@7.95
10	Lead mg/l	Main	APHA, 23rd Edition,2017, 3113B	0.0050 - 0.1000	0.01	No relaxation	BDL	±0.000266@0.005
11	Manganese mg/l	Main	IS 3025 (Part 59) : 2006	0.05 - 5.0	0.1	0.3	BDL	±0.026@2.44
12	Nitrate mg/l	Main	APHA, 23rd Edition,2017, 4500, B	0.5 - 45	45	No Relaxation	13.51	±0.528@20.41
13	Odour none	Main	IS 3025 (Part 5):1983	-	Agreeable	Agreeable	Agreeable	Not applicable
14	pH Value none	Main	IS 3025 (Part 11):1983, R : 2012	4.00 - 10.00	6.5 - 8.5	No Relaxation	7.24	±0.127@7.01
15	Phenolic compounds mg/l	Main	APHA, 23rd Edition,2017, 5530. C	0.001 - 0.2	0.001	0.002	BDL	±0.0204 at 0.1004
16	Residual Free Chlorine mg/l	Main	APHA, 23rd Edition,2017, 4500G	0.1 - 10.0	0.2	1	BDL	±0.0082@0.1
17	Selenium mg/l	Main	IS 3025 (Part 56):2003	0.001 - 0.040	0.01	No Relaxation	BDL	±0.000938@0.001
18	Sulphate mg/l	Main	APHA, 23rd Edition,2017, 4500-SO42- E	2.0 - 40.0	200	400	BDL	±0.640@19.88
19	Total Chromium mg/l	Main	IS 3025 ( Part 52 ) : 2003	0.05 - 15.0	0.05	No relaxation	BDL	±0.004@0.05
20	Total Coliform MPN/100 ml	Main	APHA, 23rd Edition, 9221 B	-	Nil	No Relaxation	BDL	Not specified
21	Total Dissolved Solids mg/l	Main	IS 3025 (Part 16):1984 R : 2006	30.0 - 2000.0	500	2000	151.00	±4.473@592.0
22	Total Hardness mg/l as CaCO3	Main	IS 3025 (Part 21):2009	4.0 - 2000.0	200	600	28.81	±11.545@612.8
23	Turbidity NTU	Main	IS 3025 (Part 10):1984, R : 2006	1.0 - 100.0	1	5	3.57	±0.855@41.58
24	Zinc mg/l	Main	IS 3025 ( Part 49 ) : 1994, R : 2009	0.01 - 2.0	5	15	BDL	±0.0013@0.01

----- END OF THE REPORT -----

Reported By  
Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :10-03-2023 11:23:41

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

<b>Unique Report No.</b>	26863	<b>Report Issue Date</b>	27-03-2023
<b>Customer Name</b>	South Estern Coal Field Ltd Bilaspur	<b>Address &amp; Contact Details</b>	SEEPAT ROAD BILASPUR 7752241927
<b>Sampling By</b>	Bharat Kumar, Sunil Kumar	<b>Date of Sampling</b>	04-03-2023
<b>Sampling Location</b>	Latori village bore hole water Nawapara U/G	<b>Sampling Plan</b>	As per monthly plan
<b>Sample Condition</b>	APPROPRIATE	<b>Date of Receipt of Sample</b>	06-03-2023
		<b>Sample ID</b>	16124
		<b>Sampling Method</b>	CMPDI/BSP/LSOP
		<b>Date of Analysis</b>	From 04-03-2023 To 19-03-2023

Sr. No	Parameter	Test At	Method of Analysis	Range of Testing	IS 10500:2012		Observed Value	UOM (at 95% C.L&K=1.96)
					Acceptable Limit	Permissible Limit		
1	Alkalinity mg/l as CaCO3	Main	IS 3025(Part 23):1986,R 2003	5.0 - 1000.0	200	1000	20.00	±0.19696@10.0
2	Arsenic mg/l	Main	IS 3025 (Part 37):1988,R 2003	0.002 - 0.040	0.01	0.05	BDL	±0.0081@0.018
3	Boron mg/l	Main	APHA, 23rd Edition,2017, 4500-B	0.5 - 14.0	0.5	1	BDL	±0.310@5.16
4	Calcium mg/l	Main	IS 3025 (Part 40): 1991, R : 2009	5.0 - 500.0	75	200	6.413	±2.512@99.8
5	Chlorides mg/l	Main	IS 3025(Part 32):1988 , R : 2007	5.0 - 1000.0	250	1000	14.50	±6.551@253.5
6	Colour Hazen	Main	APHA, 23rd Edition,2017, 2120. C	1.0 - 500	5	15	3.57	±1.05@ 49.86
7	Copper mg/l	Main	IS 3025 (Part 42) : 1992 R : 2009	0.03 - 10.0	0.05	1.5	BDL	±0.13@4.90
8	Fluoride mg/l	Main	APHA, 23rd Edition,2017, 4500, F- D	0.1 - 5.0	1.0	1.5	0.53	±0.014@0.98
9	Iron mg/l	Main	IS 3025 (Part 53) :2003, R:2009	0.05 - 15.0	0.3	No Relaxation	BDL	±0.0782@7.95
10	Lead mg/l	Main	APHA, 23rd Edition,2017, 3113B	0.0050 - 0.1000	0.01	No relaxation	BDL	±0.000266@0.005
11	Manganese mg/l	Main	IS 3025 (Part 59) : 2006	0.05 - 5.0	0.1	0.3	BDL	±0.026@2.44
12	Nitrate mg/l	Main	APHA, 23rd Edition,2017, 4500, B	0.5 - 45	45	No Relaxation	27.40	±0.528@20.41
13	Odour none	Main	IS 3025 (Part 5):1983	-	Agreeable	Agreeable	Agreeable	Not applicable
14	pH Value none	Site	IS 3025 (Part 11):1983, R : 2012	4.00 - 10.00	6.5 - 8.5	No Relaxation	6.84	±0.127@7.01
15	Phenolic compounds mg/l	Main	APHA, 23rd Edition,2017, 5530. C	0.001 - 0.2	0.001	0.002	0.001	±0.0204 at 0.1004
16	Residual Free Chlorine mg/l	Site	APHA, 23rd Edition,2017, 4500G	0.1 - 10.0	0.2	1	NIL	±0.0082@0.1
17	Selenium mg/l	Main	IS 3025 (Part 56):2003	0.001 - 0.040	0.01	No Relaxation	BDL	±0.000938@0.001
18	Sulphate mg/l	Main	APHA, 23rd Edition,2017, 4500-SO42- E	2.0 - 40.0	200	400	2.07	±0.640@19.88
19	Total Chromium mg/l	Main	IS 3025 ( Part 52 ) : 2003	0.05 - 15.0	0.05	No relaxation	BDL	±0.004@0.05
20	Total Coliform MPN/100 ml	Site	APHA, 23rd Edition, 9221 B	-	Nil	No Relaxation	BDL	Not specified
21	Total Dissolved Solids mg/l	Main	IS 3025 (Part 16):1984 R : 2006	30.0 - 2000.0	500	2000	111.00	±4.473@592.0
22	Total Hardness mg/l as CaCO3	Main	IS 3025 (Part 21):2009	4.0 - 2000.0	200	600	20.00	±11.545@612.8
23	Turbidity NTU	Main	IS 3025 (Part 10):1984, R : 2006	1.0 - 100.0	1	5	1.24	±0.855@41.58
24	Zinc mg/l	Main	IS 3025 ( Part 49 ) : 1994, R : 2009	0.01 - 2.0	5	15	BDL	±0.0013@0.01

----- END OF THE REPORT -----

Reported By  
Panna Lal Kashyap      Santosh Kumar Singh

Reviewed and Approved  
C. Kumaravel  
Manager (Env)  
Date&Time :27-03-2023 03:49:39

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

<b>Unique Report No.</b>	26872	<b>Report Issue Date</b>	27-03-2023
<b>Customer Name</b>	South Eastern Coal Field Ltd Bilaspur	<b>Address &amp; Contact Details</b>	SEEPAT ROAD BILASPUR 7752241927
<b>Sampling By</b>	Bharat Kumar, Sunil Kumar	<b>Date of Sampling</b>	04-03-2023
<b>Sampling Location</b>	Maheshpur Village Bore Hole Water Nawapara U/G	<b>Sampling Plan</b>	As per monthly plan
<b>Sample Condition</b>	APPROPRIATE	<b>Date of Receipt of Sample</b>	06-03-2023
		<b>Sample ID</b>	16125
		<b>Sampling Method</b>	CMPDI/BSP/LSOP
		<b>Date of Analysis</b>	From 04-03-2023 To 19-03-2023

Sr. No	Parameter	Test At	Method of Analysis	Range of Testing	IS 10500:2012		Observed Value	UOM (at 95% C.L&K=1.96)
					Acceptable Limit	Permissible Limit		
1	Alkalinity mg/l as CaCO3	Main	IS 3025(Part 23):1986,R 2003	5.0 - 1000.0	200	1000	30.00	±0.19696@10.0
2	Arsenic mg/l	Main	IS 3025 (Part 37):1988,R 2003	0.002 - 0.040	0.01	0.05	BDL	±0.0081@0.018
3	Boron mg/l	Main	APHA, 23rd Edition,2017, 4500-B	0.5 - 14.0	0.5	1	BDL	±0.310@5.16
4	Calcium mg/l	Main	IS 3025 (Part 40): 1991, R : 2009	5.0 - 500.0	75	200	9.619	±2.512@99.8
5	Chlorides mg/l	Main	IS 3025(Part 32):1988 , R : 2007	5.0 - 1000.0	250	1000	23.99	±6.551@253.5
6	Colour Hazen	Main	APHA, 23rd Edition,2017, 2120.C	1.0 - 500	5	15	3.10	±1.05@ 49.86
7	Copper mg/l	Main	IS 3025 (Part 42) : 1992 R : 2009	0.03 - 10.0	0.05	1.5	BDL	±0.13@4.90
8	Fluoride mg/l	Main	APHA, 23rd Edition,2017, 4500, F- D	0.1 - 5.0	1.0	1.5	0.49	±0.014@0.98
9	Iron mg/l	Main	IS 3025 (Part 53) :2003, R:2009	0.05 - 15.0	0.3	No Relaxation	BDL	±0.0782@7.95
10	Lead mg/l	Main	APHA, 23rd Edition,2017, 3113B	0.0050 - 0.1000	0.01	No relaxation	BDL	±0.000266@0.005
11	Manganese mg/l	Main	IS 3025 (Part 59) : 2006	0.05 - 5.0	0.1	0.3	BDL	±0.026@2.44
12	Nitrate mg/l	Main	APHA, 23rd Edition,2017, 4500, B	0.5 - 45	45	No Relaxation	22.34	±0.528@20.41
13	Odour none	Main	IS 3025 (Part 5):1983	-	Agreeable	Agreeable	Agreeable	Not applicable
14	pH Value none	Site	IS 3025 (Part 11):1983, R : 2012	4.00 - 10.00	6.5 - 8.5	No Relaxation	6.84	±0.127@7.01
15	Phenolic compounds mg/l	Main	APHA, 23rd Edition,2017, 5530.C	0.001 - 0.2	0.001	0.002	0.001	±0.0204 at 0.1004
16	Residual Free Chlorine mg/l	Site	APHA, 23rd Edition,2017, 4500G	0.1 - 10.0	0.2	1	NIL	±0.0082@0.1
17	Selenium mg/l	Main	IS 3025 (Part 56):2003	0.001 - 0.040	0.01	No Relaxation	BDL	±0.000938@0.001
18	Sulphate mg/l	Main	APHA, 23rd Edition,2017, 4500-SO42- E	2.0 - 40.0	200	400	2.17	±0.640@19.88
19	Total Chromium mg/l	Main	IS 3025 ( Part 52 ) : 2003	0.05 - 15.0	0.05	No relaxation	BDL	±0.004@0.05
20	Total Coliform MPN/100 ml	Site	APHA, 23rd Edition, 9221 B	-	Nil	No Relaxation	BDL	Not specified
21	Total Dissolved Solids mg/l	Main	IS 3025 (Part 16):1984 R : 2006	30.0 - 2000.0	500	2000	173.00	±4.473@592.0
22	Total Hardness mg/l as CaCO3	Main	IS 3025 (Part 21):2009	4.0 - 2000.0	200	600	56.00	±11.545@612.8
23	Turbidity NTU	Main	IS 3025 (Part 10):1984, R : 2006	1.0 - 100.0	1	5	1.24	±0.855@41.58
24	Zinc mg/l	Main	IS 3025 ( Part 49 ) : 1994, R : 2009	0.01 - 2.0	5	15	BDL	±0.0013@0.01

----- END OF THE REPORT -----

Reported By  
Panna Lal Kashyap      Santosh Kumar Singh

Reviewed and Approved  
C. Kumaravel  
Manager (Env)  
Date&Time :27-03-2023 03:49:39

JSA

Note:

- \* This is computer generated report and does not require signature
- a. The results relate only to the item sampled and tested.
- b. This report shall not be reproduced except in full without approval of the laboratory.



**TEST & SAMPLING REPORT OF (DRINKING WATER)**

<b>Unique Report No.</b>	26854	<b>Report Issue Date</b>	27-03-2023
<b>Customer Name</b>	South Eastern Coal Field Ltd Bilaspur	<b>Address &amp; Contact Details</b>	SEEPAT ROAD BILASPUR 7752241927
<b>Sampling By</b>	Bharat Kumar, Sunil Kumar	<b>Date of Sampling</b>	04-03-2023
<b>Sampling Location</b>	Gajadharpur Village Bore Hole Water Nawapara U/G	<b>Sampling Plan</b>	As per monthly plan
<b>Sample Condition</b>	APPROPRIATE	<b>Date of Receipt of Sample</b>	06-03-2023
		<b>Sample ID</b>	16123
		<b>Sampling Method</b>	CMPDI/BSP/LSOP
		<b>Date of Analysis</b>	From 04-03-2023 To 19-03-2023

Sr. No	Parameter	Test At	Method of Analysis	Range of Testing	IS 10500:2012		Observed Value	UOM (at 95% C.L&K=1.96)
					Acceptable Limit	Permissible Limit		
1	Alkalinity mg/l as CaCO3	Main	IS 3025(Part 23):1986,R 2003	5.0 - 1000.0	200	1000	15.00	±0.19696@10.0
2	Arsenic mg/l	Main	IS 3025 (Part 37):1988,R 2003	0.002 - 0.040	0.01	0.05	BDL	±0.0081@0.018
3	Boron mg/l	Main	APHA, 23rd Edition,2017, 4500-B	0.5 - 14.0	0.5	1	BDL	±0.310@5.16
4	Calcium mg/l	Main	IS 3025 (Part 40): 1991, R : 2009	5.0 - 500.0	75	200	8.016	±2.512@99.8
5	Chlorides mg/l	Main	IS 3025(Part 32):1988 , R : 2007	5.0 - 1000.0	250	1000	8.50	±6.551@253.5
6	Colour Hazen	Main	APHA, 23rd Edition,2017, 2120.C	1.0 - 500	5	15	1.19	±1.05@ 49.86
7	Copper mg/l	Main	IS 3025 (Part 42) : 1992 R : 2009	0.03 - 10.0	0.05	1.5	BDL	±0.13@4.90
8	Fluoride mg/l	Main	APHA, 23rd Edition,2017, 4500, F- D	0.1 - 5.0	1.0	1.5	0.49	±0.014@0.98
9	Iron mg/l	Main	IS 3025 (Part 53) :2003, R:2009	0.05 - 15.0	0.3	No Relaxation	0.07	±0.0782@7.95
10	Lead mg/l	Main	APHA, 23rd Edition,2017, 3113B	0.0050 - 0.1000	0.01	No relaxation	BDL	±0.000266@0.005
11	Manganese mg/l	Main	IS 3025 (Part 59) : 2006	0.05 - 5.0	0.1	0.3	BDL	±0.026@2.44
12	Nitrate mg/l	Main	APHA, 23rd Edition,2017, 4500, B	0.5 - 45	45	No Relaxation	14.30	±0.528@20.41
13	Odour none	Main	IS 3025 (Part 5):1983	-	Agreeable	Agreeable	Agreeable	Not applicable
14	pH Value none	Site	IS 3025 (Part 11):1983, R : 2012	4.00 - 10.00	6.5 - 8.5	No Relaxation	9.74	±0.127@7.01
15	Phenolic compounds mg/l	Main	APHA, 23rd Edition,2017, 5530.C	0.001 - 0.2	0.001	0.002	0.001	±0.0204 at 0.1004
16	Residual Free Chlorine mg/l	Site	APHA, 23rd Edition,2017, 4500G	0.1 - 10.0	0.2	1	NIL	±0.0082@0.1
17	Selenium mg/l	Main	IS 3025 (Part 56):2003	0.001 - 0.040	0.01	No Relaxation	BDL	±0.000938@0.001
18	Sulphate mg/l	Main	APHA, 23rd Edition,2017, 4500-SO42- E	2.0 - 40.0	200	400	4.17	±0.640@19.88
19	Total Chromium mg/l	Main	IS 3025 ( Part 52 ) : 2003	0.05 - 15.0	0.05	No relaxation	BDL	±0.004@0.05
20	Total Coliform MPN/100 ml	Site	APHA, 23rd Edition, 9221 B	-	Nil	No Relaxation	BDL	Not specified
21	Total Dissolved Solids mg/l	Main	IS 3025 (Part 16):1984 R : 2006	30.0 - 2000.0	500	2000	151.00	±4.473@592.0
22	Total Hardness mg/l as CaCO3	Main	IS 3025 (Part 21):2009	4.0 - 2000.0	200	600	36.00	±11.545@612.8
23	Turbidity NTU	Main	IS 3025 (Part 10):1984, R : 2006	1.0 - 100.0	1	5	1.47	±0.855@41.58
24	Zinc mg/l	Main	IS 3025 ( Part 49 ) : 1994, R : 2009	0.01 - 2.0	5	15	0.02	±0.0013@0.01

----- END OF THE REPORT -----

Reported By  
Panna Lal Kashyap      Santosh Kumar Singh

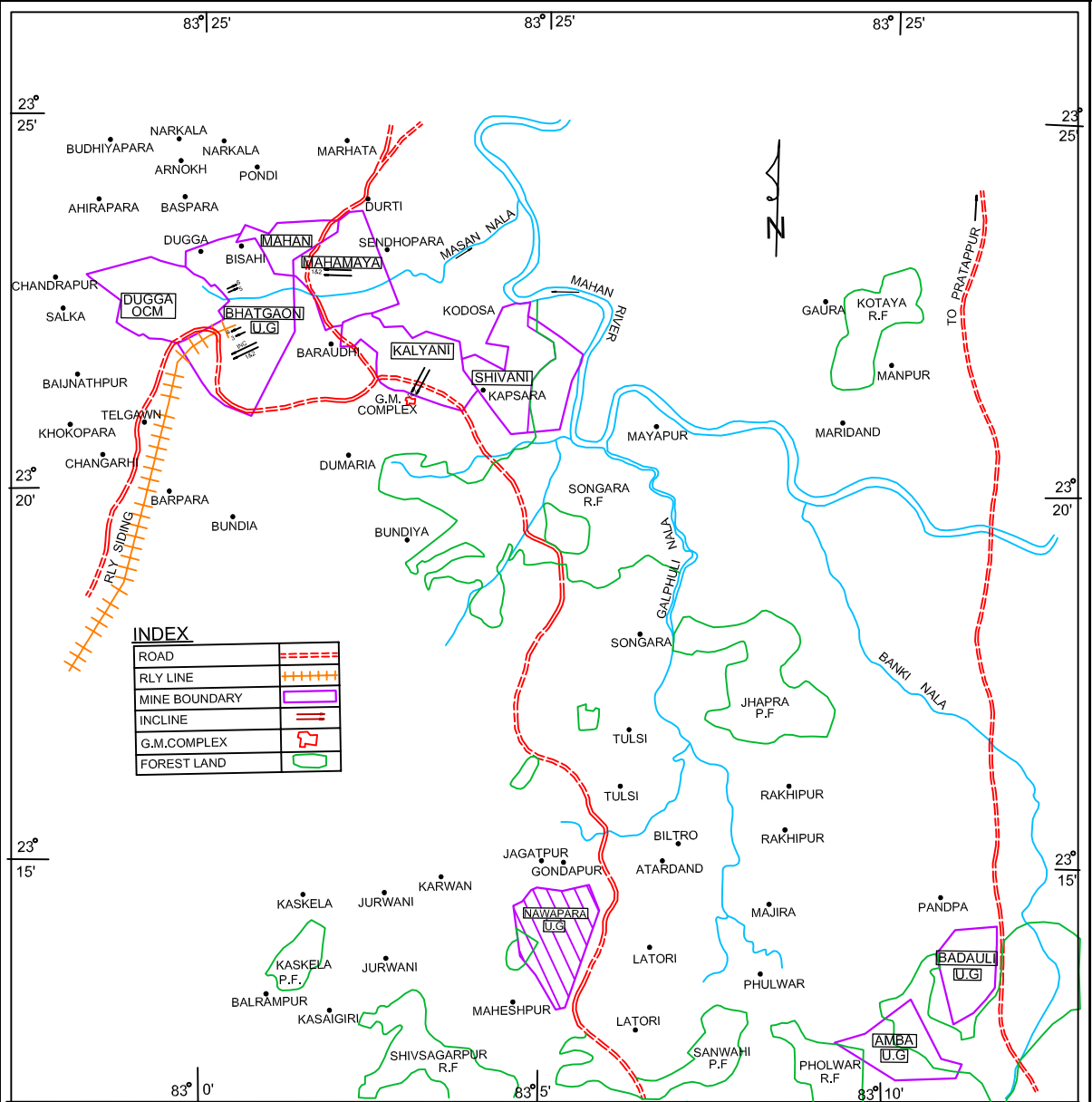
Reviewed and Approved  
C. Kumaravel  
Manager (Env)  
Date&Time :27-03-2023 03:49:39

JSA

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**ENVIRONMENTAL AUDIT  
STATEMENT 2022-23**

**NAWAPARA U.G.**