

स्टील ऑथोरिटी ऑफ इंडिया लिमिटेड  
(भारत सरकार का प्रतिष्ठान)  
रॉ मटेरियल्स डिवीजन  
मनोहरपुर और माइंस  
पोस्ट - चिरियां, प० सिंहभुम, झारखण्ड- ८३३१०६  
दुरभाष-९३०८१२८७७६,



**STEEL AUTHORITY OF INDIA LIMITED**

(A Government of India Enterprise)

RAW MATERIALS DIVISION

MANOHARPUR ORE MINES

P.O. - CHIRIA, W. Singhbhum, Jharkhand-833106

P Ph. No.9308128776.

Ref. No.MOM/PC/ 6/ 101

Date: 19-05-2020.

To,  
The Member Secretary  
Jharkhand state Pollution Control Board  
Head office, HEC Complex  
T.A. Building , Dhurua  
Ranchi-834004.


**Sub: Environmental Statement for the year 2019-20.**

Dear Sir,

Please find the enclosed herewith Environmental Statement for the year 2019-20,  
in respect of Manoharpur Ore Mines, Chiria. For needful please.

Thanking you,

Yours faithfully,

  
( S Srinivasa Rao )  
AGM (Mining)

Copy to: The Regional officer, JSPCB, Jamshedpur.

(Regd. Office: Ispat Bhawan, Lodi Road, P.O. Box-3049, New Delhi-110003, Ph. No.-011-24387481(14Lines)  
पंजीकृत कार्यालय- ईस्पात भवन, लोदी रोड, प० ब० न०-३०४९, नई दिल्ली, ११०००३, दुरभाष-०११२४३८७४८९(१४लाइन),  
Fax No.011-24367015, Gram-STEELINDIA, E-mail: [sailco@vsnl.com](mailto:sailco@vsnl.com))  
फैक्स-०११२४३६७०१५, ग्राम-स्टीलइंडिया, ई-मेल: [sailco@vsnl.com](mailto:sailco@vsnl.com))



**ENVIRONMENTAL STATEMENT YEAR: 2019-20**  
**Manoharpur Ore Mines**



**Steel Authority of India Limited**  
**Raw Materials Division**  
**Manoharpur Ore Mine**  
**West Singhbhum (Dist.)**  
**Jharkhand – 833 106**

**May, 2020**

**Environment Statement for the financial year ending 31<sup>st</sup> March 2020.**

**PART A**

1. Name and address of the owner/occupier of the industry operation or process. : Manoharpur Ore Mine  
P.O- Chiria,  
Dist. : Singhbhum (West)  
Pin- 833106, Jharkhand  
**Agent** : Shri Ravi Ranjan,  
Dy.General Manager (Mines)  
**Nominated Owner** : Sri Vivek Gupta Director (RM & L)
2. Industry Category - Primary, Iron Ore Mining
3. Production capacity - 0.75 Million tones / Annum
4. Year of establishment - 1911
5. Date of the last environment Statement submitted - 15-05-2019.

**PART B**

**Water and Raw Materials Consumption**

**I. Water Consumption KL/day:**

- Industrial
- (a) Cooling of Engine - 5 KL/day
- (b) Water Spraying on haul road & Crusher for dust suppression - 85 KL/day
- (c) Miscellaneous - 20 KL/day
- Domestic - 1350 KL/day

Name of product	<u>Process Water Consumption per unit of Product output.</u>	
	<u>During the previous financial year</u>	<u>During the current financial year.</u>
Iron Ore	0.075 KL/Te	0.045 KL/Te

**Details of Water consumption for the year 2019-20.**

Permission obtained from Water Resource Department, Govt. Of Jharkhand and agreement has been made with Water Ways Division, Chaibasa on 03.08.2017, for drawl of water from Hamsadagara Nalla to the tune of 0.62 MCM per annum for Manoharpur Ore Mines, Chiria.

As per the agreement, water charges are being paid to Executive Engineer Water Ways Division Chaibasa on monthly basis.

**Industrial:** There is no processing unit , But Water is being used in diesel engine for cooling purpose & Water Spraying on haul road & Crusher for dust suppression. Water for mines and miscellaneous uses is varying from 97-111 KL.

  
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## Township, Drinking & Domestic

About 3951 persons have been provided water supply facility in the township. water consumption for drinking and domestic purpose in the township is 1350 KL/Day.

### 2. Raw materials consumption

Name of Raw Material	Name of the product	Consumption of Raw material per unit(Te)	
		During the previous financial year 2018-19	During the current financial year 2019-20
Diesel lt/Te	Iron ore	0.110	0.095
Lubricants Lt/Te	Iron ore	0.0031	0.00073
Explosives in Kg/Te	Iron ore	0.121	0.104

### PART C

#### Pollution discharged to Environment/Unit of output

(Parameters as specified in the consent issued )

Environmental Lab has been set up at Monoharpur Ore Mines with following equipment

- Respirable Dust Sampler, Model-APM460(BL),
- Fine Particulate Sampler PM 550 Model
- Gaseous Sampling Attachment APM 411(TE) Model
- Sound Level meter Model SLM-100

Air , Water and Noise quality monitoring is being carried out regularly.

In addition to this, environmental quality monitoring is also being carried out by JSPCB on Half yearly basis.

- Water quality monitoring:** Water quality monitoring was done at different locations of Hamsadagara Nalla as well as spring water. Analysis report is enclosed as Annexure-A
- Air quality monitoring:** Ambient air quality monitoring was done during the year 2019-20 at different locations is enclosed as Annexure-B.
- Noise Monitoring:** Noise monitoring was done at Different locations and analysis report is enclosed as annexure-C.

### PART D

#### HAZARDOUS WASTE

( As specified under Hazardous Wastes / Management and Handling Rules, 1989 )

Hazardous Waste	Total qty. in Kg.	
	During the previous year 2018-19	During the current year 2019-20
(a) From process	180 Kg (Burnt or used oil)	30 Kg (Burnt or used oil)
(b) Cotton Waste	---	---

**PART E  
SOLID WASTES**

Total qty. in Kg.

	During the Previous year (2018-19)	During the current year (2019 – 20)
(a) From process (overburden)	4179.40 Te	11896.00Te
(b) From pollution control Facilities	NIL	NIL
(c) Quantity recycled : Reutilized Within the Unit	Nil	Nil
(d) Solid	Nil	Nil
(c) Disposed	4179.40 Te	11896.00Te

**PART F**

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

Used oil and Cotton waste are the hazardous waste generated at Manoharpur Ore Mines. The quantity of used oil and cotton waste is very negligible. However used oil stored temporarily stored in sealed drums for auction to registered recycler. The main solid waste generated from mining operations is OB & Waste which is dumped in the yard demarcated in the approved mining plan and leveled properly.

**PART G**

Impact of the pollution abatement measures taken on conservations of all resources and on the cost of production.

1. Regular water spraying on haul roads has reduced generation of air borne dust from mining haul roads.
2. Afforestation at mines and town ship area.
3. Ear plugs and dust masks are provided to the employees who are engaged in the area where there is possibility of such pollution.

**PART H**

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

1100 saplings are planted at mines area in 2019-20.

**PART I**

Expenditure on environmental control measures and studies during 2019-20 is given below

1. Cost of water spraying for dust Suppression	: Rs.29.37 lacs
2. Cost of afforestation of trees	: Rs 1.65 lacs
3. Cost of Water Analysis Kit	: Rs. 1.20 lacs
4. Monitoring Air and water, Noise & awareness creation World Environment week, ME&MC week, Swachata Pakwada EIA/EMP	: Rs 21.23 lacs
Total	: Rs.53.45 lacs
Iron ore dispatch	: 733794.93 Te
<b>Cost per tonne on environment Expenses=</b>	<b>Rs.7.28</b>





**STEEL AUTHORITY OF INDIA LTD.  
MANOHARPUR ORE MINES, CHIRIA**

**NOISE QUALITY MONITORING REPORT**

No. of Sapling points : 07  
Date of Sapling : 11/07/2019  
Weather : Sunny

Sl. No.	Location	Observed Noise Level in dB (A)	Prescribed Limit in day time in dB (A)
1	Near GM Office	64.2	75
2	Near Chiria Hospital	46.5	50
3	Near Mines Canteen	68.3	75
4	Near Mines Weigh Bridge	69.6	75
5	Near Sub-grade Dump	66.4	75
6	Near Ankua Chowk	48.5	55
7	Near Railway siding	70.2	75

  
 S S Rao  
 Sr. Manager (Min)





**JHARKHAND STATE POLLUTION CONTROL BOARD**  
ADITYAPUR, JAMSHEDPUR

**AMBIENT AIR QUALITY REPORT**

Lab. Ref. No:- 24/2019

Name of the Industry :- M/s Manoharpur Iron Ore Mines,  
At+ P.O- Chiriya,  
Dist- West Singhbhum.

No. of Sampling Points-3  
Sampling Position:

Date of Sampling :- 09-10.07.2019

1. Near General Office
2. Near Mines weigh Bridge
3. Near Mines work shop.

Weather Condition :- Cloudy/Rainy

Time	SO <sub>2</sub>	NO <sub>X</sub>	RSPM
<b>Point -1</b>			
8.45 AM- 12.45 PM	19.73	21.92	86.18
12.45 PM- 4.45 PM	22.47	23.80	
4.45 PM- 8.45 PM	18.64	25.13	70.96
8.45 PM- 12.45 AM	24.67	27.11	
Maximum	24.67	27.11	86.18
Average	21.38	24.49	78.57
<b>Point -2</b>			
9.15 AM-1.15 PM	18.64	20.67	82.49
1.15 PM- 5.15 PM	14.25	18.51	
5.15 PM- 9.15 PM	18.09	22.55	66.86
9.15 PM- 1.15 AM	21.38	24.47	
Maximum	21.38	24.47	82.49
Average	18.09	21.55	74.68
<b>Point-3</b>			
10 AM- 2 PM	12.06	15.66	92.74
2 PM- 6 PM	14.80	18.51	
6 PM-10 PM	16.44	21.16	78.08
10 PM- 2 AM	18.64	23.80	
Maximum	18.64	23.80	92.74
Average	15.49	19.78	85.41

NOTE :- All value are expressed in micro gram/cubic meter.

Remarks :- The value of all parameters were observed within the limit prescribed.

*09/10/19*  
(Lab. Incharge)  
Jamshedpur.

*09/10/19*  
(Regional Officer)  
Jamshedpur.

Board Analyst

*09/10/19*



**JHARKHAND STATE POLLUTION CONTROL BOARD**  
 REGIONAL OFFICE-CUM-LABORATORY, MB/15, NEW HOUSING COLONY  
 ADITYAPUR, JAMSHEDPUR.

Lab. Ref. No:- 725/2019

Date.....

Analysis report of Physico Chemical Examination of Sewage/Trade Effluent.

- |    |                              |    |   |
|----|------------------------------|----|---|
| 1. | Name and Address of the Unit | :- | M/s Manoharpur Ore Mines,<br>At- Chiriya, Dist- West Singhbhum. |
| 2. | Point of Collection          | :- | D/S Hamsadaga Nallah  |
| 3. | Date and Time of Collection  | :- | 09.07.2019 at 02.15 PM  |
| 4. | Collected By                 | :- | Regional Office-Cum Laboratory, Jsr.                            |
| 5. | Sample Source                | :- | Nallah Water  |

Sl. No.	PARTICULARS	VALUE OBTAINED
1.	Temp A/W	25.1/23.4
2.	pH	7.5
3.	BOD <sub>5</sub> mg/l	5.0
4.	COD mg/l	16.0
5.	Total Solid	352.0
6.	Total Suspended Solid	48.0
7.	Total Dissolve Solid	304.0

Remarks :-

*[Signature]*  
6-8-19  
(Analyst)

*[Signature]*  
6-8-19  
(Lab. Incharge)  
Jamshedpur.

*[Signature]*  
7-8-19  
(Regional Officer)  
Jamshedpur.

(Board Analyst)

*[Signature]*  
FHY





**JHARKHAND STATE POLLUTION CONTROL BOARD**  
REGIONAL OFFICE-CUM-LABORATORY, MB/15, NEW HOUSING COLONY  
ADITYAPUR, JAMSHEDPUR.

Lab. Ref. No:- 724/2019

Date.....

**Analysis report of Physico Chemical Examination of Sewage/Trade Effluent.**

1. Name and Address of the Unit :- M/s Manoharpur Iron Ore Mines,  
At- Chiriya, Dist- West Singhbhum.
2. Point of Collection :- U/S Hamsadaga Nallah
3. Date and Time of Collection :- 09.07.2019 at 01.30 PM
4. Collected By :- Regional Office-Cum Laboratory, Jsr.
5. Sample Source :- Nallah Water

Sl. No.	PARTICULARS	VALUE OBTAINED
1.	Temp A/W	24.2/22.5
2.	pH	7.28
3.	BOD <sub>5</sub> mg/lit	3.0
4.	COD mg/lit	12.0
5.	Total Solid	328.0
6.	Total Suspended Solid	36.0
7.	Total Dissolve Solid	292.0

Remarks :-

*[Signature]*  
6-8-19  
(Analyst)

*[Signature]*  
6-8-19  
(Lab. Incharge)  
Jamshedpur.

*[Signature]*  
6-8-19  
(Regional Officer)  
Jamshedpur.

(Board Analyst)

*[Signature]*  
6-8-19