

**REPORT ON CHECK INSPECTION OF MANOHARPUR ORE MINES (DHOBIL) MINE OF M/s STEEL AUTHORITY OF INDIA LIMITED IN WEST SINGHBHUM DISTRICT**

Name and designation of inspecting officer : Sri Anupam Nandi , RCOM.

Date of Inspection : 14.03.2019

**1. General information of the mine:**

- i) Name of mine : Manoharpur Ore Mines (Dhobil)
- ii) Owner : Steel Authority of India Ltd.
- iii) Nominated Owner : Sri H N Rai , Director (Technical )
- iv) Mining Engineer : Sri R K Patri, Manager (L&L)
- v) Agent : Sri D Das, DGM (Mines)
- vi) Mine Manager :Sri Ravi Ranjan AGM (Mining)
- vii) Lease Area :513.036 Hect.
- viii) Location : Vill:Dhobil, Dist:Wst Singhbhum,  
State:Jharkhand
- ix) Lease Period : 20 years
- x) Date of Expiry :07.03.2018
- xi) Date of approval of Mining Plan: 23.11.2017
- xii) Date of approval of scheme : Not Applicable
- xiii) Period of Mining Plan/  
Scheme of Mining : 2017-18 to 2021-22
- xiv) Production (Year 2018-19 ) : 749986 tonnes

**2. Brief description of the mine:**

- a. A brief description of the mine covering location, geology, problems associated with mining of the deposit etc. may be given.

Steel Authority of India Limited held 6 (six) mining leases in Manoharpur Ore Mines group at Chiria in the West Singhbhum District of Jharkhand State namely – Ajitaburu, McLellan (Budhaburu), Dhobil, SukriLutur Buru, Anqua and Tatiburu. The Dhobil lease is having an area of 513.036 Ha, and is covered by Survey of India Topo Sheet No. 73F/7. It lies between 85016'5.6" E to 85017'25.3" E longitude and 22014'57.3" N to 22016'15.8" N latitude.

The Lease was granted for a period of 30 years w.e.f 08.03.1948 to 07.03.1979. 1st Renewal of lease deed was executed on 06.04.1980 for the period of 20 years w.e.f 08.03.1978 to 07.03.1998. As per the

provisions of MMDR (Amendment) Act 2015 & Mineral (Mining by Govt. Company) Rules, 2015, the State Government vide order Kha.Ne(Chahiba)–44/05/586/M,Ranchi dated 07.03.2018 extended the Dhobil lease up to 07.03.2038 Vide letter dated 13.01.2017.

Lease deed for Second renewal period of 20 years from 08.03.1998 to 07.03.2018 and lease extension period of 20 years from 08.03.2018 to 07.03.2038 was executed on 21.04.2018.

The chiria iron ore deposit is banded limonite-goethite-hematite assemblage capping the budhaburu hill down to 480m RL resting on a shale BHQ country rock of the Iron ore Group. Trending parallel to the major structure, the longest axis of the deposit is N250E-S250W, spread on a visible strike length over 6.5km and an average outcrop width of about 3.5km. The oblong tabular iron ore body is bounded by the Banded iron ore formations. Lateralization is a universal feature, which obliterates the exact delineation of ore boundary on surface.

Mechanized open cast mining with 100 mm diameter wagon drillhole drilling and blasting along with shovel – dumper combination is practiced and it will be followed. Bench height and width will be 6m & 10m respectively. Drilling is done using 100 mm wagon drills and hydraulic excavators of 1.2 Cu.m capacities are used for loading of overburden and ore. 25 tonnes capacity dumpers do hauling of ore and waste. Blasting is done by using slurry explosives and Nonnel fuses detonators. Spacing and burden in OB & ore benches are 3 m and 2.5 m respectively. Blasted ore will be sorted and sized by means of mobile crusher and screening unit.

Out of 513.036 ha of lease area forest clearance was granted for only 29.411 ha. All the mining operations and mine infra and dumps were located. Mine is working from mid nineteen century , very limited are is available for mining and systematic stacking of waste and mineral rejects etc.

**b.** Description on deployment of mining machinery may be given in the following format.

**b) Deployment of mining machinery:**

Sl No	Machineries deployed	Capacity	Number of Units	In use	Ideal	Percentage Of utilization	Brief description	Remarks
1.	DOZER	13F * 5F	1	1	-	20%	BEML (INDIA)	
2.	PAYLOADER	1.5 CUM.	1	1	-	75%	HINDUSTAN (INDIA)	
3.	WATER TANKER	9000 LTRS.	1	1	-	80%	ASHOK LEYLAND (INDIA)	
4.	EXPLOSIVE VAN	10 T	1	1	-	50%	TATA (INDIA)	
A	EXCAVATOR	0.9 CUM	1	4	2	70%	TATA HITACHI (INDIA)	
B	EXCAVATOR	0.9 CUM	1				TATA HITACHI(INDIA)	
C	EXCAVATOR	1.0 CUM	1				KOBALCO (JAPAN)	
D	EXCAVATOR	1.5 CUM	1				KOMATSHU(JAPAN)	
E	EXCAVATOR	0.9 CUM	1				KOMATSHU(JAPAN)	
F	EXCAVATOR	0.5 CUM	1				KOMATSHU(JAPAN)	
G	DRILL MACHINE	DIA 100 MM	1	1	1	70	ATLAS CAPCO (INDIA)	
H	DRILL MACHINE	DIA 100 MM	1				INDESOLAND (IRELAND)	
I	PAYLOADER	1.7 CUM	4	2	1	75%	HINDUSTAN (INDIA)	
J	WATER TANKER	5000 LTRS.	3	3	-	80%	TATA (INDIA)	
K	MIC	310 MT/HRS	1	1	1	80%	MESTO (FINLAND)	
L	MSP	310 MT/HRS	1				POWER SCREEN (UK)	
M	HYVA	31T/21T 25T/15T 25T/17T	82	65	17	70%	TATA (INDIA)	
N	TRIPPERS	16T/10T	58	45	13	70%	TATA (INDIA)	

### 3. Implementation of Mining Plan or scheme of Mining:

Sr. No.	Proposal in the approved Mining Plan or Scheme of mining (Period from 2017-18 to 2021-22)	Observations regarding implementation of proposals given in approved Mining Plan or Scheme of mining.	Remarks
<b>1.</b>	<b>CONSERVATION OF MINERALS</b>		
a)	Exploration: NIL	a) No Exploration proposed during 2018-19, 8 bore holes proposed in 2019-20.	
b)	Utilization of sub-grade mineral:	b) Sub-grade material blended with high grade ores	
c)	Any other proposal for monitoring:	c) Environment monitoring is being carried as per proposal	
<b>2.</b>	<b>SCIENTIFIC MINING</b>		
a)	Mine Development and method of mining	a) Open cast mining with 100 mm diameter wagon drill hole drilling and blasting along with shovel – dumper combination is practiced.	
b)	Handling of Waste/sub-grade material:	b) Waste is being dumped at the area specified for dump yard.	
c)	Area reclamation & restoration:	c) No proposal for reclamation	
d)	Any other proposal for monitoring:	NA	
<b>3.</b>	<b>PROTECTION OF ENVIRONMENT</b>		
a)	Afforestation: 650sapling	Plantation of 650 sapling were planted at the slope of waste dump over an area of 0.2ha	
b)	Quality of Air: Quarterly monitoring	Quarterly monitoring of air quality at six stations is being done regularly	
c)	Quality of Water: Quarterly monitoring	Quarterly monitoring of water quality at five stations is being done regularly	

d)	Noise Level:	Quarterly monitoring of noise at seven stations is being done regularly	
e)	Vibration:	Vibration monitoring was conducted by CMFRI,Dhanbad.	
f)	Any other proposal for monitoring:	--	

#### 4. History of Violations after approval of Mining Plan or Scheme of Mining:

Sl. No.	Date of Inspection	Name of Inspecting Officer	Violations of MCDR,88 observed and Pointed out	Rectification of Violations	Remarks
1	09.12.2018	Sri B P Karketta, Sr, ACOM	Violations under provisions of <b>Rule 35(2)</b> of MCDR, 2017 regarding submission of soft copy (in the standard format) of high resolution satellite images obtained from CARTOSAT-2 satellite LISS-IV sensor as on the 31 <sup>st</sup> day of March	<b>Compliance Submitted</b> :soft copy (in the standard format) of high resolution satellite images obtained from CARTOSAT-2 satellite LISS-IV sensor as on the 31 <sup>st</sup> day of March covering the Dhobil mining lease area and an area of two kilometers from the lease boundary prepared through IIT(ISMU), Dhanbad was submitted on 15.01.2019.	<b>Complied on 05.02.2019</b>

### 5. Socio-Economic Development Plan: 2018-19

Sl. No.	Proposed Action Plan towards Socio-Economic Development	Expenditure Proposed (In Rs. Lakh)	Expenditure Incurred (In Rs. Lakh)	Remarks
1.	General Development in the area			Others Residential schooling, ITI,DAV School, assisting teaching staff, Skill development for local youth etc.
	i) Housing	-	-	
	ii) Water Supply	2.9	0.34	
	iii) Sanitation	-	-	
	iv) Health, Safety and Medical Facilities	59.5	30.71	
2.	Education and Training	-	-	
3.	Employment to local inhabitants	-	-	
4.	Public Transportation and communication	-	-	
5.	Recreation and other sports activities	1.0	-	
6.	Expenditure for environment management	-	-	
7.	Other	34.0	20.24	
	<b>Total:</b>	<b>96.5</b>	<b>51.19</b>	

**(Anupam Nandi)**  
**Regional Controller of Mines**  
**& Inspecting Officer**