

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR inspection REPORT

Kolkata regional office

Mine file No : CAL/BH/SB/FE(D-1)

Mine code : 30BHR27017

- (i) Name of the Inspecting : **K001**) **B.L. KISKU**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : S/Shri S.S. Rao, AGM (Mines), DR. R K Naik Sr Manager
Official with
Designation
- (iv) Date of Inspection : 02/07/2021
- (v) Prev.inspection date : 10/03/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MANOHARPUR (DHOBIL)**
- (b) **Registration NO.** : **IBM/5662/2011**
- (c) **Category** : **A Other than Fully Mech.**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **JHARKHAND**
- District : **SINGHBHUM (WEST)**
- Village : **CHIRIA**
- Taluka : **MANOHARPUR**
- Post office : **CHIRIA**
- Pin Code : **833106**
- FAX No. : **06596-263714**
- E-mail : **momchiria@gmail.com**
- Phone : **06593 287674/09308128774/**
- (f) **Police Station** : **MANOHARPUR**
- (g) **First opening date** : **14/06/1982**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **AT & PO: CHIRIA**
DISTT: SINGHBHUM WEST
JHARKHAND - 833106
3. (a) **Lease Number** : **BHR0061**
- (b) **Lease area** : **1052**
- (c) **Period of lease** :
- (d) **Date of Expiry** : **07/12/2005**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : STEEL AUTHORITY OF INDIA LTD.
 INDUSTRY HOUSE 5TH & 6TH
 FLOOR 10, CAMAC STREET
 KOLKATA WEST BENGAL
 Phone:033-22822316/0462/3385
 FAX :033-22822316/0462

Owner : Amarendu Prakash
 Steel Authority Of India
 Limited Bokaro Steel Plant
 Bokaro-827001 SINGHBHUM
 (WEST) JHARKHAND
 Phone: 05642240300,024
 FAX : (06542)240/82

Agent : D.DEY SARKAR
 At &P.O. Chiria Dist. West
 Singhbhum Jahakhand
 SINGHBHUM (WEST) JHARKHAND
 Phone: 8986881005
 FAX :

Mining Engineer

Name : R.K.Patri,Full Time
 Qualification : B.Tech (Min.)
 Appointment/ : 18/01/2019
 Termination date

Geologist

Name : RAJKESH KUMAR NAIK,Full Time
 Qualification : M. Sc(Geo)
 Appointment/ : 14/11/2014
 Termination date

Manager

Name : RAVI RANJAN
 Qualification : B.Tech(Min.)FCMMCC(R)
 Appointment/ : 18/01/2019
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	02/01/2001
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	05/05/2006
	:	Mining Scheme rule 12 MCDR1988	11/12/2008
	:	Mining Scheme rule 12 MCDR1988	06/09/2013
	:	MP review under 17(1) MCR 2016	23/11/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	It was proposed to drill 9 nos. bore holes during 2020-21.	No borehole was drilled.	Exploration not done as per proposal for want of Stage II Forest clearances.
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	As per approved Review of Mining plan, broken area has been explored upto G1 level. Area having less than 200 m borehole spacing are placed under G1 category and with less than 400m under G2 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposal.	--	--
1d	Balance area to be explored to bring Geological axis in 1 or 2	A total of 17 boreholes were proposed for drilling (8 boreholes in 2019-20 and 9 boreholes in 2020-21).	NIL.	Exploration not done as per approved proposal for want of Stage II Forest clearances.
1e	Balance reserve as on 01/04/20	Balance reserves as on 1/4/2020: 52.32 mill. tonnes (111) 5.34 mill. tonnes (122) 25.1 mill. tonne (211) 126.0 mill. tonnes (221 and 222).	--	--

1f	General remarks of inspecting officers on geology, exploration etc	--	--	Dhobil lease hold area is part of famous Chiria Iron ore block in Singhbhum Bonai Keonjhar Iron ore belt. As per approved Review of Mining plan approved on 23/11/2017, area having borehole spacing of less than 200m is considered for G1 and with spacing less than 400m for G2 category. As per MEMC Rule 2015 in case of iron ore, less than 100m spacing for G1 and less than 200 m spacing for G2 is recommended. So more boreholes will be required to fulfill G1 level criteria of M(EMC) Rules, 2015.
----	--	----	----	---

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	South east pit and north east pit.	South east pit and north east east pit.	--
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes.	--
2c	Stripping ratio or ore to OB ratio	-	1:0.176	--
2d	Quantity of topsoil generation in m3	NIL	NIL.	

2e	Quantity of overburden generation in m3	NIL	32497m3	There was less development in 2019-20 for which violation letter was issued from this office. Previous years backlog was completed in 2020-21 .
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	--	--	Extension of lease period is granted over reduced area (29.411 ha) limited to broken area only. Due to space constraints pit may not reach upto ultimate depth as a result ore reserves lying in lower benches may remain blocked. These blocked resources may be exploited after extension of lease period over non broken area.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two	Two.	
3b	Quantity of ROM mineral production proposed	749359 tonnes	553841 tonnes	
3c	Recovery of sailable/usable mineral from ROM production	95%	95%	--
3d	Quantity of mineral reject generation	NIL	NIL.	--
3e	Grade of mineral rejects generation and threshold value declared.	--	--	--
3f	Quantity of sub grade mineral generation.	NIL	NIL.	--

3g	Grade of sub grade mineral generation	--	--	--
3h	Manual / Mechanised method adopted for segregating from ROM	Manual and mechanised both	Manual and mechanised both.	-
3j	Provision of drilling and blasting in mineral benches	Yes	Yes.	--
3k	Provision of mining machineries in mineral benches	Yes	Yes.	--
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6m	Yes	--
3m	Total area covered under excavation/pits	19.16 ha	19.16 ha	--
3n	Ore to OB ratio for the pit/mine during the year.	--	1:0.176	OB generation not envisaged during 2020-21.
3o	Total area put in use under different heads at the end of year	29.411 ha	29.411 ha	--
3p	Production of ROM mineral during the last five year period as applicable	2017-18 60015 tonnes 2018-19 749986 tonnes 2019-20 749858 tonnes 2020-21 749359 tonnes	2017-18 42512 tonnes 2018-19 729308 tonnes 2019-20 733795 tonnes 2020-21 553841 tonnes	--
3q	General remarks of inspecting officers on method of mining etc.	Open cast mechanised mine having provision for deep hole drilling and blasting and shovel dumper combination for transport of ore/OB.	Mechanised mine with provisions of deep hole drilling and blasting. Transportation of ore/OB are being done by deploying shovel dumper combination.	--

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal for dumping as generation of top soil, OB and mineral reject not envisaged during reporting period.	Generated SB/IB dumped on dump D2 situated in northern side of pit.	--
4b	Location of topsoil, OB and mineral reject dumps	Two OB dumps (D1 and D2) are outside pit but inside broken area and D3 is inside pit	Two OB dumps (D1 and D2) are outside pit but inside broken area. D3 not created.	--
4c	Number of dumps within lease area and outside of lease area	Three dumps all inside lease area	Two dumps and both are inside lease area.	--
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL	Within UPL.	Lease is in restricted forest land and entire area over which Stage II clearances available are mineralised. Due to restrictions imposed by forest department all dumps are within UPL.
4e	Number of active and alive dumps.	Three	Two.	New dump namely D3 which was proposed as inpit dump not created.
4f	Number of dead dumps.	None	None	--
4g	Number of dumps established.	None	None.	--
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes.	--
4i	Length of Retaining wall or garland drain all along dumps	--	--	--
4j	Number of settling ponds	--	--	--

4k	Specific comments of inspecting officer on waste dump management	--	--	--
----	--	----	----	----

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No such proposal.	Not done.	Mineral continued in depth and no area is matured for backfilling.
5b	Area under backfilling of mined out area	No such proposal.	--	--
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal.	Generation of top soil not envisaged.	--
5d	Total area fully reclaimed and rehabilitated	No such proposal.	NIL.	--
5e	General remarks of inspecting officers on backfilling and reclamation etc.	--	--	Ore body continued in depth and there is no mature area for backfilling and reclamation.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes.	Yes.	--
6b	Area available for rehabilitation (ha) .	NIL	NIL.	--
6c	afforestation done (ha).	--	--	--

6d	No. of saplings planted during the year	650	650 saplings planted.	--	
6e	Cumulative no .of plants	--	--	--	
6f	Any other method of rehabilitation	None	None.	--	
6g	Cost incurred on watch and care during the year	Rs. 32500/-	NA.	--	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL.	--	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	--	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NIL	NIL	--	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	--	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	None	None	--	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NIL	NIL		Entire broken area over which Stage II clearances are available are mineralised and there is no waste land within broken area.

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NIL	--
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NIL	--
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Air, water, noise monitoring stations are installed and monitoring parameters are being followed.	--
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	--	--	Entire broken area over which Stage II clearances are available are mineralised and there is no mature area/waste land available for reclamation and rehabilitation.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting	Grade wise sorting.	--
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Both Manual and Mechanised	Both Manual and Mechanised.	--
7c	Different grade of mineral sorted out at mines.	Yes there is preposal for grade wise sorting.	Grade wise production during reporting period are as under: Lumps (60-62%)- 111014 tonnes, Lumps (62-65%)- 155326 tonnes, Fines (60-62%),- 103626 tonnes, Fines (62-65%)- 183875 tonnes.	--

7d	Any beneficiation process at mines .	None	None.	--
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	--	--	--

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There is no proposal for top soil removal during reporting period.	No top soil removal.	--
8b	Concurrent use or storage of topsoil	No such proposal during reporting period.	Not done as there is no top soil removal.	--
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	--
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal.	Mineral continued in depth and there is no such proposal of backfilling during reporting period.	--
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	--	Plantation done in periphery of D1 . Mineral continued in depth as a result there is no scope for rehabilitation of pit.	--

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation of 650 saplings.	650 saplings planted as per proposal.	--
8g	Survival rate	--	--	--
8h	Water sprinkling on roads to control airborne dust	Yes	Yes.	--
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	--	--	--

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	--	Monthly and Annual Returns submitted in time	--
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer : Sh. Ratan Kumar Patri Geologist : Dr. Rajes Kumar Naik	MIining Enginear and geologists are in post.	--
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Open cast working: 19.160 ha, Waste disposal: 2.70 ha, Others: 6.451 ha.	Details furnished in Annual Returns not matching with that reported in draft modification of mining plan submitted to IBM for approval.	Shortcommings were communicated to lessee through Violation letter.
9d	Scrutiny of Annual return on afforestation	650 saplings planted during 2020-21.	Details furnished in Annual Returns are in order	--
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	--	Details furnished in Annual Returns are in order	--

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM opening stock: 138156 tonnes ROM closing Stock: 138156 tonnes	Details furnished in Annual Returns are in order	--
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	There is no sale and entire production despatched to captive plants. Production cost is reported at Rs. 2860.77/tonnes	Details furnished in Annual Returns are in order.	--
9h	Scrutiny of Annual return on fixed assets	Estimated Market Value of Fixed Assets: Rs. 2230582404/-	--	--
9k	Scrutiny of Annual return on mining machineries	--	Mine was not under operation at the time of inspection.	--

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed				Show couse position		
Rule NO.		Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 37(2)	20/07/2021	10/09/2021			
MCDR17	Rule 45(7)(a)	20/07/2021	10/09/2021			

Date :

(B.L. KISKU)

Indian Bureau of Mines