

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

**Mining Plan inspection REPORT**

**Kolkata regional office**

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

**Mine code :** 30BHR27017

- (i) Name of the Inspecting : **G004** ) **OM PRAKASH GOPAL**  
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : S.S.Rao,AGM (M),RK Naik,Sr Man. (Geo.),B.Kumar(QP)  
Official with  
Designation
- (iv) Date of Inspection : 05/10/2021
- (v) Prev.inspection date : 19/09/2017

**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 : Shri MKTP Datta  
 At & PO- Chiria Dist -  
 Singhbhum (W) Jharkhand  
 SINGHBHUM (WEST) JHARKHAND  
 Phone:  
 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 boreholes in 2020-21	No boreholes were 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 400 m under G2 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposal	NIL	NIL
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)	NIL	NIL

1f	General remarks of inspecting officers on geology, exploration etc	NIL	NIL	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 200 m is considered for G1 and with spacing less than 400 m for G2 category. As per MEMC Rule 2015 in case of iron ore, less than 100 m 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 MEMC 2015.
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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 pit.	NIL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	3 benches in OB anf 6 benches in ore	3 benches in OB anf 6 benches in ores	NIL
2c	Stripping ratio or ore to OB ratio	NIL	1:0.176	NIL
2d	Quantity of topsoil generation in m3	NIL	NIL	NIL

2e	Quantity of overburden generation in m3	36813 m3(2019-20) NIL (2020-21)	5948 m3 (2019-20) 32497m3 (2020-21)	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	NIL	NIL	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	NIL
3b	Quantity of ROM mineral production proposed	749359 tonnes	553841 tonnes	NIL
3c	Recovery of sailable/usable mineral from ROM production	95%	95%	NIL
3d	Quantity of mineral reject generation	NIL	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NIL	NIL
3f	Quantity of sub grade mineral generation.	NIL	NIL	NIL

3g	Grade of sub grade mineral generation	NIL	NIL	Lean grade material is blended with high grade ore and dispatched to captive steel plants.
3h	Manual / Mechanised method adopted for segregating from ROM	Manual and mechanised both	Manual and mechanised both	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None	None	NIL
3j	Provision of drilling and blasting in mineral benches	Yes	Yes	NIL
3k	Provision of mining machineries in mineral benches	Yes	Yes	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6m	Yes	NIL
3m	Total area covered under excavation/pits	19.16 ha	19.16 ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	100.14 (2019-20) and NIL in 2020-21	1:0.008 (2019-20) and 1:0.176 (2020-21)	OB generation not envisaged during 2020-21 but backlog of previous year was completed during reporting period.
3o	Total area put in use under different heads at the end of year	29.411 ha	29.411 ha	NIL
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	NIL

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.	NIL
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## Solid Waste Management - Dumping:

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.	NIL
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.	NIL
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	NIL
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	NIL

4g	Number of dumps established.	None	None	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	NIL
4i	Length of Retaining wall or garland drain all along dumps	NIL	NIL	NIL
4j	Number of settling ponds	NIL	NIL	NIL
4k	Specific comments of inspecting officer on waste dump management	NIL	NIL	NIL

#### 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	NIL	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal	Generation of top soil not envisaged	NIL
5d	Total area fully reclaimed and rehabilitated	No such proposal	NIL	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NIL	NIL	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
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	YES	YES	NIL
6b	Area available for rehabilitation (ha) .	NIL	NIL	NIL
6c	afforestation done (ha).	NIL	NIL	NIL
6d	No. of saplings planted during the year	650	650	NIL
6e	Cumulative no .of plants	NIL	NIL	NIL
6f	Any other method of rehabilitation	None	None	NIL
6g	Cost incurred on watch and care during the year	Rs. 32500/-	Departmental	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	NIL	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NIL	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	NIL

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	None	None	NIL
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	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	None	None	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.	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NIL	NIL	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.

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#### 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	NIL

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Both Manual and Mechanised	Both Manual and Mechanised	NIL
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	NIL
7d	Any beneficiation process at mines .	None	None	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NIL	NIL	NIL

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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.	NIL
8b	Concurrent use or storage of topsoil	No such proposal during reporting period.	Not done as there is no top soil removal.	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	NIL

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.	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	Plantation done in periphery of D1 . Mineral continued in depth as a result there is no scope for rehabilitation of pit.	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation of 650 saplings	650 saplings planted as per proposal.	NIL
8g	Survival rate	NIL	NIL	NIL
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NIL	NIL	NIL

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual Returns should be submitted within prescribed time frame.	Monthly and Annual Returns submitted inp time.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer : Sh. Ratan Kumar Patri Geologist : Dr. Rajes Kumar Naik	Mining Engineer and Geologist are in post.	NIL

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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: 2.90 ha, Infrastructure : 1.10 ha and Others: 5.443 ha	In compliance to violation letter dated 20/7/2021 lesee submitted revised Returns and details of area put to use under different heads are: Open cast working: 20.82 ha, Waste disposal: 1.43 ha, Infrastructure: 1.1 ha Others: 5.601 ha	Details submitted in Revised returns are more or less in order
9d	Scrutiny of Annual return on afforestation	650 saplings	afforestation details are in order	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	Details furnished in Annual Returns are in order	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM opening stock: 138156 tonnes ROM closing Stock: 138156 tonnes	Reported details are in order	NIL
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/tonne	Details reported in Annual returns are in order.	NIL
9h	Scrutiny of Annual return on fixed assets	Estimated Market Value of Fixed Assets: Rs. 2230582404/-	No comments on fixed assets	NIL
9k	Scrutiny of Annual return on mining machineries	Dozer-1; Front end Loader-1; Air compressor-2; Blast hole drill- 2; Tipper 10; Grader-1;	Details are more or less in order	NIL

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**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

**Date :**

(OM PRAKASH GOPAL)

Indian Bureau of Mines