

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

**Inspection under SDF for star rating of mines REPORT**

**Kolkata regional office**

**Mine file No :** KOL/JHK/SB(W)/FE(M-4)

**Mine code :** 30BHR27018

- (i) Name of the Inspecting : **G004** ) **OM PRAKASH GOPAL**  
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Sh. AK Singh Mines Manager, Dr. Manoj Kumar Geologis  
Official with  
Designation
- (iv) Date of Inspection : 15/09/2021
- (v) Prev.inspection date : 05/02/2020

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **MEGHAHATUBURU**
- (b) **Registration NO.** :
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : JHARKHAND
- District : SINGHBHUM (WEST)
- Village : MEGHAHATUBURU
- Taluka : CHAIBASA
- Post office : MEGHAHATUBURU
- Pin Code : 833223
- FAX No. : 011-24367015
- E-mail : envrmd@gmail.com
- Phone : 011-24367539
- (f) **Police Station** : MEGHAHATUBURU
- (g) **First opening date** : 15/06/1985
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : Vill:- Meghahatuburu. Po:-Meghahatuburu.  
Dist - Singhbhum west  
State:- Jharkhand. PIN---833223
3. (a) **Lease Number** : BHR0073
- (b) **Lease area** : 879.44
- (c) **Period of lease** :
- (d) **Date of Expiry** : 31/03/2020
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 : kamlesh Rai  
 Meghahatuburu Iron Ore  
 Mines Dist.-West Snghbhum  
 Jharkhand SINGHBHUM (WEST)  
 JHARKHAND  
 Phone: 8986881116  
 FAX :

## Mining Engineer

Name : SANJAY KUMAR,Full Time  
 Qualification : B.Tech (Mining)  
 Appointment/ : 14/09/2019  
 Termination date

## Mining Engineer

Name : Shankar Prasad Das,Full Time  
 Qualification : B.Tech(Mining) &FCMMC(Registerd)  
 Appointment/ : 16/01/2019 14/09/2019  
 Termination date

## Geologist

Name : DR. MANOJ KUMAR,Full Time  
 Qualification : M.SC. (GEOLOGY), PHD GEOLOGY  
 Appointment/ : 28/02/2015  
 Termination date

## Manager

Name : KAMLESH RAI  
 Qualification : B TECH(MIN ENGG)  
 Appointment/ : 07/08/2014  
 Termination date

6. Date of approval of Mining :  
 Plan/Scheme of Mining

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	40 boreholes (2019-20)	No boreholes were drilled.	Drilling could not be taken up for want of Stage II FC
1b	Exploration over lease area for geological axis 1 or 2	41 boreholes (2020-21)	No boreholes were drilled.	Deviation from approved proposals communicated to lessee through violation letter. Lessee informed that Drilling could not be taken up for want of Stage II FC.
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	41 boreholes	NIL	Drilling could not be taken up for want of Stage II FC over the area proposed for exploration.
1e	Balance reserve as on 01/04/20	Balance Reserves as on 1/7/2019 Meghahatuburu Block : Reserves - 17.78MT and Remaining resources: 14.60MT Central Block : Reserves = 10.60 MT and Remaining resources: 0.07MT East of Central Block Reserves : NIL and Remaining Resource= 14.85 MT	NIL	NIL

1f	General remarks of inspecting officers on geology, exploration etc	-	-	Meghatuburu block consists of undulating hills with central portion rising to 918 m above the MSL. Block stretches over a strike length of 2100 m and width varies from 250 to 600 m. The ore in central part of the deposit extends upto 130 m depth and to relatively shallower depth in the northern and southern part. The Central block is situated at about 600 m south of Meghatuburu block and stretches over a strike length of 2000 m. having highest elevation of 890m MS
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Meghatuburu Block and Central Block.	Working restricted in Meghatuburu Block only and Central Block not opened yet for want of Forest Clearances.	NIL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	NIL
2c	Stripping ratio or ore to OB ratio	1: 0.39 (Meghatuburu Block) 1: 0.46 (Cental Block)	1: 0.44 (Meghatuburu Block) Cental Block not opened yet	NIL
2d	Quantity of topsoil generation in m3	0.06 mill. cum (Meghatuburu Central Block)	NIL	Central Block not opened yet for want of Stage II FC.

2e	Quantity of overburden generation in m3	Meghatuburu Block: 1.58 Mil. m3 Meghatuburu Central Block: 0.54 Mil. m3	Meghatuburu Block: 3275489 tonnes (1.3 mill. m3) Meghatuburu Central Block: NIL	Central block not opened during reporting period for want of Stage-II forest clearance.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Mining and development was restricted to Meghatuburu Block only and Central block not opened yet for want of Stage-II forest clearance.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two (One pit each in Meghatuburu block and Central Block)	One pit (Meghatuburu block)	Central Block not opened for want of Stage II FC.
3b	Quantity of ROM mineral production proposed	Meghatubru Block: 4016194T Central Block: 1307192 T	Meghatubru Block: 2980710T Central Block: NIL	Central block not opened yet. Stage-II FC awaited.
3c	Recovery of sailable/usable mineral from ROM production	96%	96%	NIL
3d	Quantity of mineral reject generation	NIL	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	NIL
3f	Quantity of sub grade mineral generation.	Meghatuburu Block : 5162241 tonees Central Block: 308807 tonnes	Meghatuburu Block : 50000 tonees Central Block: NIL	Central Block not opened yet for want of Stage II FC.
3g	Grade of sub grade mineral generation	NA	45-48% Fe	NIL

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	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	Wet drilling and Use of delay detonators (NONEL)	Wet drilling and Use of delay detonators (NONEL)	NIL
3k	Provision of mining machineries in mineral benches	100 t Dumpers & hudraulic Excavators/loa ders	100 t Dumpers & hudraulic Excavators/loaders	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	NIL
3m	Total area covered under excavation/pits	65.00 Ha	65.00 Ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1:0.39 (Meghahatuburu block) 1:0.46 (Meghahatuburu Central block)	1:0.39 (Meghahatuburu block). No production from Meghahatuburu Central block	NIL

3o Total area put in use under different heads at the end of year	Not available seperately Area put to Use at the begining of Plan period (1/4/2020) in respect of amalgamated lease area is as under: Area under Mining: 172.20 ha: Storage of OB: 41.0 ha: Haulage Road:105.0 ha: Railway track and loading station: 35.0 ha: Township: 131.0 ha: Tailing pond: 40.93 ha: Mineral Storage 27.0 ha: Mineral seperation plant:40.0 ha:Infrastructre: 23.0 ha: Others 110.96 ha	As per submitted AR area put to use under different heads are: Area under Mining: 65.0 ha: Storage of OB: 24.0 ha: Infrastructure and Township: 154.7ha: Others 11.34 ha	NIL
3p Production of ROM mineral during the last five year period as applicable	Meghatuburu Block: 2016-17 - 5040000 T 2017-18 - 4140000 T 2018-19 - 6540000 T 2019-20 - 5550000 T 2020-21- 4016194 T Central Block: 2015-16 - 90000 T 2016-17 - 960000 T 2017-18 - 2670000 T 2018-19 - 1890000 T 2019-20 - 2460000 T 2020-21- 1307192 T	Meghatuburu Block: 2015-16 - 3737160 T 2016-17 - 3868060 T 2017-18 - 3967340 T 2018-19 - 3870450 T 2019-20 - 3851100 T 2020-21 -3275489 T  Production not commensed yet from Central Block for want of FC	NIL

3q	General remarks of inspecting officers on method of mining etc.	NIL	NIL	Open cast mechanised mine. HEMM are being deployed for development and mining. Benches developed by deploying 150 mm dia drilling machine and blasting with Low density (LD) cartridge explosives. 100 t dumpers with matching capacity hydraulic excavators/loaders are being utilised for loading and transportation of ore.
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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)	Backfilling envisaged for Meghatubru Block and temporary dumping proposed for Central block.	Backfilling done in Meghatubru Block however, Central block is yet to be open for want of FC.	Backfilling not done at proposed location. Deviation from approved proposals pointed out through violation letter followed by showcause Notice.
4b	Location of topsoil, OB and mineral reject dumps	Backfilling envisaged for Meghatubru Block and temporary dumping proposed for Central block.	Backfilling done in Meghatubru Central Block. Central block not opened yet for want of FC.	Backfilling not done at proposed location. Deviation from approved proposals pointed out through violation letter followed by showcause Notice.
4c	Number of dumps within lease area and outside of lease area	9	9	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side UPL	Out side UPL	NIL
4e	Number of active and alive dumps.	1	1	NIL



4f	Number of dead dumps.	8	8	NIL
4g	Number of dumps established.	8	8	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	846 m garland drain and 840 m retaining wall (during entire plan period wef 2020 to 2024-25) in Central Block	NIL	Central Block yet to be open for want of Stage II FC.
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	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Full extraction	Full extraction	NIL
5b	Area under backfilling of mined out area	3.73 Ha	2 ha	Backfilling not done at proposed location Violation letter issued for non compliance of Rule 11(1) of MCDR 2017.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Generation not envisaged from Megatuburu Block. Stacking of generated soil (0.04 mill cum) envisaged in Central Block.	Generation of top soil not reported as Central Block could not be initiated for want of FC.	NIL

5d	Total area fully reclaimed and rehabilitated	1.0 ha	1.0 ha	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NIL	NIL	Backfilling not done at proposed location Violation letter issued for non compliance of Rule 11(1) of MCDR 2017.

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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	NIL
6b	Area available for rehabilitation (ha) .	1.0 ha	1.0 ha (approx)	NIL
6c	afforestation done (ha).	1.0 ha	1.0 ha (approx)	NIL
6d	No. of saplings planted during the year	500	500	NIL
6e	Cumulative no .of plants	NA	115170 (As per PMCP report)	NIL
6f	Any other method of rehabilitation	None	NA	NIL
6g	Cost incurred on watch and care during the year	No such proposal	NA	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	3.73 ha	2 ha	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	3.73 ha	2 ha	NIL

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	1.0 ha	1.0 ha	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal	NIL	NA
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposal	NIL	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No such proposal	NIL	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposal	NIL	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NIL	NIL	NIL

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Mineral Conservation:

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Sl.No.	Item	Propasals	Actual work	Remarks
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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.	Mechanised	Mechanised	NIL
7c	Different grade of mineral sorted out at mines.	No specific proposal for a particular grades to be sorted out.	(i) Lumps:58% to below 60% -3489 tonnes: 60% to below 62% - 462718 tonnes: 62% to below 65% - 226323 tonnes: and 65% and above - 72641 tonnes  (ii) Fines - 60% to below 62% - 1585195 tonnes: 62% to below 65% - 462200 tonnes and 65% and above - 181048 tonnes	NIL
7d	Any beneficiation process at mines .	Crushing and screening through Wet and dry circuit.	Crushing and screening through Wet and dry circuit.	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)	No proposal from Meghatuburu Block. It was propposaed to remove and store soil from Central block.	Central block yet to be open for want of FC. Thus there is no removal of top soil during reporting period.	NIL

8b	Concurrent use or storage of topsoil	No proposal from Meghatuburu Block. It was propposaed to store soil generated from Central block.	No generation of top soil.	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Backfilling proposed in Meghatuburu block and Temporary dumping for central block.	Backfilling done in Meghatuburu Block. Central Block not opened yet for want of Stage II FC.	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Restoration of profile by backfilling of mined out area in Meghatuburu Block. has been envisaged in Meghatuburu Block.	Restoration of profile by backfilling of mined out area is in practice in Meghatuburu Block.	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Restoration of profile by backfilling of mined out area followed by leveling and plantation has been envisaged in Meghatuburu Block.	Restoration of profile by backfilling of mined out area followed by leveling and plantation is in practice in Meghatuburu Block.	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Yes	Yes	NIL
8g	Survival rate	80%	80%	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	<p>Mining activities leads to destortion of aesthetic beuty in and around mines area. Efforts for restoration of profile by backfilling of mined out area and</p> <p>plantationbackfill ed area may maintain aesthetic beuty.</p>
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR and AR for reporting period has been submitted	MR and AR for reporting period has been submitted	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Sh. Sanjay Kumar Geologist: Dr. Manoj Kumar	Mining Engineer and Geologist are in post.	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under O/C working: 65 ha Recaimed/ Rehabilitated Area: 2 ha Waste Desposal: 24 Ha Occupied by Plant, buildings roads etc: 154.7 ha Other purposes: 11.34 ha	Details furnished on land use pattern appears to be more or less in order	NIL
9d	Scrutiny of Annual return on afforestation	Plantation: 1500 saplings	Reported nos. are in higher side.	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	Details furnished in AR regarding generation of subgrade are in order	NIL

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM : 196533 Tonnes	Details furnished in AR are in order	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production : Rs. 1227.92per tonnes	Details furnished in AR are more or less in order	NIL
9h	Scrutiny of Annual return on fixed assets	Total Fixed Assets:Rs. 1399045463/-	No comments	NIL
9k	Scrutiny of Annual return on mining machineries	Hydraulic Showel: 04, Backhoe: 03, Front end Loader: 01, Dumper : 08, Blast hole drill 04, Motor Grader: 02, Dozer: 07, Water Tanker: 02	Details furnished in AR 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
MCDR17	Rule 11(1)	04/10/2021	MCDR17	Rule 11(1)	04/10/2021

**Date :**

**(OM PRAKASH GOPAL)**

Indian Bureau of Mines