

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

**MCDR inspection REPORT**

**Kolkata regional office**

**Mine file No :** KOL/JHK/SB(W)/Fe(j-1)

**Mine code :** 40JHK18002

- (i) Name of the Inspecting : **K004** ) **B.P KERKETTA**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Mr T.C.Ananda, Manager (Geo) & Mr Rakesh Nandkuliar, Su  
Official with  
Designation
- (iv) Date of Inspection : 15/03/2020
- (v) Prev.inspection date : 17/03/2016

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **JHILLINGBURU(GUA)210.44HE**
- (b) **Registration NO.** :
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : JHARKHAND
- District : SINGHBHUM (WEST)
- Village : GUA
- Taluka :
- Post office : GUA
- Pin Code : 833213
- FAX No. : 06596-263714
- E-mail :
- Phone : 06596-263714
- (f) **Police Station** :
- (g) **First opening date** :
- (h) **Weekly day of rest** :
2. **Address for** :  
**correspondance**
3. (a) **Lease Number** : JHK0006
- (b) **Lease area** : 210.44
- (c) **Period of lease** :
- (d) **Date of Expiry** : 11/05/2040
4. **Mineral worked** : **MANGANESE 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

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	10/02/2011
Plan/Scheme of Mining	:	MP modif under 17(3) MCR 2016	26/12/2019

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	34 Core Boreholes Proposed in plan period	No Boreholes has drilled	Exploration could not be carried out throughout Plan Period (2015-20) for want of 2nd Stage FC.
1b	Exploration over lease area for geological axis 1 or 2	34 - Additional exploration was proposed in mining plan over the lease area for Geological axis - 1	Additional exploration have not been carried out in the lease area for Geological axis - 1	Exploration could not be carried out throughout Plan Period (2015-20) for want of 2nd Stage FC.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Own drilling and/ or Contract drilling machines were proposed for Exploration.	No Boreholes has drilled	Exploration could not be carried out throughout Plan Period (2015-20) for want of 2nd Stage FC.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Exploration was proposed out at 200m X 100m grid interval. Additional exploration was proposed in Plan period.	Exploration was not carried out at 200m X 100m grid interval. Entire lease area of 210.526 hect area has to be explored for availability of ore from G-2/3 to G-1.	Exploration could not be carry out throughout Plan Period (2015-20) for want of 2nd Stage FC.

1e	Balance reserve as on 01/04/20	Manganese Ore as on 01.04.2015 Probable Mineral Reserves (122) = 510000 Tons Pre-Feasibility Mineral Resources (222) = 680000 Tons  Iron Ore as on 01.04.2015 Probable Mineral Reserves (122) = 440000 Tons Pre-Feasibility Mineral Resources (222) = 110000 Tons	Manganese Ore as on 01.04.2019 Probable Mineral Reserves (122) = 51000 Tons Pre-Feasibility Mineral Resources (222) = 68000 Tons  Iron Ore as on 01.04.2019 Probable Mineral Reserves (122) = 440000 Tons Pre-Feasibility Mineral Resources (222) = 110000 Tons	Exploration could not be carry out throughout Plan Period (2015-20) for want of 2nd Stage FC.Hence there is no mining activity; R & R has not been changed from 01.04.2015 and carry forward from previous approved mining plan.
1f	General remarks of inspecting officers on geology, exploration etc	It is part of Singhbhum, Bonai and Keonjhar group of Iron Ore deposit.	The terrain forms a part of the oldest metasedimentary formational of chottanagapur plateau.	Entire Lease is having Same Geology and Mineralogy is changes from place to place. Hence borehole has to be drilled at closer interval to get quantity and quality. Exploration could not be carry out throughout Plan Period (2015-20) for want of 2nd Stage FC.

---

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Location in between Quarry-1 and Quarry-4	Working has been not carried out as per the proposal	Mine is not Working from 2011, for want of Statuary Clearances.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	There is no proposals for separate Bench's	There is no proposals for separate Bench's	Mine is not Working from 2011, for want of Statuary Clearances
2c	Stripping ratio or ore to OB ratio	1 :1.02	Nil reported, since no production during that period.	Mine is not Working from 2011, for want of Statuary Clearances
2d	Quantity of topsoil generation in m3	No proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
2e	Quantity of overburden generation in m3	During 2018-2019 it is proposed OB as 38772 cu.m and Intercalated waste as 105733 cu.m. Total waste as 144505 cu.m	Nil	Mine is not Working from 2011, for want of Statuary Clearances
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Proposed 144505 cu.m of waste.	Nil	Mine is not Working from 2011, for want of Statuary Clearances.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Development and production was proposed in Quarry-1.	Development and production are not carried out.	Mine is not Working from 2011, for want of Statuary Clearances.
3b	Quantity of ROM mineral production proposed	The total target of ROM Production of Manganese was 61000 tons during 2018-2019.	Nil	Mine is not Working from 2011, for want of Statuary Clearances. During the scheme period ie 2015-2020 there was no proposal for Iron Ore mining.
3c	Recovery of sailable/usable mineral from ROM production	15% (+10-40mm) 20% (-10mm)	Nil	Mine is not Working from 2011, for want of Statuary Clearances.

3d	Quantity of mineral reject generation	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances.
3e	Grade of mineral rejects generation and threshold value declared.	Mineral reject- No Proposal. Threshold value of Manganese is 10% (min)	Mineral reject- No Proposal. Threshold value of Manganese is 10% (min)	Mine is not Working from 2011, for want of Statuary Clearances.
3f	Quantity of sub grade mineral generation.	32533 cu.m of Sub Grade Generation has been proposed	No Work	Mine is not Working from 2011, for want of Statuary Clearances.
3g	Grade of sub grade mineral generation	+15-20% Mn, 57-60% Fe	There is No Generation of Subgrade Mineral	Mine is not Working from 2011, for want of Statuary Clearances.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Nil	Mine is not Working from 2011, for want of Statuary Clearances.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Beneficiation Study is Proposed	Only Manual Picking of Ore from Intercalated Waste	Mine is not Working from 2011, for want of Statuary Clearances.
3j	Provision of drilling and blasting in mineral benches	Spacing - 3m Burded - 2.5m It is Proposed to drill by 110mm dia, crawler mounted down hole drill. Blasting is done by using slurry explosives and nonnel fuses.	Drilling & Blasting are not done	Mine is not Working from 2011, for want of Statuary Clearances.
3k	Provision of mining machineries in mineral benches	Electric Shovels Hydraulic Excavators Tippers	Nil	Mine is not Working from 2011, for want of Statuary Clearances

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height of 6m was proposed in Mineral.	Nil	Mine is not Working from 2011, for want of Statuary Clearances
3m	Total area covered under excavation/pits	6.690 hect area is under Pit and additional 2.00 hect is required	6.690 hect areas are under Pit only.	Due to Non-working of Mines, additional area is not in use.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.02	Nil reported, since no production during that period.	Mine is not Working from 2011, for want of Statuary Clearances
3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2015. Mines = 6.69 hect Infra = 25.42 hect Green Belt = 0.65 hect	Land use Pattern as on 01.04.2019. Mines = 6.69 hect Infra = 25.42 hect Green Belt = 0.65 hect	There are no Changes in land use Pattern from 2011 because of Non-Working.
3p	Production of ROM mineral during the last five year period as applicable	2018-2019 = 61000 tons 2017-2018 = 61000 tons 2016-2017 = 61000 tons 2015-2016 = 61000 tons 2014-2015 = 61000 tons	2018-2019 = Nil 2017-2018 = Nil 2016-2017 = Nil 2015-2016 = Nil 2014-2015 = Nil	From 2011 to till date, the Mine was not working due to want of statutory clearances.
3q	General remarks of inspecting officers on method of mining etc.	Mechanised Method is Proposed	Nil	Mine is not Working from 2011, for want of Statuary Clearances i.e. Stage II Forest Clearance.

---

Solid Waste Management - Dumping:

---

Sl.No.	Item	Proposals	Actual work	Remarks
--------	------	-----------	-------------	---------

---

4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Generated Intercalated waste will be dumping nearer to NW of Quarry-1.	There is no generation of OB because of Non-working	Mine is not Working from 2011, for want of Statuary Clearances i.e. Stage II Forest Clearance.
4b	Location of topsoil, OB and mineral reject dumps	NW of Quarry-1.	Nil	Mine is not Working from 2011, for want of Statuary Clearances
4c	Number of dumps within lease area and outside of lease area	Lease area = 1 Non Lease area = Nil	Lease area = 1 Non Lease area = Nil	Mine is not Working from 2011, for want of Statuary Clearances
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL and NW of Quarry-1.	Nil	Mine is not Working from 2011, for want of Statuary Clearances
4e	Number of active and alive dumps.	Active Dump = 1 Alive Dump = Nil	There is no active dump within lease area for waste dumping.	Mine is not Working from 2011, for want of Statuary Clearances
4f	Number of dead dumps.	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
4g	Number of dumps established.	No proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes, Proposed around the dumps	Nil	Mine is not Working from 2011, for want of Statuary Clearances
4i	Length of Retaining wall or garland drain all along dumps	75m/ year around the dump	Nil	Mine is not Working from 2011, for want of Statuary Clearances
4j	Number of settling ponds	One Settling tank has proposed	Nil	Mine is not Working from 2011, for want of Statuary Clearances



4k	Specific comments of inspecting officer on waste dump management	Generated Intercalated waste will be dumping nearer to NW of Quarry-1.	Nil	Mine is not Working from 2011, for want of Statuary Clearances
----	--	--	-----	--

---

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.			
5b	Area under backfilling of mined out area			
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)			
5d	Total area fully reclaimed and rehabilitated			
5e	General remarks of inspecting officers on backfilling and reclamation etc.			

---

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).	It should be on or before 1st July every year.	Not Submitted	Mine is not Working from 2011, for want of Statuary Clearances
6b	Area available for rehabilitation (ha) .	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances

---

6c	afforestation done (ha).	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6d	No. of saplings planted during the year	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6e	Cumulative no .of plants	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6f	Any other method of rehabilitation	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6g	Cost incurred on watch and care during the year	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1500 saplings proposed during 2018-2019.All along eastern side of the mining lease and slopes of working Q1.	200 Saplings has been planted inside the lease area and 350 has been planted outside the lease area. Survival rate is 50% for both inside & outside the lease area.	Mine is not Working from 2011, for want of Statuary Clearances
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.50 hect proposed.	0.50ha planted	Mine is not Working from 2011, for want of Statuary Clearances
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	Nil	Mine is not Working from 2011, for want of Statuary Clearances
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly Monitoring of Air,water,Nois e.	Environment monitoring i.e. Quarterly Monitoring of Air,water,Noise. is carried out through own as well as private agency.	Mine is not Working from 2011, for want of Statuary Clearances
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Environment monitoring is carried out through own as well as private agency.	Nil	Mine is not Working from 2011, for want of Statuary Clearances i.e. Stage II Forest Clearance.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manganese Ore :61000 tons Iron Ore: Nil	Nil	Mine is not Working from 2011, for want of Statuary Clearances

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical Process and Manual Picking of Ore from Intercalated Waste	Nil	Mine is not Working from 2011, for want of Statuary Clearances
7c	Different grade of mineral sorted out at mines.	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
7d	Any beneficiation process at mines .	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Proposed 61000 tons of ROM (Manganese Ore) Iron Ore :Nil	Nil	Mine is not Working from 2011, for want of Statuary Clearances

---

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
8b	Concurrent use or storage of topsoil	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump has been proposed for waste dump	Nil	Mine is not Working from 2011, for want of Statuary Clearances
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	Nil	Mine is not Working from 2011, for want of Statuary Clearances
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1500 saplings/ year has proposed.	200 Saplings has planted inside the lease area and 350 has planted outside the lease area	Cumulatively 2500 saplings have been planted during previous plan period.
8g	Survival rate	Not proposed.	50%	
8h	Water sprinkling on roads to control airborne dust	Yes, it is proposed for water sprinkling on haul roads.	Water sprinkling on road is observed during the inspection.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Scanty vegetation, bushes are observed in lease area	Surrounding area beyond lease area is green. The area is hilly terrain.	Area is in forest and there is no agricultural land within the lease.

---

#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR Submitted up to = February 2020 AR Submitted up to = 2018-2019	Both Annual & Monthly returns are submitting in online system.  Submitted within the time limits	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Appointment of Mr. C.N. Kumar as Mining Engineer, and Mr. T.C.Ananda as Geologist is shown as full time.	Mining Engineer & Geologist are appointed as part time for all the non working mines.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use Pattern as on 01.04.2019. Mines = 6.69 hect Infra = 25.41 hect	Landuse Pattern is filled as per approved Mining Plan	

---

9d	Scrutiny of Annual return on afforestation	200 Saplings has planted inside the lease area and 350 has planted outside the lease area	Found to be correct. Cumulatively 2500 saplings have been planted during previous plan period.	Mine is not Working from 2011, for want of Statuary Clearances
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	There is no Mineral Rejects Generation	There is no Mineral Rejects Generation	Mine is not Working from 2011, for want of Statuary Clearances
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Due to Non-Working from 2011, there is no ROM stock and all are nil only.	Mine is not Working from 2011, for want of Statuary Clearances
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex. Mine Price & Production cost is Zero	Due to Non-Working, there is no ROM, hence Ex. Mine Price & Production cost is Zero.	Mine is not Working from 2011, for want of Statuary Clearances
9h	Scrutiny of Annual return on fixed assets	Fixed Assets is given as Rs 1653658864/-	It is for Gua group of mines of M/s Sail	Mine is not working from 2011, for want of Statuary Clearances
9k	Scrutiny of Annual return on mining machineries	Machineries detail not given	Due to Non-Working, there is no availability of machineries in field.	Mine is not Working from 2011, for want of Statuary Clearances

---

**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 :

(B.P KERKETTA)

Indian Bureau of Mines