

**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 : **K004**) **B.P KERKETTA**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sri D.Dey Sarkar,G.M& Agent,Sri Rajesh Kumar, Mining E
Official with
Designation
- (iv) Date of Inspection : 20/09/2017
- (v) Prev.inspection date : 13/02/2016

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 : AT & PO: CHIRIA
correspondance : 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 : K. MAITY
 M/S STEEL AUTHORITY OF
 INDIA LTD. ISPAT BHAWAN ,
 LODHI ROAD NEW DELHI DELHI
 DELHI
 Phone: 01124367015
 FAX :

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

Mining Engineer

Name : RAJESH KUMAR,Full Time
 Qualification : B.Tech (Mining)
 Appointment/ : 23/03/2015
 Termination date

Geologist

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

Manager

Name : SUMAN KUMAR
 Qualification : AMIE(MINING)
 Appointment/ : 16/07/2014
 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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	7 holes,700 mts	NIL	Non- Availability of FC
1b	Exploration over lease area for geological axis 1 or 2	70ha	NIL	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Specific		
1d	Balance area to be explored to bring Geological axis in 1 or 2	458.506ha	--	--
1e	Balance reserve as on 01/04/20	366.507	367.57	--
1f	General remarks of inspecting officers on geology, exploration etc		Mining is carried out as per approved mining plan.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	At 645,635, 630,655,650,RL	At ,655, ,649,632,642,635 RL	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	0	0	
2c	Stripping ratio or ore to OB ratio	1:0.06	1:0.006	
2d	Quantity of topsoil generation in m3	0	0	
2e	Quantity of overburden generation in m3	22456	1925	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Mining is carried out as per approved mining plan.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2	2	
3b	Quantity of ROM mineral production proposed	748536.46	555166.07	
3c	Recovery of sailable/usable mineral from ROM production	673682.8MT	555166.07MT	
3d	Quantity of mineral reject generation	0	0	
3e	Grade of mineral rejects generation and threshold value declared.	0	0	
3f	Quantity of sub grade mineral generation.	74853MT	0	
3g	Grade of sub grade mineral generation	45-55% Fe	45-55% Fe	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual/Mechanized	Manual/Mechanized	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Specific	No Specific	
3j	Provision of drilling and blasting in mineral benches	Wet Drilling and Delay detonators	Wet Drilling and Delay detonators	

3k	Provision of mining machineries in mineral benches	Drill, Excavators, Dumpers, Dozer, Pay loader Etc.	Drill, Excavators, Dumpers, Dozer, Pay loader Etc.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	5m	5m
3m	Total area covered under excavation/pits	19.16 ha.	19.16ha
3n	Ore to OB ratio for the pit/mine during the year.	1:0.06	1:0.006
3o	Total area put in use under different heads at the end of year	29.41ha	29.41ha
3p	Production of ROM mineral during the last five year period as applicable	Year Production(MT) 2012-13 788580 2013-14 749842.00 2014-15 748720.40 2015-16 749678.64 2016-17 748536.46	Year Production(MT) 2012-13 443187.01 2013-14 408964.5 2014-15 327029.83 2015-16 450784.89 2016-17 555166.07
3q	General remarks of inspecting officers on method of mining etc.		Mining is carried out as per approved mining plan.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Topsoil: Not specified OB dump:2 mineral reject Dump:1	Topsoil: 1 OB dump:2 reject Dump:1	

4b	Location of topsoil, OB and mineral reject dumps	Topsoil: Not specified OB dump: 1) North West Corner 2) North side of quarry mineral reject Dump: Western side of quarry	Topsoil: Not specified OB dump: 1) North West Corner 2) North side of quarry mineral reject Dump: Western side of quarry	
4c	Number of dumps within lease area and outside of lease area	within lease area:3 outside lease area :nil	within lease area:3 outside lease area :nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Over the mineralised area but Within Broken area.	Over the mineralised area but Within Broken area Due to forest restriction.	
4e	Number of active and alive dumps.	2	2	
4f	Number of dead dumps.	1	1	
4g	Number of dumps established.	One dump under stabilisation.	One dump under stabilisation.	
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall or garland drain along the dump.	Both retaining wall and garland drain provided at bottom of the dumps.	
4i	Length of Retaining wall or garland drain all along dumps	Retaining 500 mts garland drain 625 mts.	Retaining 788 mts garland drain 625 mts	
4j	Number of settling ponds	1	1	
4k	Specific comments of inspecting officer on waste dump management		Mining is carried out as per approved mining plan as far as possible. But, The Fine dump was not secured properly.	For it violation of Rule 37(2) of MCDR'2017 was issued on 04/10/2017, which has been complied on 19/01/2018

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	Not Aplicable	
5b	Area under backfilling of mined out area	No proposal	Not Aplicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Plantation	Plantation	Plantation establishment
5d	Total area fully reclaimed and rehabilitated	Not Aplicable	Not Aplicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Mining is carried out as per approved mining plan	

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).		Submitted & Enclosed	
6b	Area available for rehabilitation (ha) .	No proposal	Not Aplicable	
6c	afforestation done (ha).	No proposal	Not Aplicable	
6d	No. of saplings planted during the year	No proposal	600nos	
6e	Cumulative no .of plants	No Proposal	27900	
6f	Any other method of rehabilitation	NA	NA	
6g	Cost incurred on watch and care during the year	Not proposed	Rs50000/-approximately.	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NA	NA	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	500no of trees in 0.18ha backfilled area	No backfilling started as mineral is continuing. However, 200trees and 400 trees have been planted inside and outside lease area respectively.	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA	NA
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.18ha	No backfilling started as mineral is continuing.	

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	To prevent wash- offs during rainy season parapet walls around the waste dumps on the ground slope side will be constucted and be maintained in good condition all the tiime.	It was observed during inspection that the fines collected in the retaining wall have not been desilted from the South-western slope of fines dump.As a result the fines were escaping in harmful quantities and causing the degradation of forest land.	A violation letter was issued for violation of Rule 37(2) on 04/10/2017. It has been complied.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air 4 stations. Water 1 stations. Noise 5 stations.	Air 4 stations. Water 1 stations. Noise 5 stations.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Mining is carried out as per approved Scheme of Mining as far as possible.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Lump-411695 (Fe-63%,Si O2-2%Al2O3-3%) Fines -261987 (Fe-62.5%,Si O2-2%Al2O3-3%)	Lump-317278.64 (Fe-62-65%,) Fines -237887 (Fe-62 to 65%,	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	manual & mechanical	manual & mechanical	
7c	Different grade of mineral sorted out at mines.	Lump-411695 (Fe-63%,Si O2-2%Al2O3-3%) Fines -261987 (Fe-62.5%,Si O2-2%Al2O3-3%)	Lump-317278.64 (Fe-62-65%,) Fines -237887 (Fe-62 to 65%,	
7d	Any beneficiation process at mines	No Proposal	Not Applicable	

7e General remarks of inspecting officer on Mineral conservation and beneficiation issues Mining is carried out as per approved mining plan

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	Not Applicable	
8b	Concurrent use or storage of topsoil	For plantation	For plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB dump: 1) North West Corner 2) North side of quarry Dump: Western side of quarry mineral reject	OB dump: 1) North West Corner 2) side of quarry mineral reject Dump: Western side of quarry	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Not Applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	Not Applicable	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 saplings per year	Plantation of 600	
8g	Survival rate	Not Specific	60	

8h	Water sprinkling on roads to control airborne dust	Wet drilling, water sprinkling on roads and Dust generating areas	Wet drilling, water sprinkling on roads and Dust generating areas
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Mining is carried out as per approved mining plan

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	Monthly and Annual returns Submitted in time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer, Sri Rajesh Kumar,, Geologist: Sri Rajesh Kr. Naik and Manager: ,Sri Suman Kumar ,appointed	Found Correct	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Current working area- 19.16ha.Waste Dump- 2.32ha,Area Occupiedby Office Building, Roads 1.10ha,Fines Dump- 6.631ha,Planta tion area- 0.2ha.	Found Correct	
9d	Scrutiny of Annual return on afforestation	Proposed 500 per year Done 600 in 2016-17	Found Correct	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	mineral reject generation; Nil	Found Correct	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock 138156.27Te	Found Correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	sale value, : Captive consumption. production cost. Ex Mine Price-Rs 1042/te(Lump 62% to below 65%), Rs 583.81/te(Fine s55% to below 58%)and Rs590/te(Fines 62% to below 65%)	Found Correct
9h	Scrutiny of Annual return on fixed assets	Fixed assets Rs.536434909	Found Correct
9k	Scrutiny of Annual return on mining machineries	No. of Back Hoe:3, No.of Dumper(15Te capacity): 60 No.of Dumper(10Te capacity): 80, No.of Front end Loader: 4, No. of Dozer; 1,No. of Air compressor: 2, No.of Blast hole drill : 2, No.of Crusher: 1,No.of Explosive Van :1	Found Correct

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	04/10/2017			
MCDR17	Rule 35(2)	04/10/2017		25/01/2018	
MCDR17	Rule 37(2)	04/10/2017		25/01/2018	

Date :

(B.P KERKETTA)

Indian Bureau of Mines