

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-35/BBS

Mine code : 30ORI08059

- (i) Name of the Inspecting : **CHHA**) **SHRI L H CHHANGTE**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sri Rajiv Kumar, Head (Mining)
Official with
Designation
- (iv) Date of Inspection : 10/06/2015
- (v) Prev.inspection date : 02/07/2012

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KHONDBOND**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : ORISSA
District : KEONJHAR
Village : KHONDBOND
Taluka : CHAMPUA
Post office : BICHAKUNDI
Pin Code :
FAX No. :
E-mail :
Phone : 06767 72239
- (f) Police Station :
- (g) First opening date : 17/01/1983
- (h) Weekly day of rest : SUN
2. Address for : VILL:KHANDBOND& GURDA
correspondance PO:BICHAKUNDI
P.S.JODA,DIST:KEONJHAR,ORISSA,PIN:758034
3. (a) Lease Number : ORI0108
(b) Lease area : 978
(c) Period of lease : 20
(d) Date of Expiry : 16/01/2003
4. Mineral worked : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : TISCO
Bombay House 24, Homy Mody
Street Mumbai MUMBAI
(SUBURBAN) MAHARASHTRA
Phone:
FAX :

Owner : M/sTISCO
Mr. N.P.Sinha M/s TISCO
singhbhum SINGHBHUM (WEST)
JHARKHAND
Phone: 06767-72010
FAX :

Agent : P.C.SAHOO
C/O MONMORA MN MINES M/S
TISCO LTD P.O.JODA KEONJHAR
ORISSA
Phone: 06767-72289
FAX :

Geologist

Name : RAJIV RANJAN, Full Time
Qualification : M.Sc (GEOLOGY)
Appointment/ :
Termination date

Manager

Name : S.MOHANTY
Qualification : AMIE(MINING)
Appointment/ :
Termination date

Manager

Name : S.SIT
Qualification : M.SC PhD IN GEOLOGY
Appointment/ :
Termination date

Manager

Name : M.K.NAIK
Qualification : B.E.MINING
Appointment/ :
Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	11/12/2001
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	11/06/2004
	:	Modif.of approved Mining Plan	09/03/2009
	:	FMCP under 23C(1)	09/03/2009
	:	Mining Scheme rule 12 MCDR1988	31/03/2009
	:	Mining Scheme rule 12 MCDR1988	19/06/2013

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	
1b	Exploration over lease area for geological axis 1 or 2	214.9 ha	215.9 ha	
1e	Balance reserve as on 01/04/20	699014 MT	Same as estimated	
1f	General remarks of inspecting officers on geology, exploration etc			The area has been adequately explored

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	3 pits scattered all over the ML	Developed also 3 pits as proposed	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Separate benches developed in OB and Ore	
2c	Stripping ratio or ore to OB ratio	1:7.49 for Manganese and 1 : 1.5 for Iron ores	1:9.11 actual for Mn and 1 : 1.35 for Iron ore	
2d	Quantity of topsoil generation in m3	NIL	No top soil here	
2e	Quantity of overburden generation in m3	Given in MP	Cummulative OB removed till date was 1293815.39 CuM	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The deposit has been developed in the most scientific manner

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3 pits for Iron ore and 3 pits for Manganese	Developed as proposed	
3c	Recovery of sailable/usable mineral from ROM production	Iron ore - 95% and Manganese - 85 % of ROM	Achieved as proposed	
3d	Quantity of mineral reject generation	617040 CuM	Actual was 7350 CuM	
3f	Quantity of sub grade mineral generation.	2450000 MT for Iron ores and 8280 MT for Manganese	Actual was 96900 MT for Iron ores and 3.8 MT only for Manganese during the year 2014-15	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual and Mechanical	Mostly Mechanical	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Yes	Carried out routinely	
3j	Provision of drilling and blasting in mineral benches	Yes	Controlled blasting beeing carried out	
3k	Provision of mining machineries in mineral benches	Yes	Machineries have been deployed in benches as well	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench dimensions ahve been specified	6m high 15-20m wide benches are in vogue	
3m	Total area covered under excavation/pits	215.9 ha	139.92 ha	

3o	Total area put in use under different heads at the end of year	Details given	Pits- 139.92 ha, Dumps- 26.207 Plants/ buildings - 33.278 ha, Stackings - 11.697 ha, Green belt - 5.962 ha	
3q	General remarks of inspecting officers on method of mining etc.			The method of mining in vogue is considered to be the most scientific method possible for the type and extent of deposit

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	OB abd Stackings are seperate	
4b	Location of topsoil, OB and mineral reject dumps	Specified	Dumps at maintained as 1A, 2A and 3	
4c	Number of dumps within lease area and outside of lease area	Yes	Dumps are well within the M1 area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Yes	Dumps are developed well outside the UPL	
4e	Number of active and alive dumps.	3 active dumps	Only 3 active dumps	
4g	Number of dumps established.	NIL	No dump have been fully established as on date	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	All the 3 dumps have been strongly retained	
4i	Length of Retaining wall or garland drain all along dumps	3000 m all along	Actual length of retaining walls of all the 3 dumps are 2925 m approximately	

4k	Specific comments of inspecting officer on waste dump management	No problem with soild waste dump management
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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.	5.0 ha	Partially reclaimed area at 2.76 ha	
5b	Area under backfilling of mined out area	5.0 ha	2.76 ha only	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	5.0	2.76 ha	
5d	Total area fully reclaimed and rehabilitated	NIL	None	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Reclamation has been started in recent years

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	Submitted on a regular basis	

6e	Cumulative no .of plants	500000 plants	Actual was 396305 plants within the M1 covering an area of 82.293 ha and onther 19174 plants covering an area of 5.0 ha survival rate is between 70-75%	
6f	Any other method of rehabilitation	NIL	Natural growth of plants only	
6g	Cost incurred on watch and care during the year	Details not given	NA	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Regular monitoring of enviuronmental parameters	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			All proposals in PMCP have been complied with

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechnical	
7d	Any beneficiation process at mines	Mechanical process	Dry Practised as proposed	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No problem with mineral conservation in this mine

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8b	Concurrent use or storage of topsoil	Yes	As far as practicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Seperate dumps for OB and Fines	
8h	Water sprinkling on roads to control airborne dust	Yes	Both Water tanker and fixed line water sprinkling have been in vogue in this mine	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The genral aesthetic beauty of the area has not been unduly affected by this mining

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes	Submitted regularly	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Statutory employment have been made	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Details given	Production for the year 2014-15 : Iron ores - 99298.40 MT , Manganese - 758.456	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Details given	PMV for Iron ores Rs 1195.70 per MT (+55% Fe), Mn- Rs 3093.91 (Chemical grade) per MT Stocks : Iron ore- 48244.970 MT, Mn - 2640.453 MT	
9h	Scrutiny of Annual return on fixed assets	Given	Adequately invested	

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 :

(SHRI L H CHHANGTE)

Indian Bureau of Mines