

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON-MN/KJR/MCDR-57/BBS

Mine code : 30ORI08075

- (i) Name of the Inspecting : **DEY**) **NARENDRA MOHAN DEY**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : SHRI H H PANDA, MINES MANAGER, SHRI B BARIK, SURVEYOR
Official with
Designation
- (iv) Date of Inspection : 05/11/2015
- (v) Prev.inspection date : 30/04/2013

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **UNCHABALI**
- (b) **Registration NO.** : **IBM /135 / 2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : UNCHABALI
- Taluka : BARBIL
- Post office : BAMEBARI
- Pin Code :
- FAX No. : 06767-275362
- E-mail : snmbbsr@sify.com
- Phone : 06767-212164
- (f) Police Station : BAMEBARI
- (g) First opening date : 25/09/1987
- (h) Weekly day of rest : MON
2. Address for : UNCHABALI IRON &MN MINES
correspondance VIL-UNCHABALI .PO-BAMIBARI
DIST-KEONJHAR
3. (a) Lease Number : ORI0050
- (b) Lease area : 8.13
- (c) Period of lease : 20
- (d) Date of Expiry : 06/01/2027
4. Mineral worked : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : S.N.MOHANTY
 STATION ROAD AT/PO:BARBIL
 PO NO.21 KEONJHAR ORISSA
 Phone:30362 (OFFICE),30254(R)
 FAX :

Owner : PROBODH MOHANTY
 PROBODH MOHANTY,MINES OWN
 AT-STATION ROAD,BARBIL
 DIST-KEONJHAR.758035
 KEONJHAR ORISSA
 Phone:
 FAX :

Agent : SHRI T C SEI
 KOIRA KEONJHAR KEONJHAR
 ORISSA
 Phone: 06767275362
 FAX : 06767275362

Mining Engineer

Name : L.K.BEURIA,Part Time
 Qualification : DIGREE IN MINING ENGG
 Appointment/ : 19/05/1997
 Termination date

Mining Engineer

Name : ASHUTOSH KUMAR,Full Time
 Qualification : DIPLOMA MINING ENGG
 Appointment/ : 24/02/2005
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	18/03/2003
Plan/Scheme of Mining		Renewal under rule 24 MCR1960	17/03/2008
		Mining Scheme rule 12 MCDR1988	27/02/2012
		FMCP under 23C(1)	11/04/2012

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	IRON ORE: 2012-13: 05, 2013-14:04 & 2014-15: 0 MANGANESE: 2012-13: 03, 2013-14: 03 & 2014-15: 04	IRON ORE: 2012-13: NIL, 2013-14: NIL & 2014-15: NIL MANGANESE: 2012-13: NIL, 2013-14: NIL & 2014-15: NIL	ON THE DATE OF INSPECTION (05.11.2015) IT WAS OBSERVED THAT 15 NUMBER OF BOREHOLES HAVE BEEN DRILLED IN IRON & MANGANESE ZONE AND INFORMED VIDE THEIR LETTER NO.15-16 /394 DATED 22.12.2015 THAT ENTIRE HOLES AS PROPOSED IN THE SCHEME OF MINING WILL BE COMPLETED BY DECEMBER, 2015.
1b	Exploration over lease area for geological axis 1 or 2	9 BH IN IRON ORE ZONE AND 16 BH IN MANGANESE ORE ZONE DURING 2012-13 TO 2016-17	2013-14 : NIL 2014-15: NIL 2015-16 : 13 BH METERAGE 776.5 M WITH 50 MTS GRID INTERVAL.	MINE WAS DISCONTINUED SINCE 11.12.2014 DUE TO EXPIRY OF E C.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NOT AVAILABLE	Rs.2716000 /-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	OUT OF TOTAL LEASE AREA 8.133 HA, 6.10 HA HAS BEEN EXPLORED UNDER G1 LEVEL. BALANCE 2.033 HA TO BE EXPLORED.	OUT OF 25 BH TO BE DRILLED DURING 2012-13 TO 2016-17, 13 BH HAVE ALREADY BEEN DRILLED DURING 2015-16.	

1e	Balance reserve as on 01/04/20	IRON ORE : 964014 MT MANGANESE: 224835 MT AS PER APPROVED SCHEME OF MINING APPROVED ON 27.02.2012 FOR THE PERIOD 2012- 13 TO 2016- 17.	AFTER DRILLING OF B H ADDITIONAL RESERVE / RESOURCE HAS NOT BEEN RE-ESTIMATED.	
1f	General remarks of inspecting officers on geology, exploration etc	ON THE DATE OF INSPECTION IT WAS OBSERVED THAT 2 NOS CORE DRILLING MACHINE WERE DEPLOYED TO CARRY OUT EXPLORATION WORK I IRON & MN ZONE TO COMPLETE THE ENTIRE HOLES AS PROPOSED IN THE SCHEME OF MINING.	SO FAR 15 NOS BH HAVE BEEN DRILLED	EXPLORATION ALREADY CARRIED OUT AND PROPOSED IS SATISFACTORY.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	EASTERN SIDE OF ML	EASTERN SIDE OF ML.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	BENCHES IN OVERBURDEN ; 04 BENCHES IN MINERAL: 01	BENCHES IN OVERBURDEN: 04 BENCHESIN MINERAL: 01	
2c	Stripping ratio or ore to OB ratio	1:0.08	1:0.05	
2d	Quantity of topsoil generation in m3	VERY NEGLIGIBLE	VERY NEGLIGIBLE	

2e	Quantity of overburden generation in m3	2014-15: 17648CUM 2015-16 : 20653 CUM	2014-15: 3500 CUM 2015-16 (AS ON DATE OF INSPECTION i.e 05.11.2015) : 200 CUM
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	THE LAMINATED MINING OPERATION IS VERY / INSITU IRON SMALL SCALE. ORE ARE RESTRICTED TO HILL TOPS AND TWO FLOAT IRON ORE ZONES ARE AT THE LOWER REACHES OF THE HILLOCK. THE MANGANIFEROUS SHALE WITH LATERITES OCCUPY THE CENTRAL FLANK OF THE HILLOCK. MANGANESE OCCURS AS SMALL POCKETS / PATCHES WITHIN THE SHALE ZONE.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	IRON ORE QUARRY : ONE AT THE SOUTH-WESTERN PART OF THE LEASE MANGANESE QUARRY : ONE AT THE SOUTH-EASTERN PART OF THE LEASE.	IRON ORE QUARRY ONE AT THE SOUTH-WESTERN PART AND MANGANESE QUARRY ONE AT THE SOUTH-EASTERN PART OF THE LEASE.	
3b	Quantity of ROM mineral production proposed	2014-15: IRON ORE: 30870 MT MANGANESE: 8021 MT 2015-16: IRON ORE : 40302 MT, MANGANESE: 10003 MT	2014-15 : IRON ORE 04 MT , MANGANESE: NIL 2015-16 (UPTO DATE OF INSPECTION): IRON ORE : 03 MT , MANGANESE : NIL	MINING OPERATION WAS SUSPENDED SINCE 11.12.2014 DUE TO EXPIRY OF E C .

3c	Recovery of sailable/usable mineral from ROM production		2014-15: IRON ORE: 04 MT, MANGANESE : NIL 2015-16 (UPTO DATE OF INSPECTION) : IRON ORE 03 MT , MANGANESE : NIL	VERY SMALL MINING OPERATION IS GOING ON
3d	Quantity of mineral reject generation		NIL	
3e	Grade of mineral rejects generation and threshold value declared.		REJECT GENERATION IS NIL	MINING OPERATION IS VERY SMALL SCALE
3f	Quantity of sub grade mineral generation.		NIL	
3g	Grade of sub grade mineral generation		SUBGRADE MINERAL GENERATION NIL	
3h	Manual / Mechanised method adopted for segregating from ROM		MANUAL METHOD ADOPTED FOR SEGREGATING FROM ROM	
3j	Provision of drilling and blasting in mineral benches	FOR INSITU IRON ORE ZONE BLASTING IS REQUIRED	BLASTING NOT CARRIED OUT	VERY SMALL SCALE MINING
3k	Provision of mining machineries in mineral benches	JACK HAMMERS & COMPRESSOR FOR DRILLING, TIPPERS FOR TRANSPORTATION , EXCAVATOR FOR EXCAVATION AND WATER TANKER FOR SPRINKLING	VERY SMALL SCALE MINING OPERATION, MINING MACHINERY ENGAGED AS & WHEN REQUIRED	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	YES	YES	VERY SMALL SCALE MINING
3m	Total area covered under excavation/pits	3.5 HA	2.800 HA	

3n	Ore to OB ratio for the pit/mine during the year.	1: 0.08	1: 0.05	
3o	Total area put in use under different heads at the end of year		PUT IN USE UNDER CURRENT WORKINGS : 2.800 HA. USED FOR WASTE DISPOSAL : 0.800 HA , OCCUPIED BY ROAD : 0.240 HA AND STACKING FOR ORE: 0.010 HA	
3p	Production of ROM mineral during the last five year period as applicable	IRON ORE : 2011-12: 44590 MT, 2012-13: 21437 MT, 2013-14: 27440 MT, 2014-15: 30870 MT, 2015-16: 40302 MT MANGANESE : 2011-12: 16224 MT, 2012-13: 5076 MT, 2013-14: 6012 MT, 2014-15: 8021 MT, 2015-16: 1000 MT	IRON ORE: 2011-12: 18 MT, 2012-13: 10MT, 2013-14: 10 MT, 2014-15: 04 MT, 2015-16 (UPTO DATE OF INSPECTIO) : 03 MT MANGANESE : 2011-12 TO 2015-16: NIL	VERY SMALL SCALE MINING AND MINING OPERATION WAS SUSPENDED FROM 11.12.2014 DUE TO EXPIRY OF EC.
3q	General remarks of inspecting officers on method of mining etc.	METHOD OF MINING IS OTHER THAN FULLY MECHANISED METHOD . LOOSENING OF HARD STRATA THROUGH DRILLING AND BLASTING. EXCAVATION AND LOADING BY SEMI-MECHANISED MEANS.	MINING OPERATION IS VERY SMALL SCALE	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a Separate dumping
of topsoil, OB
and mineral
rejects (Rule
32,33)

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area		04 MT	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.		MANUAL	
7c	Different grade of mineral sorted out at mines.		4 MT 65% Fe AND ABOVE	
7d	Any beneficiation process at mines .		NO	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		SMALL SCALE MINING OPERATION IS GOING ON IN THE MINE	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)		NO	
8b	Concurrent use or storage of topsoil		NO	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)		ONE OVERBURDEN DUMP OVER NON-MINERALISED LAND NO REJECT DUMP	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use		TILL DATE NO USE OF OB, WASTE ROCK, REJECTS ETC FOR RESTORING THE LAND TO ITS ORIGINAL USE.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)		NO	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		BESIDES EXISTING PLANTATION ADDITIONAL 600 NUMBER OF TREES WERE PLANTED WITHIN LEASE AREA	
8g	Survival rate		80 % 480 NUMBER	
8h	Water sprinkling on roads to control airborne dust		REGULAR WATER SPRINKLING ON ROADS TO CONTROL AIEBORNE DUST	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		AESTHETIC BEATY IN AND AROUND MINES AREA IS GOOD.	

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		MINE WAS INSPECTED ON 05.11.2015. IT WAS OBSERVED THAT MONTHLY RETURN FOR THE MONTH OF OCTOBER,2015 AND ANNUAL RETURN FOR THE YEAR 2014-15 HAVE BEEN SUBMITTED.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		SHRI B SAMAL, MINING ENGINEER(DEGREE WITH 10 YEARS EXPERIENCE), SHRI A MAHAPATRA, MSC GEOLOGY AND SHRI H H PANDA , DEGREE IN MINING ENGINEERING WITH 2ND CLASS COMPETENCY AS AS MANAGER OF THE MINE ARE EMPLOYED.	
9d	Scrutiny of Annual return on afforestation		500 NO OF TREES HAVE BEEN PLANTED DURING 2014-15	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)		NO MINERAL REJECT	
9f	Scrutiny of Annual return on ROM stock and/or graded ore		IRON ORE STOCK 6400 MT HAVING GRADE 65% FE & ABOVE MANGANESE ORE STOCK 447.860 MT HAVING GRADES AS FOLLOWS: 326.650 MT 25% TO BELOW 35% MN 79.480 MT 35% TO BELOW 46% MN 40.850 MT 46% MN AND ABOVE 0.880 MT DIOXIDE ORE	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		NO DESPATCH / SALE DURING 2014-15 EX-MINE PRICE OF IRON ORE NOT MENTIONED EX - MINE PRICE OF MANGANESE NOT MENTIONED PRODUCTION COST Rs.23253 /-(MINING : Rs.20000/-+ DEAD RENT : Rs.3253/-)	

9h	Scrutiny of Annual return on fixed assets	FIXED ASSETS : 0
9k	Scrutiny of Annual return on mining machineries	NO MINING MACHINES

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
Rule 13(1)	18/11/2015	15/01/2016			

Date :

(NARENDRA MOHAN DEY)

Indian Bureau of Mines