

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/MN/SNG/MCDR-1/BBS

Mine code : 400RI13001

- (i) Name of the Inspecting : **DEY**) **NARENDRA MOHAN DEY**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : **SHRI D K SINGH, GM, SHRI A C MAJHI, DGM, SHRI A K MAL**
Official with
Designation
- (iv) Date of Inspection : 06/06/2015
- (v) Prev.inspection date : 18/12/2012

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BHANJI-KUSUM**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : ORISSA
District : SUNDARGARH
Village : BHANJIKUSUM
Taluka : BONAI
Post office : KOIRA
Pin Code : 770048
FAX No. :
E-mail :
Phone : 0661-4735063
- (f) Police Station :
- (g) First opening date : 01/01/1954
- (h) Weekly day of rest : SAT
2. Address for : BHANJAKUSUM MN MINE
correspondance AT/PO-KOIRA
DIST-SUNDERGARH
3. (a) Lease Number : ORI0201
- (b) Lease area : 8.41
- (c) Period of lease : 10
- (d) Date of Expiry : 01/01/2000
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/s Orissa Manganese and minerals (p) Lt
 M/SOMML9, esplanade mansi,
 14-Govt. Place (east),
 Calcutta KOLKATA WEST
 BENGAL
 Phone: 2484988, 2484033, 2482871
 FAX : 033- 2483717

Owner : M/S Orissa Manganese and Minerals (p) Ltd.
 9, Esplanade Mansion, 14-
 Govt. Place (east),
 Calcutta KOLKATA WEST
 BENGAL
 Phone: 033-2434177, 243
 FAX : 033-2482871

Mining Engineer

Name : A.K.SAHOO, Full Time
 Qualification : A.M.I.E
 Appointment/ : 04/11/1999
 Termination date

Manager

Name : D.KAR
 Qualification : PERMIT MANAGER
 Appointment/ :
 Termination date

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	12/10/2007
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	26/03/2012

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2014-15 : 6 NO OF BH	NIL	MINE IS UNDER SUSPENSION SINCE 17.05.2014 AS PER ORDER OF THE HON'BLE SUPREME COURT OF INDIA DATED 16.05.2014.
1b	Exploration over lease area for geological axis 1 or 2	2014-15 : 6 NO BH	OUT OF TOTAL LEASE AREA 8.134 HA, LEASE AREA ALREADY EXPLORED AS PER UNFC NORMS AS FOLLOWS: UNDER G1 LEVEL : 4.0 HA, UNDER G2 LEVEL 1.80 HA AND UNDER G3 LEVEL : 2.334 HA CUMULATIVE 20 NO BH DRILLED WITH GRID INTERVAL 50 M MAXIMUM DEPTH 46 M MINIMUM DEPTH 16 M TOTAL METERAGE DRILLED 643 METER.	MINE IS UNDER SUSPENSION SINCE 17.05.2014.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NOT AVAILABLE	NOT AVAILABLE	
1d	Balance area to be explored to bring Geological axis in 1 or 2	TO PROVE THE LATERAL AND VERTICAL EXTENSION OF THE ORE BODY , 28 NO OF BH ARE PROPOSED TO BE DONE DURING THE SCHEME PERIOD 2012-13 TO 2016-17 AS PER SOM APPROVED ON 26.03.2012.	CUMULATIVE 20 BH ALREADY DRILLED	MINE IS UNDER SUSPENSION SINCE 17.05.2014.
1e	Balance reserve as on 01/04/20		111: 194420.720 MT, 121: 86250 MT, 333 : 86250 MT AS ON 01.04.2015	

1f	General remarks of inspecting officers on geology, exploration etc	PROPOSAL FOR 28 BH DURING 2012-13 TO 2016-17	CUMULATIVE 20 NOS BH DRILLED WITH TOTAL METERAGE 643 METER.	MINE IS UNDER SUSPENSION SINCE 17.05.2014.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	QUARRY - 1 (MAIN QUARRY)	NIL	MINE IS UNDER SUSPENSION SINCE 17.05.2014
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	SEPARATE BENCHES PROPOSED	SEPARATE BENCHES IN OB : 2 NOS SEPARATE BENCHES IN ORE : 1 NO	
2c	Stripping ratio or ore to OB ratio	1 : 1.31	NIL	MIN IS UNDER SUSPENSION
2d	Quantity of topsoil generation in m3	NO PROPOSAL	NIL	
2e	Quantity of overburden generation in m3	16800 CUM	NIL	MINE IS UNDER SUSPENSION
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY STATE GOVT IN PURSUANCE OF THE DIRECTIVE OF HON;BLE SUPREME COURT OF INDIA.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	ONE	ONE	MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY DDM, KOIRA

3b	Quantity of ROM mineral production proposed	14000 MT	NIL	MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY DDM KOIRA
3c	Recovery of sailable/usable mineral from ROM production	SALEABLE : 12600 MT + SUB-GRADE: 1400 MT = 14000 MT	NIL	
3d	Quantity of mineral reject generation	INTERCALATED WASTE 16800 CUM + OB : 1600 CUM = 18400 CUM	NIL	
3e	Grade of mineral rejects generation and threshold value declared.	LESS THAN 10% MN	NIL	
3f	Quantity of sub grade mineral generation.	1400 MT	NIL	
3g	Grade of sub grade mineral generation	10 TO 20% MN CONTENT IS CONSIDERED AS SUB-GRADE	NIL	
3h	Manual / Mechanised method adopted for segregating from ROM	MANUAL	NIL	
3j	Provision of drilling and blasting in mineral benches	YES DRILLING BY DRIFTER DRILL OF 75 MM DIA AND CLASS -III (SPECIAL GELATIN 80% STRENGTH) AND CLASS - VI EXPLOSIVE(DETONATOR AND SAFETY FUSE OF STANDARD LENGTH) PROPOSED	NIL	

3k	Provision of mining machineries in mineral benches	YES HYDRAULIC SHOVEL ONE NO	NIL	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	HEIGHT 5 M AND WIDTH 10 M	HEIGHT 5 M AND WIDTH 10 M	
3m	Total area covered under excavation/pits	2.70 HA	2.70 HA	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.31	NIL	
3p	Production of ROM mineral during the last five year period as applicable	2012-13: 13250 MT, 2013-14: 13900 MT, 2014-15: 14000 MT, 2015-16: 15000 MT, 2016-17: 15000 MT	2012-13: 3288.668 MT 2013-14: 1040.605 MT 2014-15 : NIL 2015-16: NIL	MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY DDM, KOIRA
3q	General remarks of inspecting officers on method of mining etc.	OTHER THAN FULLY MECHANISED (OTFM) METHOD OF MINING ON A SINGLE SHIFT BASIS		MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY DDM KOIRA

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	SEPARATE DUMPING OF OB	ONE DUMP	
4b	Location of topsoil, OB and mineral reject dumps	OB DUMP ON NON-MINERALISED LAND	AS PROPOSED	

4c	Number of dumps within lease area and outside of lease area	WITHIN LEASE AREA : ONE DUMP OUT SIDE LEASE AREA : NIL	WITHIN LEASE AREA : ONE DUMP ON THE EASTERN SIDE OF THE QUARRY	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	BEYOND ULTIMATE PIT LIMIT ON THE EASTERN SIDE OF THE QUARRY	AS PROPOSED	
4e	Number of active and alive dumps.	ONE	ONE	
4f	Number of dead dumps.	NIL	NIL	
4g	Number of dumps established.	ONE	ONE	
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES	
4i	Length of Retaining wall or garland drain all along dumps	RETAINING WALL: 160 M X 3 M X 2 M GARLAND DRAIN : 80 M X 2 M X 1 M MAINTANANCE ONLY DURING THIS YEAR 2014-15	RETAINING WALL : 160 M X 3 M X 2 M GARLAND DRAIN : 80 M X 2 M X 1 M MAINTAINANCE ONLY DURING THIS YEAR	MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY DDM, KOIRA
4k	Specific comments of inspecting officer on waste dump management			SINCE MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY DDM, KOIRA NO WORK HAS BEEN CARRIED OUT.

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.	NO PROPOSAL	NIL	

5b	Area under backfilling of mined out area	NO PROPOSAL	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NO PROPOSAL	NIL	
5d	Total area fully reclaimed and rehabilitated	NO PROPOSAL	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			MINE IS UNDER SUSPENSION SINCE 17.05.2014, HOWEVER THERE IS NO PROPOSAL OF BACKFILLING ETC.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	YES	ANNUAL REPORT ON PMCP UNDER RULE 23E (2) HAS BEEN RECEIVED.	
6b	Area available for rehabilitation (ha) .	NO PROPOSAL	NIL	
6c	afforestation done (ha).	0.400 HA DURING 2012-13 TO 2016-17	DURING THIS YEAR 2014-15 : NIL HOWEVER CUMULATIVE AFFORESTED AREA 2.05 HA	
6d	No. of saplings planted during the year	640 NOS OF SAPLINGA	DURING THIS YEAR : NIL CUMULATIVE 6375 NOS SAPLINGS PLANTED	
6e	Cumulative no .of plants		5375 NOS CUMULATIVE	

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY DDM, KOIRA. NO WORK HAS BEEN CARRIED OUT SINCE THEN.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM : 14000 MT (2014-15) SALEABLE : 12600 MT SUB-GRADE: 1400 MT	NIL	MINE IS UNDER SUSPENSION
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	MANUAL	NIL	
7c	Different grade of mineral sorted out at mines.	BELOW 25% MN 25 TO - 35% MN 35 TO -46% MN 46% MN & ABOVE DIOXIDE ORE	NIL	
7d	Any beneficiation process at mines .	NO	NIL	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			NO BENEFICIATION IS DONE IN THE MINE. MANUAL LABOURS ARE EMPLOYED FOR SEGREGATING THE GANGUE MATERIALS FROM THE ORE. SUB-GRADE (10-20% MN) GENERATED STACKED AT EARMARKED PLACE AND SOLD AS & WHEN MARKET DEMAND INCREASED.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NO PROPOSAL	NIL	
8b	Concurrent use or storage of topsoil	NO PROPOSAL	NIL	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	SEPARATE DUMP FOR OB / INTERCALATED WASTE	DUMP ONE	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NO PROPOSAL	NIL	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		TOTAL LEASE AREA 8.134 HA IS NON-FOREST. NO AGRICULTURAL LAND WITHIN LEASE AREA. ADDITIONAL PLANTATION DONE OVER 2.05 HA AND 5375 NO OF TREES HAVE BEEN PLANTED CUMULATIVE.	
8g	Survival rate		65 %	
8h	Water sprinkling on roads to control airborne dust	YES	WATER IS SPRINKLED ON ROADS TO CONTROL AIRBORNE DUST.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			AESTHETIC BEAUTY IN AND AROUND THE MINE AREA HAS BEEN ENHANCED BY AFFORESTATION

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	YES, SUBMITTED.	MONTHLY RETURNS SUBMITTED. ANNUAL RETURN FOR THE YEAR 2014-15 SUBMITTED.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	ANNUAL RETURN 2014-15 SCRUTINISED.	SHRI MUNTASHIR IQBAL , MANAGER AND SHRI C P N PATHAK , AGENT WERE APPOINTED	MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY DDM KOIRA
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		AREA UNDER PITS : 2.700 HA USED FOR WASTE DISPOSAL : 1.250 HA OCCUPIED BY ROAD & BUILDING ETC : 0.784 HA	
9d	Scrutiny of Annual return on afforestation		NIL	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)		NIL	
9f	Scrutiny of Annual return on ROM stock and/or graded ore		ROM STOCK : NIL GRADE - WISE STOCK : 25 TO -35% MN : 190.085 MT 35 TO -46% MN : 17.047 MT 46% MN & ABOVE : 6.178 MT DIOXIDE ORE : 5.597 MT	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		NO PRODUCTION DURING 2014-15 PRODUCTION COST : NIL EX-MINE PRICE PER TONNE : 25 TO -35% MN : Rs.6007 /- 35 TO -46% MN : Rs.8646 /- 46% MN & ABOVE : Rs.14356 /- DIOXIDE ORE: Rs 23000 /- .	
9h	Scrutiny of Annual return on fixed assets		Rs.699565 /-	

9k	Scrutiny of Annual return on mining machineries	NO MACHINERY	MINE IS UNDER SUSPENSION SINCE 17.05.2014 BY DDM, KOIRA
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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

Date :
(NARENDRA MOHAN DEY)

Indian Bureau of Mines