

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON-MN/SNG/MCDR-11/BBS

Mine code : 30ORI13011

- (i) Name of the Inspecting : **CHHA**) **SHRI L H CHHANGTE**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sri H.S.Biswal, AGM (Mines)
Official with
Designation
- (iv) Date of Inspection : 28/01/2016
- (v) Prev.inspection date : 24/05/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **NADIDIH**
- (b) **Registration NO.** :
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : NADIDIH
- Taluka : BONAIGARH
- Post office : GUALI(VIA)BARBIL
- Pin Code :
- FAX No. : 06767-276161
- E-mail : rungta_bbl@yahoo.com
- Phone : 06767-275221/277441/277481
- (f) Police Station :
- (g) First opening date : 22/10/1967
- (h) Weekly day of rest : SAT
2. Address for : NADIDIH IRON &MN MINE
correspondance VILL-NADIDIH,PO-GUALI.DIST-SUNDERGARH
ORISSA. 758035
3. (a) Lease Number : ORI0126
- (b) Lease area : 73.86
- (c) Period of lease : 20
- (d) Date of Expiry : 10/12/1987
4. Mineral worked : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : BONAI INDUSTRIAL COMPANY LTD
P.O.BARBIL KEONJHAR
ORISSA
Phone:06767-30221
FAX :

Owner : M D RUSTAGI, NOMINATED OWNER
RUNGTA OFFICE,MAIN ROAD,
BARBIL AT/PO- BARBIL,DIST-
KEONJHAR SUNDARGARH ORISSA
Phone:
FAX :

Agent : D.R.OJHA
C/O BICO LTD AT O.P.BARBIL
KEONJHAR ORISSA
Phone: 06596-62321,62221
FAX :

Mining Engineer

Name : LAKHAN SAW,Full Time
Qualification : AMIE (MINING) DIGRE IN MINING ENGG
Appointment/ : 26/05/2011
Termination date

Geologist

Name : TANMAY PANDA,Full Time
Qualification : MSC GEOLOGY
Appointment/ : 01/06/2011
Termination date

Manager

Name : GANESH SAH
Qualification : AMIE (MINING) 1ST CLASS CERTIFICATE
Appointment/ :
Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	30/05/2006
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	09/05/2008
	:	Modif.of approved Mining Plan	25/02/2010
	:	Modif.approved Mining Scheme	22/01/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	No further exploration work during the previous year	No deviation
1b	Exploration over lease area for geological axis 1 or 2	Not specified	71.45 hectares	The whole ML area is being brought to G1 level of exploration
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	None	
1d	Balance area to be explored to bring Geological axis in 1 or 2	2.3 hectares only	NIL	
1e	Balance reserve as on 01/04/20	As on 1/4/2015 was 22.05 MMT (111), 8.67 MMT (121, 122)	Same as proposed	
1f	General remarks of inspecting officers on geology, exploration etc			The whole ML area is considered fully explored

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Top Pit in the Northern Side, Pit-3 in the Central part and Boundary Pit at the Southern Pit	Developed as proposed	No deviation
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes proposed	Separate benches developed in OB and Ore	No deviation

2c	Stripping ratio or ore to OB ratio	Ore : OB = 1:0.11 (M3 :M3)	Actual same as calculated in all the 3 pits	
2d	Quantity of topsoil generation in m3	4,39,690 CuM	Actual 45,209 CuM	Under generation due to slack working
2e	Quantity of overburden generation in m3	NIL	None	Old Mine , fresh area not worked
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The extent of mine working was erratic due to various management problem an dmarket fluctuation

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3nos	Developed 3 nos as well	No deviation
3b	Quantity of ROM mineral production proposed	32,10,030 MT from Pits and another 10,00,000 M3 from the dumps	1,62.535.06 MT	Under production due to suspension of the mine from the State govt.
3c	Recovery of sailable/usable mineral from ROM production	90 %	Almost 90%	No deviation
3d	Quantity of mineral reject generation	4,39,690 M3	18,083.688 M3	Less generation due to suspension of mine
3e	Grade of mineral rejects generation and threshold value declared.	- 45% Fe, Threshold Value also 45% Fe	Same as porposed	No deviation
3f	Quantity of sub grade mineral generation.	NIL	None	
3g	Grade of sub grade mineral generation	45-55% Fe	Grade as proposed	

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical	Mechanical	No deviation
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No specific proposal	Carried out as and when required	
3j	Provision of drilling and blasting in mineral benches	Yes, proposed	carried out as proposed	No deviation
3k	Provision of mining machineries in mineral benches	Yes	Machineries safely deployed in benches	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench dimensions proposed as 8m high and 14 m wide	Bench dimensions as proposed	No deviation
3m	Total area covered under excavation/pits	Top Pit 450m x 220m x 40m , Bottom Pit 60m x 30m x 18m and Boundary Pit 450m x 220m x40m	Actual pit sizes, Top Pit 450m x 200m x 40m , Bottom Pit 50m x 30m x 15m and Boundary Pit 450m x 200m x40m	No significant deviation
3n	Ore to OB ratio for the pit/mine during the year.	Ore : OB = 1; 0.11 generally for all the pits	Same as proposed	No deviation
3o	Total area put in use under different heads at the end of year	Pits =33.82 ha, Waste dumps = 12.648 ha, Stackings = 14.94 ha, Others / buildings = 4.678 ha	Actual also same as proposal	No significant deviation

3q	General remarks of inspecting officers on method of mining etc.	The has been no significant deviation in terms of exploitation in this mine
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Seperate dumping in vogue	
4b	Location of topsoil, OB and mineral reject dumps	A large dump at grids between S760 - 880 and E150 - E350	Dump developed as proposed	No deviation
4e	Number of active and alive dumps.	Only 1 dump, DUMP A	Only 1 dump developed as proposed	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes retaining wall all along the dump A	Developed as proposed	No deviation
4i	Length of Retaining wall or garland drain all along dumps	1200x2 + 100x2 = 2500 m all along the Dump A	Developed as proposed	No deviation
4k	Specific comments of inspecting officer on waste dump management			there has been no problem with Waste management in this mine

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 full extraction of mineral from any area of the ML	No full extraction status as proposed	

5b	Area under backfilling of mined out area	NIL	None	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil to be utilised as proposed used for civil works		
5d	Total area fully reclaimed and rehabilitated	NIL	None	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No area has been matured for back filling or reclamation in this mine

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	Yes submitted on aregular basis	
6b	Area available for rehabilitation (ha) .	Nil	None	
6c	afforestation done (ha).	5 ha	3.75 ha	
6d	No. of saplings planted during the year	15000 saplings	Planted as proposed	
6f	Any other method of rehabilitation	Terracing	Apart from plantation dumps have been stabilised / rehabilitated by way of terracing	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	None	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NIL	None	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Not specified	However , routine monitoring and as need base has been carried out in this mine	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP has been satiosfactorily taken care of

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	32,10,030 MT for the year of Ores (+ 55% Fe)	Actual production/ despatch for the year 2015-15 was 2,57,472 MT	Due to unforesen felxibility in the market and company's management
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical in vogue, however if required manual method also employed	
7d	Any beneficiation process at mines	Mechanical	Mobile crushing and screening in vogue	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No problem with Conservation of mineral aspect here
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NIL	None	No top soil here
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	There are seperate dumps for Ore, OB, Fines etc	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	None	NIL	No matured land available as on date
8h	Water sprinkling on roads to control airborne dust	Yes	Routine water spinkling by fixed line method	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			There has been no adverse effect in th emine's environment

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Yes	Submitted on a regular basis
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	All statutory posts have been adequately filled up here
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pits - 32.628 ha, OB dump - 12.648 ha, Stackings - 8.438 ha, Roads/ Infrastructure - 3.28 ha, Green belt - 4.575 ha, Beneficiation plant - 1.396 ha	Practical requirements have been satisfied
9d	Scrutiny of Annual return on afforestation	During the year 2014-15 , 15000 saplings proposed	Planted as proposed
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Scrutinised 2014-15 A/R	Closing stock - 3,12,425 ROM (+58% Fe) , 8,31,450 MT Fines
9h	Scrutiny of Annual return on fixed assets	A/R on Fixed assets scrutinised	Found in order and acceptable from field observation

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 :

(SHRI L H CHHANGTE)

Indian Bureau of Mines