

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

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

Mine code : 300RI13011

- (i) Name of the Inspecting : **CCHA**) **SHRI L H CHHANGTE**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Dr. Abhijit Sen, DGM (Mines)
Official with
Designation
- (iv) Date of Inspection : 20/08/2014
- (v) Prev.inspection date : 04/02/2014

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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	5 bore holes	5 bore holes drilled	No deviation
1b	Exploration over lease area for geological axis 1 or 2	3.0 hectares	Covered as proposed	No deviation
1c	Exploration Agencies and Expenditure in lakh rupees during the year	M/s VKS Mining Services , Keonjhar, Proposed amount to be spent for the same was Rs 8.7 lakh	Carried out by the designated agency , spent about Rs 7.5 lakh	No significant deviation
1d	Balance area to be explored to bring Geological axis in 1 or 2	7.5 ha approx	3.0 ha approximate	Exploration for the year was carried as per proposal
1e	Balance reserve as on 01/04/20	As on 1/4/2013 was 25.02 MMT (111), 8.67 MMT (121, 122)	Same as proposed	No deviation
1f	General remarks of inspecting officers on geology, exploration etc			Exploration in this mine has been carried out as proposed in their Mining Plan successfully and satisfactorily

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	Development as proposed	NO significant deviation

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Seperate benches maintained	No significant deviation
2c	Stripping ratio or ore to OB ratio	Ore : OB = 1:0.12	Actual Ore : OB = 1:0.15	No significant deviation
2d	Quantity of topsoil generation in m3	1,77,962 CuM	Actual for the year 2012-13 turned out to be 1,24,093 CuM	Slightly under generation
2e	Quantity of overburden generation in m3	NIL	None	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development of pits were commensurate with the proposed production

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3 pits	Developed 3 pits as well	
3b	Quantity of ROM mineral production proposed	25,63,988 MT from Mines and 5,00,000 M3 from dumps	Actual turned out to be 18,19,969.480 MT	Under production due to unexpected management problems
3c	Recovery of sailable/usable mineral from ROM production	95%	95% as well	No deviation
3d	Quantity of mineral reject generation	NIL	None	
3e	Grade of mineral rejects generation and threshold value declared.	-45% Fe, Threshold value at 45% Fe	Actual same as proposed	

3f	Quantity of sub grade mineral generation.	NIL	None	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical	machanical process of benficiation in vogue	No deviation
3j	Provision of drilling and blasting in mineral benches	Yes	Heavy machineries are being deployed in this mine safely	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height 8m , width 12-15 m	Bench dimensions are maintained 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 x 40m	Actual pit sizes, Top Pit 420m x 200m x 40m , Bottom Pit 50m x 30m x 15m and Boundary Pit 450m x 190 m x 40m	No significant deviation
3n	Ore to OB ratio for the pit/mine during the year.	Ore : OB = 1:0.12	Ore : OB = 1: 0.1	No significant 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	Same as proposed	No deviation
3q	General remarks of inspecting officers on method of mining etc.			No significant deviation

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)	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	Developed as proposed	No deviation
4c	Number of dumps within lease area and outside of lease area	1 only	1 large dump developed	No deviation
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL	Developed within UPL	No deviation
4e	Number of active and alive dumps.	1 active dump	1 large active dump where dumping is going on as well as rehandling for production simultaneously	No deviation
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining all along the Dump proposed	Retaining wall developed as well	No deviation
4i	Length of Retaining wall or garland drain all along dumps	Dump size is 12 ha , i.e 1200 m x 100 m, hence 2600 m length of retaining wall proposed	Developed as proposed	No deviation
4k	Specific comments of inspecting officer on waste dump management			No significant deviation or problem due to waste dump management in this mine

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not specified	NIL	
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 generated to be used for local civil works	As proposed	
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 reclamation in this mine

Progressive Mine Closure Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes , there is a chapter in MP	Followed	
6b	Area available for rehabilitation (ha) .	Nil	None	Except phase reclamation is being planned in the near future
6c	afforestation done (ha).	2013-14 , 10,000 plants	Actually planted as proposed	No deviation
6f	Any other method of rehabilitation	Nil	None so far	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Non specific proposal	No concrete work so far	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Non specific	Routine and need base monitoring carried out in this mine so far	No problem in this regard
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			There has been no lapse in implementing PMCP in this mine

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	25,63,988 MT of Ores +55% Fe content	Grade maintained but despatch was less at 18,19,969 MT	Due to fluctuating market and forces beyond controll of the management
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical as well as manula methos as and when required	
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 of Mineral conservation in this mine till date

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	NIL	None	Practically no Top soil here
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Seperate dumps for ores, wastes, fines etc	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	None	No matured land as on date
8h	Water sprinkling on roads to control airborne dust	Yes	Routine sprinkling of water in fixed line method	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			No adverse effect on environment due to mining activities here

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes	M/R and A/R submitted an a regular basis	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Scrutinised	All statutory employment have been made satisfactorily	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pits - 30.500 ha, OB dump - 10.648 ha, Stackings - 7.5 ha, Roads/ Infrastructure - 3.00 ha, Green belt - 4.575 ha, Beneficiation plant - 1.396 ha	All necessary developmental activities have been made satisfactorily
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock - 2,55,230 MT ROM (+58% Fe) , 5,35,000 MT Fines	Found to be acceptable from field observation
9h	Scrutiny of Annual return on fixed assets	Scrutinised	Found to be reasonable from field observations

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