

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/BXT/SNG/MCDR-5/BBS

Mine code : 30ORI13005

- (i) Name of the Inspecting : RAM) RAMKISHAN R
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri T C SEI, Agent, Shri C K Rath, Manager
Official with
Designation
- (iv) Date of Inspection : 20/08/2019
- (v) Prev.inspection date : 10/04/2018

PART-I : GENERAL INFORMATION

1. (a) Mine Name : K.J.S.T. JALDHI
- (b) Registration NO. : IBM/135/2011
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : ORISSA
District : SUNDARGARH
Village : JALDHI
Taluka : BONAI
Post office : KOIRA
Pin Code : 770048
FAX No. : 06767275362
E-mail : snmbbl@gmail.com
Phone : 06767275362
- (f) Police Station : KOIRA
- (g) First opening date : 20/01/1987
- (h) Weekly day of rest : SAT
2. Address for
correspondance : KJST(JALDIHI) BXT & IRON MINE, M/S P.MOHANTY
P.O.KOIRA, DIST:SUNDERGARH
ORISSA
3. (a) Lease Number : ORI0151
- (b) Lease area : 188.27
- (c) Period of lease : 50 yrs
- (d) Date of Expiry : 19/01/2037
4. Mineral worked : BAUXITE Main
IRON ORE Associated

5. Name and Address of the

Lessee : PRABADH MOHANTY
L.H. OF LATE S.N.MOHANTY
MINES OWNER, STATION ROAD
P.B.NO.21, P.O.BARBIL
KEONJHAR ORISSA
Phone:
FAX :

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

Agent : T C SEI
WEIGH BRIDGE ROAD BARBIL
AT/PO-BARBIL DIST-
KEONJHAR, ODISHA KEONJHAR
ORISSA
Phone: 06767275362
FAX : 06767275362

Mining Engineer

Name : B. Samal, Full Time
Qualification : BE Mining
Appointment/ : 20/10/2008
Termination date

Geologist

Name : MANASH RANJAN PARIDA, Full Time
Qualification : M Sc Geology
Appointment/ : 07/07/2017
Termination date

Manager

Name : SHRI C K RATH
Qualification :
Appointment/ : 01/07/2017
Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	09/05/2005
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	23/08/2006
	:	Modif.of approved Mining Plan	25/06/2009
	:	FMCP under 23C(1)	12/01/2011
	:	Mining Scheme rule 12 MCDR1988	06/04/2011
	:	Mining Scheme rule 12 MCDR1988	11/03/2016
	:	MP modif under 17(3) MCR 2016	15/05/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NA	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	As per the approved mining plan dated 15.05.2018 all the potential mineralised area has been explored under G1 level to the extent of 123.86 ha.	123.86 ha has been explored under G1 level	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	As per the approved mining plan dated 15.05.2018, an area of 26.908 ha needs to be explored under G1 level.	26.908 ha needs to be explored under G1 level	Exploration could not be carried out as the area is inaccessible due to steep hill slope

1e	Balance reserve as on 01/04/20	As per the approved mining plan dated 15.05.2018, the iron ore reserves under category 111: 41.457 mil.t, and resources under 211: 3.203 mil.t, and Buaxite ore reserves under category 121: 0.636 mil.t, and resources under 221: 0.166 mil.t.	due to depletion of reserves over the period of time the updated iron ore reserves as on dated 01.04.2019 are under category 111: 39.75 mil.t. and resources under 211: 3.203 mil.t. and bauxite reserves under 111: 0.636 mil.t and resources under 221: 0.166 mil.t.	Nil
1f	General remarks of inspecting officers on geology, exploration etc		the deposit forms a part of the iron ore creation of Archian system. the explored area under G1 level is 12386 ha.	Nil

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	One no. of iron ore quarry in the central part of lease area and one bauxite quarry in the south west part of lease area are proposed for development during the year 2018-19.	development is carried out in iron ore quarry in the central part of lease area.	due to poor market demand of buaxite ore, the development in buaxite quarry has not been carried out.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	no bench formation in top soil is proposed and separate benches in OB, and mineral area proposed.	seperate benches in OB and mineral area mainatined.	Nil
2c	Stripping ratio or ore to OB ratio	1:0.14 t/cu.m.	1:0.14 t/cu.m.	Nil
2d	Quantity of topsoil generation in m3	42 cu.m.	40 cu.m.	Nil
2e	Quantity of overburden generation in m3	245730 cu.m.	222730 cu.m.	due to less development work and less production from opencast mining.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		development is carried out in one iron quarry. but development in bauxite quarry has not been carried out.	Nil

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one iron quarry and one bauxite quarry are proposed for production during the year 2018-19.	one iron quarry is developed for production only.	bauxite quarry not developed for prodction due to poor market demand.
3b	Quantity of ROM mineral production proposed	Iron ore: 2 mil.t and bauxite: 50040 t.	iron ore: 1.703 ilt. and baxuite: Nil	Nil
3c	Recovery of sailable/usable mineral from ROM production	Iron : 1778953 t of saleable ore, mineral rejects: 221157 t	Iron : 1583214 t of saleable ore, mineral rejects: 120000 t	Nil
3d	Quantity of mineral reject generation	221157 t	120000 t	Nil

3e	Grade of mineral rejects generation and threshold value declared.	+45-55% Fe	+45-55% Fe	Nil
3f	Quantity of sub grade mineral generation.	Not applicable	Nil	Nil
3g	Grade of sub grade mineral generation	Not applicable	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised.	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal.	Not applicable	Nil
3j	Provision of drilling and blasting in mineral benches	provision for drilling and blasting is proposed in mineral benches	drilling and blasting is carried out before excavation.	Nil
3k	Provision of mining machineries in mineral benches	excavator and dumper combinatin is proposed for excvation and hauling of material.	excavator and dumper combinatin is deployed for excvation and hauling of material.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8 m height bench is proposed	8 m height bench is mainatined.	Nil
3m	Total area covered under excavation/pits	33.843 ha at the end of mining plan period i.e. year 2020-21.	31.436 ha till the end of year 2018-19.	Nil

3n	Ore to OB ratio for the pit/mine during the year.	1:0.14 t/cu.m. 1:0.14 t/cu.m.	Nil
3o	Total area put in use under different heads at the end of year	under Mining: 33.843 ha, waste dumping: 8.395 ha, mineral storage: 10.614 ha, Infrastructure & Roads: 8.764 ha at the of plan period.	under Mining: 31.436 ha, waste dumping: 7.563 ha, mineral storage: 10.614 ha, Infrastructure & Roads: 8.764 ha
3p	Production of ROM mineral during the last five year period as applicable	Iron, 2014-15: 1402960 t 2015-16: 1400546 t 2016-17: 1896148 t 2017-18: 1950069 t 2018-19: 1703214 t 2015-16: 130250 t 2016-17: 50076 t 2017-18: 70044 t 2018-19: 50040 t	Iron, 2014-15: 699489 t 2015-16: 2016-17: 1896148 t 2017-18: 1950069 t 2018-19: 1703214 t Bauxite, 2014-15: Nil 2015-16: 2016-17: 2017-18: 2018-19: Nil Nil Nil Nil
3q	General remarks of inspecting officers on method of mining etc.	the mining operations are carried out by opencast mining method as proposed.	Nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	top soil generated is proposed to be utilised. seperate dumping for OB and mineral rejects are proposed.	top soil generated is being utilised. seperate dumping for OB and mineral rejects are carried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	OB dump and Mineral rejects dump are proposed in the northern side of the lease area.	OB dump and Mineral rejects dump are maintained in the northern side of the lease area.	Nil
4c	Number of dumps within lease area and outside of lease area	1 no. of waste dump is proposed.	1 no. of waste dump is maintained.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside of UPL	outside of UPL	Nil
4e	Number of active and alive dumps.	1 no. of dump	1 no. of dump	Nil
4f	Number of dead dumps.	Nil	Not applicable	Nil
4g	Number of dumps established.	Nil	Not applicable	Active dumping
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes proposed.	maintained.	Nil
4i	Length of Retaining wall or garland drain all along dumps	450 m of retaining wall and 200 m of garland drain around waste dump proposed during the year 2018-19.	545 m of retaining wall and 545 m of garland drain constructed.	Nil
4j	Number of settling ponds	No proposal.	Not applicable	Nil

4k	Specific comments of inspecting officer on waste dump management	waste dump material is allowed to be mixed with processed mineral as there is no distinct barrier. so violation observed and communicated letter dated 06.09.2019.	Nil
----	--	--	-----

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.	iron ore quarry is not exhausted of mineral where as bauxite quarry part portion is exhausted.	iron ore quarry is not exhausted of mineral where as bauxite quarry part portion is exhausted.	Nil
5b	Area under backfilling of mined out area	0.167 ha is proposed to be backfilled during the year 2018-19.where the mineral is exhausted.	0.617 ha is backfilled.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes proposed.	Utilised.	Nil
5d	Total area fully reclaimed and rehabilitated	Nil	Not applicable	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Iron ore quarry not matured for reclamation and rehabilitation measures.	Nil

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).	have to submit under rule 26 (2) of MCDR, 2017.	submitted.	Nil
6b	Area available for rehabilitation (ha) .	3.007 ha	3.007 ha	Nil
6c	afforestation done (ha).	0.5 ha	0.5 ha	Nil
6d	No. of saplings planted during the year	1250 nos	5000 nos	Nil
6e	Cumulative no .of plants	3750 nos.	5000 nos.	Nil
6f	Any other method of rehabilitation	Nil	Not aplicable	Nil
6g	Cost incurred on watch and care during the year	Rs. 50000	Rs. 250000	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	0.06 ha	0.06 ha	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.167 ha	0.167 ha	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Nil	Not applicable	Nil

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Not applicable	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Nil	Not applicable	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Nil	Not applicable	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Nil	Not applicable	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Nil	Not applicable	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	No such specific proposal.	However all environmental parameters are monitored periodically as per the relevant statute.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		PMCP measures are carried out as per the proposal.	Nil

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

7a	ROM Mineral dispatch or grade-wise sorting within lease area	yes proposed.	carried out.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical	mechanical	Nil
7c	Different grade of mineral sorted out at mines.	a) below 55% fe b) 55% to below 58% (c) 58% to below 60% (d) 60% to below 62% (e) 62% to below 65%	a) below 55% fe b) 55% to below 58% (c) 58% to below 60% (d) 60% to below 62% (e) 62% to below 65%	Nil
7d	Any beneficiation process at mines	Nil	only dry crushing and screening.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		iron ore produced from mine workings are processed in to different grades of iron content and dispatched.	Nil

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposed.	carried out.	Nil
8b	Concurrent use or storage of topsoil	concurrent use of top soil is proposed.	utilised.	Nil

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps for OB, mineral rejects and fines are proposed.	maintained.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	part of the waste generated is proposed to be backfilled on part of the mineral exhausted area.	carried out.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	0.167 ha is proposed for backfilling	carried out.	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1250 nos saplings proposed to be planted	5000 nos saplings planted.	Nil
8g	Survival rate	No such specific proposal.	80%	Nil
8h	Water sprinkling on roads to control airborne dust	mobile water sprikling for dust supression on haul roads.	carried out.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aesthetic beauty in and around the mines area is mainatined.	Nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------


9a	Status of submission of Monthly and Annual returns	submitted	submitted.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	(i) Graduate Mining Engineer 3 (ii) Diploma Mining Engineer 4 (iii) Geologist 1	found to be in order.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(ii) Covered under current (O/C) Workings 31.436 ha (iii) Reclaimed/Rehabilitated 0.167 ha (iv) Used for waste disposal 7.563 ha (v) Occupied by plant, buildings, residential, welfare buildings & roads : 8.584 ha (vi) Other Purpose (Mineral storage, ETP, Mineral separation plant, magazine, etc.) 17.988 ha	found to be in order.	Nil
9d	Scrutiny of Annual return on afforestation	5000 nos	found to be in order.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	120000 t	120000 t	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock : Nil for iron ore Bauxite: Nil Lumps iron ore (a) Below 55% Nil (b) 55% to below 58% 6033.040 t (c) 58% to below 60% 488241.917 t (d) 60% to below 62% 64828.855 t	found to be in order.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost: Rs. 1027/-	Production cost: Rs. 1027/-	Nil
9h	Scrutiny of Annual return on fixed assets	fixed assests value Rs. 777976000/-	fixed assests value Rs. 777976000/-	Nil
9k	Scrutiny of Annual return on mining machineries	ROCK DRILL (NONELEC.) 100.000 MM 3 nos AIR COMPRESSOR 12.500 CUM/MN 3 nos BACK HOE 1.200 CUM 8 Nos WHEEL LOADER 1.200 CUM 5 nos DOZER 180.000 HP 1 No CRUSHER 180.000 T/H 2 nos DUMPER 16.000 TONNE 15 nos WATER TANKER 8000.000 LITRE 3 nos	found to be in order.	Nil

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
MCDR17	Rule 11(1)	06/09/2019			
MCDR17	Rule 14(3)	06/09/2019			

Date : 25/10/19


(RAMKISHAN R)

Indian Bureau of Mines