

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/SNG/MCDR-24/BBS

Mine code : 30ORI13058

- (i) Name of the Inspecting : **RKD**) **RAJESH KUMAR DAS**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri PRADIP KUMAR SAHU, QP and Shri S K Pradhan (Mining
Official with
Designation
- (iv) Date of Inspection : 21/07/2022
- (v) Prev. inspection date : 29/08/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **RANTHA BLOCK IRON MINE (4**
- (b) **Registration NO.** : **IBM/4269/2011**
- (c) Category : A Other Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village :
- Taluka :
- Post office :
- Pin Code :
- FAX No. : 0674-23696889
- E-mail : info@orissamineral.com
- Phone : 06767-275225
- (f) Police Station : Barsuan
- (g) First opening date : 31/12/1968
- (h) Weekly day of rest : SUN
2. Address for : M/s OMC LTD.
correspondance : OMC HOUSE
BHUBANESWAR
3. (a) Lease Number : ORI0039
- (b) Lease area : 408.87
- (c) Period of lease :
- (d) Date of Expiry : 30/12/2038
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : M/S Orissa Mining Corporation Ltd
P.O.NO.34 OMC House
Bhubaneswar KHURDA ORISSA
Phone:
FAX :

Owner : m/s ORISSA MINING CORPORATION LTD
OMC HOUSE P.B.No.34
BHUBNESHWAR ORISSA
Phone: 2393431
FAX : 2391629

Manager

Name : Sri A. K. Pradhan
Qualification : BE Mining
Appointment/ : 30/05/2019
Termination date

6. Date of approval of Mining	:	FMCP under 23C(1)	25/10/2018
Plan/Scheme of Mining	:	MP modif under 17(3) MCR 2016	01/09/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	48 nos bore proposed	Nil	No forest clearance
1b	Exploration over lease area for geological axis 1 or 2	48 nos	Nil	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specifically mentioned	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	62.837 ha. unexplored area and 166.371 ha. explored in G1 to be convert in G1 in plan period.	Nil	No exploration done still in present document plan period 2018-19 to 2021-22.
1e	Balance reserve as on 01/04/20	Reserves :88.187 million tons & Resources: 1.954 million tons	Reserves :88.187 million tons & Resources: 1.954 million tons	No production reported.
1f	General remarks of inspecting officers on geology, exploration etc			The deposit is part of Sinhbhum-Sundargarh-Bonai iron ore belt, also known as the Jamda- Koiria valley and is represented by narrow NNE plunging folded synclinalorium of 60 km long and 25 km in width. The deposit is partially explored and total 77 nos bore holes reported in lease area explored from 2007-2011.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	308000E-308430 & 2407792N-2408197N	NA	Development work not started due to not having Forest Clearence
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes given	NA	
2c	Stripping ratio or ore to OB ratio	1:0.02t/m3	NA	
2d	Quantity of topsoil generation in m3	2870	Nil	
2e	Quantity of overburden generation in m3	21600	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			As the mine is non-working due to not having valid FC therefore development is nil.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Production proposal is given Quarry-1	NA	
3b	Quantity of ROM mineral production proposed	999900 tons	Nil	
3c	Recovery of sailable/usable mineral from ROM production	approx 67%	NA	
3d	Quantity of mineral reject generation	426600 tons	Nil	

3e	Grade of mineral rejects generation and threshold value declared.	not mentioned specifically	NA
3f	Quantity of sub grade mineral generation.	Nil	NA
3g	Grade of sub grade mineral generation	NA	NA
3h	Manual / Mechanised method adopted for segregating from ROM	mechanical	NA
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NA	NA
3j	Provision of drilling and blasting in mineral benches	yes drilling is proposed with primary drilling of 100mm DTH/Wagon drills and secondary with 32mm jack hammer. Blating is proposed with 2.0m burden, 2.5m spacing and 6.0m hole depth with powergel explosives of 83 mm cartridges.	NA

3k	Provision of mining machineries in mineral benches	Yes with excavator of 1.2m ³ to 3.5m ³ bucket capacity, Loader 1.5-3.0m ³ capacity, Dumper 25-35 ton with allied equipment Dozer, Grader, etc.	NA
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	NA
3m	Total area covered under excavation/pits	10.356 ha. at the end of plan per	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.02	NA
3o	Total area put in use under different heads at the end of year	Mining:10.356 ha., Mineral stoage:7.684 ha., Roads:3.087 ha., Infrastructure:3.962 ha., OB Dump:3.049 ha., Top soil:0.342 ha., Mineral seperation plant:1.4 ha., others:6.66 ha. The proposal is upto end of plan period.	Nil

3p	Production of ROM mineral during the last five year period as applicable	2019-20:0.83 million tons, 2020-21:0.99 million tons, 2021-22:0.99 million tons.	Production till date Nil.	Last scheme of mining was prepared for a period of 5 years from 2008-09 to 2012-13. Lessee has surrendered the part area over 139.992 ha. and state govt has granted this balance area over 268.84 ha. after approval of FMCP. There is no scheme of mining from 2013-14 to 2017-18. Modification of mining plan approved dated 01.10.2019 for period 2018-19 to 2022-23 and proposal of 2019-20 to 2022-23
3q	General remarks of inspecting officers on method of mining etc.			The mining is yet to be started. The mine is non-working due to not having valid forest clearance.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes given	NA	
4b	Location of topsoil, OB and mineral reject dumps	Top soil Dump:2408115N-2408159N, 307996E-308084E& OB Dump:2408295-2408504N,308248-308438.	NA	

4c	Number of dumps within lease area and outside of lease area	Top Soil & OB dump each one.	NA	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Top soil Dump:2408115N-2408159N, 307996E-308084E& OB Dump:2408295-2408504N,308248-308438.	NA	
4e	Number of active and alive dumps.	01 OB dump is major dump	Nil	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	No stabilised dump	NA	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal of retaining wall proposed only maintenance of existing proposed & for garland drain also same.	NA	
4i	Length of Retaining wall or garland drain all along dumps	No proposal of retaining wall proposed only maintenance of existing proposed & for garland drain also same.	NA	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management			As the mining activities yet to be started therefore no scope for waste dump management.

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.	NA	NA	
5b	Area under backfilling of mined out area	Nil	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			As the mine is non-working and therefore area not matured for backfilling.

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 submitted	yes submitted	
6b	Area available for rehabilitation (ha) .	No proposal	NA	
6c	afforestation done (ha).	0.65 ha.	Nil	
6d	No. of saplings planted during the year	1000 nos	Nil	
6e	Cumulative no .of plants	3000 nos	Nil	

6f	Any other method of rehabilitation	No proposal	NA
6g	Cost incurred on watch and care during the year	Rs 1622500/-	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	No proposal	NA
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	NA	NA
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NA	NA
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	0.40 ha.	Nil

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly	Not done	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The proposal given is not complied.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise dispatch proposal	NA	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	NA	
7c	Different grade of mineral sorted out at mines.	Different grade material blend to get required grade	NA	
7d	Any beneficiation process at mines	NA	NA	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Nil
----	--	-----

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	yes proposal given	NA	
8b	Concurrent use or storage of topsoil	Stored initially at earmarked site and subsequently utilized for reclamation & Rehabilitation	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	NA	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	no such information	1000 nos afforestation proposed yearwise.	
8g	Survival rate	Not mentioned specifically	NA	
8h	Water sprinkling on roads to control airborne dust	Yes water tanker of 18KL is proposed for dust suppression	NA	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			As the mine is non-working therefore no such adverse impact observed.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR for JUNE submitted on 09.07.2022 & AR for 2021-22 on 29.06.2022	Submitted in time.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes given	Shri Sanjib Kumar Pradhan as Mining Engineer, Shri Dileswar Kissan as Geologist & Shri Pradyuman Kumar Nayak as Manager(Mine)	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Nil is mentioned	As the mine is yet to start operation therefore no land use.	
9d	Scrutiny of Annual return on afforestation	Nil	Nil	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Nil	Nil production & dispatch due to no valid forest clearance.
9h	Scrutiny of Annual return on fixed assets	Nil	Nil
9k	Scrutiny of Annual return on mining machineries	No machineries.	As the mine is non-working due to lack of valid FC therefore no machineries.

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

Date :

(RAJESH KUMAR DAS)

Indian Bureau of Mines