INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/MN/KJR/MCDR-5/BBS Mine code : 400RI08010

(i) Name of the Inspecting : SRM) SHRI SUDIP RANJAN MAZUMDAR

Officer and ID No.

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine : Shri Shyama Sundar Barik, Mine Agent

Official with

Designation

(iv) Date of Inspection : 10/01/2020

(v) Prev.inspection date : 08/10/2017

PART-I : GENERAL INFORMATION

1. (a) Mine Name : DUBNA

(b) Registration NO. : IBM/4269/2011

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : ORISSA
District : KEONJHAR
Village : DUBNA
Taluka : BARBIL

Post office : DUBNA
Pin Code : 75 80 86

Pin Code : 75 80 8 6 FAX No. : 0674-2391629

E-mail : planningcellomc@gmail.com

Phone : 0674-2393431

(f) Police Station : Bamebari

(g) First opening date : 01/01/1972

(h) Weekly day of rest : MON

2. Address for : DUBNA MN MINES correspondance VILL/PO-DUBNA

DIST-KEONJHAR

3. (a) Lease Number : ORIO181

(b) Lease area : 1135.42 1332.019 Hq

(c) Period of lease : 20

(d) Date of Expiry : 07/09/1991 27.12.2029

4. Mineral worked : IRON ORE Associated MANGANESE 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

AT/PO- BARBIL DIST-

KEONJHAR ODISHA KEONJHAR

ORISSA

: SHRI S S BARIK

Phone: 06767-275253 FAX: 06767-275275

Mining Engineer

Name : SHRI ARUN BALABANT ROY, Full Time

Qualification :

Appointment/ : 14/06/2019

Termination date

Manager

Agent

Name : SHI ARUN BALABANT ROY

Qualification : B E MINING Appointment/ : 14/06/2019

Termination date

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 15/04/2004 Plan/Scheme of Mining : FMCP under 23C(1) 22/05/2007 Renewal under rule 24 MCR1960 01/03/2011 MP modif under 17(3) MCR 2016 15/11/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration:

Sl.No.	Item	Proposals	Actual work	Remarks
la	Backlog of previous year	In 2018-19, 61 numbers of boreholes have been proposed to be drilled	In 2018-19, the proposed exploration have not been carried out due to want of forest clearance	operational due to want of EC and FC
1b	Exploration over lease area for geological axis 1 or 2	To prove the existence of ore in unexplored area of 924.939 Ha	As on 01.04.2019, the lease area explored under G1: 401.685Ha and G2 is G2: 4.925Ha. In 2018-19, the proposed exploration have not been carried out due to want of forest clearance	The mine was non- operational due to want of EC and FC
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Specified	Nil	In 2018-19, the proposed exploration have not been carried out due to want of forest clearance
1d	Balance area to be explored to bring Geological axis in 1 or 2	To prove the existence of ore in unexplored area of 924.939 Ha	In 2018-19, the proposed exploration have not been carried out due to want of forest clearance	operational due to want of EC and FC

1e Balance reserve as on 01/04/20

As per the modified mining plan approved dated 15.11.2017, the iron ore reserve is 20.022 million tones resources is tones. Total Reserve and Resource is 27.129 million tones. Manganese ore reserve is 0.837 million tones and resources at 0.309 million tones. Total reserve and

The mine was nonoperational and therefore there is no depletion in reserves. Thus, as on 01.04.2019, the iron ore reserve is 20.022 million tones and remaining resources is 7.107 million tones. Total Reserve and and remaining Resource of iron ore is 27.129 million tones. 7.107 million Manganese ore reserve is 0.837 million tones and resources at 0.309 million tones. Total reserve and resource of Mn is 1.146 million tones

The mine was nonoperational due to want of EC and FC

1f General remarks of inspecting officers on geology, exploration etc

In 2018-19, 61 numbers of boreholes have been proposed to be drilled to prove the existence of ore in unexplored area

resource of Mn is 1.146 million tones

> In 2018-19, the proposed The mine was nonexploration have not been carried out due to want of EC and FC want of forest clearance

operational due to

Development :

Sl.No. Item Propasals

Actual work

Remarks

The mine was non-The mine was non-IRON 2a Location of Deposit 2 operational due to want operational due to development w.r.t.lease area Qry3:- 332413 of EC and FC want of EC and FC E to 332757 E & 2415311 N to 2415731 N Deposit 3:-332504 E to 332738 E & 2414276 N to 2415002 N MANGANESE Deposit 5 Top:- 332855 E to 333149 E & 2417637 N to 2417842N Deposit 6B:-332723E to 332862E & 2417452N to 2417700N The mine was nonoperational due to want operational due to The mine was non-2b Separate benches IRON in topsoil, Deposit 2 want of EC and FC Qry3:- Ore of EC and FC overburden and minerals (Rule bench - 03 nos. Topsoil -Nil, OB - Nil Deposit 3:-Ore bench - 05 nos, Topsoil -Nil, OB - Nil MANGANESE Deposit 5 Top:- Ore bench - 02 nos, Topsoil - Nil, OB - 01 no. Deposit 6B:-Ore bench - 01 no, Topsoil -Nil, OB - 01

2c ratio cum/cum and for manganese ore 2.93 t/cum

no.

Stripping ratio Stripping Not applicable as mine The mine was non-or ore to OB ratio for iron was non-operational due operational due to ore 0.2 t/cum to want of EC and FC

want of EC and FC.

2d	Quantity of topsoil generation in m3	Not Proposed	Nil	The mine was non- operational due to want of EC and FC
2e	Quantity of overburden generation in m3	IRON Deposit 2 Qry3:- 0.18 M.cum Deposit 3:- 0.22 M.cum Total:- 0.40 M.cum MANGANESE Deposit 5 Top:- 0.181 M.cum Deposit 6B:- 0.086 M.cum Total:- 0.267 M.cum	Nil	The mine was non- operational due to want of EC and FC .
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	In 2018-18, development for iron ore proposed in Deposit 2 (Quarry 3) & Deposit 3 and for Manganese ore in Deposit 5 Top and Deposit 6B	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production		The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC
3b	Quantity of ROM mineral production proposed		The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC
3c	Recovery of sailable/usable mineral from ROM production		The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC

The mine was non-Iron Ore: 0.06 Nil. The mine was non-Quantity of 3d operational due to million tones operational due to want mineral reject want of EC and FC and Mn Ore: of EC and FC generation 0.05 million tones The mine was non-Grade of mineral Iron Ore: - 45% Nil. The mine was non-3е operational due to Fe to 55% Fe, operational due to want rejects want of EC and FC Threshold: 45% of EC and FC generation and threshold value Fe; Manganese Ore:- 10% Mn declared. to 25% Mn, Threshold value +10% Mn. The mine was non-Iron Ore: 1.59 Nil. The mine was non-Quantity of sub operational due to million tones operational due to want grade mineral want of EC and FC generation. and Mn Ore: of EC and FC 0.05 million tones Iron Ore:- 45% Nil. The mine was non-The mine was non-3q Grade of sub Fe to 55% Fe; operational due to want operational due to grade mineral want of EC and FC of EC and FC Manganese generation Ore:- 10% Mn to 25% Mn The mine was non-Mechanized The mine was non-3h Manual / operational due to operational due to want method for Mechanised want of EC and FC of EC and FC Iron ore method adopted excavation & for segregating processing and from ROM Manganese OB excavation. Manual Sorting for Manganese Ore Nil Nil 3i Any analysis or Nil beneficiation study proposed and carried out for sub grade mineral and rejects.

3j	Provision of drilling and blasting in mineral benches		Not Carried out. The mine was non-operational due to want of EC and FC	The mine was non- operational due to want of EC and FC
3k	Provision of mining machineries in mineral benches	Excavator and dumper combination have been proposed for mining in mineral benches.	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The proposed height of bench is 6 m	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC
3m	Total area covered under excavation/pits	Area under mining at the end of plan period will be 260.6765 Ha	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC

Remarks

3n	for the pit/mine	ratio for iron	Not applicable as mine was non-operational due to want of EC and FC	The mine was non- operational due to want of EC and FC.
30	Total area put in use under different heads at the end of year	Total area put in use under different heads at the end of plan period will be 319.0151Ha	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC
3p	Production of ROM mineral during the last five year period as applicable	2017-18: Iron- 0.029 Million tones, Mn- 0.02 million tones 2018-19: Iron- 1.65 million tones, Mn-0.1 million tones		The mine was non- operational due to want of EC and FC
3q	General remarks of inspecting officers on method of mining etc.	proposal during 2018-	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC

Solid Waste Management - Dumping:

Sl.No. Item Propasals Actual work

4a

and mineral rejects (Rule 32,33)

proposal for of EC and FC top soil generation. Separate dumping of OB proposed. Mineral reject proposed to be blended with high grade ore therefore no separate stacking of subgrade/miner al reject has been planned

Separate dumping In 2018-19, The mine was nonof topsoil, OB there was no operational due to want

The mine was nonoperational due to want of EC and FC

4b Location of mineral reject dumps

top soil

There is no The mine was nontopsoil, OB and proposal for operational due to want of EC and FC

The mine was nonoperational due to want of EC and FC

generation. Waste generated from iron ore to be dumped in waste dump WD2 proposed at southern side of deposit -2 between 332836E to 333098E & 2414575N to 2414956N. Waste generated from manganese has been planned to be dumped in waste Dump WD1M in the southern Side of Dep. 5 Top between 332785E to 333109 E & 2417160 N to 2417422N. Mineral reject proposed to be blended with high grade ore therefore no separate stacking of subgrade/miner al reject has been planned.

within lease area and outside Lease - 11 of lease area

4c

nos, Outside lease area -Nil

Number of dumps Existing waste The mine was nondumps within operational due to want of EC and FC

The mine was nonoperational due to want of EC and FC

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	In 2018-19, waste generated from iron ore has been planned to be dumped in waste dump WD2 and waste from manganese has been planned to be dumped in waste Dump WD1M. Both dumps are proposed to be outside the UPL		The mine was non-operational due to want of EC and FC
4 e	Number of active and alive dumps.			The mine was non- operational due to want of EC and FC
4 f	Number of dead dumps.	Existing 11 nos of dead dumps	Existing 11 nos of dead dumps	The mine was non- operational due to want of EC and FC
4 g	Number of dumps established.	Nil	Nil	Nil

In 2018-19, Whether 4h Retaining wall retaining wall or garland drain and garland all along dumps drain have are there. been proposed near proposed waste dump WD3 on Northern side of deposit -8 of length 630 m and 635 m respectively In 2018-19, Nil Length of 4i Retaining wall retaining wall or garland drain and garland all along dumps drain have been proposed near proposed waste dump WD3 on Northern side of deposit -8 of length 630 m and 635 m respectively In 2018-19, Nil 4 j Number of one settling settling ponds tank have been proposed near proposed waste dump WD3 on Northern side

of deposit -8

The mine was nonoperational due to want of EC and FC

The mine was nonoperational due to want of EC and FC

The mine was nonoperational due to want of EC and FC 4k Specific In 2018-19, The mine was non-The mine was noncomments of there was no operational due to want operational due to inspecting proposal for of EC and FC want of EC and FC officer on waste top soil dump management generation. Separate dumping of OB proposed. Mineral reject proposed to be blended with high grade ore therefore no separate stacking of subgrade/miner al reject has been planned

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.	Not Proposed	Nil	The mine was non- operational due to want of EC and FC
5b	Area under backfilling of mined out area	Not Proposed	Nil	The mine was non- operational due to want of EC and FC
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	Nil	The mine was non- operational due to want of EC and FC
5d	Total area fully reclaimed and rehabilitated	Not Proposed	Nil	The mine was non- operational due to want of EC and FC
5e	General remarks of inspecting officers on backfilling and reclamation etc.	There was no proposal for backfilling	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC

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).	Annual report on PMCP to be submitted as per Rule 26 (2) of MCDR, 2017	Annual report on PMCP for the year 2018-19 have been submitted	Annual report on PMCP for the year 2018-19 have been submitted
6b	Area available for rehabilitation (ha) .	Not proposed	Nil	The mine was non- operational due to want of EC and FC
6c	afforestation done (ha).	Not proposed	Nil	Nil
6d	No. of saplings planted during the year	500 nos of saplings	1000 nos of saplings planted	Nil
6e	Cumulative no .of plants	Not Specified	48250 nos of saplings planted	Nil
6f	Any other method of rehabilitation	Not proposed	Nil	Nil
6g	Cost incurred on watch and care during the year	0.10 Lakhs	0.30 lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D		Nil	The mine was non- operational due t want of EC and FC
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed	Nil	The mine was non- operational due t want of EC and FC
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area		Nil	The mine was non- operational due t want of EC and FC

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Nil	The mine was non- operational due to want of EC and FC
61	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed	Nil	The mine was non- operational due to want of EC and FC
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not proposed	Nil	The mine was non- operational due to want of EC and FC
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not proposed	Nil	The mine was non- operational due to want of EC and FC
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not proposed	Nil	The mine was non- operational due to want of EC and FC
6p	Compliance of environmental monitoring (core zone and buffer zone)	of ambient air quality,		The mine was non- operational due to want of EC and FC

6q compliance and per Rule 26 progressive (2) of MCDR, 2017 closure operations etc.

General remarks Annual report Annual report on PMCP The mine was non-of inspecting on PMCP to be for the year 2018-19 operational due to officers on PMCP submitted as have been submitted want of EC and FC

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area	The mine was non- operational due to want of EC and FC	want of EC and FC
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Fully Mechanized method of working for Iron ore and Manganese excavation. Manual sorting and sizing of Manganese ore.	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC
7c	Different grade of mineral sorted out at mines.	Iron Ore: 45% Fe to 55% Fe and above 55% Fe; Mn Ore: 10% Mn to 25% Mn and above 25% Mn	operational due to want	The mine was non- operational due to want of EC and FC
7d	Any beneficiation process at mines	Not Proposed	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	offer	The mine was non- operational due to wan of EC and FC	The mine was non- t operational due to want of EC and FC

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Nil	Nil
8b	Concurrent use or storage of topsoil	Not proposed	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of OB proposed. Mineral reject proposed to be blended with high grade ore therefore no separate stacking of subgrade/miner al reject has been planned.	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	Nil
8 e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 nos. of sapling proposed plantation	1000 nos. of sapling planted	Nil
8 g	Survival rate	Not Specified	Survival rate : 40% as reported in annual return for 2018-19	Nil

8h	Water sprinkling on roads to control airborne dust	sprinkling on	The mine was non- operational due to want of EC and FC	The mine was non- operational due to want of EC and FC
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Aesthetic beauty of mine is maintained	The mine was non- operational due to want of EC and FC

Compliance of Rule 45:

Compilance of Rate 43.					
Sl.No.	Item	Propasals	Actual work	Remarks	
9a	Status of submission of Monthly and Annual returns	Monthly and Annual returns to be submitted as per rule 45 of MCDR 2017	Monthly returns and annual return for 2018-19 have been submitted	Monthly returns and annual return for 2018-19 have been submitted	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager have	Information on Manager have been furnished in annual return for 2018-19	Information on Manager have been furnished in annual return for 2018-19	

9c	Annual return on land use pattern for area under pits, reclaimed	(surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 196.972 ha, Used for waste	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 196.972 ha, Used for waste disposal: 39.46 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 24.121 Ha, other purposes: 1.265 Ha	The mine was non-operational due to want of EC and FC
9d	Scrutiny of Annual return on afforestation		1000 nos of saplings planted	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	The mine was non- operational due to want of EC and FC
9f	Scrutiny of Annual return on ROM stock and/or graded ore	of ROM : Iron	Found to be in order	The mine was non- operational due to want of EC and FC
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		Production Cost: Nil. The mine was non- operational due to want of EC and FC	Nil
9h	Scrutiny of Annual return on fixed assets	Assets (in Rs)	Value of Fixed Assets (in Rs) 8035689	As reported in annual return
9k	Scrutiny of Annual return on mining machineries	Nil	Nil	The mine was non- operational due to want of EC and FC

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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 :

Indian Bureau of Mines

SUDIF RANJAN MAZUMDAR)