

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-1/BBS-29/5/1

Mine code : 30ORI08036

- (i) Name of the Inspecting : **SKM**) **SANJAY KUMAR MAHAPATRA**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : **SHRI NILAKANTHA SAMAL MINES MANAGER**
Official with
Designation
- (iv) Date of Inspection : 18/03/2022
- (v) Prev.inspection date : 06/03/2020

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KHANDBANDH**
- (b) **Registration NO.** : **IBM/4269/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : KHANDBANDH
- Taluka : BARBIL
- Post office : KHANDBANDH
- Pin Code : 758034
- FAX No. : 06742396889
- E-mail : info@orissamining.com
- Phone : 06767-279360
- (f) Police Station : JODA
- (g) First opening date : 30/11/1963
- (h) Weekly day of rest : TUE
2. Address for : VILL/PO-KHANDBANDH
correspondance VIA-JODA
DIST-KEONJHAR. ORISSA
3. (a) Lease Number : ORI0082
- (b) Lease area : 366.31
- (c) Period of lease :
- (d) Date of Expiry : 29/11/2033
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

Agent : Abni Kanta Pradhan
OMC office Barbil Dist-
Keonjhar BHUBNESHWAR ORISSA
Phone: 0674-2377400
FAX : 0674-2580145

Mining Engineer

Name : Sri Nishikanta Samal, Full Time
Qualification : B Tech in mining Engineering
Appointment/ : 15/10/2021
Termination date

Geologist

Name : Mr. Taruna Kumar Kandeyang, Full Time
Qualification : MSc, M.Phil(Geology), 17 years experience
Appointment/ : 15/10/2021
Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	29/10/2003
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	18/06/2009
		Modif.approved Mining Scheme	11/11/2011
		Modif.of approved Mining Plan	14/09/2016
		MP review under 17(1) MCR 2016	16/11/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2018-19 - 71 BORE HOLE, 2019-20- 51 BORE HOLE, 2020-21- NIL,2021-22 NIL	NIL	To prove the existence of ore in the unexplored area , drilling is proposed to be carried out at 100x100m grid . as the mine is not under operation due to want of Forest clearamce (since 05.012010) the same has not been carried out
1b	Exploration over lease area for geological axis 1 or 2	As per the review of mining plan approved on 16/11/2017, an extent of 207.255 ha of area has been explored. G1 level & 13.858ha upto G2 level & an extent of 145.1973 ha remains un explored	An extent of 207.2551ha of area has been explored upto G1 level & 13.858ha upto G2 level & an extent of 145.1973 ha remains un-explored as on date.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	OMC was the exploration agency for this mine	Exploration was not done during previous years as the mine was not under operation since 05.01.2010. The expenditure on account of exploration is treated as nil	Mine was non-working since 05.01.2010 due to want of Forest Clearnce.
1d	Balance area to be explored to bring Geological axis in 1 or 2	An extent of 145.197 is to be explored as envisaged in the of mining plan, approved on 16.11.2017.	No exploration was carried as the mine was Non-working.	Mine was non-working since 05.01.2010 due to want of Forest clearance.

1e	Balance reserve as on 01/04/20	In the review of mining plan approved on 16/11/2017, the reserves /resources have been estimated as on 30/07/2017 under (111): 0.546MT million tonnes, reserves under (121): 20.486 million tonnes & total remaing mineral resources of 1.542 million tonnes.	In the review of mining plan approved on 16/11/2017, the reserves /resources have been estimated as on 30/07/2017 under (111): 0.546MT million tonnes, reserves under (121): 20.486 million tonnes & total remaing mineral resources of 1.542 million tonnes.	Mine was non- working Mine was non-working since 05.01.2010 due to want of Forest clearance no exploration carried .
1f	General remarks of inspecting officers on geology, exploration etc			The horse shoe shaped iron ore deposit of Joda- koira sector forms a northerly plunging synclinorium . The hill ranges broadly delineate the folded limbs of the synclinorium. Super impositions of several phases of deformation in the area have resulted in a complex fold system. The mine is not under operation. Mine was non-working since 05.01.2010 due to want of Forest clearance.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Depost-I and Deposit-V	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance)
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	There is no topsoil generation proposal & seperate benches for the purpose has been made	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance)
2c	Stripping ratio or ore to OB ratio	1:0.68cum	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.
2d	Quantity of topsoil generation in m3	No top soil.	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.
2e	Quantity of overburden generation in m3	It was proposed to generate 0.68 Million CUM	Nil	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried. Thus no comment is offered.

Exploitation:

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

3a	Number of pit proposed for production	02 quarry proposed in Deposit-I and Deposit-V	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.
3b	Quantity of ROM mineral production proposed	Deposit-I : 0.52 million tonne and Deposit- N : 0.48 million tonne	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.
3c	Recovery of sailable/usable mineral from ROM production	95%	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.
3d	Quantity of mineral reject generation	0.01 MT	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.
3e	Grade of mineral rejects generation and threshold value declared.	<45%<55% Fe	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.
3f	Quantity of sub grade mineral generation.	0.05 MT	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.
3g	Grade of sub grade mineral generation	55%	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clerances. (forest clerance) Hence no work carried.

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clearances. (forest clearance) Hence no work carried.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clearances. (forest clearance) Hence no work carried.
3j	Provision of drilling and blasting in mineral benches	Drilling and Blasting proposal has been envisaged .	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clearances. (forest clearance) Hence no work carried.
3k	Provision of mining machineries in mineral benches	Ore and Over Burden excavation and transportion to be carried by conventional Shovel and Dumper combination.	NIL	Mine is not in operation since 05.01.2010 due to want of statutory clearances. (forest clearance) Hence no work carried.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Seperate benches in overburden and in ore are proposed	No benches advancement , as the mine is not in operation	Mine is not in operation since 05.01.2010 due to want of statutory clearances. (forest clearance) Hence no work carried.
3m	Total area covered under excavation/pits	110.67 ha	NIL	Mine is not in operation since 05.01.2010 due t
3n	Ore to OB ratio for the pit/mine during the year.	1:0.68	NIL	Mine is not in operation since 05.01.2010 due want of Forest clearance.

3o	Total area put in use under different heads at the end of year	117.4486 ha	total area proposed under different heads as per approved document Mining: 117.4486ha Overburden Dump: 1.1198ha Mineral storage: 7.2163ha Infrastructure: 2.108ha Road: 11.865ha, Mineral separation plant: 0.296ha Township area: 1.827ha & Sub-grade storage: 14.117ha	Mine is not in operation since 05.01.2010 due t
3p	Production of ROM mineral during the last five year period as applicable	2015-16 0.1269million cum, 2016- 2018-19 390000MT 2019-20 790000 MT 2020-21 1020000 MT 2021-22 1000000 MT	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
3q	General remarks of inspecting officers on method of mining etc.		Mine was Non working since 05.01.2010.	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of 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)	Stacked at separate dump for subgrade and for waste at WD1	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date .

4b	Location of topsoil, OB and mineral reject dumps	OB 2427720N to 2428150N & 335400E to 335700E SUB GRADE 2427600N- 2427760N & 334930E- 335160E 2427760N- 2427980N & 334850E- 335020E 2428360N- 2428440N & 335680E- 335760E 2427540N- 242600N & 334640E- 334930E 2426240N- 2427980N & 335820E- 335980E 2426620N- 2426800N & 333550E- 333770E 2426300N- 2426520N & 333600E- 333750E	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.	No mining operation, as the mine operation was temporarily suspended since 05-01-2010.
4c	Number of dumps within lease area and outside of lease area	01	01	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Near Deposit- III	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
4e	Number of active and alive dumps.	01	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
4f	Number of dead dumps.	NIL	NIL	NIL
4g	Number of dumps established.	NIL	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	NIL	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
4i	Length of Retaining wall or garland drain all along dumps	NIL	NIL	NIL
4j	Number of settling ponds	NIL	NIL	NIL
4k	Specific comments of inspecting officer on waste dump management		No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due .

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.	Prposal for back filling of Deposit-VI	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
5b	Area under backfilling of mined out area	No such proposal	NIL	No proposal
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal.	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.

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).	Submitted	NIL as mine was not working. Only plantation carried.	Mine was not working since 2010.
6b	Area available for rehabilitation (ha) .	No such proposal.	Nil	

6c	afforestation done (ha).	NIL	700 samplings	
6d	No. of saplings planted during the year	500 plants	700 samplings.	
6e	Cumulative no .of plants	2000	Approximately 2700.	
6f	Any other method of rehabilitation	No such proposal.	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.	
6g	Cost incurred on watch and care during the year	2020-21 is Rs 7500/-2021-22 is Rs 7500/-	2020-21-Rs 197808/- 2021-22-Rs 202644/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No such proposal.	NIL	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposal.	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not applicable	Nil	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal.	NIL. No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposal.	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NIL	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Core zone - 04 nos. Buffer Zone - 04 nos.	NIL	Mining operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
----	---	---

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1000000 Tonne	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised.	NIL	No mining operation, as the mine operation was temporarily suspended since 05-01-2010 to till date due to want of forest clearance.
7c	Different grade of mineral sorted out at mines.	Separate stacking of Mineral.	NIL	Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.
7d	Any beneficiation process at mines .	Crushing and Screening proposed,	NIL	Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No work carried as Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.	Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.
----	--	---	--

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No such proposal.	NIL	
8b	Concurrent use or storage of topsoil	No such proposal	NIL	Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Provisions for dumping of overburden and waste rock has been made in the review - of mining plan	Nil	Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal	NIL	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposal.	NIL	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No specific proposal.	Approximately 2700 plantation carried.	Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.
8g	Survival rate	90%	Approx 75%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul road proposed.	NIL	Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		No work carried except plantation.	Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Annual Return submitted for the year 2020-21. Monthly for Feb 2022 submitted.	Mine was temporarily suspended since 05-01-2010 due to want of forest clearance.	This is a Non Working mines. Nil return submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	the employment status of mining engineer , geologist and mine manager are furnished	Information furnshed is found to be correct.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	The status of existing land use pattern is furnished	In formation of existing land use pattern is corect as no mining operation carried since 2010.	
9d	Scrutiny of Annual return on afforestation	NIL	Mine was Non-working.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No mineral reject is generated from the mine as the mine is not in operation since 2010	No mineral reject is generated .	No mineral reject is generated from the mine as the mine is not in operation since 2010
9f	Scrutiny of Annual return on ROM stock and/or graded ore	No production reported.	the mine is not in operation since 2010	The mine is not in operation since 2010
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	NIL as no propduction.	Mine is not in operation since 2010	Mne is not in operation since 2010
9h	Scrutiny of Annual return on fixed assets	Rs 69176288	Rs 69176288	
9k	Scrutiny of Annual return on mining machineries	No mining mechnary deployed.	Mne is not in operation since 2010 and submitted information is in order.	Mne is not in operation since 2010

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed		No Violation issued		Show cause position	
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

Date :

(**SANJAY KUMAR MAHAPATRA**)

Indian Bureau of Mines