

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-42/BBS

Mine code : 30ORI08039

- (i) Name of the Inspecting : **SKM1**) **SANJIB KUMAR MOHAPATRA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Sri Rama Chandra Mohapatra (Mines Manager)
Official with
Designation
- (iv) Date of Inspection : 24/06/2022
- (v) Prev.inspection date : 25/09/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MURGABEDA**
- (b) **Registration NO.** : **IBM /5243 /2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : ORISSA
District : KEONJHAR
Village : MURGABEDA
Taluka : BARBIL
Post office : DEOJHAR
Pin Code :
FAX No. : 06767- 272304 / 91-661-240
E-mail : miom.drp@gmail.com
Phone : 06767-73448 / 91-661-240
- (f) Police Station : BARBIL
- (g) First opening date : 03/08/1976
- (h) Weekly day of rest : SUN
2. Address for : VILL-MURGABEDA
correspondance PO-DEOJHAR
DIST-KEONJHAR
3. (a) Lease Number : ORI0058
(b) Lease area : 15.38
(c) Period of lease : 50
(d) Date of Expiry : 02/07/2026
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : Sri D.R.Patnaik
 Sri D.R.Patnaik P.O.
 Boneikala KEONJHAR ORISSA
 Phone:06767-73448
 FAX :

Owner : Sri D.R.Patnaik
 Sri D.R.Patnaik
 P.O.Boneikala KEONJHAR
 ORISSA
 Phone: 06767-73448
 FAX :

Mining Engineer

Name : A M VALI BABU, Full Time
 Qualification : B TECH MINING
 Appointment/ : 01/11/2019
 Termination date

Manager

Name : RAM CHANDRA MOHAPATRA
 Qualification :
 Appointment/ : 05/03/2020
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	19/02/2004
Plan/Scheme of Mining		Renewal under rule 24 MCR1960	15/02/2008
		Modif.of approved Mining Plan	23/10/2008
		MP review under 17(1) MCR 2016	14/03/2018
		MP review under 17(1) MCR 2016	18/11/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	No backlog of previous year.
1b	Exploration over lease area for geological axis 1 or 2	7 nos of core bore hole proposed	7 nos of core bore hole carried out	7 nos of core bore hole carried out during the reporting year.
1c	Exploration Agencies and Expenditure in lakh rupees during the year		M/s. Thriveni Earthmovers Pvt. ltd. Rs. 7.33 Lakhs	M/s. Thriveni Earthmovers Pvt. ltd. Rs. 7.33 Lakhs
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Entire lease area of 15.378 Ha has been explored under G1 category.	Entire lease area of 15.378 Ha has been explored under G1 category.
1e	Balance reserve as on 01/04/20		5378868 tons as on 01/04/2022	5378868 tons as on 01/04/2022
1f	General remarks of inspecting officers on geology, exploration etc		Entire lease hold area (15.378 Ha.) has been already explored under G1 category. A violation letter has been issued for contravention of rule 12(4B) of MCDR 2017, i.e. submission of geological report prepared in the manner specified in the Minerals (Evidence of Mineral Contents) Rules, 2015 vide letter dated 07/07/2022.	Entire lease hold area (15.378 Ha.) has been already explored under G1 category. A violation letter has been issued for contravention of rule 12(4B) of MCDR 2017, i.e. submission of geological report prepared in the manner specified in the Minerals (Evidence of Mineral Contents) Rules, 2015 vide letter dated 07/07/2022.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	N 2445510-NN 2446150 to E 341770- E 342070	N 2445510-NN 2446150 to E 341770- E 342070	N 2445510-NN 2446150 to E 341770- E 342070 The lessee has carried out the development as per the proposal during the reporting year. however could not achieved the proposed target production.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal for development of top soil benches during the reporting year.	No proposal for development of top soil benches during the reporting year.	No proposal for development of top soil benches during the reporting year.
2c	Stripping ratio or ore to OB ratio	1: 0.039	1: 0.032	As the evelopment proposal could not achieved 100% , according the there is adeviation in stripping ratio.
2d	Quantity of topsoil generation in m3	Nil	Nil	No proposal during the reporting year.
2e	Quantity of overburden generation in m3	35367 Cum	18591 Cum	18591 Cum
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The lessee has carried out the development as per the proposal during the reporting year. however could not achieved the proposed target production.	The lessee has carried out the development as per the proposal during the reporting year. however could not achieved the proposed target production.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	One	One	One
3b	Quantity of ROM mineral production proposed	1998527 tons	1274560 tons	The lessee has carried out the exploitation as per the proposal during the reporting year. however could not achieved the proposed target production.
3c	Recovery of sailable/usable mineral from ROM production	1782924 tons	1058960 tons	The lessee has carried out the exploitation as per the proposal during the reporting year. however could not achieved the proposed target production.
3d	Quantity of mineral reject generation	215603 tons	215600 tons	215600 tons
3e	Grade of mineral rejects generation and threshold value declared.	+45 % Fe to 58 % Fe	+45 % Fe to 58 % Fe	+45 % Fe to 58 % Fe
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	NA	NA	NA
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Mechanized
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	Nil

3j	Provision of drilling and blasting in mineral benches	Yes, Jack Hammer 115 mm dia Drills. Blasting proposed with LD explosives of 25mm dia. & 83mm dia. with detonating cord & milli second delay detonators.	Yes, Jack Hammer 115 mm dia. Drills. Blasting proposed with LD explosives of 25mm dia. & 83mm dia. with detonating cord & milli second delay detonators.	Yes, Jack Hammer 115 mm dia. Drills. Blasting proposed with LD explosives of 25mm dia. & 83mm dia. with detonating cord & milli second delay detonators.
3k	Provision of mining machineries in mineral benches	Yes, Shovel and Dumper combination proposed	Yes, Shovel and Dumper combination carried out.	Yes, Shovel and Dumper combination carried out.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The height of the bench proposed is 10m.	The height of the bench is suitable for the method of mining proposed in review of mining plan.	The height of the bench is suitable for the method of mining proposed in review of mining plan.
3m	Total area covered under excavation/pits	12.681 Ha.	12.681 Ha.	12.681 Ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.039	1:0.039	1:0.039
3o	Total area put in use under different heads at the end of year	As per the approved review of mining plan , the total area under different heads at the end of plan period will be 14.678 Ha.	As per the approved review of mining plan , the total area under different heads at the end of the reporting year is 14.678 Ha.	As per the approved review of mining plan , the total area under different heads at the end of the reporting year is 14.678 Ha.
3p	Production of ROM mineral during the last five year period as applicable	2017-18- Nil 2018-19- 2000000mt. 2019-20- 1999998 mt. 2020-21- 2000000 mt. 2021-22- 1998527 mt.	2017-18- Nil 2018-19- Nil 2019-20- 451740 mt. 2020-21- 753670 mt. 2021-22- 1274560 mt.	2017-18- Nil 2018-19- Nil 2019-20- 451740 mt. 2020-21- 753670 mt. 2021-22- 1274560 mt.

3q	General remarks of inspecting officers on method of mining etc.	The ROM production has been carried out in one pit as proposed. However the lesee could not achieved 100% of the proposed production target but carried out within the proposed area during the reporting year.	The ROM production has been carried out in one pit as proposed. However the lesee could not achieved 100% of the proposed production target but carried out within the proposed area during the reporting year.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Only stacking of mineral reject was proposed.	Separate stacking of mineral reject was carried out and subsequently blended wth sale bale ore and sold out of a regular manner.	Separate stacking of mineral reject was carried out and subsequently blended wth sale bale ore and sold out of a regular manner. As per the proposal of the plan period, the generated wate are being used for maintainance of road and bund preparation.
4b	Location of topsoil, OB and mineral reject dumps	Nil	Nil	As per the proposal of the plan period, the generated wate are being used for maintainance of road and bund preparation.
4c	Number of dumps within lease area and outside of lease area	Nil	Nil	As per the proposal of the plan period, the generated wate are being used for maintainance of road and bund preparation.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NA	Nil	As per the proposal of the plan period, the generated wate are being used for maintainance of road and bund preparation.
4e	Number of active and alive dumps.	Nil	Nil	Nil
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.	NA	NA	Nil
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	Nil
4j	Number of settling ponds	01	01	One
4k	Specific comments of inspecting officer on waste dump management		Separate stacking of mineral reject was carried out and subsequently blended wth sale bale ore and sold out of a regular manner. As per the proposal of the plan period, the generated wate are being used for maintainance of road and bund preparation.	Separate stacking of mineral reject was carried out and subsequently blended wth sale bale ore and sold out of a regular manner. As per the proposal of the plan period, the generated wate are being used for maintainance of road and bund preparation.

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 proposed as pit is not exhausted.	Nil	No proposal during the reporting year.
5b	Area under backfilling of mined out area	Not proposed as pit is not exhausted.	Nil	No proposal during the reporting year.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal for generation of top soil.	Nil	No proposal during the reporting year.
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Mine is not matured for reclamation and rehabilitation.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		As the mine is not matured during the reporting year, no proposal for reclamation and rehabilitation was proposed.	As the mine is not matured during the reporting year, no proposal for reclamation and rehabilitation was proposed.

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).	As per Rule 26(2) Annual PMCP report to be submitted before 1st day of July of Every Year	Submitted within the stipulated time period for the reporting year.	Submitted within the stipulated time period for the reporting year.
6b	Area available for rehabilitation (ha) .	Nil	Nil	Are not matured for rehabilitation during the reporting year.
6c	afforestation done (ha).	0.30 Ha.	0.30 Ha.	0.30 Ha.
6d	No. of saplings planted during the year	750 Nos sapplings proposed	1050 nos of sapplings planted during the reporting year.	1050 nos of sapplings planted during the reporting year.

6e	Cumulative no .of plants		17652 sapplings	17652 sapplings
6f	Any other method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch and care during the year	Nil	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Nil	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.30 Ha. 750 sapplings	0.30 Ha. 1050 sapplings	0.30 Ha. 1050 sapplings

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.30 Ha. 750 sapplings	0.30 Ha. 1050 sapplings	0.30 Ha. 1050 sapplings
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	Plantation
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air, Noise and Water quality monitoring will be done during the year within the lease area.	Air, Noise and Water quality monitoring carried out as per the proposal during the reporting year.	Air, Noise and Water quality monitoring carried out as per the proposal during the reporting year.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		The lessee has carried out afforestation and environmental monitoring as per the proposal during the reporting year.	The lessee has carried out afforestation and environmental monitoring as per the proposal during the reporting year.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe was proposed.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe sorting is being praticed.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe sorting is being praticed.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised	Mechanised	Mechanised

7c	Different grade of mineral sorted out at mines.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe was proposed.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe sorting is being practiced.	Saleable Ore:+58 % Fe, Mineral Reject:- +45 to 58% Fe sorting is being practiced.
7d	Any beneficiation process at mines .	Nil	No beneficiation process was proposed. Only crushing and screening is being carried out.	No beneficiation process was proposed. Only crushing and screening is being carried out.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		No beneficiation process was proposed. Only crushing and screening is being carried out.	No beneficiation process was proposed. Only crushing and screening is being carried out.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal for generation of top soil.	Nil	No proposal for generation of top soil during the reporting year.
8b	Concurrent use or storage of topsoil	Nil	Nil	No proposal for generation of top soil during the reporting year.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Nil	Nil	Separate stacking of mineral reject was carried out and subsequently blended wth sale bale ore and sold out of a regular manner. As per the proposal of the plan period, the generated wate are being used for maintainance of road and bund preparation.

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	As per the proposal of the plan period, the generated waste are being used for maintenance of road and bund preparation.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	Separate stacking of mineral reject was carried out and subsequently blended with sale bale ore and sold out of a regular manner. As per the proposal of the plan period, the generated waste are being used for maintenance of road and bund preparation.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation-750 sapplings	Plantation-71050 sapplings carried out.	Plantation-71050 sapplings carried out.
8g	Survival rate	60-70%	63%	63%
8h	Water sprinkling on roads to control airborne dust	Water Sprinkling on haul road were proposed.	Water sprinkling by water tanker over haul roads has been carried out.	Water sprinkling by water tanker over haul roads has been carried out.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Lessee has planted 1050 no of sapling within the lease area and water sprinkling by water tanker over haul roads to minimize the fugitive dust emission. This sustains the aesthetic beauty of the mine area.	Lessee has planted 1050 no of sapling within the lease area and water sprinkling by water tanker over haul roads to minimize the fugitive dust emission. This sustains the aesthetic beauty of the mine area.

Compliance of Rule 45:

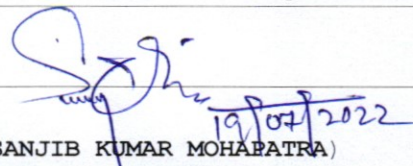
Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Monthly return for the month of May 2022 has been submitted. Annual return for FY 2021-22 is due for for submission and yet to be submitted.	Monthly return for the month of May 2022 has been submitted. Annual return for FY 2021-22 is due for for submission and yet to be submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		Annual return for FY 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		Annual return for FY 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9d	Scrutiny of Annual return on afforestation		Annual return for FY 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)		Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9h	Scrutiny of Annual return on fixed assets	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.
9k	Scrutiny of Annual return on mining machineries	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.	Annual return for Fy 2021-22 has not been submitted till the date of inspection and yet to be submitted within the scheduled time period.

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 12(4)(B) 07/07/2022		

Date : 19/07/2022


19/07/2022

(SANJIB KUMAR MOHAPATRA)

Indian Bureau of Mines