

**INDIAN BUREAU OF MINES**  
**MCDR INSPECTION REPORT**  
**Bhubaneswar Region**

**General**

SL. No.	Particulars	Details
1.	Name of the Mine	Murgabeda Iron Ore Mines
2.	Date of Inspection	28.08.2024
3.	Name of Inspection officer:	Sri. Rohita Sethi, ACOM
4.	Name of official accompanying inspection	Sri. Rama Chandra Mohapatra, Mines Manager, and other mine officials
5.	Last date of Inspection & Officer	16.03.2024, Sri Sanjib Kumar Mohapatra, SMG
6.	Total Lease Area (Ha) with breakup of non-forest and forest land	Total-15.378 Ha Forest Area - 13.904 Ha Non-Forest-1.474 Ha
7.	Mine code	30ORI08039
8.	IBM Registration Number under rule 45 of MCDR, 2017	IBM/5243/2011
9.	Name of the lessee, Address, phone, email and fax number.	Sri D.R.Patnaik, AT-Bonaikela,PO-Banaikela,Dist-Keonjhar, 758034. Email-diom.tmpl@gmail.com
10.	Village	Murgabeda
11.	Taluka/Mandal	Barbil
12.	District	Keonjhar
13.	Pincode	758038
14.	State	Odisha
15.	Post office.	Deojhar
16.	Nearest police station	Bileipada
17.	Nearest Railway station	Deojhar
18.	Date of Grant of Mining Lease	03.07.1976
19.	Date of Execution	03.07.1976
20.	Date of opening of Mine	03.07.1976
21.	Date of expiry	02.07.2026
22.	Name of the <b>Nominated Owner</b> with Address, phone, email, fax number and date of appointment	Sri D.R.Patnaik , A/6,Commercial Estate,Civil Township,Rourkela, <a href="mailto:Email-miom.drp@gmail.com">Email-miom.drp@gmail.com</a>
23.	Name of the <b>Mine Agent</b> with	Nil

	Address, phone, email, fax number and date of appointment	
24.	Name of the <b>Mines Manager</b> with Address, mobile no, email, fax number and date of appointment in mine	Rama Chandra Mohapatra, <a href="mailto:Email-miom.drp@gmail.com">Email-miom.drp@gmail.com</a> Murgabeda,Keonjhar Phone-9437057807, DOA- 05.03.2020
25.	Name of the <b>Mining Engineer</b> , Qualification and total experience with Address, mobile no, email, fax/ phone number and date of appointment in mine	Pratik WasudevraV Khere Murgabeda,Keonjhar Phone:- 9890855051 DOA:- 09.04.2024
26.	Name of the <b>Geologist</b> , Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	Alok Kumar Rout, (Msc. Geology) Murgabeda,Keonjhar DOA- 10.11.2021
27.	Date of Approval of Mining Plan/Review of Mining Plan/ their modifications with five-year period and specific condition in approval letter, if any.	Mining Scheme rule 12 MCDR198819/02/2004 Renewal under rule 24 MCR196015/02/2008 Modif.of approved Mining Plan23/10/2008 MP review under 17(1) MCR 201614/03/2018 MP review under 17(1) MCR 201618/11/2020
28.	Mineral (s) granted in lease and proved for mining.	Iron Ore
29.	Method of Mining (Opencast, Underground)	Open cast
30.	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
31.	Captive/Non-Captive	Non-Captive

**Exploration:---**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
1a	Backlog of previous year	No Proposal	Nil	Nil
1b	Exploration over lease area for Geological axis 1 or 2.	No Proposal	Nil	Entire potential mineralized area explored under G1 Level of exploration.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal	NA	
1e	Balance reserves as on 01.04.2024. (Proved + Probable)	As on 20.09.2020 111-10170932 122-315138	As on 31/03/2024 111-3402720 122-315138	As per Annual return 23-24

		211-2119153 222-905331	211-2119153 222-905331	
1f	General remarks of inspecting officer on geology, exploration etc.	Lease is going to expired on 02/07/2026. Entire potential mineralized area explored under G1 Level of exploration.		

**Development:--**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
2a	Location of development w.r.t. lease area	Section 244557,2445620,2445670, 2445720,2445770,2445820, 2445870,2445920&2446070	Broadly as per the proposal	Nil
2b	Separate benches in topsoil, overburden and mineral	Separate benches in ore and Waste proposed	As per proposal	Nil
2c	Stripping ratio or Ore to OB ratio	1:0.01	1:0.01	Nil
2d	Quantity of topsoil generation in m3	No Proposal	Nil	Nil
2e	Quantity of overburden generation in m3	31286m <sup>3</sup>	11409.09 m <sup>3</sup>	Violation issued
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development has been carried out as per proposal. For less development violation issued under Rule 11(1) of MCDR-2017		

**Exploitation:--**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
3a	Number of pits proposed for production	One	One	Nil
3b	Quantity of ROM mineral production proposed	1584871tonnes	710630tonnes	Violation issued
3c	Recovery of salable/usable mineral from ROM production	1282436 tonnes	710630 tonnes	Violation issued
3d	Quantity of mineral reject generation	302435 tonnes	Nil	Violation issued
3e	Grade of mineral reject generation and threshold value declared	45% to 55%	45% to 55%	Nil
3f	Quantity of sub-	Same as Para 3d		Nil

	grade mineral generation			
3g	Grade of sub-grade mineral generation	Same as Para 3e		Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	Nil
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	Nil
3j	Provision of drilling & blasting in mineral benches	Deep dole drilling and blasting proposed	Carried out as per proposal	Nil
3k	Provision of mining machineries in mineral benches	Dumper, excavator combination	Carried out as per proposal	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, it is proposed to keep the bench height up to 10 mtr for both Ore & OB benches.	Not maintained as per proposal	Violation letter for contravention of Rule 11(1) of MCDR 2017 was issued vide letter dated 01.04.2024, based on the last inspection.
3m	Total area covered under excavation/pits	13.081ha, up to the end of the plan period	12.781Ha	Nil
3n	Ore to OB ratio for the pit/mine during the year	1:0.01	1:0.01	Nil
3o	Total area put in use under different heads at the end of year	Area under mining : 13.081Ha Road: 0.2, Infrastructure: 0.3 Ha, safety zone: 1.597 Ha, Other: 0.146 Up to end of plan period	Mining pit: 12.781Ha Road: 0.16, Infrastructure: 0.3 Ha, Other: 2.290	Nil
3p	Production of ROM mineral during <b>last five-years period</b> , as applicable	2018-19 -20,00,000 MT 2019-20 -19,99,998 MT 2020-21 -20,00,000 MT 2021-22 - 1998527 MT 2022-23 - 1998967 MT 2023-2024- 1584871 MT	2018-19 -NIL 2019-20 -451740 MT 2020-21 -753670 MT 2021-22 - 1274560 MT 2022-23 - 950380 MT 2023-24- 710630 MT	Mine was not in operation till the end of 2019

3q	General remarks of inspecting Officer on method of mining etc.	Open cast mechanized method of mining is being practiced. Violation letter for contravention of Rule 11(1) of MCDR 2017 was issued vide letter dated 01.04.2024, based on the last inspection.
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**Solid Waste Management-Dumping:--**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	No Proposal	Nil	OB is used for road maintenance.
4b	Location of topsoil, OB & mineral reject dumps	No Proposal	Nil	Nil
4c	Number of dumps within lease area and outside lease area	No Proposal	Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit	No Proposal	Nil	Nil
4e	Number of active & alive dumps	No Proposal	Nil	Nil
4f	Number of dead dumps	No Proposal	Nil	Nil
4g	Number of dumps stabilized	No Proposal	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 dump	NA	NA	Nil
4j	Number of settling ponds	01(Maintenance)	Maintenance	One outside lease area.
4k	Specific comments of inspecting Officer on waste dump management	Waste management is being carried out as per proposal. No waste dump available inside the lease area.		

**Solid Waste Management-Backfilling:--**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
5a	Status on part or full extraction	No Proposal	NA	Nil

	of mineral from mined out area before starting backfilling			
5b	Area under backfilling of mined out area	No Proposal	NA	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	No Proposal	NA	Nil
5d	Total area fully reclaimed & rehabilitated	No Proposal	NA	Nil
5e	General remarks of inspecting Officer on backfilling and reclamation etc	Existing pit is not matured for backfilling as ore/mineral not exhausted completely.		

**Progressive Mine Closure Plan: ---**

SL.N.	Item	Proposals (FY 2023-24)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). (Hard copy same provided)	As per Rule 26(2) Annual PMCP report to be submitted before 1st day of July of Every Year.	PMCP Report Submitted on 30.06.2024	Nil
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	No proposal	Nil	Nil
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X	Nil	Nil	Nil

	D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Nil Nil Nil Nil	Nil Nil Nil Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	0.30 Ha 0.30 Ha Plantation-480 Saplings	0.30 Ha 0.30 Ha Plantation-800 Saplings with 80% survival rate	Nil
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air, Noise and Water quality monitoring will be done during the year within the lease area as per MOEF&CC guidelines.	Air, Noise and Water quality monitoring carried out during the year within the lease area as per MOEF&CC guidelines.	Nil
6f	General remarks of inspecting Officer on PMCP compliance & progressive closure operation etc	The lessee has planted 800 no of saplings over an area of 0.3 Ha. Within the lease area. No such backfilling proposal during the reporting year.		

### Mineral Conservation:---

SL.No.	Item	Proposals ((FY 2023-24)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise Mineral Stacking within lease area proposed	Carried out as per proposal	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	Nil
7c	Different grade of mineral sorted out at mines	45-55%Fe & >55Fe	As per proposal	Nil
7d	Any beneficiation process at mines	No Proposal	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Saleable Ore +55 % Fe, Mineral Reject: - +45 to 55% Blending practiced are being carried out.		

**Environment:--**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	No top soil generation	Nil	Nil
8b	Concurrent use or storage of topsoil	NA	NA	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines	No OB/Waste dump proposed	NA	Waste rock/overburden generation is very less .
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	Nil
8f	Baseline information on existence of plantation & additional plantation done	Plantation-480 Saplings during the reporting year	Plantation-800 Saplings with 80% survival rate	Nil
8g	Survival rate	NA	80%	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling by water tanker over haul roads will be carried out during the reporting year.	Water sprinkling by water tanker over haul roads has been carried out during the reporting year.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty of the mine area is good		Nil

**Compliance of Rule 45**

SL.No.	Item	COMMENTS		Remarks.
9a	Status of submission of Monthly and Annual returns	All monthly returns for the reporting year are submitted with in the stipulated time period and annual return for the year 2023-24 is submitted on 30/06/22024.		Nil
S.N.	Item	Details given in A.R. for the year 2023-24	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return	Mines Manager- 1 Engineer - 1	Actual also the same.	-----



	for information on Mining Engineer, Geologist and Manager	Geologist 1		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mining pit: 12.781Ha Road: 0.16, Infrastructure: 0.3 Ha, Other: 2.290	Appears to be correct	-----
9d	Scrutiny of Annual return on afforestation	800 plants planted	Appears to be correct	-----
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	NA	-----
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Closing stock-98210 Fines 51-below 55%Fe-41026.98 55-below 58%Fe-17992.953 58 to below 60%Fe-12038.07 60 to below 62 % Fe-23227.19 62 to below 65%Fe-552.503 CLO: Below 62% Fe(any size)- 113702.06 62 to below 65% Fe(5-18mm)-191.02 62 to below 65% Fe(10-40mm)- 1532.69  COST OF PRODUCTION-1947.62	Appears to be correct at that time	-----
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Fines 51-below 55%Fe Rs.2100.76 55-below 58%Fe-Rs.3056.55 58 to below 60%Fe- Rs 3518.73 60 to below 62 % Fe-Rs 3968.85 62 to below 65%Fe-Rs 4675.83  CLO: Below 62% Fe-Rs 4752.44 62 to below 65% Fe- Rs 6999.50 COST OF PRODUCTION- Rs.1947.62/-	Appears to be correct	-----
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset is Rs.28700529/-	Appears to be correct	-----
9i	Scrutiny of Annual return	Back hoe-04 Truck-03	Observed to be correct	-----

	on mining machineries	Water tanker -02 Wheel loader -02 Generator – 01 Mobile Screen plant- 01 Mobile Crusher plant -1		
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**(10) Violation observed during current inspection and compliance position of earlier**

**Violation pointed out:**

(a) Compliance position of earlier violation pointed out: During last inspection dated 16/03/2024, the violation of rule 11(1) of MCDR 2017 was pointed out and, said rule has been complied on 21/05/2024.

(b) During current inspection: The violation of Rule 11 (1), of MCDR 2017 have been observed and the violation letter issued on 27/09/2024.

(11) The lessee was submitted DAI/drone survey data under rule 34A for FY 23-24 on 04/07/2024

Rohita Sethi  
Assistant Controller of Mines