

**MCDRINSPECTION REPORT
BHUBANESWAR REGIONAL OFFICE**

MINE CODE: 30ORI08001

Part-I: General

SL. No.	Particulars	Details
1	Name of the Mine	Bagiaburu Iron Ore Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	21.52 Ha (Forest)
3	Mine code	30ORI08001
4	IBM Registration Number under rule 45 of MCDR, 2017	IBM/4895/2011
5	Name of the lessee, Address, phone, email and fax number	Orissa Minerals Development Company Ltd. Plot No-271, Ground floor, Bidyut Marg, Shastri Nagar, Unit-IV, Bhubaneswar, Odisha.-751001. E Mail:info.birdgroup@nic.in
6	Village	Bagiaburu
7	Taluka/Mandal	Barbil
8	District	Keonjhar
9	Pincode	758035
10	State	Odisha
11	Post office	Barbil
12	Nearest police station	Barbil
13	Nearest Railway station	Barbil
14	Date of Grant of Mining Lease	07.12.2021
15	Date of Execution	06.07.2022
16	Date of opening of Mine	15.09.2023
17	Date of expiry	11.10.2041
18	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Sri Arun Kanti Bagchi Plot No-271, Ground floor, Bidyut Marg, Shastri Nagar, Unit-IV, Bhubaneswar, Odisha.--751001. DOA:22.02.2024
19	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Sri Rakesh Kumar The OMDC Ltd. Roida 9439308905 DOA: 21.08.2023
20	Name of the Mines Manager with Address, mobile no, email, fax number and date of appointment in mine	Sri Samar Chakraborty The OMDC Ltd 9777758839 E Mail:csamar30@yahoo.com DOA:21.08.2023
21	Name of the Mining Engineer , Qualification and total experience with Address, mobile no, email, fax/phone number and date of appointment in mine	Sri Sibudash Degree in Mining Engineering The OMDC Ltd. Thakurani 9007312309 DOA:21.08.2023
22	Name of the Geologist , Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	Dr Alok Kumar Mohaptara, M.Sc. Geology, M.Tech. (Geospatial Technology), Ph.D in Applied Geology (IIT Kharagpur) Sr. Geologist Total Experience:18 year Address: BG-03, Thakurani, OMDC Ltd. DOA:21.08.2023
23	Date of Approval of Mining Plan/Review of	Modification of Mining plan on 22.07.2021

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	Mining Plan/ their modifications with five-year period and specific condition in approval letter, if any.	
24	Mineral (s) granted in lease and proved for mining	Iron
25	Method of Mining(Open cast, Underground)	Open Cast
26	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
27	Captive/Non Captive	Non Captive
28	Present EC Capacity	3,60,000 MTPA (ROM)

Exploration:---

S.N.	Item	Proposals (FY 2023-24)	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	33 bore holes were proposed to drill for total area of 21.52ha. under G1-category	Nil	No exploration has been carried out during the year 2023-24
1c	Exploration Agency & Expenditure in lakh Rupees during the year	--	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Total Lease Area of 21.52 Ha. under G-1 category	G2-9.60Ha. Unexplored Area-11.92 Ha.	No exploration has been carried out during the year 2023-24
1e	Balance reserves as on 01.04.2021	Reserve-3.8 MT Resource-1.1 MT	Reserve-3.8 MT Resource-1.1 MT	As per approved modified mining plan dtd.22.07.2021
1f	General remarks of inspecting officer on geology, exploration etc.	Since the mining operation has been started from December, 2023, no exploration has been carried out during the year 2023-24.		

Development:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work (2023-24)	Remarks
2a	Location of development w.r.t. lease area	North Quarry South Quarry	North Quarry	Operation started from December-2023 within approved limit. Tree- felling completed in Apr'2024 at South quarry
2b	Separate benches in topsoil, overburden and mineral	North quarry Top Soil=Nil	North Quarry OB =01	No operation in South Quarry

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		OB =01 Mineral=4 South quarry Top Soil=Nil OB =01 Mineral=03	Mineral=4	
2c	Stripping ratio or ore to OB ratio	1:0.12	1:0.19	
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	24585 Cum.	6652 Cum.	Waste removed from North Quarry only
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc	During the year 2023-24, only North Quarry was in operation as the mining operation started from December, 2023 and hence less development has been occurred.		

Exploitation:--

SL.No.	Item	Proposals (Reporting of FY 2023-24)	Actual work (2023-24)	Remarks
3a	Number of pits proposed for production	02 (South & North Quarry)	01 (North Quarry)	Mining operation started from December-2023
3b	Quantity of ROM mineral production proposed	3, 60,000MT	72,372.44 MT	Dec-23 to Mar 24) Mining operation started from December-2023
3c	Recovery of salable/usable mineral from ROM production	2,45,455MT	35,896.53 MT	
3d	Quantity of mineral reject generation	1,14,545 MT	33,196.42 MT	
3e	Grade of mineral reject generation and threshold value declared	45-58%Fe	45-58%Fe	
3f	Quantity of sub-grade mineral generation	1,14,545 MT	33,196.42 MT	
3g	Grade of sub-grade mineral generation	45-58%Fe	45-58%Fe	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposal	Nil	
3j	Provision of drilling & blasting in mineral benches	Overburden as well as iron ore will be dislodged by drilling and blasting prior to excavation and loading.	As per approved proposal	

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3k	Provision of mining machineries in mineral benches	Excavator -03 Dumper-02 Pay loader-02 Dozer-02 Drill Crawler-02 Water Tanker-02 Mobile Crusher-02	Excavator -02 Dumper-04 Pay loader-01 Dozer-02 Drill Crawler-01 Water Tanker-01 Mobile Crusher-02	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6m Bench height was proposed	Height of benches is being maintained as per proposal.	
3m	Total area covered under excavation/pits	4.490 ha. area was proposed for mining during plan period.	1.01 Ha.	Mining Operation started from December, 2023
3n	Ore to OB ratio for the pit/mine during the year	1:0.12	1:0.19	
3o	Total area put in use under different heads at the end of year	Mining-4.490 Ha Dumping-1.000 ha. Mineral Storage-1.600 Ha Infrastructure - 0.540ha. Mineral separation plant - 1.750ha. Total- 9.380 Ha.	Mining-1.01 Ha Dumping-1.00Ha Mineral Storage -1.393 Ha Road-0.410 Ha	
3p	Production of ROM mineral during last five-years period as applicable	2023-24 -3,60,000 MTPA 2022-23- 3,60,000 MTPA 2021-22- 3,60,000 MTPA 2020-21-3,60,000 MTPA 2019-20- 3,60,000 MTPA	2023-24 : 72,372.44 MT (Dec-23 to Mar 24)	Mining operation started from Dec'2023
3q	General remarks of inspecting officer on method of	Less exploitation of mineral is due to the mining operation is started from December 2023-24 and only North quarry is in operation and tree felling work has been completed in April -2024 after getting necessary permission in South Quarry		

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)	Top Sol- Nil OB-01 No. MR Stack-1 No.	Top Soil -Nil OB-01 No. Storage- 1 No.	
4b	Location of topsoil, OB & mineral reject dumps	N-2448593 to 2448708 E- 333548 to 333633	N-2448593to 2448708 E-333548 to 333633	Temporary Near North Quarry
4c	Number of dumps within lease area and outside lease area	Within Lease-01 Outside lease-Nil	Within Lease-01 Outside lease-Nil	
4d	Location of dumps w.r.t. ultimate pit limit	N-2448593 to 2448708 E-333548 to 333633	N-2448593 to 2448708 E-333548 to 333633	
4e	Number of active & alive dumps	01	01	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilised	01	01	Old dump

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4h	Whether Retaining wall or garland drain all along dumps are there	Retaining wall & garland drain were proposed	Nil	Since the operation started in Dec-2023, Retaining wall & garland drain proposal have not been carried out.
4i	Length of Retaining wall or garland drain all along dump	Retaining Wall-210 Mtr Garland Drain-210 Mtr	Nil	Since the operation started in Dec-2023, Retaining wall & garland drain proposal have not been carried out.
4j	Number of settling ponds	01	Nil	
4k	Specific comments of inspecting officer on waste dump management	Waste Dump as proposed has not yet been established as the the operation started in Dec-2023. Further the waste thus generated during the course of mining has been accumulated temporarily near North quarry.		

Solid Waste Management-Backfilling:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	NIL	Not yet matured for backfilling/for fully reclaimed & rehabilitated.
5b	Area under backfilling of mined out area	No proposal	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	No proposal	NIL	
5d	Total area fully reclaimed & rehabilitated	No proposal	NIL	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Backfilling/reclamation has not been proposed as the mined out areas are not yet matured.		

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)	Yes	The PMCP return is submitted.	
6b	Management of worked/mined out	No proposal	Nil	

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	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	0.34 0.34 600 - No proposal No proposal	0.40 0.40 1000 6000 Nil Rs. 80000/-	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	No Proposal No Proposal No Proposal No Proposal No Proposal	Nil Nil Nil Nil Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No Proposal	NIL	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly environmental monitoring for air monitoring, water quality & noise level study were proposed.	Environmental Monitoring works are being carried out as per proposal.	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	1000 saplings have been planted in safety zone area approximately towards PMCP proposals during the year 2023-24.		

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 sorting 45-58% Fe + 58 % Fe	Grade wise sorting 51-55% Fe 55-58 %Fe 58-60%fe	By crushing and screening unit
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	
7c	Different grade of mineral sorted out at mines	58%Fe & above and 45%Fe to 58% Fe	51-55% Fe 55-58 %Fe 58-60% Fe	
7d	Any beatification process at mines	No proposal	Nil	

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7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	ROM produced from the mine is processed grade wise by crushing and screening unit as per proposal.
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Environment:--

SL.No.	Item	Proposals ((FY 2023-24))	Actual work	Remarks
8a	Separate removal and utilization of topsoil	No proposal	NIL	
8b	Concurrent use or storage of topsoil	No proposal	NIL	
8c	Separate dumps for overburden, waste rock, rejects and fines	Yes, the waste dump & mineral reject dump are proposed to be done separately	As per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Waste material is proposed for haul road repairing	As per proposal	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	NIL	
8f	Baseline information on existence of plantation & additional plantation done	600 nos of trees	1000 trees planted till the year 2023-24	
8g	Survival rate	75%	70%	
8h	Water sprinkling on roads to control airborne dust	one water sprinkler is proposed to deploy	Sprinkling on roads to control airborne dust is being carried out by water tanker.	
8h	General remarks of inspecting officer on aesthetic beauty in and around mines area	Plantations have been done in the safety zone area of the lease. One water tanker was deployed for suppression of dust. Greenery is maintained in & around the lease area.		

Compliance of Rule 45

S.N.	Item	Details given in Annual Return for the year 2022-23	Observation of I/Officer	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return submitted up to May, 2024 Annual Return submitted up to 2022-23		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager : Sri Samar Chkraborty Mining Engineer- Sri Sibu Das Geologist- Dr Alok Kumar Mohapatra		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area,	Mining-2.78 Covered under current working-5.99	No Mining Operation has been carried out	

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	dumps etc.	Waste disposal=1.4	during the year 2022-23. The mining operation has been carried out since December, 2023.
9d	Scrutiny of Annual return on afforestation	Nil	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock- 52,185.20 MT	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Nil	
9h	Scrutiny of Annual return on fixed assets	NIL	
9i	Scrutiny of Annual return on mining machineries	Nil	

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
11(1)					

Date : 08.07.2024

(Rajani Kanta Rautaray)
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