

INDIAN BUREAU OF MINES
MCDR INSPECTION REPORT
Bhubaneswar Region

General

SL. No.	Particulars	Details
1.	Name of the Mine	Banspani Iron Ore Mines
2.	Date of Inspection	07.02.2025
3.	Name of Inspection officer:	Shri Rajesh Kumar Das, Deputy controller of Mines
4.	Name of official accompanying inspection	Shri Satyasiba Das, Mines Manager Shri Subhendu Kumar Sahoo, Mining Engineer Shri Omkar Narayan Behera, Geologist Shri Suvendu Kumar Das, Surveyor
5.	Last date of Inspection & Officer	05.03.2024 Shri Sanjay Kumar Mahapatra, Asst Controller of Mines
6.	Total Lease Area (Ha) with breakup of non-forest and forest land	Total area: 380.40 Ha Forest Area: 187.753 Ha Non-Forest Area: 192.647 Ha
7.	Minecode	30ORI08089
8.	IBM Registration Number under rule 45 of MCDR, 2017	IBM/4269/2011
9.	Name of the lessee, Address, phone, email and fax number.	ODISHA MINING CORPORATION LIMITED, Address-OMC house, Unit IV, Bhubaneswar, 751001 Phone- (0674) 2393431, 2390882 Email- info@odishamining.in Fax-(0674) 2391629, 2396889
10.	Village	Banspani
11.	Taluka/Mandal	Barbil
12.	District	Keonjhar
13.	Pincode	758034
14.	State	Odisha
15.	Post office.	Banspani
16.	Nearest police station	Joda
17.	Nearest Railway station	Banspani
18.	Date of Grant of Mining Lease	21/05/1966
19.	Date of Execution	21/05/1966
20.	Date of re-opening of Mine	16/05/2022
21.	Date of expiry	20.05.2036
22.	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Sudhanshu Mohan Samal, IAS MD, ODISHA MINING CORPORATION LIMITED, Address-OMC house, Unit IV, Bhubaneswar, 751001 Phone- (0674) 2393431, 2390882 Email- info@odishamining.in Fax-(0674) 2391629, 2396889
23.	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Abanikanta Pradhan, Regional Office, Barbil, Keonjhar, Odisha-758034 Phone- 9861248412 Email- rmbartilomc1@gmail.com , Date of appointment- 02.06.2021
24.	Name of the Mines Manager with Address, mobile no, email, fax number and date of appointment in mine	Shri Satyasiba Das At/PO- Banspani, PS-Joda, Keonjhar, Odisha-758035 Mobile no- 7328032613 Email- manager.banspani@gmail.com Date of appointment- 23.03.2024

25.	Name of the Mining Engineer , Qualification and total experience with Address, mobile no, email, fax/phone number and date of appointment in mine	Shri Subhendu Kumar Sahoo Qualification-B.Tech (Mining Engineering) Total Experience- 9yrs At/PO- Banspani, PS-Joda, Keonjhar, Odisha-758035 Mobile no- 7978374904 Email- Subhendu.sahoo@odishamining.in Date of appointment- 26.12.2022
26.	Name of the Geologist , Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	Shri Omkar Narayan Behera Qualification-M Sc. (Geology) Total Experience- 6.5yrs At/PO- Banspani, PS-Joda, Keonjhar, Odisha-758035 Mobile no- 7978374904 Email- omkar.behera@odishamining.in Date of appointment- 03.02.2025
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.	24.01.2023
28.	Mineral (s) granted in lease and proved for mining.	Iron ore
29.	Method of Mining (Opencast, Underground)	Opencast
30.	Category (Fully Mechanized, Others or Manual)	Fully mechanized
31.	Captive/Non-Captive	Non-captive
32.	Present EC Capacity	1.0 Million Ton

Exploration:---

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
1a	Backlog of previous year			
1b	Exploration over lease area for Geological axis 1 or 2.	900m (16 Holes) @100x100m	1969m (48 holes) @100x100m	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	6539957 INR	FY 23-24 39295191 INR	
1d	Balance area to be explored to bring Geological axis in 1 or 2	0	0	No Backlog
1e	Balance reserves as on 01.04.2024. (Proved + Probable)	The position of reserve as on 01/04/2023: 111- 0 MT 121-13,927,855 MT 122- 79,105 MT Total- 14,006,960 MT	The position of reserve as on 01/04/2024: 111- 0 MT 121- 13,027,855 MT 122- 79,105 MT Total- 13,106,960 MT	
1f	General remarks of inspecting officer on geology, exploration etc.	The Iron ore deposit of Banspani Iron Ore mines are forms a part of Horse-shoe Synclinorium, near to the closure of the major Synclinorium. The major lithological units of the area comprised of mainly Banded Iron Formation (BIF) with several major granitic intrusive e.g. Singhbhum, Bonai, Mayurbhanj Granite etc. along with the volcano		

		Sedimentary sequences. The potential mineralized area broadly explored in G1 & G2.
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Development:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
2a	Location of development w.r.t. lease area	KMC QUARRY: 2429700N TO 2430000N 336400E TO 336800E 573 MRL to 520 MRL BANSPANI TOP QUARRY: 2430550N TO 2430725N 336815E TO 336520E 640 MRL to 630 MRL	KMC QUARRY: 2429700N TO 2430000N 336485E TO 336800E 567 MRL to 520 MRL BANSPANI TOP QUARRY: The proposed area at top quarry could not be started due to non-availability of forest land.	
2b	Separate benches in topsoil, overburden and mineral	Proposed in approved mining plan	Separate benches in topsoil, overburden and mineral has been maintained	
2c	Stripping ratio or Ore to OB ratio	1:0.64	1:0.19	
2d	Quantity of topsoil generation in m3	22278	0	
2e	Quantity of overburden generation in m3	6,40,940	1,69,479	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The development is very less w.r.t. proposal. The development is proposed in two pits but actual work is done in KMC Quarry.		

Exploitation:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
3a	Number of pits proposed for production	2	1	
3b	Quantity of ROM mineral production proposed	10,00,000	9,00,000	
3c	Recovery of salable/usable mineral from ROM production	9,05,640	9,00,000	
3d	Quantity of mineral	94,360	Nil	

	reject generation			
3e	Grade of mineral reject generation and threshold value declared	Mineral Reject Grade: 45% – 55%	NA	
3f	Quantity of sub-grade mineral generation	NIL		
3g	Grade of sub-grade mineral generation	NA		
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No	NA	
3j	Provision of drilling & blasting in mineral benches	Yes	Being done as per approved RMP	
3k	Provision of mining machineries in mineral benches	Yes	Provided	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Maintained	
3m	Total area covered. under excavation/pits	55.31 Ha	48.649 Ha	
3n	Ore to OB ratio for the pit/mine during the year	1.56 ton/m ³	5.31 ton/m ³	
3o	Total area put in use under different heads at the end of year	Mining: 55.31 Overburden dumping: 19.87 Mineral storage: 5.73 Infrastructure: 18.24 Roads: 9.99 Railways: 69.26 Mineral separation plant: 1.24 Others (water reservoir): 0.77	Mining: 48.649 Overburden dumping: 5.286 Mineral storage: 3.85 Infrastructure: 11.95 Roads: 4.173 Railways: 68.983 Mineral separation plant: 0.619 Others (water reservoir): 0.77	
3p	Production of ROM mineral during last five-years period , as applicable (Tons)	FY22-23: 10,00,000 FY23-24: 10,00,000	FY22-23: 7,27,800 FY23-24: 9,00,000	
3q	General remarks of	The method of mining is by opencast method by using HEMM		

	Inspecting officer on method of mining etc	and deep hole drilling and blasting. The mining activity by fully mechanized method with shovel and dumper combination.
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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)	Yes	Maintained	
4b	Location of topsoil, OB & mineral reject dumps	TOP SOIL: 2431185N to 2431110N & 336812E to 336720E OB Dump: 336346E TO 336697E 2431275N TO 2431596N	TOP SOIL: NIL OB DUMP : 336511E TO 336692E 2431294N TO 2430348N	
4c	Number of dumps within lease area and outside lease area	2 (inside lease area)	1 (inside lease area)	
4d	Location of dumps w.r.t. ultimate pit limit	Outside Ultimate pit	Outside Ultimate pit	
4e	Number of active & alive dumps	2	1	
4f	Number of dead dumps	0	0	
4g	Number of dumps stabilized	0	0	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Available	
4i	Length of Retaining wall or garland drain all along dump	150	130	
4j	Number of settling ponds	0	0	
4k	Specific comments of inspecting Officer on waste dump management	During mine visit it was observed that waste dumping management was broadly as per proposal		

Solid Waste Management-Backfilling:-- (NOT APPLICABLE)

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 Backfilling Proposed	NA	
5b	Area under backfilling of mined out area	NIL	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	NIL	NA	

5d	Total area fully reclaimed & rehabilitated	NIL	NA	
5e	General remarks of inspecting Officer on backfilling and reclamation etc	Area not matured for backfilling.		

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	Submitted on 21.06.2024	
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	i) Area available for rehabilitation (ha) - NIL ii) Afforestation done (ha) -1.2 iii) No. of saplings planted during the year - 480 iv) Cumulative no. of plants- 1480 nos. v) Any other specific method of rehabilitation- NA vi) Cost incurred on watch & care during the year -INR 1,20,000	i) Area available for rehabilitation (ha) - NIL ii) Afforestation done (ha) -1.2 iii) No. of saplings planted during the year - 480 iv) Cumulative no. of plants- 1480 nos. v) Any other specific method of rehabilitation- NA vi) Cost incurred on watch & care during the year -INR 7,91,063	
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	NA	NA	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation	NA	NA	

	ii) Area rehabilitated (ha) iii) Method of rehabilitation			
6e	Compliance of Environmental monitoring (core zone & buffer zone)	YES	100% complied	
6f	General remarks of inspecting Officer on PMCP compliance & progressive closure operation etc	Broadly as per proposal.		

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 within lease area	maintained	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines	yes	Sorted as planned	
7d	Any beneficiation process at mines	NA		
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The blending of low grade with high grade done to get the desired grade. No wet beneficiation within lease.		

Environment:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	Yes	No generation	
8b	Concurrent use or storage of topsoil	Stacked at earmarked site.		
8c	Separate dumps for overburden, waste rock, rejects and fines	Yes	maintained	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	
8f	Baseline information on existence of plantation	1.2 Ha, 1100 no saplings planted	1.2 Ha , 480 no plantation	

	& additional plantation done			
8g	Survival rate	85%	95%	
8h	Water sprinkling on roads to control airborne dust	Yes	Water sprinkling is being carried out by 03nos. of mobile water tanker regularly.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	During mine visit no adverse impact on aesthetic beauty within lease observed but the plantation not done as per proposal.		

Compliance of Rule 45

SL.No.	Item	COMMENTS		Remarks.
9a	Status of submission of Monthly and Annual returns	Submitted annual return on 29.06.2024 and monthly return by 10 th of next month.		
S.N.	Item			
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Satyasiba Das (Mines Manager) Subhendu Kumar Sahoo (Mining Engineer) Omkar Narayan Behera (Geologist)		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	i) Area available for rehabilitation (ha) -NIL ii) Afforestation done (ha) -1.2 iii) No. of saplings planted during the year - 480 iv) Cumulative no. of plants- 1480 nos. v) Any other specific method of rehabilitation- NA vi) Cost incurred on watch & care during the year -INR 7,91,063		
9d	Scrutiny of Annual return on afforestation	480 nos saplings planted over 1.2 Ha		
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Proposal-94,560 MT Generation-NIL		
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM:Nil Fines(60-62)-156156.669 Fines(62-65)- 56244.650 Fines(+65%)- 7000.390 CLO (62-65)- 197444.400		
9g	Scrutiny of Annual return on sale value, Ex. Mine	Sale value- Given		

	price & production cost	Ex mines price: Fines(60-62)- Rs 5019.74 Fines(62-65)-Rs 5104.06 Fines(+65%)-Rs 5847.49 CLO (62-65)-6290.63 Production cost-2710.30 per ton		
9h	Scrutiny of Annual return on fixed assets	Land-235420801 Building-9499125 Machinery-10198772 Capital expenditure- 154383733		
9i	Scrutiny of Annual return on mining machineries	Excavator-3 Dumper-15 Dozer-2 Wheel loader-5 Drill Machine-1 Water tanker- 2		

During present inspection the violations under Rule 11(1) of MCDR, 2017 was pointed out.

Shri Rajesh Kumar Das
Deputy Controller of Mines