

INDIAN BUREAU OF MINES
MCDR INSPECTION REPORT
Bhubaneswar Region

General

SL. No.	Particulars	Details
1.	Name of the Mine	Guali Iron Ore Mines
2.	Date of Inspection	08.11.2024
3.	Name of Inspection officer:	Sh. Rohita Sethi, ACOM
4.	Name of official accompanying inspection	Sh. Pankaj Kumar Mahanta(Mines Manager) Sh. Dhaneswar Tudu(Geologist) Sh. Chandan Ku Samal(Mining Engg.) Sh. Purna Chandra Padhi(Surveyor)
5.	Last date of Inspection & Officer	07.02.2024, Sh. Prashant S Hegde, RMG
6.	Total Lease Area (Ha) with breakup of non-forest and forest land	358.258 ha(As per Hal & Sabik Record) Non forest-26.158 ha, Forest-332.100 ha
7.	Minecode	30ORI08126
8.	IBM Registration Number under rule 45 of MCDR, 2017	IBM/4269/2011
9.	Name of the lessee, Address, phone, email and fax number.	M/s Odisha Mining corporation Ltd. A Govt. of Odisha Undertaking OMC House,Unit-5, Post Box No.-34,Bhubaneswar Phone No-06742392778 Email-info@odishamining.in Fax No-06742396889
10.	Village	Topadihi
11.	Taluka/Mandal	Barbil
12.	District	Keonjhar
13.	Pincode	758035
14.	State	Odisha
15.	Post office.	Guali
16.	Nearest police station	Rugudi
17.	Nearest Railway station	Barbil
18.	Date of Grant of Mining Lease	12/01/2021 12/01/2021 (Earlier the mine was put under auction by the state Government and the successful bidder could not comply the terms & conditions. Thereafter, Odisha state Government granted ML for 10 years period to M/s OMC as the block has been reserved under section 17A(2) of MMDR Act by the Central Government)
19.	Date of Execution	12/01/2021
20.	Date of opening of Mine	12/01/2021
21.	Date of expiry	11/01/2031

22.	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Balwant Singh M/s The Orissa Mining Corporation Ltd. A Govt of Orissa Undertaking ,OMC House,Unit-5,Post Box No-34,BBSR D.O.A-08.01.2021
23.	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Abanikanta Pradhan Regional Office,Barbil,PO-Barbil,Dist-Keonjhar- 758035,Odisha D.O.A-02.06.2021
24.	Name of the Mines Manager with Address, mobile no, email, fax number and date of appointment in mine	Shri Pankaj Kumar Mahanta Address-Qtr. No-C/3,OMC Colony, Barbil Phone-9981995991 Email-pankaj.mahanta@odishamining.in D.O.A-28/09/2022
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 Chandan Kumar Samal Qualification-B.Tech (Mining Engineering) Experience-12 Yrs. Address-Qtr. No. E-22,Omc Colony, Barbil Phone No-6207491994 Email-chandan.samal@odishamining.in D.O.A-10/08/2021
26.	Name of the Geologist , Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	Shri Dhaneswar Tudu Qualification- M.Sc.Tech(Applied Geology) Experience- 10 Years. Address- Qtr No-2RA-34,KIW Colony, Barbil Phone No- 8895630417 Email-dhaneswar.tudu@odishamining.in D.O.A-30/03/2024
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.	Approved Mining Plan Letter No. MP/A/38 ORI/BHU/2020-21dated 19/03/2021 for period 2020-21 to 2024-25.
28.	Mineral (s) granted in lease and proved for mining.	Iron Ore
29.	Method of Mining (Opencast, Underground)	Open Cast
30.	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
31.	Captive/Non-Captive	Non Captive
	Present EC Capacity	12 MTPA (As per EC J-11015/1155/2007-IA.II(M) dated 17/07/2023 with specific condition that further expansion of 20 MTPA will be considered only after achieving the production of 12 MTPA and based on satisfactory compliance of EC condition)

Exploration:---

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
1a	Backlog of previous year	36 NosBH(3600Mtr)	71 Nos BH(5516 Mtr)	All backlog exploration work has been carried out by the Lessee in compliance to this office violation letter no. No: MCDR-MiFLOFE/11/2022-BBS-IBM_RO_BBS dated 21.02.2024
1b	Exploration over lease area for Geological axis 1 or 2.	Conversion of entire area under G-1, 52 Nos(5200mtr.)	71 Nos BH(5516 Mtr)	For Conversion of G2 to G1 area.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	Maheswari Mining Pvt. Ltd 3,14,69649	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	26.65 Ha area to be explored for G-1 reported	-----
1e	Balance reserves as on 01.04.2024. (Proved + Probable)	NA	141,023,641 metric ton(as on 31.03.2024)	Based on approved MP dated 19/3/2021.
1f	General remarks of inspecting officer on geology, exploration etc.	The lease area is a part of major Horse-shoe shaped Singhbhum-Bonai-Keonjhar iron ore belt/series/formation. The deposit forms a northerly plunging synclinorium. The litho-unit observed at ML as follows: Laterite, Lateritic iron ore, Iron ore (HLO, SLO & blue dust), BHJ/BHQ. All backlog exploration work has been carried out by the Lessee. Also exploration proposal given on 26.65ha, in the approved RMP dated 13/12/2024.		

Development:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
2a	Location of development w.r.t. lease area	A-Block - N-2432699 to N-2433662 E-325274 to E-326052, B-Block - N-2432659 to N-2433179 E-323689 to E-324427	A-Block - N-2432768to N-2433625 E-325443 to E-326050, B-Block - NIL	Violation Issued under Rule 11(1) of MCDR,2017
2b	Separate benches in topsoil, overburden and mineral	Separate benches in overburden and minerals	As per Proposal	NIL

2c	Stripping ratio or Ore to OB ratio	1:0.57	1:0.10	Violation Issued under Rule 11(1) of MCDR,2017
2d	Quantity of topsoil generation in m3	160000 Cum	Nil	Violation Issued under Rule 11(1) of MCDR,2017
2e	Quantity of overburden generation in m3	1710000m ³ (Including 0.16 M. cu.m of top soil)	7,90,620 Cum	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	For the year 2023-24 there was a proposal to produce 20.07million tonnes of ROM from topadih quarry and 9.93 million tonnes of ROM from baliasahi quarry. It is observed that no excavation has been carried out from baliasahi quarry. 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	Block-A(Topadih) Block-B(Baliasahi)	Block-A(Topadih)	Violation Issued under Rule 11(1) of MCDR,2017
3b	Quantity of ROM mineral production proposed	300,00,000 tonnes	73,49,980 tonnes	
3c	Recovery of salable/usable mineral from ROM production	26,35,0000 tonnes	73,49,980 tonnes	
3d	Quantity of mineral reject generation	36,50,000 tonnes	8,53,010 tonnes	In Annual return the Lessee has reported +57% Fe as mineral reject for which violation issued
3e	Grade of mineral reject generation and threshold value declared	45-55 % Fe	57 %	
3f	Quantity of sub-grade mineral generation	Same as Para 3d		
3g	Grade of sub-grade mineral generation	Same as Para 3e		
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for	NIL	NIL	

	sub-grade mineral and reject			
3j	Provision of drilling & blasting in mineral benches	Deep hole drilling blasting of 150mm-160 mm dia	Deep hole drilling blasting of 150mm dia	
3k	Provision of mining machineries in mineral benches	Excavator-4.3/6.0/15/36 Cum Dumper-80/120/240 tonner Loader-5 Cum Drill machine-150-160 mm Dozer-20 Cum	As per proposal	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	For ROM Bench Height-15 mt Width-30 mt For OB Bench Height-15 mt Width-30 mt	As per proposal	NIL
3m	Total area covered under excavation/pits	115.961 Ha(At the end of Plan Period)	61.390 Ha	Due to less production
3n	Ore to OB ratio for the pit/mine during the year	1:0.57	1:0.10	Violation Issued under Rule 11(1) of MCDR,2017
3o	Total area put in use under different heads at the end of year	Mining -115.961 Ha Mineral Storage-66.388 Ha Roads – 14.995 Ha Infrastructure (Workshop, admini. building etc.)–5.166 Ha Waste dump-21.532Ha Mineral Separation Plant-24.000Ha Others-95.874 Ha Total area at the end of plan period-343.916 Ha	Mining -61.390 Ha Mineral Storage-32.363 Ha Roads - 27.496 Ha Infrastructure (Workshop, admin. building etc.) -4.86 Ha Waste dump-12.984 Ha Mineral Separation Plant-2.915 Ha Others- Nil Total area put to use 142.0080 Ha	Due to less production
3p	Production of ROM mineral during last five-years period, as applicable	2020-21-4,80,000 m ton 2021-22-57,00,000 mton 2022-23-300,00,000mton 2023-24-300,00,000mton	2020-21-3,62,400 mton 2021-22-57,00,000 mton 2022-23-56,99,979 mton 2023-24-73,49,980 mton	NIL
3q	General remarks of inspecting	Open-cast fully mechanized mining method is being carried as per approved MP. Only 24.5% of production has been achieved against the proposed production for which violation issued. Also violation		

	Officer on method of mining etc	issued for major variation against the proposed striping ratio.
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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)	OB Dumping proposed at new waste dump-A at North western side ML (N 2433403 to 2433713 & E 323200 to 323660)	OB dumping at TWD-04,	Top soil are fully utilized for plantation purpose & mineral reject are utilized for blending. Violation was issued for deviation in in location of dumping vides this office violation letter no. MCDR-MiFLOFE/11/2022-BBS-IBM_RO_BBS dated 21.02.2024
4b	Location of topsoil, OB & mineral reject dumps	OB Dumping N-2433403 to 2433713 E-323233 to 323795 MR dump- D-1(N 2433282 to 2433515,E-324482 to 324800) D-2(N 2433263 to2433362, E323553 to 324005)	OB Dumping N-2433289 to 2433476, E-323519 to 323737	All the mineral rejects having avg grade 52% Fe are blended with HG (63-64 %Fe)to produce desired grade having range (60-62 % Fe) Violation was issued for deviation in in location of dumping, vides this office violation letter no. MCDR-MiFLOFE/11/2022-BBS-IBM_RO_BBS dated 21.02.2024
4c	Number of dumps within lease area and outside lease area	Within lease-1 Out side lease-NIL	Within lease-1(Temporary waste dump) 1(Active Dump) Outside lease-NIL	Including Two nos of old dumps pertain to ex-lessee.
4d	Location of dumps w.r.t. ultimate pit limit	N-2433410 to 2433728 E-323200 to 323660	N-2433289 to 2433476, E-323519 to 323737	Violation was issued for deviation in in location of dumping vides this office violation letter no. MCDR-MiFLOFE/11/2022-BBS-IBM_RO_BBS dated 21.02.2024
4e	Number of active & alive dumps	1	1	NIL
4f	Number of dead dumps	02	02	Pertains to ex-lessee
4g	Number of dumps stabilshed	NIL	NIL	NIL
4h	Whether	YES	YES	NIL

	Retaining wall or garland drain all along dumps are there			
4i	Length of Retaining wall or garland drain all along dump	Retaining wall-Maintenance Garland drain-Maintenance	Retaining wall-Maintenance Garland drain-Maintenance	NIL
4j	Number of settling ponds	Maintenance	Maintenance	NIL
4k	Specific comments of inspecting Officer on waste dump management	Waste dumping has not been carried out on the earmarked area for which violation was issued vide letter no. MCDR-MiFLOFE/11/2022-BBS-IBM_RO_BBS dated 21.02.2024. Re-handling of Temp. WD No-2 of ex lessee not yet started due to less excavation & advancement of pit.		

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	NA	NA	
5b	Area under backfilling of mined out area	NA	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	NA	NA	
5d	Total area fully reclaimed & rehabilitated	NA	NA	
5e	General remarks of inspecting Officer on backfilling and reclamation etc	Existing pits were not matured by backfilling as ore/mineral not exhausted fully.		

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	Before 1st July 2023	Annual report on PMCP submitted on 29/06/2023	NIL

	same provided)			
6b	<p>Management of worked/mined out benches</p> <p>i) Area available for rehabilitation (ha)</p> <p>ii) Afforestation done (ha)</p> <p>iii) No. of saplings planted during the year</p> <p>iv) Cumulative no. of plants</p> <p>v) Any other specific method of rehabilitation</p> <p>vi) Cost incurred on watch & care during the year</p>	<p>i)NIL</p> <p>ii) 0.98 Ha</p> <p>iii)2450</p> <p>iv) 6625</p> <p>v) NA</p>	<p>i) NIL</p> <p>ii) 1.8 ha</p> <p>iii) 2215</p> <p>iv) 7970</p> <p>v) NA</p>	<p>Violation issued for less plantation against the proposal</p>
6c	<p>Compliance on reclamation and rehabilitation by backfilling</p> <p>i) Voids available for backfilling (L X B X D)</p> <p>ii) Void filled by waste/tailings</p> <p>iii) Afforestation on the backfilled area</p> <p>iv) Rehabilitation by making water reservoir</p> <p>v) Any other specific means</p>	<p>NA</p>	<p>NA</p>	<p>No such reclamation and rehabilitation by backfilling proposals.</p>
6d	<p>Compliance of Rehabilitation of waste land within lease</p> <p>i) Afforestation</p> <p>ii) Area rehabilitated (ha)</p> <p>iii) Method of rehabilitation</p>	<p>NA</p>	<p>NA</p>	<p>NIL</p>
6e	<p>Compliance of Environmental monitoring (core zone & buffer zone)</p>	<p>As proposed</p>	<p>Complied</p>	
6f	<p>General remarks of inspecting Officer on PMCP compliance & progressive closure</p>	<p>For the year 2023-24 there was a proposal of 0.98ha of plantation with 2450 no. of saplings against which only 2215 no. of saplings has been planted as shown in submitted annual return for the year 2023-24, for which violation issued.</p>		

	operation etc	
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Mineral Conservation:---

SL.No.	Item	Proposals ((FY 2023-24)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NA	NA	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines	Iron Ore of different size (Fines & CLO) and Grade wise sorting and dispatched (Fine Iron Grade range- 55 to 65% Fe) and CLO (5-18 mm &10-40 mm size)	As per proposals (Fine Iron Grade range- 60-below 62% Fe & 62-below 65% Fe) and CLO 62 to 65 % Fe (5-18 mm &10-40 mm size)	
7d	Any beneficiation process at mines	NO	NO	Only dry Screening and crushing.

Environment:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	Yes(155280 Cum)	52500 Cum	All the top soil are utilized for plantation.
8b	Concurrent use or storage of topsoil	Use of Top soil for afforestation	Top soil is utilized for plantation purpose.	
8c	Separate dumps for overburden, waste rock, rejects and fines	YES	As per proposal	
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	No Proposal	NIL	NIL

	operations (Pits, dumps etc)			
8f	Baseline information on existence of plantation & additional plantation done	2450 saplings to be planted in safety zone area of 0.98 Ha	2215 saplings were planted in safety zone area of 1.8 Ha	Violation issued for Less plantation
8g	Survival rate	Above 90%	98%	NIL
8h	Water sprinkling on roads to control airborne dust	Regular sprinkling of water on Haul roads, crushing & screening plant site and dump location etc using Water tanker to suppress the dust.	Actual as per the proposal	NIL

Compliance of Rule 45

SL.No.	Item	COMMENTS		Remarks.
9a	Status of submission of Monthly and Annual returns	Regularly submitting the MRs/ARs on-time.		NIL
S.N.	Item	Details GIVEN in A.R.	Actual in field	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager- Pankaj Ku. Mahanta Geologist-Mr. Dhaneswar Tudu Mining Eng-Mr Chandan Ku Samal	Actual also the same.	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(1) Covered under current (O/C) Workings- 61.390 Ha (2) Used for Waste Disposal 12.984 Ha (3) Occupied by plant, buildings, residential, welfare, buildings and roads- 35.271 Ha (4)Other Purpose (including Mineral Storage)- 32.363 Ha	Actual also as per AR.	NIL
9d	Scrutiny of Annual return on afforestation	2215 saplings were planted	Violation issued	Violation issued for Less plantation
9e	Scrutiny of Annual return on mineral reject generation (Grade &	During year-23-24 (Generated) Iron Unprocessed Ore (57 %	In approved mining plan +45 to -55%	

	quantity)	Fe) 853010tonnes Iron Processed Ore (45-55 % Fe) NIL	Fe proposed as mineral reject however +57% Fe considered as mineral reject as shown in submitted annual return for the year 2023-24	Violation issued														
9f	Scrutiny of Annual return on ROM stock and/or graded ore	<table border="1"> <tr> <th colspan="2">Fines closing stock in tonnes</th> </tr> <tr> <td>60%-below 62%</td> <td>301583.806</td> </tr> <tr> <td>62%-below 65%Fe</td> <td>191.160</td> </tr> <tr> <td>65%Fe and above</td> <td>3450</td> </tr> <tr> <th colspan="2">CLO stock in tonnes</th> </tr> <tr> <td>62%-below 65% Fe (5 18 mm)</td> <td>446603.183</td> </tr> <tr> <td>62%-below 65% Fe (10 40 mm)</td> <td>153701.966</td> </tr> </table>	Fines closing stock in tonnes		60%-below 62%	301583.806	62%-below 65%Fe	191.160	65%Fe and above	3450	CLO stock in tonnes		62%-below 65% Fe (5 18 mm)	446603.183	62%-below 65% Fe (10 40 mm)	153701.966	Appear to be correct at that time.	NIL
Fines closing stock in tonnes																		
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62%-below 65% Fe (10 40 mm)	153701.966																	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	<table border="1"> <tr> <th colspan="2">Ex-mine Price of Iron ore Fines in Rs per tonne</th> </tr> <tr> <td>60%-below 62% Fe</td> <td>4966.36</td> </tr> <tr> <td>62%-below 65 %Fe</td> <td>5324.06</td> </tr> <tr> <th colspan="2">Ex-mine Price for CLO in Rs per tonne</th> </tr> <tr> <td>62%-65% Fe (5-18 mm Size)</td> <td>6513.98</td> </tr> <tr> <td>62%-65% Fe (10-40 mm Size)</td> <td>6533.94</td> </tr> </table>	Ex-mine Price of Iron ore Fines in Rs per tonne		60%-below 62% Fe	4966.36	62%-below 65 %Fe	5324.06	Ex-mine Price for CLO in Rs per tonne		62%-65% Fe (5-18 mm Size)	6513.98	62%-65% Fe (10-40 mm Size)	6533.94	Appear to be correct.	NIL		
Ex-mine Price of Iron ore Fines in Rs per tonne																		
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62%-65% Fe (5-18 mm Size)	6513.98																	
62%-65% Fe (10-40 mm Size)	6533.94																	
9h	Scrutiny of Annual return on fixed assets	Fixed Value of Assets: Rs.1019512050/-	Appear to be correct.	NIL														
9i	Scrutiny of Annual return on mining	Back Hoe: 16 nos; Wheel Loader:7 nos;	Observed to be correct.	NIL														

	machineries	Dumpers 47 nos ; Rock Drill (150 mm): 1 nos; Water tanker: 7 nos; Crusher: 1nos; Pumps: 1 nos; Dozer: 2 nos Motor Grader: 1 nos.		
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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 07/02/2024, the violation of rule 11(1) and 45(7) of MCDR 2017 was pointed out and subsequently, said rule complied on 03/04/2024.

(b) During current inspection: The violation of Rule 11 (1) of MCDR 2017 have been observed and the violation letter issued on 03/01/2025.

(11) The lessee was submitted DAI/drone survey data under rule 34A for FY 23-24 on **27/05/2024**.

Rohita Sethi
Assistant Controller of Mines