

## MCDR INSPECTION Format

### General

SL. No.	Particulars	Details
1	File no.	MCDR-MiFLOCR/1/2023-BBS-IBM_RO_BBS
2	Name of the Inspecting Officer	Vikram Deshpande, Assistant Controller of mines
3	Date of Inspection	26/11/2024
4	Name of the Mine	Bangur Chromite Mines
5	Total Lease Area (Ha) with breakup of Non-forest and forest land	139.940 Ha. Non Forest- 139.940 Ha.
6	Minecode	11ORI08001
7	IBM Registration Number under rule 45 of MCDR, 2017	4269/IBM/2011
8	Name of the lessee, Address, phone, email and fax number	Odisha Mining Corporation Ltd. OMC House, Bhubaneswar Email-omcbangur@gmail.com
9	Village	Bangur
10	Taluka/Mandal	Hatadihi
11	District	Keonjhar
12	Pincode	758078
13	State	Odisha
14	Post office	Dhanurjoypur
15	Nearest police station	Soso
16	Nearest Railway station	Bhadrak
17	Date of Grant of Mining Lease	03.02.1973
18	Date of Execution	02.09.1975
19	Date of opening of Mine	O/C- 25.01.1980 , U/G- 29.05.2000
20	Date of expiry	01.09.2025
21	Name of the <b>Nominated Owner</b> with Address, phone, email, fax number and date of appointment	Sri Balwant Singh, IAS The Odisha Mining corporation Ltd, OMC House GPO, Post Box No-34, Bhubaneswar, Khurda, Pin-751001, Ph No- 0674-2393431 Email- info@orissamining.com DOA- 08.01.2021
22	Name of the <b>Mine Agent</b> with Address, phone, email, fax number and date of appointment	Sri Ashish Kumar Samantray Bangur Chromite Mines, M/s-OMC Ltd. Po- Dhanurjoypur, Dist-Keonjhar, Pin-758078 Mobile No- 9937207144 Email- aksamantray@odishamining.in DOA- 22.08.2024
23	Name of the <b>Mines Manager</b> with Address, mobile no, email, fax number and date of appointment in mine	Sri Susanta Kumar Naik Bangur Chromite Mines, M/s-OMC Ltd. Po- Dhanurjoypur, Dist-Keonjhar, Pin-75807 Email- sknaik@odishamining.in Mobile No- 9777940276 DOA- 06.04.2021
22	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	Sri Rakesh Kumar Nayak Degree in Mining Engineering with first class manager competency with more than 07 years of experience. Bangur Chromite Mines, M/s-OMC Ltd. Po- Dhanurjoypur, Dist-Keonjhar, Pin-75807 Email- rakesh.nayak@odishamining.in Mobile No- 9668514212 DOA- 01.10.2024
23	Name of the <b>Geologist</b> , Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	Sri Radheshyam Sahoo, Bangur Chromite Mines, M/s-OMC Ltd., Po- Dhanurjoypur, Dist-Keonjhar, Pin-758078 Email- radheshyam.sahoo@odishamining.in Mobile No- 6372749365 DOA- 19.04.2024
24	Date of Approval of Mining Plan/Review of Mining Plan/ their modifications with five-year period and specific condition in approval letter, if any.	Review of Mining Plan Letter No. MPM/A/07-ORI/BHU/2018-19/1458 dated. 06.11.2019 Period- 01.04.2020 to 31.03.2025
25	Mineral(s) granted in lease and proved for mining	Chromite
26	Method of Mining(Open cast, Underground)	Underground
27	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
28	Captive/Non Captive	Non Captive
29	Present EC Capacity	60000MT

**Exploration:-**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
1a	Backlog of previous year	---	---	Exploration in G1 axis has been completed over lease area of 64.02Ha.
1b	Exploration over lease area for Geological axis 1 or 2.	---	---	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	---	---	
1d	Balance area to be explored to bring Geological axis in 1 or 2	---	---	
1e	Balance reserves as on 01.04.2024	---	4,440,742 MT	
	General remarks of inspecting officer on geology, exploration etc.	Bangur ML of OMC Ltd is Southern part of exposed Boula-Nuasahi ultramafic complex. The ultramafic complex strikes NNW-SSE direction dipping at 750-800 towards NE. Further, Exploration in G1 axis has been completed over lease area of 64.02Ha.		

**Development:-**

SL.No	Item	Proposals (FY 2023-24)	Actual work	Remarks
2a	Location of development w.r.t. lease area	-30 mRL Block-2, 0 mRL (290S/39E), -30 mRL (290S/21W), -30 mRL (250S/30W), -30 mRL(250S/135W)	0 & -30 mRL Block-4, 0 & -30 mRL Block-2	Existing Contractor left the site in between the contract period on 01.07.2019 and new Mining Operator (MO) was engaged and site was hand over on 21.12.2021. Due to this there is no development from FY2020-2021 & FY2021-2022. Thus, the proposed development of those years was carry forwarded.
2b	Separate benches in topsoil, overburden and mineral	Not Applicable	Not Applicable	
2c	Stripping ratio or ore to OB ratio	Not Applicable	Not Applicable	
2d	Quantity of topsoil generation in m3	Not Applicable	Not Applicable	
2e	Quantity of overburden generation in m3	Not Applicable	Not Applicable	
	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The mine has one open pit which is not in operation. The production is reported from Underground working. The underground workings are restricted in North Block, Panel 'B'.		

**Exploitation:-**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
3a	Number of pits proposed for production	South Block-2 (0 to -30 mRL)	North Block (Panel B) (0 to -30 mRL)	
3b	Quantity of ROM mineral production proposed	98400 MT	22615 MT	
3c	Recovery of salable/usable mineral from ROM production	60000 MT	21331.970 MT	
3d	Quantity of mineral reject generation	6000 MT	2165 MT	This has been blended with high grade chrome ore to make saleable
3e	Grade of mineral reject generation and threshold value declared	+10 – 30% Cr2O3	+10 – 30% Cr2O3	
3f	Quantity of sub-grade mineral generation	Not applicable	Not applicable	
3g	Grade of sub-grade mineral generation	Not applicable	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject		Done	Internal analysis was done for sub-grade mineral.
3j	Provision of drilling & blasting in mineral benches	No	Maintained	
3k	Provision of mining machineries in mineral benches	No	Maintained	
3l	Whether height of benches in	Not applicable	Not applicable	Only underground

	overburden and mineral suitable for method of mining proposed in MP/SOM			operation.
3m	Total area covered under excavation/pits	13.30 Ha	13.30 Ha	Only underground operation.
3n	Ore to OB ratio for the pit/mine during the year	Not applicable	Not applicable	Only underground operation.
3o	Total area put in use under different heads at the end of year	i. Already exploited & abandoned by open cast mining is 13.300Ha  ii. Used for waste disposal is 11.510 Ha.  iii. Occupied by plant, buildings, residential, welfare building & roads is 6.23 Ha.  iv. Mineral Storage is 4.34 Ha.	i. 13.300Ha  ii. 11.510 Ha  iii. 6.23 Ha  iv. 4.34 Ha	
3p	Production of ROM mineral during <b>last five-years period</b> , as applicable			Existing Contractor left the site in between the contract period on 01.07.2019 and new Mining Operator (MO) was engaged and site was hand over on 21.12.2021. Due to this there is no production from FY2020-2021 & FY2021-2022.
	Year- 2019-20	90890 MT	650 MT	
	Year- 2020-21	34979 MT	Nil	
	Year- 2021-22	94546 MT	Nil	
	Year-2022-23	98400 MT	15643 MT	
	Year-2023-24	98400 MT	22615 MT	
	Total	417215 MT	38908 MT	
	General remarks of inspecting officer on method of mining etc.	Mining operations are carried out by Underground method of mining by open stope method. It is restricted to North Block, Panel 'B'.		

#### 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)	Dumping of waste material at open cast quarry for reclamation.	Dumping of waste material done at open cast quarry for reclamation	No top soil generated and waste generated is used for reclamation in open cast quarry. Mineral rejects are blended with high grade chrome ore to make saleable
4b	Location of topsoil, OB & mineral reject dumps	Dump-3(Waste) E- 21:16:06.65 to 21:15:58.22 N- 86:19:50.77 to 86:19:52.25	Dump-3(Waste) E- 21:16:06.65 to 21:15:58.22 N- 86:19:50.77 to 86:19:52.25	
4c	Number of dumps within lease area and outside lease area	3 nos. Dump No.1- Inactive & stable  Dump No.2- Inactive & stable Dump No.3- Active	3 nos. Dump No.1- Inactive & stable  Dump No.2- Inactive & stable Dump No.3- Active	Dump No-1 E- 21:16:07.89 to 21:15:49.07 N- 86:19:18.37 to 86:19:27.80 Dump No-2 E- 21:15:50.58 to 21:15:47.93 N- 86:19:42.53 to 86:19:44.62 Dump No-3 E- 21:16:06.65 to 21:15:58.22 N- 86:19:50.77 to 86:19:52.25
4d	Location of dumps w.r.t. ultimate pit limit		Location is maintained as per plan	The Open cast Operation has been discontinued from 1998 and underground operation was commenced from 2000.
4e	Number of active & alive dumps	1 no.	1 no.	Dump No-3
4f	Number of dead dumps	2 nos.	2 nos.	Dump No-1 & Dump No-2
4g	Number of dumps stabilized	2 nos.	2 nos.	Dump No-1 & Dump No-2
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Available	
4i	Length of Retaining wall or garland	Not in proposal	Not in proposal	Retaining wall or garland

	drain all along dump			drain is already present all along dump
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4j	Number of settling ponds	1 no.	1 no.	Water is maintained in the Quarry from bottom RL i.e., +17 mRL to +25 mRL.
	Specific comments of inspecting officer on waste dump management	There are 3 dumps in total existing in the lease out of which 2 are stabilized. The active dump is covered with garland drain.		

**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	Not applicable	Not applicable	
5b	Area under backfilling of mined out area	42000 Cu.M	12199 Cu.M	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	Not applicable	Not applicable	
5d	Total area fully reclaimed & rehabilitated	Not applicable	Not applicable	
	The Northern part of the open pit is being backfilled by waste generated from underground workings	The Northern part of the open pit is being backfilled by waste generated from underground workings.		

**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).	To be submitted by 30 <sup>th</sup> June	Submitted on 27.06.2024 vide letter No. 403/OMC/BCM/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) Nil ii) Nil iii) 500 nos. iv) 8000 nos. v) Nil vi) 500000 INR	i) Nil ii) 0.3 ha iii) 500 nos. iv) 9400 nos. v) Nil vi) 410008 INR	
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	i) Nil ii) 42000 cum iii) Nil iv) Nil iv) Nil	i) Nil ii) 12199.2 cum iii) Nil iv) Nil iv) Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) Nil ii) Nil iii) Nil	i) Nil ii) Nil iii) Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Regular Environmental monitoring of Ambient Air Quality, Water Quality etc to be done	Environmental monitoring done by Centre for Envotech and Management Consultancy Pvt. Ltd.	
	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	The mining operations are being carried out by underground method.		

**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 the lease	Sorting and sizing done as per proposal.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual Method of grade-wise mineral sorting proposed	Manual Method of grade-wise mineral sorting carried out.	
7c	Different grade of mineral sorted out at mines	Below 40% Cr2O3 40% to below 52% Cr2O3 Above 52% Cr2O3	Below 40% Cr2O3 40% to below 52% Cr2O3 Above 52% Cr2O3	
7d	Any beneficiation process at mines	No	No	
	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Except manual sorting no other beneficiation process is carried out. Further, the grade-wise sorting is done as per buyers specification.		

**Environment:-**

SL.No.	Item	Proposals ((FY 2023-24)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	Not applicable	Not applicable	No top soil as it is underground mines
8b	Concurrent use or storage of topsoil	Not applicable	Not applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines	Dumping of waste in Dump-3	Done as per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Waste generated to be used for reclamation in open cast quarry	waste generated is used for reclamation in open cast quarry	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Waste generated to be used for reclamation in open cast quarry	waste generated is used for reclamation in open cast quarry	
8f	Baseline information on existence of plantation & additional plantation done		Being Maintained	
8g	Survival rate	75%	75%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads to be done to control airborne dust	Water sprinkling done by water tanker	As per requirement the water spraying is done which is nearly 1KLD.

**Compliance of Rule 45**

SL.No.	Item	COMMENTS		Remarks.
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to December-2024 A.R. submitted up to 31 <sup>st</sup> March-2024		
S.N.	Item	<b>Details GIVEN in A.R.</b>	<b>Actual in field</b>	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri Susanta Kumar Naik Mine Manager & Mining Engineer. Sri Debasis Nayak, Geologist	Sri Susanta Kumar Naik, Mine Manager. Sri Radheshyam Sahoo, Geologist. Sri. Rakesh Kumar Nayak, Mining Engineer.	New Geologist appointed on 19.04.2024 and new Mining Engineer appointed on 01.10.2024.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	i. Already exploited & abandoned by open cast mining is 13.300Ha ii. Used for waste disposal is 11.510 Ha. iii. Occupied by plant, buildings, residential, welfare building & roads is 6.23 Ha. iv. Mineral Storage is 4.34 Ha.	i. 13.300Ha ii. 11.510 Ha iii. 6.23 Ha iv. 4.34 Ha	
9d	Scrutiny of Annual return on afforestation	500 nos.	500 nos.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	2165 MT	Appears to be correct.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	2382.830 MT ROM	Appears to be correct.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Lumps: (i) Below 40% Cr2O3- Rs 18438.97 (ii) 40% to below 52 % Cr2O3- Rs 21001.82 Fines: (i) Below 40% Cr2O3- Rs 12377.61 (ii) 40% to below 52 % Cr2O3- Rs 14354.88 (iii) 52% and above Cr2O3- Rs	Appears to be correct.	

		25075.00 (iv)Concentrates- Rs 3508.25 Cost of Production: Rs 21716.00		
9i	Scrutiny of Annual return on fixed assets	₹ 47744777	Appears to be correct.	
9k	Scrutiny of Annual return on mining machineries	AIR COMPRESSOR-5 GENERATOR (DIESEL)-3 HAULAGE (ELEC.)-1 PUMPS (ELEC.)-6 BLAST HOST DRILL-4 FRONT END LOADER-1 ROCK DRILL (NON-ELEC.)-10 ROCK DRILL (ELEC.)-1 ROCKER SHOVEL-5 TIPPER-2	Observed to be correct.	

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