

**INDIAN BUREAU OF MINES
MCDR INSPECTION REPORT
BHUBANESHWAR REGIONAL OFFICE**

General:

SL. No.	Particulars	Details
1	Name of the Mine	Asurabandha Chromite Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	91.827 (Forest land - 6.33 Ha +Non forest land - 85.497 Ha)
	Inspecting Officer with Designation	Shri Sujit Kumar Jena, JMG
	Date of Inspection	30.11.24
3	Mine code	11ORI05004
4	IBM Registration Number under rule 45 of MCDR, 2017	IBM/20873/2016
5	Name of the lessee, Address, phone, email and fax number	M/s Real India Consultancy Limited, Plot No:428/3818, Jayadev Nagar, Bhubaneswar, Khurda, Odisha,751002 Phone No : 0674 2430 528 ,Fax No : 0674 2430528
6	Village	Asurabandha
7	Taluka/Mandal	Bhuban
8	District	Dhenkanal
9	Pin code	759017
10	State	Odisha
11	Post office	Bhuban
12	Nearest police station	Bhuban
13	Nearest Railway station	Jajpur-Kendujhargarh Railway Station
14	Date of Grant of Mining Lease	04.04.2011
15	Date of Execution	25.05.2015
16	Date of opening of Mine	10.10.2016
17	Date of Expiry	24.05.2035
18	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. Abhishek Rath , Plot No: 428/3818 , Jayadev Nagar, Bhubaneswar, Khurda, Odisha,751002, Phone No : 0674 2430 528 Fax No : 0674 2430528
19	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Abhishek Rath , Plot No: 428/3818 , Jayadev Nagar, Bhubaneswar, Khurda, Odisha,751002, Phone No : 0674 2430 528 Fax No : 0674 2430528
20	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mine	Mr. Satyabadi Sahu, D.O.A- 17.11.2018 Plot no - 1157/3867, Vill - Bhadaliapasi, Word no-2, Sai Sadan, Po-New Bhuban, PS - Bhuban, Dist - Dhenkanal, Pin -759017
21	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine,	Er. Debasis Behera (B.E Mining) , D.O.A- 01.12.2016, Exp- 18 yrs, Plot no- 1157/3867, Vlg-Bhadaliapasi, Word no-2, SaiSadan, Po-New Bhuban, Ps- Bhuban, Dist- Dhenkanal, Pin-759017 Ph No.-06769 272277
22	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine,	Mr. Ajit Kumar Khatua (M.Sc. in Geology), D.O.A - 27.08.2019 , Plot no - 1157/3867,Vill - Bhadaliapasi, Word no-2, Sai Sadan, Po - New Bhuban, Ps - Bhuban, Dist- Dhenkanal, Pin -759017,

23	Date of Approval of Mining plan/Review of mining plan/their Modifications with five-year period and specific condition in approval letter, if any.	30.03.2021 (As per conditions of approval of mining Scheme, the validity of mining Scheme/plan is 4 years from the date of Approval)
24	Mineral(s) granted in lease and proved for mining	Chromite
25	Method of Mining(Opencast, Underground)	Opencast
26	Category (Fully Mechanized, Others or Manual)	OTFM
27	Captive/Non Captive	Non Captive
28	Present EC Capacity	200000 MTPA

Exploration:

SLNO.	Item	Proposals (FY 23-24)	Actual work (FY 23-24)	Remarks
1a	Backlog of previous year	26 nos. of Boreholes proposed during the year 2021-22	4 Nos of Boreholes drilled in FY 23-24	
1b	Exploration over lease area for Geological axis 1 or 2	No proposal during the year 2023-24	NA	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Drill king Pvt Ltd., C/o-Damburudhar Mohanta, S/o-Sambhunath Mohanta, P.O-Ransol, P.S-Kaliapani, Dist-Jajpur, Total Expenditure - Rs.19, 25,760.00.		
1d	Balance area to be explored to bring Geological axis in 1 or 2	89.577	2.25	
1e	Balance reserves as on 01.04.2024	As per the approved Review of Mining Plan, the reserve/resource status as on 01.02.2021 is follows:- Reserve- : 109123 Tonne Resource : 16184 Tonne Balance reserves/resource as on 01.04.2024 as per Annual Return is as follows:- Reserve- : 109116 Tonne Resource : 16184 Tonne		

Development:

SL.NO.	Item	Proposals (FY 23-24)	Actual work (FY 23-24)	Remarks
2a	Location of development w.r.t. lease area	Quarry- 1	As per proposal	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate Benches Proposed	As per proposal	
2c	Stripping ratio or ore to OB ratio	1 : 7.17	Nil	
2d	Quantity of topsoil generation in m ³	1,225 m ³	Nil	
2e	Quantity of overburden generation in m ³	85,820 m ³	28 m ³	

Exploitation

SL.NO.	Item	Proposals (FY 23-24)	Actual work (FY 23-24)	Remarks
3a	Number of pits proposed for production	1	1	As per plan
3b	Quantity of ROM mineral production proposed	24038 tonne	7.00 tonne	
3c	Recovery of salable/usable mineral from ROM production	97.15%	97.15%	
3d	Quantity of mineral reject generation	404 m3	Nil	
3e	Grade of mineral reject generation and threshold value declared	Mineral reject- 10% to 20 % Cr2O3. Threshold Value- 10% Cr2O3		
3f	Quantity of sub-grade mineral generation	Same as mineral reject		
3g	Grade of sub-grade mineral generation	Same as mineral reject		
3h	Manual / Mechanized method adopted for segregating from ROM	Manual	Manual	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral	No such proposal	NA	
3j	Provision of drilling & blasting in mineral benches	Provision of drilling & blasting not proposed in mineral benches	NA	
3k	Provision of mining machineries in mineral benches	Excavator – 0.9 M3 Dumper – 10 tonne	As per proposal	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height: 6 m Bench Width: 9 m	Benches not developed properly due to no production	
3m	Total area covered under excavation/ pits	4.795 ha	Nil	
3n	Ore to OB ratio for the pit/mine during the year	1:7.17	Nil	

3o	Total area put in use under different heads at the end of year	Pit: 1.807 Ha, Waste disposal: 0.232 Ha, Infrastructure: 0.500 Ha, Mineral storage: 1.718 Ha ,Others : 1.848 Ha	Pit: 1.807 Ha, Waste disposal: 0.232 Ha, Infrastructure: 0.500 Ha, Mineral storage: 1.718 Ha ,Others : 1.848 Ha	
3p	Production of ROM mineral during the last five year period , as applicable.	FY 2020-21 - 24038 MT 2021-22 - 24038 MT 2022-23 - 24038 MT 2023-24 - 24038 MT	FY 2020-21 – 6 tonne 2021-22 - 9 tonne 2022-23 – Nil 2023-24 – 7 tonne	

Solid Waste Management- Dumping:

S.N.	Item	Proposals (FY 23-24)	Actual work (FY 23-24)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of Topsoil, OB and mineral reject proposed	As per proposal	
4b	Location of topsoil, OB & mineral reject dumps	Between the grid 800 West to 700 West	As per proposal	
4c	Number of dumps within lease area and outside lease area	1 (one) Dump within lease	As per proposal	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	NA	
4e	Number of active & alive dumps	1	1	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	NA	NA	
4i	Length of Retaining wall or garland drain all along dump	420 m	140 m constructed	
4j	Number of settling ponds	No proposal	NA	

Solid Waste Management-Backfilling:

S.N.	Item	Proposals (FY 23-24)	Actual work (FY 23-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	NA	Nil	
5b	Area under backfilling of mined out area	NA	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	NA	Nil	

5d	Total area fully reclaimed & rehabilitated	NA	Nil	
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Progressive Mine Closure Plan:

S.N.	Item	Proposals (FY 23-24)	Actual work (FY 23-24)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26 (2). Hard copy of same	To be submitted before 1 st July	Submitted	
6b	Management of worked /mined out benches (i)Area available for rehabilitation (ha)	No proposal	NA	
	(ii)Afforestation done (Ha). (F/Y 2023-24)	0.120 Ha	0.1 Ha (Outside lease)	
	(iii)No. of saplings planted during the year. (F/Y 2023-24)	625	300 (Outside lease)	
	(iv)Cumulative no. of plants	3150	1200 over area of 2.5 Ha	
	(v)Any other specific method of rehabilitation	NA	NA	
	(vi)Cost incurred on watch & care during the year	NA	NA	
6c	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L X B X D).	NA	NA	
	(ii) Void filled by waste/tailings.	NA	NA	
	(iii)Afforestation on the backfilled area.	NA	NA	
	(iv) Rehabilitation by making water reservoir.	NA	NA	
	(v) Any other specific means	NA	NA	
6d	Compliance of Rehabilitation of waste land within lease (i)Afforestation	NA	NA	
	(ii) Area rehabilitated (ha)	NA	NA	
	(iii) Method of rehabilitation	NA	NA	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly monitoring of Air and Ground water quality proposed	Monitoring carried out quarterly.	

Mineral Conservation:

S.N.	Item	Proposals (FY 23-24)	Actual work (FY 23-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area	As per proposal	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	10% to 40% Cr ₂ O ₃ and above 40% Cr ₂ O ₃	10% to 40% Cr ₂ O ₃ and above 40% Cr ₂ O ₃	
7d	Any beneficiation process at mines	NA	NA	

Environment:

S.N.	Item	Proposals (FY 23-24)	Actual work (FY 23-24)	Remarks
8a	Separate removal and utilization of top soil (Rule 32)	Separate removal and utilization of topsoil	Separately stacked	
8b	Concurrent use or storage of topsoil	Plantation	Plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines	Separate dump proposed	Separate stack for Top soil and fines (Sub-Grade) has established	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	NA	
8f	Baseline information on existence of plantation & additional plantation done	625 Nos	300 Nos	
8g	Survival rate	80%	30%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul roads proposed to suppress the dust	Water tanker of 8KL capacity is being deployed	

Compliance of Rule 45

Sl.No	Item	Proposals (FY 23-24)	Actual work (FY 23-24)	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return and Annual return has been submitted within due date.		
Sl.No	Item	Details Given in A. R.	Observation of I/O	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on Geologist and Manager is furnished in the return.	Appointed and present in the field during inspection.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 1.807 Ha, Waste disposal: 0.232 Ha, Infrastructure: 0.500 Ha, Mineral storage: 1.718 Ha ,Others :	It appears to be correct	
9d	Scrutiny of Annual return on Afforestation	300 Nos	It appears to be correct	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	It appears to be correct	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	35.506 tonne	It appears to be correct	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost etc.	2470.00	It appears to be correct	
9h	Scrutiny of Annual return on fixed assets	46742354.00	It appears to be correct	
9i	Scrutiny of Annual return on mining machineries	Shovel- 1 Nos. Dumper- 20 Nos.	It appears to be correct	

Date:27.02.2025

Sujit Kumar Jena
Junior Mining Geologist