

**INDIAN BUREAU OF MINES**  
**MINERALS DEVELOPMENT AND REGULATION DIVISION**  
**MCDR INSPECTION REPORT**  
**BHUBANESHWAR REGIONAL OFFICE**

File No-MCDR-MiFLOCR/2/2023-BBS-IBM\_RO\_BBS

Mine Code- 11ORI05004

**General**

S N	Particulars	Details
1	Name of the Mine	Asurabandha Chromite Mine, M/s Real India Consultancy Limited
2	Date of Inspection	14.03.2024
3	Name of Inspecting Officer	Shri Ashok Kumar Pany, Assistant Mining Engineer
4	Name of official accompanying inspection	Shri Abhishek Rath, Agent
5	Last date of Inspection & Officer	18.11.2021 Shri Ashok Kumar Pany, Assistant Mining Engineer
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest Land- 6.33 ha Non Forest Land- 85.497 ha Total Lease area- 91.827 ha
7	Mine code	11ORI05004
8	IBM Registration Number under rule 45 of MCDR, 2017	IBM/20873/2016
9	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
10	Village	Asurabandha
11	Taluka/Mandal	Bhuban
12	District	Dhenkanal
13	Pin code	759017
14	State	Odisha
15	Post office	Bhuban
16	Nearest police station	Bhuban
17	Nearest Railway station	Jajpur Road
18	Date of Grant of Mining Lease	04.04.2011
19	Date of Execution	25.05.2015
20	Date of Expiry	24.05.2035
21	Date of opening of Mine	10.10.2016
22	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Abhishek Rath , Plot No: 428/3818 , Jayadev Nagar, Bhubaneswar, Khurda, Odisha,751002, Phone No : 0674 2430 528 Fax No : 0674 2430528

1/28728/2023	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Abhishek Rath , Plot No: 428/3818 , Jayadev Nagar, Bhubaneswar, Khurda, Odisha,751002, Phone No : 0674 2430 528 Fax No : 0674 2430528
24	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri S Sahu, Plot no - 1157/3867, Vill - Bhadaliapasi, Word no-2, Sai Sadan, Po-New Bhuban, PS - Bhuban, Dist- Dhenkanal, Pin -759017
25	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri S Sahu, Plot no - 1157/3867, Vill - Bhadaliapasi, Word no-2, Sai Sadan, Po-New Bhuban, PS - Bhuban, Dist- Dhenkanal, Pin -759017
26	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Ajit Kumar Khatua (M.Sc. in Geology), D.O.A - 27.08.2019 , Plot no - 1157/3867,Vill - Bhadaliapasi, Ward no-2, Sai Sadan, Po - New Bhuban, Ps - Bhuban, Dist- Dhenkanal, Pin -759017
27	Date of Approval of Review of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Review of Mining Plan approved vide letter No. RMP/A/54-ORI/BHU/2020-21 dated 30.03.2021 for the period 2020-21 to 2024-25
28	Mineral(s) granted in lease and proved for mining	Chromite
29	Method of Mining (Opencast, Underground)	Opencast
30	Category (Fully Mechanized, Others or Manual)	Category-A, FM
31	Captive/Non Captive	Non-Captive
32	Present EC Capacity	Chromite - 200000 tonne

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Scientific Mining: Compliance of proposals of approved Mining Plan/Review of mining for the Year 2022-23.

**Exploration**

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	26 nos. of Boreholes proposed during the year 2021-22	Nil	Deviation in exploration work is pointed out to lessee through violation.
1b	Exploration over lease area during the year for Geological axis 1 or 2.	No proposal during the year 2022-23	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	As per approved Review of Mining plan the balance area to be explored is 82.077 ha.		
1e	Balance reserves/resource as on 01.04.2023	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 01.04.2023 as per Annual Return is as follows:- Reserve- : 109114 Tonne Resource : 16184 Tonne		
1f	General remarks of inspecting officer on geology, exploration etc.	9.75 ha has been explored in G2 level and the balance area 82.077 ha is to be explored. Non-compliance of exploration proposal is pointed out to lessee through violation letter issued.		

**Development**

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Quarry- 1	Nil	
2b	Separate benches in topsoil, overburden and mineral	Separate Benches Proposed	Nil	
2c	Stripping ratio or ore to OB ratio (t/Cum)	1:2.4	Nil	
2d	Quantity of topsoil generation in m <sup>3</sup>	1971	Nil	
2e	Quantity of overburden/waste generation in m <sup>3</sup>	58520	Nil	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	No work during the year due to local problem.		

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	One	Nil	
3b	Quantity of ROM production proposed	24038 tonne	Nil	
3c	Recovery of saleable/usable mineral from ROM production	23028 tonne	Nil	
3d	Quantity of mineral reject generation	1010 tonne	Nil	
3e	Grade of mineral reject generation and threshold value declared	Mineral reject- 10% Fe to 20 % Cr2O3. Threshold Value- 10% Cr2O3	Nil	
3f	Quantity of sub-grade mineral generation	Same as mineral reject	Nil	
3g	Grade of sub-grade mineral generation	Same as mineral reject	Nil	
3h	Manual / Mechanized method adopted for segregating from ROM	Mechanized	Nil	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No beneficiation study proposed	Nil	
3j	Provision of drilling & blasting in mineral benches	Provision of drilling & blasting not proposed in mineral benches	Nil	
3k	Provision of mining machineries in mineral benches	Excavator – 0.9 M3 Dumper – 10 tonne	Nil	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/RMP	Bench Height: 6 m Bench Width: 9 m	Nil	
3m	Total area covered under excavation/pits	4.795 ha	Nil	

1/28728/2023	3n	Ore to OB ratio for the pit/mine during the year	1:2.4	Nil	
	3o	Total area put in use under different heads at the end of year	Total – 15.853 ha	6.257 ha	
	3p	Production of ROM mineral during last five-year period, as applicable	2018-19 - 150030 tonne 2019-20 – 200025 tonne 2020-21 - 24038 tonne 2021-22 - 24038 tonne 2022-23 - 24038 tonne	2018-19 - 821 tonne 2019-20 – Nil 2020-21 – 6 tonne 2021-22 - 9 tonne 2022-23 - Nil	
	3q	General remarks of inspecting officer on method of mining etc.	No work during the year due to local problem. During the year 2023-24 upto Feb-24, only 7 tonne of chromite production is achieved and the same is less than the production proposal. Deviation in production is pointed out to lessee through violation letter.		

### **Solid Waste Management-Dumping**

S.N	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of Topsoil, OB and mineral reject proposed	Nil	
4b	Location of topsoil, OB & mineral reject dumps	Between the grid 800 West to 700 West	Nil	
4c	Number of dumps within lease area and outside lease area	within lease area – One outside lease area - Nil	Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Nil	
4e	Number of active & alive dumps	01	Nil	
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	No	Nil	
4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management	One small waste dump located within the lease area.		

I/28728/2023 **Solid Waste Management-Backfilling**

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Nil	Nil	
5b	Area under backfilling of mined out area	Nil	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Nil	Nil	
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	No back filling proposal.		

**Progressive Mine Closure Plan**

S.N.	Item	Proposals (Yr.2022-23)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26.	To be submitted before 1 <sup>st</sup> July	Submitted	
6b	Area available for rehabilitation (ha)	Nil	NIL	
6c	Afforestation done (ha)	0.12 ha	0.1 ha	
6d	No. of saplings planted during the year	625	300	
6e	Cumulative no. of plants	Total 1200 Nos. of trees planted.		-
6f	Any other specific method of rehabilitation	-	-	-
6g	Cost incurred on watch & care during the year	NA	Rs. 6000/-	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L X B X D).	Nil	Nil	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings.	Nil	Nil	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area.	Nil	Nil	-

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6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir.	Nil	Nil	-
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	Nil	Nil	-
6m	Compliance of Rehabilitation of waste land within lease (i)Afforestation	Nil	Nil	-
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha) Method of rehabilitation	Nil	Nil	-
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	Nil	Nil	-
6p	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly monitoring of Air and Ground water quality proposed	Monitoring carried out quarterly.	-
6q	General remark of inspecting officer on PMCP compliance and progressive closure operation etc.	No work during the year due to local problem.		

### **Mineral Conservation**

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area	Nil	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Nil	
7c	Different grade of mineral sorted out at mines	10% to 40% Cr <sub>2</sub> O <sub>3</sub> and above 40% Cr <sub>2</sub> O <sub>3</sub>	Nil	
7d	Any beneficiation process at mines	No	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No work during the year due to local problem.		

I/28728/2023 **Environment**

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump proposed	Nil	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
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 (Rule 41)	625 Nos. of Plantation	300 Nos.	
8g	Survival rate	NA	10%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul roads proposed to suppress the dust	Nil	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	The aesthetic beauty in & around the mine area maintained.		

**Compliance of Rule 45**

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return and Annual return has been submitted within due date.		
S.N.	Item	Details Given in AR.	Observation of I/Officer	Remarks
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.	Area under Pit- 1.6 ha, Reclaimed area- Nil Area under waste disposal- 0.45 ha	Within the proposed land use.	
9d	Scrutiny of Annual return on afforestation	300 Nos. of plantation during the year	Plantation carried out.	



I/28728/2024	9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	NA	
	9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock-28.506 tonne	Found to be in order	
	9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex- Mine price of varies from Rs. 276.43/- Cost of production - Nil	Ex- Mine price of varies from Rs. 276.43/- Cost of production - Nil	
	9i	Scrutiny of Annual return on fixed assets	Value of fixed asset is Rs. 45881672/-	Value of fixed asset is Rs. 45881672/-	
	9k	Scrutiny of Annual return on mining machineries	Shovel- 1 Nos. Dumper- 20 Nos.	Currently no machineries deployed.	

**Violation observed during current inspection and compliance position of earlier violation pointed out:**

- (a) Compliance position of earlier violation pointed out:- No violations pointed out during earlier inspection.
- (b) Violation of provisions of Rule 11(1) of MCDR, 2017 is observed during current inspection and pointed out to lessee.

Ashok Kumar Pany  
Assistant Mining Engineer

