

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/CR/DKL/MCDR-4/BBS

Mine code : 11ORI05004

- (i) Name of the Inspecting : **RAM**) **RAMKISHAN R**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Abhishek Rath (Agent), Shri Satyabadi Sahu (Mine
Official with
Designation
- (iv) Date of Inspection : 27/10/2018
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ASURABANDHA CHROMITE MINE**
- (b) **Registration NO.** : **11ORI05004**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
State : ORISSA
District : DHENKANAL
Village :
Taluka :
Post office :
Pin Code :
FAX No. : 0674-2430528
E-mail : ricl.bbsr@gmail.com
Phone : 0674-2430528
- (f) Police Station : BHUBAN
- (g) First opening date : 10/10/2016
- (h) Weekly day of rest : SUN
2. Address for : village- ASURABANDHA, PO-CHANDIPAL
correspondance PS-BHUBANA
DIST-DHENKANAL, PIN-759 017
3. (a) Lease Number :
(b) Lease area :
(c) Period of lease :
(d) Date of Expiry :
4. Mineral worked : CHROMITE Main

5. Name and Address of the

Lessee : M/S REAL INDIA CONSULTANCY LTD
 PLOT NO - 428/3818 JAYDEV
 NAGAR, NEAR PANTHANIVAS
 BHUBANESWAR BHUBNESHWAR
 ORISSA
 Phone:0674 2430528
 FAX :0674 2430520

Owner : M/S REAL INDIA CONSULTANCY LTD
 PLOT NO 428/3818 JAYDEV
 NAGAR MNEAR PANTHNIVAS
 BHUBNESHWAR ORISSA
 Phone: 06742430528
 FAX : 06742430520

Agent : ABHISHEK RATH
 N-3/194 IRC VILLAGE
 NAYAPALLI BHUBANESWAR
 BHUBNESHWAR ORISSA
 Phone: 8763332876
 FAX : 0674 2550442

Mining Engineer

Name : SHRI DEBASISH BEHERA,Full Time
 Qualification : B E (MINING)
 Appointment/ : 01/12/2016
 Termination date

Geologist

Name : ASHUTOSH MOHAPATRA,Full Time
 Qualification : MSC (APPLIED GEOLOGY)
 Appointment/ : 05/06/2017
 Termination date

Manager

Name : SHRI SATYABADI SAHOO
 Qualification : DIPLOMA MINING ENGG
 Appointment/ : 22/10/2018
 Termination date

Manager

Name : DASARATHI BEHERA
 Qualification : DIPLOMA MINING, 1ST CLASS CERTIFICATE CC
 Appointment/ : 20/10/2018
 Termination date

6. Date of approval of Mining :
 Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal.	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	54 nos of boreholes were proposed during the year 2017-18.	9 nos of boreholes were drilled	violation issued letter dated 14/11/2018.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal.	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.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	54 nos of boreholes proposed during the year 2017-18.	9 nos of boreholes drilled.	violation issued letter dated 14/11/2018.
1e	Balance reserve as on 01/04/20	As per the approved document on 5/11/2018 the chrome ore reserves are 0.84 million tonnes (121: 0.844 mt) and resources are 1.85 million tonnes (333: 1.8 mt, 331: 0.05 mt).	due to depletion of reserves the chrome ore reserves as on 01.04.2018 are 0.84 million tonnes (121: 0.844 mt)and resources are 1.85 million tonnes (333: 1.8 mt, 331: 0.05 mt).	Nil
1f	General remarks of inspecting officers on geology, exploration etc	No comments to offer.	exploration not carried out as proposed.	Nil

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	single quarry proposed in the North eastern side of the lease area.	single quarry developed in the North eastern side of the lease area.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	seperate becnhes in top soil,OB and mineral are proposed.	maintained.	Nil
2c	Stripping ratio or ore to OB ratio	1:0.24 t/cu.m.	1:0.63 t/cu.m.	violation issued for less development letter dated 14/11/2018.
2d	Quantity of topsoil generation in m3	8335 cu.m.	1350 cu.m.	Nil
2e	Quantity of overburden generation in m3	38008 cu.m.	2342 cu.m.	violation issued letter dated 14/11/2018..
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No comments to offer.	the mine was opened on i.e. 10.10.2016. so not much developemnt work taken place.	Nil

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	single quarry proposed in the North eastern side of the lease area.	production is carried out from single quarry in the North eastern side of the lease area.	Nil
3b	Quantity of ROM mineral production proposed	154430 t	3665.10 t	violation issued letter dated 14/11/2018.
3c	Recovery of sailable/usable mineral from ROM production	150030 t saleable ore and 4400 t sub grade ore	3665.10 t saleable ore	violation issued for less development letter dated 14/11/2018.

3d	Quantity of mineral reject generation	Not proposed.	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	Not proposed.	Nil	Nil
3f	Quantity of sub grade mineral generation.	4400 t	Nil	violation issued letter dated 14/11/2018.
3g	Grade of sub grade mineral generation	-10% Cr	-10% Cr	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	drill dai of 32 mm with powergel explosives are proposed with intiiation of eletric delay detonator	Not used till now. most of the excvations are sub surafce in nature.	Nil
3k	Provision of mining machineries in mineral benches	Shovel and dumper combination.	Shovel and dumper combination.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	bench height is 3 m	bench height is 3 m mainatined.	Nil
3m	Total area covered under excavation/pits	8.335 ha at the end of plan period.	1.6 ha	due to less development land degradation is less.

3n	Ore to OB ratio for the pit/mine during the year.	1:0.24 t/cu.m.	1:0.63 t/cu.m.	Nil
3o	Total area put in use under different heads at the end of year	workings: 8.335 ha waste disposal: 1.368 Ha plant, roads: 3 ha mineral storage: 2 ha at the end of plan period.	workings: 1.600 ha waste disposal: 0.45 Ha plant, roads: 0.86 ha mineral storage: 1.848 ha	due to less development land degradation is less.
3p	Production of ROM mineral during the last five year period as applicable	F/Y 2015-16 (1ST) - 103015 MT 2016-17 (2ND) - 128677 MT 2017-18 (3RD) - 154430 MT	F/Y 2015-16 (1ST) - Nil 2016-17 (2ND) - Nil 2017-18 (3RD) - 3665.1 MT	Nil
3q	General remarks of inspecting officers on method of mining etc.	No comments to offer.	mine was opened on 10.10.2016, so not much development work carried out.	Nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	seperate dumping of topsoil, OB and mineral rejects are proposed.	seperate dumping of topsoil, OB and mineral rejects are carried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	Between the grid 800 West to 700 West	Between the grid 800 West to 700 West	Nil
4c	Number of dumps within lease area and outside of lease area	1 no waste dump with in lease area.	1 no of waste dump	Nil

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL	Nil
4e	Number of active and alive dumps.	1 no.	1 no.	Nil
4f	Number of dead dumps.	Not proposed.	Nil	Nil
4g	Number of dumps established.	Not proposed.	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	proposed.	not carried out.	violation observed.
4i	Length of Retaining wall or garland drain all along dumps	550 m.	not carried out	violation observed.
4j	Number of settling ponds	1 No.	2 nos.	Nil
4k	Specific comments of inspecting officer on waste dump management	No comments to offer.	soild waste management is not as per proposed mining plan. violation observed.	Nil

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not proposed.	Nil	Nil
5b	Area under backfilling of mined out area	Not proposed.	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed.	Nil	Nil

5d	Total area fully reclaimed and rehabilitated	Not proposed.	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No comments to offer.	Area not matured for reclamation and rehabilitation.	Nil

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	submit yeraly report under 26 (2)	not submitted.	violation issued.
6b	Area available for rehabilitation (ha) .	0.5 ha in barren area and 0.1 ha on dump	Nil	violation issued dated 14/11/2018.
6c	afforestation done (ha).	0.5 ha in barren area and 0.1 ha on dump	Nil	violation issued dated 14/11/2018.
6d	No. of saplings planted during the year	160 nos on dumps and 800 nos in barren area	Nil	violation issued dated 14/11/2018..
6e	Cumulative no .of plants	Not proposed.	Nil	Nil
6f	Any other method of rehabilitation	Not proposed.	Nil	Nil
6g	Cost incurred on watch and care during the year	Not proposed.	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed.	Nil	Nil

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed.	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not proposed.	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed.	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed.	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	800 nos saplings plantation	Nil	violation observed.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.5 ha	Nil	violation observed.
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	plantation	Nil	Nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	periodical monitoring of environmental parameters like air quality, water quality, etc.,	carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No comments to offer.	PMCP works not carried out as proposed, so violation observed.	Nil

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	gradewise sorting is proposed.	grade wise sorting is carried out.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	Nil
7c	Different grade of mineral sorted out at mines.	+40% & -40% Cr	+40% & -40% Cr	Nil
7d	Any beneficiation process at mines .	Not proposed.	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No comments to offer.	grade wise sorting of mineral is carried out by manual.	Nil

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	proposed.	stacked.	Nil
8b	Concurrent use or storage of topsoil	stacking	stacking	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps for OB, waste rock, rejects proposed.	maintained.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed.	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed.	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	960 nos proposed.	Not carried out.	Nil
8g	Survival rate	Not proposed.	Nil	Nil
8h	Water sprinkling on roads to control airborne dust	mobile water sprinkling proposed.	mobile water sprinkling is carried out.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No comments to offer.	Afforestation not carried out as proposed.	Nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	submitted.	submitted.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining engineer: 1 Diploma Mining engineer: 1 Geologist: 1	Graduate Mining engineer: 1 Diploma Mining engineer: 1 Geologist: 1	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	workings: 1.600 ha waste disposal: 0.45 Ha plant, roads: 0.86 ha mineral storage: 1.848 ha	workings: 1.600 ha waste disposal: 0.45 Ha plant, roads: 0.86 ha mineral storage: 1.848 ha	Nil
9d	Scrutiny of Annual return on afforestation	Nil	Nil	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock: 40% to below 52% Cr203: 1101.075 t Below 40% Cr203: 1128.225 t	ROM closing stock: 40% to below 52% Cr203: 1101.075 t Below 40% Cr203: 1128.225 t	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost: Rs.4565.50	Production cost: Rs.4565.50	Nil
9h	Scrutiny of Annual return on fixed assets	Rs. 5776640	Rs. 5776640	Nil

9k	Scrutiny of	DUMPER 35.000	DUMPER 35.000 TONNE 3	Nil
	Annual return on	TONNE 3	WATER TANKER 8000.000	
	mining	WATER TANKER	LITRE 1	
	machineries	8000.000 LITRE	M.T.P. (NON-ELEC.	
		1	MOTOR) 5.000 HP 1	
		M.T.P. (NON-	SHOVEL (HYDRAULIC) 0.900	
		ELEC.	CUM 2	
		MOTOR) 5.000		
		HP 1		
		SHOVEL		
		(HYDRAULIC)		
		0.900 CUM 2		

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	14/11/2018			
	Rule 26(2)	14/11/2018			

Date :**(RAMKISHAN R)**

Indian Bureau of Mines