

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of the Mine	Mewasa 205 Bauxite mines, S.No-205/P
1(b)	Name of Inspecting Officer & Designation	Sanjay M. Girhe, Sr. Mining Geologist
1(c)	Accompanying Mines Representatives	Sh. Sunil Patel, ME & Sh. Nagori, TQP
1(d)	Type of Inspection	Review of Mining Plan
1(e)	Date of Inspection	25.07.18
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	4.5790 hect.
3	Mine Code	07GUJ07146
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/ 5331/2011
5	Name of the lessee, Address, phone, email and fax number	M/S, CARBORUNDUM UNIVERSAL LTD. P.B.NO-02, PORT OKHA, DIST: DEVBHUMI DWARKA, E-mail: salesemd@cumi.murugappa.com Contact No-02892-262063
6	Village	MEWASA
7	Taluka/Mandal	KALYANPUR
8	District	DEVBHUMI DWARKA
9	Pincode	361315
10	State	GUJARAT
11	Post office	BHATIYA
12	Nearest police station	BHATIYA
13	Nearest Railway station	BHATIYA
14	Date of Grant of Mining Lease	11.11.2003
15	Date of Execution	09.09.2004
16	Date of opening of Mine	12.04.2006
17	Date of first Renewal, if applicable and its period & expiry	Mining Lease was executed on 09.09.2004 for the period of 20 years after that as per the MMDR Amendment Rule,2015 lease period extended up to 2030.
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	MR. K.S.SHRINIVASAN 43, MORE STREET, PERRY HOUSE, CHENNAI-600001
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	MR. A.K.SAHU M/S, CARBORUNDUM UNIVERSAL LTD. P.B.NO-02, PORT OKHA, DIST: DEVBHUMI DWARKA
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	MR. A.K.SAHU M/S, CARBORUNDUM UNIVERSAL LTD. P.B.NO-02, PORT OKHA, DIST: DEVBHUMI DWARKA
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Sunil Patel appointed as Mining Enginner
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Nil
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan was approved vide letter No-682(23)(299)/2003 MCCM(N) dtd 02.01.2004
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Mining Scheme was approved vide letter No-682(23)(MS-579/10) MCCM(N) dtd 11.02.2011
27	Mineral(s) granted in lease and proved for mining	BAUXITE

28	Method of Mining(Opencast, Underground)	OPENCAST
29	Category (Fully Mechanised, Others or Manual)	MANUAL
30	Captive/Non Captive	CAPTIVE

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –

Exploration

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
1a	Backlog of previous year	No proposals	NA	-
1b	Exploration over lease area for Geological axis 1 or 2.	No proposals	NA	-
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	NA	NA	-
1e	Balance reserves as on 01.04.2018	No Proposals	In Million tones Proved-29949 Probable-0	Reserves figures as per submitted AR
1f	General remarks of inspecting officer on geology, exploration etc.	Exploration not carried out in the past to bring the whole area in G1 & G2 level.		

2.0 Development

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
2a	Location of development w.r.t. lease area	No proposals	Mining was carried out from central part of the area	-
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No proposals	2 benches in OB 1 bench in mineral	-
2c	Stripping ratio or ore to OB ratio	No proposals	1:1.01	-
2d	Quantity of topsoil generation in m ³	No proposals	500 MT	-
2e	Quantity of overburden generation in m ³	No proposals	Nil	-
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Nil		

3.0 Exploitation

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
3a	Number of pits proposed for production	No Proposals	Excavation done from Pit No-1	
3b	Quantity of ROM mineral production proposed	No Proposals	7250 MT	
3c	Recovery of saleable/usable mineral from ROM production	No Proposals	80%	
3d	Quantity of mineral reject generation	No Proposals	20 %	
3e	Grade of mineral reject generation and threshold value declared	No Proposals	Nil	
3f	Quantity of sub-grade mineral generation	Nil	Nil	
3g	Grade of sub-grade mineral generation	Nil	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Not Proposed	Semi-mechanised	
3i	Any analysis or beneficiation study proposed & carried out for	Not Proposed	Nil	-

	sub-grade mineral and reject			
3j	Provision of drilling & blasting in mineral benches	Not Proposed	Shallow hole drilling & blasting was practised. Spacing : 1.0 mtrs. Burden : 1.0 mtrs. Depth : 1.65 mtrs. By jack hammer (RH 658/42)	-
3k	Provision of mining machineries in mineral benches	Not Proposed	Semi-mechanised method with drilling & blasting was done with excavator of 0.90CuM & Tipper-15MT combination.	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	NIL	1.2 MT	
3m	Total area covered under excavation/pits	Not proposed	1.710 HA	
3n	Ore to OB ratio for the pit/mine during the year	1:1.01	1:1.01	
3o	Total area put in use under different heads at the end of year	Nil	Already exploited & abandoned-1.455Ha Current working Pit-1.1710 Reclaimed & Rehabilitated -0.72 Others- 0.3 HA	
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2014-15:Not Proposed Yr 2015-16:Not proposed Yr 2016-17:Not proposed Yr 2017-18:Not proposed	Yr-2014-15 13975 Yr-2015-16 47700 Yr-2016-17 3350 Yr-2017-18 7250	
3q	General remarks of inspecting officer on method of mining etc.	Mining plan was not approved for above mentioned period.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	No proposals	220 M ³	-
4b	Location of topsoil, OB & mineral reject dumps	No proposals	Top soil was dumped at waste land of the mines area.	-
4c	Number of dumps within lease area and outside lease area	No proposals	1 Mineral Dumps	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposals	Nil	-
4e	Number of active & alive dumps	No proposals	Nil	-
4f	Number of dead dumps	No proposals	Nil	-
4g	Number of dumps stabilised	No proposals	Nil	-
4h	Whether Retaining wall or garland drain all along dumps are there	No proposals	NA	-
4i	Length of Retaining wall or garland drain all along dump	Nil	NA	-
4j	Number of settling ponds	NIL	NI	-
4k	Specific comments of inspecting officer	Nil		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No Proposals	Bauxite was mined out completely & then backfilled the area. There was no mineral reserve in that area	
5b	Area under backfilling of mined out area	No Proposals	220 Sq.M	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposals	Yes concurrent use of top soil is done.	
5d	Total area fully reclaimed & rehabilitated	No Proposals	0.720 ha	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Nil		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	Nil	Yes. PMCP report has been submitted	
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	Nil	0.220 m2 0.800 m2 30 sampling 50 plants 44,000 Rs	
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	- - -	- - 0.800 m2	- - -
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Not proposed	Nil	-
6e	Compliance of Environmental monitoring (core zone & buffer zone)	nil	Maintained Ambient Air quality ,Water quality & Noise quality	-
6f	General remarks of inspecting officer on PMCP compliance & progressive	Environmental monitoring is being carried out by outsourced consultant and monitoring reports were produced during inspection		

7.0 Mineral Conservation

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Not Proposed	Grade-wise sorting was done within lease area	-

7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not Proposed	Manual	-
7c	Different grade of mineral sorted out at mines	Not Proposed	Yes, HG & NPG grade of Bauxite ore for captive & dispatch purposed carried out	-
7d	Any beneficiation process at mines	Not Proposed	PG and NPG bauxite was sorted out from ROM by sizing, screening and mixing.	-
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Mineral conservation is done effectively by way of manual sorting to get desired grade of ore. Optimum utilization of ore (NPG-grade) up to threshold value (>Al ₂ O ₃ -30%).		

8.0 Environment

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Top soil was stocked separately at backfilled area	-
8b	Concurrent use or storage of topsoil	Not Proposed	Concurrent use of top soil for plantation purpose.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	Separate dumps for OB & mineral waste/mineral rejects are being maintained	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Up to limited extend i.e. available quantity is used for reclamation	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Overburden was stocked separately at backfilled area & used for restoration purpose.	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Nil	50 saplings have been planted during the year.	-
8g	Survival rate	NA	60%	
8h	Water sprinkling on roads to control airborne dust	Not Proposed	Sprinkling of water by water tanker was used to reduce dust	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	It was advised to plant maximum number of saplings as year wise target set for plantation was appears as very low.		

9.0 Compliance of Rule 45

S.N	Item	COMMENTS	Remarks
.	Status of submission of Monthly and Annual returns	M.R. Submitted upto – 2017-18 till the last month of inspection A.R. submitted upto- 2017-18	

S.N	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Shri Sunil Patel appointed as Mining Engineer	During the inspection it was advised to Mine representative
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps	Given	Already exploited & abandoned-1.455Ha Current working Pit- 1.1.1710	

	etc.		Reclaimed & Rehabilitated - 0.72 Others- 0.3 HA	to submit the AR & MR correctly for correct cost of production & Ex mine price, DMF, NMET, etc as per the guidelines in future.
9d	Scrutiny of Annual return on afforestation	Given	50 saplings with 60% survival rate	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NA	NA	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	40% to below 45% AL ₂ O ₃ -46183MT Abrasive-63.435MT	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Given	Ex-mine price-145/MT Cost of production-1199MT	
9i	Scrutiny of Annual return on fixed assets	NA	NA	
9k	Scrutiny of Annual return on mining machineries	Given	Excavator of 0.90CuM & Tipper-15MT combination	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out: - Based on the office records violation of rule 11(4) was pointed out on dtd 08.02.18 & subsequently due to non-compliance of this rule mine was suspended on 15.06.18. This inspection was carried out in connection with examination of Review of Mining Plan & during the inspection no violations were pointed out.
