

## MCDR INSPECTION REPORT

### 1.0 GENERAL

SN	Particulars	Details
1(a)	Name of the Mine	Mewasa Bauxite Mine, S. No- 146/147
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	8.09 HA, Forest Area- Nil
3	Mine Code	07GUJ07089
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, Phone No-262928, E-mail: salesemd@cumi.murugappa.com
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 Sept- 1995
15	Date of Execution	19 Oct- 1996
16	Date of opening of Mine	01 Nov- 1996
17	Date of first Renewal, if applicable and its period & expiry	Mining Lease was executed on 19.10.1986 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	Not Applicable
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable
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	MR. GAURAV ROY M/S, CARBORUNDUM UNIVERSAL LTD. P.B.NO-02, PORT OKHA, DIST: DEVBHUMI DWARKA
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	NA
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	23/06/1993
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Last Scheme of Mining was approved vide letter No-682(23)216/2003 MCCM(N)UDP dtd 05.12.2013 for 4yrs period 2013-14 to 2016-17
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	<b>In Million tones</b> Proved-154317 Probable-Nil	<b>In Million tones</b> Proved-154317 Probable-Nil	-
1f	General remarks of inspecting officer on geology, exploration etc.	Area not fully explored as per the provisions of MEMC Rules, 2015 & same were pointed while issuing the ROMP scrutiny.		

### **2.0 Development**

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
2a	Location of development w.r.t. lease area	Not Proposed	Not Applicable	No mining work started during the year due to lack of ore demand as reported.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Not Proposed	1 separate bench in OB-Clay- 1.5 to 2mts, 1 bench in Ore of 4 to 5Mts	Total 5 working pits are existing having different dimension
2c	Stripping ratio or ore to OB ratio	Not Proposed	1:1.12	
2d	Quantity of topsoil generation in m3	Not Proposed	Not Applicable	
2e	Quantity of overburden generation in m3	Not Proposed	Not Applicable	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Separate benches in OB were made, very thin layer of top soil noticed. Mining operations appears to be carried out in haphazard manner.		

### **3.0 Exploitation**

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
3a	Number of pits proposed for production	Not Proposed	NA	No mining work carried out during the year due to lack of ore demand as reported.
3b	Quantity of ROM mineral production proposed	Not Proposed	Nil, Dispatch-Nil	
3c	Recovery of salable/usable mineral from ROM production	Not Proposed	Nil	
3d	Quantity of mineral reject generation	Not Proposed	Nil	
3e	Grade of mineral reject generation and threshold value declared	Not Proposed	Nil	
3f	Quantity of sub-grade mineral generation	Not Proposed	Nil	
3g	Grade of sub-grade mineral generation	Not Proposed	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Not Proposed	Manual sorting	

3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not Proposed	Nil	-
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 : 2.0 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 & Tipper combination.	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Not Proposed	4-5 meters height is suitable for this method as this is shallow depth deposit	-
3m	Total area covered under excavation/pits	Not Proposed	Not Applicable	-
3n	Ore to OB ratio for the pit/mine during the year	Not Proposed	Not Applicable	-
3o	Total area put in use under different heads at the end of year	Pit: 3.96 Reclaimed & Rehabilitated - 2.883 Waste Dump-0.563	Pit: 3.96 Reclaimed & Rehabilitated -2.883 Waste Dump-0.563	-
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2013-14 : 29943 MT Yr-2014-15 39600 MT Yr-2015-16 20313 MT Yr-2016-17 40500 MT Yr -2017-18 No Proposals	Yr-2013-14 : Nil Yr-2014-15: 31855 Yr-2015-16: 64600 Yr-2016-17: 0 Yr -2017-18: 0	-
3q	General remarks of inspecting officer on method of mining etc.	Due to less demand of Bauxite ore, year wise production of ROM showing big variations in production achievement.		

#### **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)	Nil	Separate dumping of OB & mineral rejects was being carried out.	-
4b	Location of topsoil, OB & mineral reject dumps	Nil	One small dump towards south-west corner located	-
4c	Number of dumps within lease area and outside lease area	Nil	One small dump within ML area, no dumps outside ML	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Nil	Temporary dump inside ultimate pit limit	-
4e	Number of active & alive dumps	Nil	Active-1 dump Dead dump-Nil	-
4f	Number of dead dumps	Nil	Nil	-
4g	Number of dumps stabilised	Nil	Nil	-
4h	Whether Retaining wall or garland drain all along dumps are there	Nil	Nil	-
4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	-
4j	Number of settling ponds	Nil	Nil	-
4k	Specific comments of inspecting officer	OB dumps are of temporary nature with less quantity observed within ML area.		

### 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	Shallow depth mineralisation pit backfilled after complete mineral exhaustion.	-
5b	Area under backfilling of mined out area	No proposals	1.82 Ha	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposals	Concurrent use of topsoil for plantation purpose	-
5d	Total area fully reclaimed & rehabilitated	No proposals	1.82 Ha reclaimed but not fully rehabilitated.	-
5e	General remarks of inspecting officer on backfilling, reclamation etc.	No deviation observed in this regard.		

### 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	No Proposals	No work has been done on management of worked out benches.  40 plants  40,000/-	
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	- - -	- - 650 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			

### 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	No dispatched, grade wise sorting by manual means practised	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Nil	Grade-wise mineral sorting by manual means	-
7c	Different grade of mineral sorted out at mines	Nil	Yes, HG & NPG grade of Bauxite ore for captive & dispatch purposed carried out	-
7d	Any beneficiation process at mines	Not Proposed	Nil	-
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 <sub>2</sub> O <sub>3</sub> -30%).		

### 8.0 Environment

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Yes, separate removal & utilisation is being done.	-
8b	Concurrent use or storage of topsoil	-	Concurrent use of top soil for plantation purpose.	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Nil	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	Nil	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)	Nil	NA	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Nil	20 saplings have been planted during the year.	-
8g	Survival rate	Nil	50%	-
8h	Water sprinkling on roads to control airborne dust	NIL	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 A.R. submitted till the last month of inspection date	-

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	MR. Gaurav Roy appointed as Mining Engineer.	During the inspection it was advised to Mine representative to submit the AR & MR correctly for correct cost of production & Ex mine price, DMF, NMET, etc as per the guidelines in future.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Pit: 3.96 Reclaimed & Rehabilitated - 2.883 Waste Dump-0.563	
9d	Scrutiny of Annual return on afforestation	Given	40 Saplings were planted Survival rate-50%	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Not given	No mineral reject generation due to Nil production during the year	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	40% to below 45% Al <sub>2</sub> O <sub>3</sub> - Closing stock: 65781MT Abrasive-Closing stock:144.60MT	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Not given	Not given	
9i	Scrutiny of Annual return on fixed assets	NA	NA	
9k	Scrutiny of Annual return on mining machineries	Given	Tipper-15MT, Excavator-0.9CuM, Jack Hammer-RH-658/42, T	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out: -The last inspection of mine was carried out on dtd 19.10.15 and violations of rule 24 of MCDR,2017 was pointed out and this violation was rectified by the lessee vide letter No-Nil dtd 15.12.15. This inspection was carried in connection with examination of Review of Mining Plan & during the inspection violations of rules 11(1), 26(2), 28(1) & 32(1)(a) pointed out & violation letter was issued accordingly for its rectification.

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