

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of the Mine	Mahadeviya 241 bauxite mine, Survey No-241/P
1(b)	Name of Inspecting Officer & Designation	Sanjay M. Girhe, Sr. Mining Geologist
1(c)	Accompanying Mines Representatives	Sh. Sunil Patel, ME & Sh. K.S. Nagori, TQP
1(d)	Type of Inspection	Review of Mining Plan
1(e)	Date of Inspection	24.07.2018
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	4.4617 hect.- Non Forest Forest land - Nil
3	Mine Code	07GUJ07095
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	MAHADEVIYA
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	10.04.1991
15	Date of Execution	27.02.1992
16	Date of opening of Mine	06.06.1992
17	Date of first Renewal, if applicable and its period & expiry	17.02.2012
18	Date of second Renewal, if applicable and its period & expiry	Mining Lease was executed on 27.02.92 for the period of 20 years. Lessee had applied for ML renewal on 17.02.2012. As per the MMDR Amendment Rule,2015 lease period extended up to 2030.
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	17.02.2012 (50 YEARS)
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. A.K.SAHU 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 55 & carrying out their duties as per rule 56 & 44.	NA
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)(MP-333/2005)MCCM(N)UDP dtd 03.04.2006
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 MP was approved vide No-682(23)(MP-333/2005)MCCM(N)UDP dtd 06.12.2013 for 5 years period
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	2013-14- One Trial Pit 2014-15- One Trial Pit 2015-16- One Trial Pit 2016-17- One Trial Pit 2017-18- No proposals	Not done as per the proposals	-
1b	Exploration over lease area for Geological axis 1 or 2.	Not Proposed	NA	-
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not Proposed	NA	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not Proposed	NA	-
1e	Balance reserves as on 01.04.2018	Proved – 244058MT Probable- Nil	Proved-170647 MT Probable-12246 MT	-
1f	General remarks of inspecting officer on geology, exploration etc.	Most of mining lease area have explored by working pits		

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 carried out near to the mine office.	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No Proposals	Separate bench in OB 2 separate bench in mineral/ore	-
2c	Stripping ratio or ore to OB ratio	No Proposals	1.66	-
2d	Quantity of topsoil generation in m3	No Proposals	NA	-
2e	Quantity of overburden generation in m3	No Proposals	NA	-
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	There was no valid approved Mining Plan for the year 2017-18 hence no proposals were made.		

3.0 Exploitation

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
3a	Number of pits proposed for production	Not Proposed	Actual working carried out in Pit-1	-
3b	Quantity of ROM mineral production proposed	Not Proposed	1600 MT	-
3c	Recovery of salable/usable mineral from ROM production	Not Proposed	90%	-
3d	Quantity of mineral reject generation	Not Proposed	10 % of ROM	-
3e	Grade of mineral reject generation and threshold value declared	Not Proposed	Not given	-
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	Semi-mechanised mine	-
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not Proposed	NA	-

3j	Provision of drilling & blasting in mineral benches	Not Proposed	Drilling & blasting is being carried out as when required	-
3k	Provision of mining machineries in mineral benches	Semi-mechanised method of mining is being carried out by deploying excavators & dumpers		
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Not Proposed	Suitable bench height is maintained in OB & Mineral bench	-
3m	Total area covered under excavation/pits	Not Proposed	4.39 Ha	-
3n	Ore to OB ratio for the pit/mine during the year	Not Proposed	1.66	-
3o	Total area put in use under different heads at the end of year	Not Proposed	Already abandoned - 1.99Ha Current working-2.40Ha Mineral Storage-0.50 Road-0.02 Infrastructure-0.250	-
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2013-14: 33270MT Yr-2014-15: 44000MT Yr-2015-16: 45000MT Yr-2016-17: 45000MT	Yr-2013-14 : Nil Yr-2014-15 : NIL Yr-2015-16 : 73500 Yr-2016-17 : 7200 Yr-2017-18 : 1600	-
3q	General remarks of inspecting officer on method of mining etc.	ROM excavation not carried out as per the proposals.		

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)	Not Proposed	Separate dumping of OB is being carried out (150 M ³)	-
4b	Location of topsoil, OB & mineral reject dumps	Not Proposed	nil	-
4c	Number of dumps within lease area and outside lease area	Not Proposed	1 Mineral stack	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not Proposed	NA	-
4e	Number of active & alive dumps	Not Proposed	NA	-
4f	Number of dead dumps	Not Proposed	Nil	-
4g	Number of dumps stabilised	Not Proposed	Nil	-
4h	Whether Retaining wall or garland drain all along dumps are there	Not Proposed	NA	-
4i	Length of Retaining wall or garland drain all along dump	Not Proposed	Nil	-
4j	Number of settling ponds	Not Proposed	Nil	-
4k	Specific comments of inspecting officer	During inspection it was observed that one dump is active and some plantation done on old dumps and somewhere by natural means.		

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	Not Proposed	Bauxite was mined out area backfilled. There is no mineral reserve in that area	-
5b	Area under backfilling of mined out area	Not Proposed	0.3 ha	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not Proposed	Concurrent use of top for plantation purpose over backfilled area is done	-
5d	Total area fully reclaimed & rehabilitated	Not Proposed	1.68 Ha	-
5e	General remarks of inspecting officer on backfilling, reclamation etc	Some area backfilled & reclaimed by OB (Clay) but not fully rehabilitated. Some babool tress grown by natural means were observed.		

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 26(2). Details should be given in the format as given in Annexure-20.	To be submitted within stipulated time	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	Not Proposed	0.3 ha 550 m2 20 sampling 60 plants 1,18,000 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	Not Proposed	Nil	- - -
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)	Not Proposed	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 agency.		

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	No Proposals	grade-wise sorting was done within lease area for HG & NPG Bauxite	-
7b	Method of grade-wise mineral sorting i.e.	No Proposals	Manual sorting	-

	manual or mechanical			
7c	Different grade of mineral sorted out at mines	No Proposals	NPG- Non plant grade PG- Plant grade	-
7d	Any beneficiation process at mines	No Proposals	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/ore beneficiation is not proposed as the same not required. Manual sorting is being practised.		

8.0 Environment

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposals	Concurrent use of top soil for plantation	-
8b	Concurrent use or storage of topsoil	No Proposals	Yes	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposals	Yes, separate dumps are being maintained.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposals	Yes, overburden, waste rock/ rejects are being used for restoration.	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposals	NA	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	No Proposals	20 saplings planted during the year	-
8g	Survival rate	Not given	40-50% due to scarcity of water & thin cover of top soil, survival rate is low.	
8h	Water sprinkling on roads to control airborne dust	Not given	Sprinkling of water by water tanker, used to reduce dust.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Due to low plantation carried out in the area, aesthetic beauty in and around mines is not that much good.		

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 upto till the last of inspection	

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	MR. A.K.SAHU Is mentioned as appointed ME	Mining Engineer appointed as per rule 55 of MCDR,20107	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Already pit abandoned area-1.99Ha Current working-2.40Ha Mineral Storage-0.50 Road-0.02 Infrastructure-0.250	-
9d	Scrutiny of Annual return on afforestation	20 saplings	-	-

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 =84334MT Abrasive Grade-251.70MT	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Given	Cost of production is furnished as 1223/MT	-
9i	Scrutiny of Annual return on fixed assets	NA	NA	-
9k	Scrutiny of Annual return on mining machineries	Given	By deploying excavators & dumpers	-

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 27.09.13 and violations of rule 42(1)(b)(11) was pointed out. This inspection was carried out in connection with examination of Review of Mining Plan and during inspection violations of rules 11(1), 26(2), 28(1) & 32(1)(a) were pointed out and accordingly violation letter was issued on 06.09.18.
