

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1 (a)	Name of the Mine	KENEDY BAUXITE MINE S.NO 506
1(b)	Name of Inspecting officer & Designation	Sanjay M. Girhe, Sr. Mining Geologist
1(c)	Date of Inspection	02/11/2017
1(d)	Accompanying officer	
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	1.2362 HECT
3	Mine Code	07GUJ07144
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/248/2011
5	Name of the lessee, Address, phone, email and fax number	M/S SAURASHTRA CALCINE Bauxite & Allied Industries Harshad Road /P.O.-Bhatia, Ta-Kalyanpur,Dist- Devbhumi-dwarka, Ph no- 02891-233199
6	Village	KENEDY
7	Taluka/Mandal	KALYANPUR
8	District	DEVBHUMI-DWARKA
9	Pincode	361315
10	State	GUJARAT
11	Post office	BHATIA
12	Nearest police station	BHATIA
13	Nearest Railway station	BHATIA
14	Date of Grant of Mining Lease	29/11/1982
15	Date of Execution	21/05/1983
16	Date of opening of Mine	
17	Date of first Renewal, if applicable and its period & expiry	Lessee had applied for first ML renewal on dtd- 01/12/1997 and matter pending at State Govt. level 30/01/2002
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	Lessee had applied for first ML renewal on dtd- 29/10/2002 for next 20 years. As per MMDR Amendment Act,2015 letter for ML extension consideration is received to lessee from District Geologist
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	SHRI DWARKADAS RAICHURA Harshad Road /P.O.-Bhatia, Ta-Kalyanpur,Dist- Devbhumi-dwarka, Ph no- 02891-233199
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	SHRI GULABBHAI PABARI Harshad Road /P.O.-Bhatia, Ta-Kalyanpur,Dist- Devbhumi-dwarka, Ph no- 02891-233199
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	NA
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sh. Nainesh Gandhi is working as Mining Engineer
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	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)- 558/2007MCCM(N)UDP dtd 30.11.2007 for five year period.

26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Scheme of Mining was approved vide letter No-682(23)MS-558/2007 (N) UDP dtd 07.05.2014 for 5 year period.
27	Mineral(s) granted in lease and proved for mining	Bauxite
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanised, Others or Manual)	Others
30	Captive/Non Captive	Captive

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

Exploration

SN	Item	Proposals (2016-17)	Actual work	Remarks
1a	Backlog of previous year	Not Proposed	Area is very small having one working pit located in central portion. Entire area appears to be mineralised.	exploration by working pit & trial pits done
1b	Exploration over lease area for Geological axis 1 or 2.	No Proposals	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No Proposals	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal for exploration to bring Geological axis 1 or 2	Nil	
1e	Balance reserves as on 01.04.2017	<u>Balance Reserves as on Scheme of Mining 2014-15 to 2017-18</u> Proved (111)-79484MT Pre-feasibility-15295MT	<u>Balance Reserves as on 01.04.17</u> Proved (111)-40221MT Probable(121)-7600MT Pre-feasibility-15295MT	As per Annual Return 2016-17
1f	General remarks of inspecting officer on geology, exploration etc.	Shallow depth Bauxite mineralisation of 5 to 6 mts where exploration by trial pit serve the purpose.		

2.0 Development

SN	Item	Proposals (2016-17)	Actual work	Remarks
2a	Location of development w.r.t. lease area	Working was proposed along section M-M' west of strip-II.	Working carried out as per the proposed location but partly deviated due less production	Production proposed - 7963MT & Production achieved-7560MT during 2016-17
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate bench for top soil proposed	Separate bench working being carried out	No OB in the area
2c	Stripping ratio or ore to OB ratio	1:0.17	1:18	Top soil as OB
2d	Quantity of topsoil generation in m ³	546 CuM Top Soil	521 CuM	
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.	No overburden occurred in the area and 5% of total ROM which has clayish material is considered as waste.		

3.0 Exploitation

SN	Item	Proposals (2016-17)	Actual work	Remarks
3a	Number of pits proposed for production	Proposed in 1 Pit only	Achieved in 1 Pit only	
3b	Quantity of ROM mineral production proposed	7963 MT	7560 MT	
3c	Recovery of saleable/usable mineral from ROM production	High Grade Bauxite-20% (Al ₂ O ₃ >50%) Low grade Bauxite 80% (Al ₂ O ₃ >35%) Abrasive & Refractory grade	More or less achieved as per the proposals	Recovery from total ROM
3d	Quantity of mineral reject generation	No Proposals	Nil	
3e	Grade of mineral reject generation and threshold value declared	No Proposals	Nil Nil	
3f	Quantity of sub-grade mineral generation	No Proposals	Nil	
3g	Grade of sub-grade mineral generation	No Proposals	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Proposed Manual	Manual	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposals	Nil	
3j	Provision of drilling & blasting in mineral benches	No Proposals	Nil	
3k	Provision of mining machineries in mineral benches	JCB-0.3cft/m Tipper-15MT Jack Hammer-32	JCB-0.3cft/m Tipper-15MT Jack Hammer-32	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	1 Bench of 5Mts height proposed in Bauxite. No OB in the area	Height of Bench in Ore-5 Mts	
3m	Total area covered under excavation/pits	0.5150Ha	0.3327Ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.17	1:18	
3o	Total area put in use under different heads at the end of year	Pit- 0.4620Ha Infrastructure-0.005 Green belt-0.0200	Pit- 0.3327Ha Mineral Storage-0.0900 Road-0.1242	
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2013-14 Yr-2014-15 8032 Yr-2015-16 8050 Yr-2016-17 7963 Yr-2017-18 7980	Yr-2013-14 Yr-2014-15 25 Yr-2015-16 6790 Yr-2016-17 7560 Yr-2017-18 up to 7830	ROM Production as per approved documents
3q	General remarks of inspecting officer on method of mining etc.	Violation of rules 11(1), 33 & 45(5)(b) of MCDR, 2017 pointed for rectification.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2016-17)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Concurrent use of OB top soil & waste proposed.	Concurrent OB top soil & waste used.	Simultaneous backfilling
4b	Location of topsoil, OB & mineral reject dumps	It was proposed that the waste generated during scheme period will be backfilled in central and western part of the mined out area	centre central & western part	Top soil is as overburden
4c	Number of dumps within lease area and outside lease area	Not proposed	Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not proposed	NA	
4e	Number of active & alive dumps	Nil	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	Nil		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (2016-17)	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Backfilling by waste material proposed in mine out area where ore completely exhausted.	Backfilling by waste material is done in mine out area where ore is completely exhausted.	Backfilling by waste material proposed in mine out area where ore completely exhausted.
5b	Area under backfilling of mined out area	Proposed 212 CuM	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent use of topsoil for restoration or rehabilitation proposed	Concurrent use of topsoil is done as proposed.	
5d	Total area fully reclaimed & rehabilitated	212 CuM proposed for backfilling	Nil	Not done as some bauxite ore was still existing at proposed location
5e	General remarks of inspecting officer on backfilling, reclamation etc	Nil		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals (2016-17)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details	Last day for submitting Annual Return was 31 st July of every year	Yes submitted within stipulated time limit.	

	should be given in the format as given in Annexure-20.			
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	Nil	
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	- - - 0.0212 Ha 0.0050 - 0.0698 100M Fencing	0.0212 Ha - 100 M Fencing	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Not Proposed	Nil	No waste land existed in ML area
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Ambient Air Quality, Water Quality, Noise Quality monitoring proposed	Monitoring carried in core as well as buffer zone.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Environmental quality monitoring works was entrusted to the outsourced consultant & relevant reports were produced during site inspection.		

7.0 Mineral Conservation

SN	Item	Proposals (2016-17)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise despatch proposed.	Bauxite is being dispatched grade wise, 115.80 MT Cement Grade despatched	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	Grade wise hand sorting of Bauxite ore within mining lease proposed	Bauxite is hand sorted within the quarry for different grade, such as a abrasive grade , refractory grade, ceramic grade, cement grade (NPG)	
7d	Any beneficiation process at mines	No beneficiation process is proposed	No beneficiation process is proposed	

7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Mineral/ore is being conserved judiciously as the ore utilised up to the threshold value i.e. 30% Al ₂ O ₃
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8.0 Environment

SN	Item	Proposals (2016-17)	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	The top soil to be generated during 2016-17 scheme period was proposed to spread on backfilled area.	The top soil generated during 2016-17 scheme period was used to spread on already backfilled area.	
8b	Concurrent use or storage of topsoil	Concurrent use of topsoil proposed during the year	The top soil generated during 2016-17 scheme period was used to spread on already backfilled area.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Concurrent use of topsoil proposed during the year hence separate dumping not proposed.	The top soil generated during 2016-17 of scheme period was used to spread on already backfilled area.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Use of waste & overburden proposed to be backfilled	Use of waste & overburden proposed to be backfilled	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	In the approved mining scheme it was proposed that the mined out land will be backfilled.	In the approved mining scheme it was proposed that the mined out land will be backfilled.	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	10 saplings were proposed to be planted over 50M ² area within ML	10 saplings were planted over 50M ² area within ML, Cumulative saplings planted not given	
8g	Survival rate	NA	NA	
8h	Water sprinkling on roads to control airborne dust	It was proposed to sprinkling water on haul road.	sprinkling water on haul road being carried out	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Environmental quality monitoring was entrusted to the outsourced consultant & all relevant reports were produced during inspection		

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Online Monthly and Annual returns	M.R. Submitted upto till date A.R. submitted for the year- 2016-17 within stipulated time	

S. N.	Item	Details GIVEN in A.R.2016-17	OBSERVATION OF / OFFICER	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	NA	NA	
9c	Scrutiny of Annual return on land use pattern for area	Pit-0.500 Ha Reclaimed &	Area some how not matching with the figures given in AR	

	under pits, reclaimed area, dumps etc.	Rehabilitated-0.130 Waste Dump-0.140 Infrastructure-0.005 Other -0.130		
9d	Scrutiny of Annual return on afforestation	40 saplings planted within mining lease & survival rate is given as 40%	Survival rate was appeared to be low during site inspection.	It was advised to the mine representative s present in the inspection to submit the online AR & MR meticulously and furnished the correct figures on Ex-mine price/Cost of production, etc.
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	Closing stock Cement Grade-13172MT Refractory-1195	Ore was stocked within Mining lease.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cement Grade-820/MT Refractory-550/MT Cost of production-932/MT	Cement Grade-820/MT Refractory-550/MT Cost of production-932/MT	
9i	Scrutiny of Annual return on fixed assets	NA	NA	
9k	Scrutiny of Annual return on mining machineries	JCB-0.3cft/m Tipper-15MT Jack Hammer-32	JCB-0.3cft/m Tipper-15MT Jack Hammer-32	

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 23.01.2009 and violations of rules 13(1) and 23E(2) were observed and these violation rectified by the lessee vide letter No-Nil dtd 07.04.2009. This inspection was carried out in connection with Review of Mining Plan and during the inspection violation of rules 11(1), 33 & 45(5)(b) of MCDR,2017 were pointed for its rectification and violation letter was issued on dt 22.12.2017.
