

Regional office: Gandhinagar

File no: GUJ/JMNG/ BXT-36

MCDR INSPECTION REPORT

Inspecting officer: Dr. N K Mathur, AMG, Gandhinagar

Inspection date: 22.04.2018, Type of Inspection: Review of Mining Plan

1.0 GENERAL

SN	Particulars	Details	
1	Name of the Mine	Pillidhar Bauxite Mines	
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Area under lease (hectares)	121.4054
		Under Forest (hectares)	0.0000
		Outside Forest (hectares)	121.4054
3	Mine code	07GUJ 07097	
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/1077/2011	
5	Name of the lessee, Address, phone, email and fax number	M/s. Dalmia Refractories Limited (Formerly, Shri Nataraj Ceramic And Chemical Ind. Ltd.) Post Box No. 10 at & Po Khambhalia, Dist : Devbhumi Dwarka, Gujarat Phone No.: 098252 08605 E-mail : k.sanjaykumar@dalmiaocl.com Fax No.: Nil	
6	Village	Dharampur	
7	Taluka/Mandal	Jam - Khambhalia	
8	District	Devbhumi Dwarka	
9	Pincode	361305	
10	State	Gujarat	
11	Post office	Jam - Khambhalia	
12	Nearest police station	Jam - Khambhalia	
13	Nearest Railway station	Jam - Khambhalia	
14	Date of Grant of Mining Lease	07.07.1979	
15	Date of Execution	16.10.1979	
16	Date of opening of Mine	11.02.1991 (Opening Date)	
17	Date of first Renewal, if applicable and its period & expiry	Dated: 03.11.1998 in time for further 20 Years.	
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	Dated: 03.11.1998 in time for further 20 Years.	

20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Sameer Nagpal, Nominated Owner, Connaught Place, 4, Scindia House, New Delhi – 110 001. Phone : 011-123465308, E-mail : nagpal.sameer@dalmiabharat.com Fax : 91 – 11 - 23324136 Date of appointment in mines 11.03.2016
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri UM Moorthy, Agent of Mines Dalmia Refractories Limited, At : Dalmiapuram, P.O. Kallakudi – 621 651, Dist.: Tiruchirapalli, Tamil Nadu, Phone : 04329 - 235188, 09842435144 E-mail : um.moorthy@dalmiaocl.com Fax : (04329) 235122 Date of appointment in mines 10.01.2016
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Sanjay Kumar Tiwari, Mines Manager Dalmia Refractories Limited (Shri Nataraj Ceramic and Chemical Ind. Ltd.), Post Box No. 10 at & Po Khambhalia, Dist : Devbhumi Dwarka, Gujarat 361 305. Phone : 09825126624, E-mail : Tiwari.sanjay1@dalmiaocl.com Date of appointment in mines 09.07.2013.
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Sanjay Kumar Tiwari, Mines Manager Dalmia Refractories Limited (Shri Nataraj Ceramic and Chemical Ind. Ltd.) Post Box No. 10 at & Po Khambhalia, Dist : Devbhumi Dwarka, Gujarat 361 305. Phone : 09825126624, E-mail : Tiwari.sanjay1@dalmiaocl.com Date of appointment in mines 09.07.2013.
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes
25	Date of Approval of Mining Plan / Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Dt. 30.06.1999 684(4) (1)/MP-134/2018-GNR dt. 29.05.2018
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	682(23) MS - 499/2009 MCCM (N) UDP and letter dated 27/09/2004 682(23) MS - 499/2009 MCCM (N) UDP and letter dated 08/07/2014
27	Mineral(s) granted in lease and proved for mining	Bauxite
28	Method of Mining(Open cast, Underground)	Open cast Working
29	Category (Fully Mechanised, Others or Manual)	Semi mechanised
30	Captive/Non Captive	Captive

1.0 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	Nil	Nil	Nil

1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Nil	47 Bore holes (466 Mtrs.) Balance lease hold area in FY - 17.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	M/s. stratum Geo Services & Rs.790000 in FY-17
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Nil	47 Bore holes (466 Mtrs.) Balance lease hold area in FY - 17.
1e	Balance reserves as on 01.04.2018	6404929 MT	111: 4221173 MT 121 : 310137 MT 221 and 222 : 1521039 MT 333 : 352580 MT	
1f	General remarks of inspecting officer on geology, exploration etc.	Violation under provision of rules 11(1) &13 pointed out by SMG on dt. 02.01.2018 for rectification.		

2.0 Development

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
2a	Location of development w.r.t. lease area	X-X', C-C' & Y-Y' and Z-Z'	Y-Y' and Z-Z'	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	OB : 04 ORE : 02	OB : 04 ORE : 02	
2c	Stripping ratio or ore to OB ratio	1:3	1:2.5	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	144300	34305	Due to EC
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Violation under provision of rules 11(1) &13 pointed out by SMG on dt. 02.01.2018 for rectification.		

Note : Environment Clearance already taken by Lessee on 27th August 2007 Vide Govt. Clearance Order No: J – 11015/168/2006 – IA. II (M) From Ministry of Environment & Forests, New Delhi for 80000 ROM per Annum for 300000 pending for amendment.

3.0 Exploitation

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
3a	Number of pits proposed for production	Five Pit	Two Pit	

3b	Quantity of ROM mineral production proposed	300076 tonne	79955 tonne	Due to EC
3c	Recovery of salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No Proposal	No Proposal	
3e	Grade of mineral reject generation and threshold value declared	Threshold value= $Al_2O_3 \geq 30\%$ and $SiO_2 \leq 5\%$	NIL	
3f	Quantity of sub-grade mineral generation	255065 MT	61381 MT	Less Due to EC
3g	Grade of sub-grade mineral generation	$Al_2O_3 : 42\%$	$Al_2O_3 : 42\%$	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposal	Not applicable	
3j	Provision of drilling & blasting in mineral benches	Manual Drill (32mm Dia)	Manual Drill (32mm Dia)	
3k	Provision of mining machineries in mineral benches	Excavator-01 Tipper-04	Excavator-01 Tipper-04	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	YES	YES	
3m	Total area covered under excavation/pits	8.15	0.6705	
3n	Ore to OB ratio for the pit/mine during the year	1:4	1:2.5	
3o	Total area put in use under different heads at the end of year	Pit-10.2973ha OB Dump : 0.3918 Mineral storage/sub-grade stack : 2.25 Infrastructure & building, etc.) : 2.4802	Pit-22.2807 ha OB Dump : 0.3918 Mineral storage/sub-grade stack : 2.25 Infrastructure & building, etc.) : 2.4802 Reclaim & Rehabilitated Area : 5.9647	
3p	Production of ROM mineral during last five-year period, as applicable	Yr-(2013-14)- 300000MT	51057MT	Less Due to EC
		Yr-(2014-15)-300000MT	78838 MT	Less Due to EC

		Yr-(2015-16)- 300000MT	79912MT	Less Due to EC
		Yr-(2016-17)- 300000MT	79968 MT	Less Due to EC
		Yr-(2017-18)- 300000MT	79955 MT	Less Due to EC
3q	General remarks of inspecting officer on method of mining etc.	Violation under provision of rules 11(1) &13 pointed out by SMG on dt. 02.01.2018 for rectification.		

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)	OB and waste generated during mining scheme period will be backfilled in southern and northern part of the mined out area	Backfilled Area	
4b	Location of topsoil, OB & mineral reject dumps	No Proposal	NA	
4c	Number of dumps within lease area and outside lease area	One Old dump present	Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	
4e	Number of active & alive dumps	Nil	Nil	
4f	Number of dead dumps	One	Nil	
4g	Number of dumps stabilised	One	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	No Proposal	Nil	
4i	Length of Retaining wall or garland drain all along dump	No Proposal	Nil	
4j	Number of settling ponds	No Proposal	Nil	
4k	Specific comments of inspecting officer	Violation under provision of rules 11(1) &13 pointed out by SMG on dt. 02.01.2018 for rectification.		

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	Nil	NIL	
5b	Area under backfilling of mined out area	Nil	0.29 Hac.	

5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Topsoil to be utilised on backfilled area.	Topsoil to be utilised on backfilled area.	
5d	Total area fully reclaimed & rehabilitated	5.9647 Ha	5.9647 Ha	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Violation under provision of rules 11(1) &13 pointed out by SMG on dt. 02.01.2018 for rectification.		

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.	As per Proposal submitted	Submitted in time	
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (ha)	No Proposal	0.29 Ha	
	ii) Afforestation done (ha)		0.29 Hac	
	iii) No. of saplings planted during the year		1400 Nos.	
	iv) Cumulative no. of plants		21150 Nos.	
	v) Any other specific method of rehabilitation			
	vi) Cost incurred on watch & care during the year		4 Lac.	
6c	Compliance on reclamation and rehabilitation by backfilling			
	i) Voids available for backfilling (L X B X D)	Nil	0.29	
	ii) Void filled by waste/tailings	Nil	0.29	
	iii) Afforestation on the backfilled area	Nil	Nil	
	iv) Rehabilitation by making water reservoir	Nil	0.29	
	v) Any other specific means (Fencing)	Fencing-100 Meter	100 Meter	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No Proposal	No Proposal	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air- 01 Water-01 Noise-01	Air- 04 Water-04 Noise-04	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Violation under provision of rules 11(1) &13 pointed out by SMG on dt. 02.01.2018 for rectification.		

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	Proposal made for manual sorting and sizing. ROM 300076 MT	18574 MT	Refractory Grade Bauxite Dispatches for Captive Use only.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	Refractory & Non Refractory Grade	Refractory & Non Refractory Grade	
7d	Any beneficiation process at mines	Only manual sorting and sizing.	Only manual sorting and sizing.	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Violation under provision of rules 11(1) & 13 pointed out by SMG on dt. 02.01.2018 for rectification.		

8.0 Environment

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposal made for the separate removal and spreading of top soil on the backfilled area.	Separate removal and spreading of top soil on the backfilled area.	
8b	Concurrent use or storage of topsoil	In approved MP soil was proposed to spread on backfilled area.	Soil was proposed to spread on backfilled area for plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposal for no external dump of overburden and waste rock	No external dump of overburden and waste rock.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposal made for the backfilling of overburden/waste rock into the mined out pit.	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Part of the mineral exhausted pit to be backfilled and remaining part to be converted into water reservoir	Part of the mineral exhausted pit to be backfilled	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Plantation will be done on backfilled land & in statutory barrier. The species Neem Gulmohar and other local species will be planted. person will be deputed for post plantation care such as watering, manuring etc.	Local species has been planted on the backfilled area and post plantation care such as watering and manuring etc. Being done regularly.	
8g	Survival rate	50%	46.85%	

8h	Water sprinkling on roads to control airborne dust	Water to be sprinkled on the haul road to suppress the dust being getting airborne	Hired Basis Mobile water tankers have been deployed for the purpose.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Environment control parameters are under control.		

9.0 Compliance of Rule 45

S.N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted up to – Mar-2018 A.R. submitted up to- year 2016-2017	

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	NIL	Check & found in order	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	NIL	Check & found in order	NIL
9d	Scrutiny of Annual return on afforestation	NIL	Check & found in order	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NIL	Check & found in order	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL	Check & found in order	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	NIL	Check & found in order	NIL
9i	Scrutiny of Annual return on fixed assets	NIL	Check & found in order	NIL
9k	Scrutiny of Annual return on mining machineries	NIL	Check & found in order	NIL

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out: -

Violation under provision of rules 11(1) &13 pointed out by SMG on dt. 02.01.2018 for rectification. Mine owner complied the violation of all the rules.

Place Gandhinagarr

Name: Dr N. K. Mathur

Signature

Date 16-07-2018

Designation: AMG

