

# INSPECTION REPORT

## 1.0 GENERAL

SN	Particulars	Details	
1(a)	Name of the Mine	<b>Pillidhar Bauxite Mines</b>	
1(b)	Name of Inspecting Officer & Designation	Shri PushpendraGour , Regional Controller of Mines	
1(c)	Accompanying Mines Representatives	Sanjay Kumar Tiwari	
1(d)	Type of Inspection	<b>MCDR – 2017 &amp; STAR RATING 2021 – 22.</b>	
1(e)	Date of Inspection	<b>18.12.2022</b>	
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	<b>Area under lease (hectares)</b>	<b>121.4054</b>
		<b>Under Forest (hectares)</b>	<b>0.0000</b>
		<b>Outside Forest (hectares)</b>	<b>121.4054</b>
3	Mine code	<b>07GUJ 07097</b>	
4	IBM Registration Number under rule 45 of MCDR, 1988	<b>IBM/1077/2011</b>	
5	Name of the lessee, Address, phone, email and fax number	<b>M/s. Dalmia Refractories Limited</b> <b>Post Box No. 10 at &amp; Po Khambhalia, Dist :</b> <b>DevbhumiDwarka, Gujarat</b> <b>Phone No.: 098252 08605</b> <b>E-mail : <a href="mailto:k.sanjaykumar@dalmiaocl.com">k.sanjaykumar@dalmiaocl.com</a></b> <b>Fax No.: Nil</b>	
6	Village	Dharampur	
7	Taluka/Mandal	Jam - Khambhalia	
8	District	DevbhumiDwarka	
9	Pincode	361 305	
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	<b>07.07.1979</b>	
15	Date of Execution	<b>16.10.1979</b>	
16	Date of opening of Mine	<b>11.02.1991 (Opening Date)</b>	
17	Date of first Renewal, if applicable and its period & expiry	<b>Applied for Renewal vide his letter No: Snccl / KmbI / Mines / Renewal / 98 / 05192(A) Dated: 05.10.1998 and Application received in Form D Vide No: ADGM / ML / Renewal / 969 / 13982, Dated: 03.11.1998 in time for further 20 Years.</b>	
18	Date of second Renewal, if applicable and its period & expiry	<b>Not Applicable</b>	
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	<b>Applied for Renewal vide his letter No: Snccl / KmbI / Mines / Renewal / 98 / 05192(A) Dated: 05.10.1998 and Application received in Form D Vide No: ADGM / ML / Renewal / 969 / 13982, Dated: 03.11.1998 in time for further 20 Years.</b>	

20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	<b>Shri Sameer Nagpal</b> <b>Nominated Owner / Occupier</b> <b>4, Scindia House, Connaught Place,</b> <b>New Delhi – 110 001.</b> <b>Phone : 011-123465308,</b> <b>E-mail : <a href="mailto:nagpal.sameer@dalmiabharat.com">nagpal.sameer@dalmiabharat.com</a></b> <b>Fax : 91 – 11 - 23324136</b> <b>Date of appointment in mines 11.03.2016</b>
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	<b>Shri Sanjay Kumar Kaushik</b> <b>Agent of Mines</b> <b>Dalmia Refractories Limited (Shri Nataraj Ceramic and Chemical Ind. Ltd.)</b> <b>Post Box No. 10 at &amp; Po Khambhalia, Dist :DevbhumiDwarka, Gujarat 361 305.</b> <b>Phone : 09825208605,</b> <b>E-mail : <a href="mailto:k.sanjaykumar@dalmiaocl.com">k.sanjaykumar@dalmiaocl.com</a></b> <b>Date of appointment in mines 18.12.2018.</b>
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	<b>Shri Sanjay Kumar Tiwari</b> <b>Mines Manager</b> <b>Dalmia Refractories Limited (Shri Nataraj Ceramic and Chemical Ind. Ltd.)</b> <b>Post Box No. 10 at &amp; Po Khambhalia, Dist :DevbhumiDwarka, Gujarat 361 305.</b> <b>Phone : 09825126624,</b> <b>E-mail : <a href="mailto:Tiwari.sanjay1@dalmiaocl.com">Tiwari.sanjay1@dalmiaocl.com</a></b> <b>Date of appointment in mines 09.07.2013.</b>
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	<b>Shri Sanjay Kumar Tiwari</b> <b>Mining Engineer (B.E. Mining)</b> <b>Total Experience :- 16 Years</b> <b>Dalmia Refractories Limited (Shri Nataraj Ceramic and Chemical Ind. Ltd.)</b> <b>Post Box No. 10 at &amp; Po Khambhalia, Dist :DevbhumiDwarka, Gujarat 361 305.</b> <b>Phone : 09825126624,</b> <b>E-mail : <a href="mailto:Tiwari.sanjay1@dalmiaocl.com">Tiwari.sanjay1@dalmiaocl.com</a></b> <b>Date of appointment in mines 09.07.2013.</b>
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	<b>Yes</b> <b>Shri Sanjay Kumar Kaushik, Geologist</b> <b>Shri Sanjay Kumar Tiwari, Mining Engineer</b>
25	Date of Approval of Mining Plan / Modified Mining Plan with five-year period and specific condition in approval letter, if any.	<b>Review of Mining Plan with approved Number 684(4)(1) / MP - 214/2019 MCCM (N) UDP and letter dated 09/04/2019, period- 2019-20 to 2023-24. No Specific Condition</b>
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	<b>Not Applicable</b>
27	Mineral(s) granted in lease and proved for mining	<b>Bauxite</b>
28	Method of Mining(Opencast, Underground)	<b>Opencast Working</b>
29	Category (Fully Mechanised, Others or Manual)	<b>Category - A</b>
30	Captive/Non Captive	<b>Captive</b>

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

SN	Item	Proposals (2021 - 22)	Actual work (2021 - 22)	Remarks
1a	Backlog of previous year	No proposal	No proposal	No proposal
1b	Exploration over lease area for Geological axis 1 or 2.	No proposal	No proposal	No proposal
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No proposal	No proposal	No proposal
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	No proposal	No proposal
1e	Balance reserves as on 01.04.2022	6161635 MT	111: 3907879 MT	
			121 : 310137 MT	
			221 and 222 : 1521039 MT	
			333 : 352580 MT	
1f	General remarks of inspecting officer on geology, exploration etc.	Satisfied		

**2.0 Development**

SN	Item	Proposals (2021 - 22)	Actual work (2021 - 22)	Remarks
2a	Location of development w.r.t. lease area	N280-N409,W1244-W1182,N628-N678,W300-W46,N222-N364,W67-W180,S05-S63,E41-W18,S100-S406,E468-E312	N628-N678,W300-W46 (B2)  S100-S406,E468-E312 (E1)	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	OB : 03 ORE : 02	OB : 03 ORE : 02	
2c	Stripping ratio or ore to OB ratio	1:0.62	1:0.3.44	
2d	Quantity of topsoil generation in m3	1715.00	1715.00	Used in Plantation on back filled area
2e	Quantity of overburden generation in m3	82488.00	20010.00	Less Due to EC
<p><i>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 &amp; Forests, New Delhi for 80000 Mt. ROM per Annum. EC for 300000 Mt. is pending for further amendment.</i></p>				
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	NA		

### 3.0 Exploitation

SN	Item	Proposals (2021 - 22)	Actual work (2021 - 22)	Remarks
3a	Number of pits proposed for production	Five Pit	Two Pit	
3b	Quantity of ROM mineral production proposed	300772 Mt.	79885 Mt.	Less Due to EC
3c	Recovery of saleable / usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No Proposal	Nil	
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	255656 MT	59865 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	19.03 Ha.	Within the previous proposal.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.62	OB removal 20010(1:0.25)	
3o	Total area put in use under different heads at the end of year	Pit-19.8787 Ha. OB Dump: 0.3918Ha. Mineral storage/sub-grade stack: 3.610 Ha. Infrastructure & building, etc.): 2.4802 Ha. Reclaim & Rehabilitated Area: 8.9647 Ha.	Pit-18.609 Ha. OB Dump : 0.3918 Mineral storage / sub-grade stack: 3.610 Ha. Infrastructure & building, etc.): 2.4802 Ha. Reclaim & Rehabilitated Area: 7.011 Ha.	

3p	Production of ROM mineral during last five-year period, as applicable	Yr-(2017-18)- 300000MT	79955 MT	Less Due to EC
		Yr-(2018-19)- 300000MT	77730 MT	Less Due to EC
		Yr-(2019-20)- 300000MT	75844 MT	Less Due to EC
		Yr-(2020 - 21)- 300000MT	79835 MT	Less Due to EC
		Yr-(2021 - 22)- 300000MT	79885 MT	Less Due to EC
<i>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 &amp; Forests, New Delhi for 80000 Mt. ROM per Annum. EC for 300000 Mt. is pending for further amendment.</i>				
3q	General remarks of inspecting officer on method of mining etc.	NA		

#### **4.0 Solid Waste Management-Dumping**

SN	Item	Proposals (2021 - 22)	Actual work (2021 - 22)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	OB and Waste generated during the period will be back filled in proposed part of the mined out area	Backfilling not found as per MP	
4b	Location of topsoil, OB & mineral reject dumps	No Proposal	Asked for Corrected Drone data	
4c	Number of dumps within lease area and outside lease area	One Old dump present	Asked for Corrected Drone data	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Asked for Corrected Drone data	
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	Nil		

### 5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (2021 - 22)	Actual work (2021 - 22)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting back filling	Nil	NIL	
5b	Area under back filling of mined out area	0.9889	No backfilling evident very clearly, drone data asked, which was not clear	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Top soil to be utilised on back filled area.	Top soil to be utilised on back filled area.	For Plantation
5d	Total area fully reclaimed & rehabilitated	8.9647 Ha	Under process	
5e	General remarks of inspecting officer on backfilling, reclamation etc	NA		

### 6.0 Progressive Mine Closure Plan

SN	Item	Proposals (2021 - 22)	Actual work (2021 - 22)	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 on	
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (ha)	No Proposal	0.48 Ha	
	ii) Afforestation done (ha)		0.48 Hac	
	iii) No. of saplings planted during the year		1500 Nos.	
	iv) Cumulative no. of plants		27150 Nos.	
	v) Any other specific method of rehabilitation		No	
	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)	0.9889	0	
	ii) Void filled by waste/tailings	85000	Nil	
	iii) Afforestation on the back filled area	0.9889	Nil	
	iv) Rehabilitation by making water reservoir	1. Ha.	Nil	Pit filled with

				water, may be due to precipitation.
	v) Any other specific means (Fencing)	Fencing-324 Meter	Less than proposed	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	1. 1250 Nos. 2. Within 8 Ha. 3. Simultaneous backfilling & Plantation	1. 1500 Nos. 2. Within 7.0110 Ha.	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air- 01 Water-01 Noise-01	Air- 01 Water-01 Noise-01	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Found satisfactory.		

### **7.0 Mineral Conservation**

SN	Item	Proposals (2021 - 22)	Actual work (2021 - 22)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposal made for manual sorting and sizing. PG – 45116 MT NPG – 255656 MT ROM 300772 MT	PG – 20020.005 MT NPG – 59865.223 MT ROM 79885.229 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 beatification process at mines	No Proposal	Nil	
<p><i>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 &amp; Forests, New Delhi for 80000 Mt. ROM per Annum. EC for 300000 Mt. is pending for further amendment.</i></p>				
7e	General remarks of inspecting officer on Mineral conservation & beatification issues	NA		

## 8.0 Environment

SN	Item	Proposals (2021 - 22)	Actual work (2021 - 22)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and spreading of top soil on the backfilled area.	Done	
8b	Concurrent use or storage of topsoil	As Above	For plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposal	Nil	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Part of the Mined out area to be backfilled and remaining part to be converted into water reservoir	Backfilled 7.0110 Ha. 16.2757 Ha. Area available for water reservoir	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Plantation will be done on backfilled land & in statutory barrier. The species NeemGulmohar and other local species will be planted. person will be deputed for post plantation care.	Local species has been planted on the backfilled area and post plantation care is carried out on regular basis.	
8g	Survival rate	50%	98%	Cum. 58.67%
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 is using & deploying on regular basis.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	NA		



## 9.0 Compliance of Rule 45

S.N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted up to – Nov - 2022 A.R. submitted up to- year 2021 - 2022	

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

10- In previous inspection dt. 17-07-2021, Rule 26(2) and 45(7) found to be violated.

In this inspection, Rule 11(1), Rule 33 read with 31(4) and Rule 34A(1) read with rule 34A(5) found to be violated.