

## MCDR Inspection Report

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### 1.0 GENERAL

SN	Particulars	Details
1(a)	Name of the Mine	Zinzarka Limestone Mine
1(b)	Name of Inspecting Officer & Designation	SnehalKumar Patel Asst. Mining Engineer
1(c)	Accompanying Mines Representatives	Sh. D. K. Singh, Mines Manager
1(d)	Type of Inspection	MCDR/Star Rating
1(e)	Date of Inspection	03-08-2022
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	24.28 Ha (Non-Forest Area- 24.28 Ha, Forest Area- Nil)
3	Mine code	38GUJ21051
4	IBM Registration Number under rule 45 of MCDR, 2017	IBM/265/2011
5	Name of the lessee, Address, phone, email and fax number	M/S Saurashtra Chemicals Division of Nirma Ltd, Birla Sagar, Porbandar-360576, Phone No: 0286 2242479/80/81, Fax-0286 2245431, quarry_pbr@nirma.co.in
6	Village	Boricha
7	Taluka/Mandal	Porbandar
8	District	Porbandar
9	Pin-code	360545
10	State	Gujarat
11	Post office	Boricha
12	Nearest police station	Bagvadar
13	Nearest Railway station	Ranavav
14	Date of Grant of Mining Lease	30.11.1985
15	Date of Execution	08.06.1988 for 20 year
16	Date of opening of Mine	05.03.2022
17	Date of first Renewal, if applicable and its period & expiry	Lease was transferred vide Govt.of Gujarat order no: MCR-1589(S-54)-2164-CHH dated 24.11.1992
18	Date of second Renewal, if applicable and its period & expiry	Lease was extended up to 07.06.2038 vide order no: MCR/1589(S-34)2164/CHH dated 02.07.2020 of IMD Govt. of Gujarat
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	N.A
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shailesh V Sonara, Nirma Ltd, Nirma House, Ashram Road, Ahmedabad Phone No: 079 27546222, Fax-079 27546603, Email: mines@nirma.co.in
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Manish D Patel, M/S Saurashtra Chemicals Division of Nirma Ltd, Birla Sagar, Porbandar-360576, Phone No: 0286 2242479/80/81, Fax-0286 2245431, quarry_pbr@nirma.co.in
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Rakesh P Patel M/S Saurashtra Chemicals Division of Nirma Ltd, Birla Sagar, Porbandar-360576, Phone No: 0286 2242479/80/81, Fax-0286 2245431, quarry_pbr@nirma.co.in
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Agnivesh Singh Rathor, B.E.Mining Engg., M/S Saurashtra Chemicals Division of Nirma Ltd, Birla Sagar, Porbandar-360576, Phone No: 0286 2242479/80/81, Fax-0286 2245431, quarry_pbr@nirma.co.in, Date of appointment:05.03.2022
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.	17.06.2019 2019-20 to 2022-23

26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	N.A
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	OTFM
30	Captive/Non Captive	Captive

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

1.0 Exploration				
SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
1a	Backlog of previous year	No backlog of previous year 2020-21	NA	
1b	Exploration over lease area for Geological axis 1 or 2.	9 PBH 119 Total meterage	9 DTH hole drilled	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Proposed	Exploration done in House	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Proposed	Area covered under G1 exploration is about 6.72 Ha. G2-12.93 Ha. G3-4.62 Ha.	
1e	Balance reserves as on 01.04.2022	Proposed	111- 392981 T 121-1061160 T 221- 125886 T 222- 841004 T 333- 4550560 T	
1f	General remarks of inspecting officer on geology, exploration etc.	The lease area is developed by open pit & core drilling done in this year & further exploration proposed in depth wise.		

**2.0 Development**

SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
2a	Location of development w.r.t. lease area	Pit-1	Pit-1	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	3 Bench	03 Bench	
2c	Stripping ratio or ore to OB ratio	1:0	1:0	
2d	Quantity of topsoil generation in m3	No	NA	
2e	Quantity of overburden generation in m3	No	NA	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Satisfactory.		

**3.0 Exploitation**

SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
3a	Number of pits proposed for production	02 Pits	02 Pits	
3b	Quantity of ROM mineral production proposed	200000 MT	838.540 MT	
3c	Recovery of salable /usable mineral from ROM production	180000 MT	838.540MT	
3d	Quantity of mineral reject generation	20000 MT	NIL	
3e	Grade of mineral reject generation and threshold value declared	Chemical Grade Undersize Limestone		
3f	Quantity of sub-grade mineral generation	No	No	
3g	Grade of sub-grade mineral generation	No	No	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No	No	
3j	Provision of drilling & blasting in mineral benches	No drilling & blasting.	No	

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		Eco-Friendly mining by use of Ripper & Dozer is proposed.		
3k	Provision of mining machineries in mineral benches	Yes	Yes	
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	10.127 Ha	10.127 Ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0	1:0	
3o	Total area put in use under different heads at the end of year	Pit-10.127 Ha. Waste/reject -Nil Others- 3.9 Ha.	Pit-10.127 Ha. Waste/reject - Nil Others- 3.9 Ha.	
3p	Production of ROM mineral during last five-year period, as applicable	Year 2017-18 - 1,50,000MT Year 2018-19- 1,5,0000MT Year 2019-20- 2,00000MT Year 2020-21- 2,00000MT Year 2021-22- 2,00000MT	Year 2017-18 - 0.000MT Year 2018-19- 0.000MT Year 2019-20- 0.000MT Year 2020-21- 0.000 Year 2021-22- 838.540MT	
3q	General remarks of inspecting officer on method of mining etc.	There is no Overburden in mining area and height of benches in mineral is suitable for method of Mining proposed in Plan.		

#### 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)	Separate stacking of Mineral reject ( undersize Limestone)	Separate stacking of Mineral reject ( undersize Limestone)	
4b	Location of topsoil, OB & mineral reject dumps	2405470N to 2405370N and 569735E to 569890	2405400N to 2405400N & 569700E to 569800E	
4c	Number of dumps within lease area and outside lease area	No	No	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No	No	
4e	Number of active & alive dumps	N.A	N.A	
4f	Number of dead dumps	N.A	N.A	
4g	Number of dumps stabilised	N.A	N.A	
4h	Whether Retaining wall or garland drain all along dumps are there	N.A	N.A	
4i	Length of Retaining wall or garland drain all along dump	N.A	N.A	
4j	Number of settling ponds	N.A	N.A	
4k	Specific comments of inspecting officer	There is no Overburden in mining area as the limestone is outcropping in the area.		

#### 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 backfilling	Partial	Partial	
5b	Area under backfilling of mined out area	Nil	Nil	

5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Plantation	Plantation
5d	Total area fully reclaimed & rehabilitated	Nil	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc	There is practically no soil covering in this area. So provision for separate stacking of topsoil also has not been made and area is not matured for backfilling.	

### 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.	YES	YES	
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	i) 0.01 ii) 0.01 iii) 400 iv) 400 v) No vi) 44000	Approx. work done.	
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	No reclamation is proposed by means of backfilling as no waste material is available.	As per plan.	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No waste Land is available within lease area	As per plan.	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Ambient Air Monitoring, Water quality monitoring and Noise monitoring	Ambient Air Monitoring, Water quality monitoring and Noise monitoring is being done on quarterly basis and soil monitoring on yearly basis.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	The PMCP returns are submitted on time as per the provision of Rule 26 of MCDR 2017		

### 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	2,00000MT	838.540 MT	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	NA	NA	
7c	Different grade of mineral sorted out at mines	NA	NA	
7d	Any beneficiation process at mines	NA	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Found Satisfactory.		

### 8.0 Environment

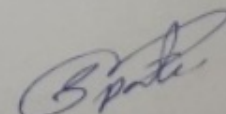
SN	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	NA	

8b	Concurrent use or storage of topsoil	Plantation	Plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposal	NA	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	N.A	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Mined out pits will be utilized as rain water storage	Pits are being used for rain water harvesting	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Plantation was proposed total sapling is 400	Approx. 400 Nos of sapling planted in 2021-22.	
8g	Survival rate	100 %	Approx. 50%	
8h	Water sprinkling on roads to control airborne dust	Regular water sprinkling is done on haul road and loading and unloading point	Regular water sprinkling is done on haul road and loading and unloading point to control fugitive emission.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	The aesthetic environment in and around lease is beautiful.		

### 9.0 Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to till date – up to June-2022 A.R. submitted up to till date-up to 2021-22		
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	Rakesh Patel-Manager, Govind Khatri- Geologist, Agnivesh Singh Rathor-Mining Engg	Rakesh Patel-Manager, Govind Khatri- Geologist, Agnivesh Singh Rathor-Mining Engg	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered Under Current working- 6.72 Ha/ Afforestation/ plantation - 0.20 Ha	Covered Under Current working- 6.72 Ha/ Afforestation/ plantation -0.20 Ha	
9d	Scrutiny of Annual return on afforestation	Afforestation/ plantation - 0.2 Ha	Afforestation/ plantation -0.2 Ha	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Subgrade or Undersize Limestone 10 % of ROM (20,000 Mt)	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL	NIL	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	1. Ex.Mine Prise Rs.415.60/- per tonne 2. Cost of production 415.60/- per tonne	1. Ex.Mine Prise Rs.415.60/- per tonne 2. Cost of production 415.60/- per tonne	
9i	Scrutiny of Annual return on fixed assets	NIL	NIL	
9k	Scrutiny of Annual return on mining machineries	Rock-Breaker & Dumper	Rock-Breaker & Dumper	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:- No Violation pending. During inspection No violation found.



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