File no: GUJ/PORB/ LST-048

MCDR INSPECTION REPORT

Inspecting officer: Dr. N K Mathur, AMG, Gandhinagar Inspection date: 16.12.2018, Type of Inspection: Star Rating/MCDR

1.0 **GENERAL**

| SN | Particulars | Details |
|-----|---|---|
| 1 | Name of the Mine | Dharampur/Kajawdri Limestone Mines |
| 2 | Total Lease Area (Ha) with breakup of | 87.33 Ha. (Forest Area: Nil) (Non-forest |
| | Non-forest and forest land | Area: 87.33 ha) (S. no. 2/9/P) |
| 3 | Mine code | 38GUJ08001 |
| 4 | IBM Registration Number under rule | IBM/238/2011 |
| | 45 of MCDR, 1988 | |
| 5 | Name of the lessee, Address, phone, | Saurashtra Chemical, Division of Nirma Ltd. |
| | email and fax number | Porbandar, |
| 6 | Village | Dharampur |
| 7 | Taluka/Mandal | Ranavav (Now – Porbandar) |
| 8 | District | Porbandar |
| 9 | Pincode | 360560 |
| 10 | State | Gujarat |
| 11 | Post office | Dharampur |
| 12 | Nearest police station | Udhyognagar, Porbandar |
| 13 | Nearest Railway station | Ranavav |
| 14 | Date of Grant of Mining Lease | 14.10.1965 |
| 15 | Date of Execution | 05.04.1966 |
| 16 | Date of opening of Mine | |
| 17 | Date of first Renewal, if applicable and its period & expiry | 01.04.1985 |
| 18 | Date of second Renewal, if applicable and its period & expiry | 28.03.2005, (as per the section 8(A)(5) of MMDR Act-2015 State Govt, vide order Number- MCR-1564-28298 Chh-1 Date-18/10/2017 upto 31/03/2030) |
| 19 | Date of submission of renewal | 10/10/2017 apto 01/00/2000) |
| . • | application if Mining Operations are | |
| | continuing under deemed extension | |
| 20 | Name of the Nominated Owner with Address, phone, email, fax number and date of appointment | Sri Sailesh V. Sonara, Executive Director, Saurashtra Chemical, Division of Nirma Ltd. Porbandar quarry@saukemindia.com 0286-2245431 (Fax No) 0286-2242479-81 (Phone No) |
| 21 | Name of the Mine Agent with Address, phone, email, fax number and date of appointment | Sri Anay Awasthi, Mines Agent, Saurashtra Chemical, Division of Nirma Ltd. Porbandar quarry@saukemindia.com 0286-2245431 (Fax No) 0286-2242479-81 (Phone No) |
| 22 | Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines | Sri Shashi Bhusan Prasad, Mines Manager, Saurashtra Chemical, Division of Nirma Ltd. Porbandar <u>quarry@saukemindia.com</u> 0286-2245431 (Fax No) |

| 0286-2242479-81 | (Phone No) |
|-----------------|------------|
|-----------------|------------|

| 23 | Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine | Shri S.B.Prasad, (B.E. Mining) Saurashtra Chemical, Division of Nirma Ltd. Porbandar quarry@saukemindia.com 0286-2245431 (Fax No) 0286-2242479-81 (Phone No) |
|----|---|--|
| 24 | Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44. | Sri Mehul D Sharma, Geologist, Saurashtra Chemical, Division of Nirma Ltd. Porbandar quarry@saukemindia.com 0286-2245431 (Fax No) 0286-2242479-81 (Phone No) |
| 25 | Date of Approval of Mining plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any. | Letter No – 682(23)(541/95MCCM(N)UDP) Date - 10/06/1996 |
| 26 | Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any. | Letter No. 684(4)(1)/MP-91MDRD(N) GNR, Date – 13/02/2018 (2017-18 to 2020-21) |
| 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) | O.T.F.M. |
| 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 | Remarks |
|----|---|---------------------|---|--|
| 1a | Backlog of previous year | N.A. | Nil | |
| 1b | Exploration over lease area for Geological axis 1 or 2. | N.A. | Nil | Area has been fully explored in G1 category |
| 1c | Exploration Agency & Expenditure in lakh Rupees during the year | N.A. | Nil | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Nil | Nil | |
| 1e | Balance reserves as on 01.04.2018 | | 2047899 ton (Chemical Grade + Cement Grade) under category 111,121 and | 527899 Ch. + 1520000 Cement 111,121,122 |

| | | 122 | | | |
|----|--|-----|---|------|--|
| 1f | General remarks of inspecting officer on geology, exploration etc. | | nder provision of ru ed out on dt. 21.01 1. | ` '' | |

2.0 Development

| SN | Item | Proposals (2017-18) | Actual work | Remarks |
|----|---|---|----------------|---|
| 2a | Location of development w.r.t. lease area | N.A. | N.A. | |
| 2b | Separate benches in topsoil, overburden and mineral (Rule 15) | N.A. | N.A. | There is no O/B and there is also no any generation of rejects as a result of the mining operations |
| 2c | Stripping ratio or ore to OB ratio | 1:0 | 1:0 | |
| 2d | Quantity of topsoil generation in m3 | 10 | 10 | Utilized for plantation |
| 2e | Quantity of overburden generation in m3 | Nil | Nil | As stated above |
| 2f | General remarks of inspecting officer on development of pit w.r.t. type of deposit etc. | Violation under provision of rules 26(2), 33 & 35(2) pointed out on dt. 21.01.2019 for rectification. | | |

3.0 Exploitation

| SN | Item | Proposals (2017-18) | Actual work | Remarks |
|----|---|---|---|---------|
| 3a | Number of pits proposed for production | 2 (pit no- 5 & 6) | 2 (pit no- 5 & 6) | |
| 3b | Quantity of ROM mineral production proposed | 6000 ton | 5200.340 ton | |
| 3c | Recovery of salable/usable mineral from ROM production | 5700 ton | 5200.340 ton | |
| 3d | Quantity of mineral reject generation | NA | Nil | |
| 3e | Grade of mineral reject generation and threshold value declared | NA | | |
| 3f | Quantity of sub-grade mineral generation | 600 | 470 | |
| 3g | Grade of sub-grade mineral generation | Other than Chemical Grade Limestone and Undersize Limestone | Other than Chemical Grade Limestone and Undersize Limestone | |
| 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 | No | |
| 3j | Provision of drilling & blasting in mineral benches | No | No | |
| 3k | Provision of mining machineries in | No | No | |

| | m | nineral benches | | | | |
|--|---|-----------------|--|--|--|--|
|--|---|-----------------|--|--|--|--|

| 31 | 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 | Between local grid line 2394715 N to 2395350 N 570560 E to 569740 E | Between local grid line 2394715 N to 2395350 N 570560 E to 569740 E |
| 3n | Ore to OB ratio for the pit/mine during the year | 1:0 | 1:0 |
| 30 | Total area put in use under different heads at the end of year | Pit-24.55 Ha. Waste/reject - Others- (1) 1.37 Ha. Plantation (2) 1.90 Ha. Road and infrastructure | Pit-24.55 Ha. Waste/reject - Others-(1) 1.37 Ha. Plantation (2) 1.90 Ha. Road and infrastructure |
| 3р | Production of ROM mineral during last five-year period, as applicable | 2013-14 24000T 2014-15 24000T 2015-16 24000T 2016-17 24000T 2017-18 6000T | 2013-14-9902.5T 2014-15-12389T 2015-16- 21929.5T 2016-17 19773.905 2017-18-5200.34T |
| 3q | General remarks of inspecting officer on method of mining etc. | <u> </u> | ovision of rules 26(2), 33 & on dt. 21.01.2019 for |

4.0 Solid Waste Management-Dumping

| SN | Item | Proposals (2017-18) | Actual work | Remarks |
|----|--|---|-------------|-------------------------------|
| 4a | Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) | There is no O/B and there will also not be any generation of rejects as a result of the mining operations and wherever found top soil will be used in plantation work | 10 mt. | Used in Plantation work |
| 4b | Location of topsoil, OB & mineral reject dumps | N.A. | N.A. | Used in Plantation |
| 4c | Number of dumps within lease area and outside lease area | Nil | Nil | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | N.A. | N.A. | |
| 4e | Number of active & alive dumps | Nil | Nil | |
| 4f | Number of dead dumps | Nil | Nil | |

| 4g | Number of dumps | | Nil |
|----|---|---|------|
| | stabilished | Nil | |
| 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 | Nil | Nil |
| 4j | Number of settling ponds | N.A. | N.A. |
| 4k | Specific comments of inspecting officer | Violation under provision of rules 26(2), 33 & 35(2) pointed out on dt. 21.01.2019 for rectification. | |

5.0 Solid Waste Management-Backfilling

| SN | Item | Proposals (2017-18) | Actual work | Remarks |
|----|--|--|-------------------------|---------|
| 5a | Status on part or full extraction of mineral from mined out area before starting backfilling | N.A. | N.A. | |
| 5b | Area under backfilling of mined out area | Not in Proposal | Not in Proposal | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | There is practically no soil covering in this area. So provision for separate stacking of topsoil also has not been made. However, the topsoil if found in plot holes or along the solution channels will be utilized for plantation work. | Same as proposal | |
| 5d | Total area fully reclaimed & rehabilitated | N.A. | N.A. | |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc | The topsoil generation i purposes only. | s utilised for plantati | on |

6.0 Progressive Mine Closure Plan

| SN | Item | Proposals (2017- 18) | Actual work | 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) | i) | No Provision was Made | 1.No Provision was Made | |
| | ii) Afforestation done (ha) | ii) | 0.1 Ha. | 2. 0.1 Ha. | |
| | iii) No. of saplings planted during the year | iii) | 100 sapling | 3. 450 sapling | |
| | iv) Cumulative no. of plants | iv) | Approx. | 4. | |
| | v) Any other specific method of rehabilitation | v) | No | 5.No | |
| | vi) Cost incurred on watch & care | vi) | Approx. | 6. Approx. | |
| | during the year | | 120000/- | 120000/- | |
| 6c | Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) | prop | re is no posal for kfilling. | There is no proposal for backfilling. | |
| | ii) Void filled by waste/tailings | | | | |
| | iii) Afforestation on the backfilled | | | | |
| | area | | | | |
| | iv) Rehabilitation by making water | | | | |
| | reservoir | | | | |
| | v) Any other specific means | | | | |

| 6d | Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation | No proposal for rehabilitation however undersize material which was generated during sizing will be use for partial backfilling of the voids temporarily | Same as Proposal |
|----|--|--|--|
| 6e | Compliance of Environmental monitoring (core zone & buffer zone) | Air quality monitoring was done as per CCOM's circular 3/92 during mining. | Air quality Monitoring is being regularly carried out as half yearly and all results are within prescribed limit |
| 6f | General remarks of inspecting officer on PMCP compliance & progressive | Violation under provision pointed out on dt. 21.01.2 | |

7.0 Mineral Conservation

| SN | Item | Proposals (2017-18) | Actual work | Remarks |
|----|--|---|--|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | 5100 Mt Sized Limestone 600 mt U.S. 300 mt Mining Loss | 4730.340 Mt Sized Limestone 470 mt U.S. | |
| 7b | Method of grade-wise mineral sorting i.e. manual | Manual | manual | |

| | or mechanical | | | |
|----|--|--|-----------------|-----|
| 7c | Different grade of mineral sorted out at mines | Undersized Limestone and other than chemical grade limestone stored at mines pit floor | As per proposal | |
| 7d | Any beneficiation process at mines | N.A. | N.A. | |
| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | | | ` ' |

8.0 Environment

| SN | Item | Proposals (2017-18) | Actual work | Remarks |
|----|---|---|--|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | There is practically no soil covering in this area. So provision for separate stacking of topsoil also has not been made. However, the topsoil if found in pot holes or along the solution channels will be utilized for plantation work. | As per Proposals | |
| 8b | Concurrent use or storage of topsoil | Wherever encountered ,Utilized for Plantation | Wherever encountered, Utilized for Plantation | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | The Undersized generated during sizing will be stacked on pit floor at earmarked site for future use. The site for stacking of under sized limestone is earmarked bounded within grid 2394717 to 2934755 N and 569761 E to 569826 E. | Same as proposal | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No proposal for rehabilitation however undersize material which was generated during sizing will be used for partial backfilling of the voids temporarily. | No proposal for rehabilitation however undersize material which was generated during sizing will be used for partial | |

| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining | No Proposal | backfilling of the voids temporarily No proposal |
|----|---|--|---|
| 8f | operations (Pits, dumps etc.) Baseline information on existence of plantation & additional plantation done | Plantation was proposed in 0.1 Ha area total sapling is 100. | Plantation was done in 0.1 Ha area and total |
| 8g | (Rule 41) Survival rate | 80% | sapling is 450. |
| 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 | Violation under provision pointed out on dt. 21.01.2 | of rules 26(2), 33 & 35(2) 2019 for rectification. |

9.0 Compliance of Rule 45

| S. N. | Item | COMMENTS | | Remarks |
|----------|--|---|--|---------|
| | Status of submission of Online Monthly and Annual returns | M.R. Submitted up to till date. A.R. submitted up to till date. | | |
| S. N. | Item | Details given in A.R.(2017-18) | Observation of I/Officer /Actual reported in Returns | Remarks |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | 1 Manager, 1 Geologist, 1 Mining Engineer | Check & found in order. | Nil |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Covered under current opencast Working – 24.55 Ha. Reclaimed and rehabilitation – 1.37 Ha. Road and Infrastructure – 1.90 Ha. | Check & found in order. | Nil |

| | | Remaining Area 61.10 | | |
|----|---|--|---|-----|
| 9d | Scrutiny of Annual return on afforestation | 450 sapling are planted against 100 proposed. | Check & found in order. | Nil |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & quantity) | Nil | Nil | Nil |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | O/s- Nil, ROM- 5200.34T, Dispatch- 4730.34T, C/s- 3807.205T, Ex Mine- 473/ | O/s- Nil, ROM- 5200.34T, Dispatch -4730.34T, C/s- 3807.205T, Ex Mine-473/ | Nil |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost | Cost of production- 473/ | Check & found in order. | Nil |
| 9i | Scrutiny of Annual return on fixed assets | Rs.2555834 | Check & found in order. | Nil |
| 9k | Scrutiny of Annual return on mining machineries | Air Compressor-450, Rock drill-110MM & 32MM, Front end loader-2M3 | 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 26(2), 33 & 35(2) pointed out on dt. 21.01.2019 for rectification.

Place Gandhinagarr Name: Dr N. K. Mathur Signature

Date 25-01-2019 Designation: AMG