

MCDR INSPECTION REPORT

1.0 GENERAL

| SN | Particulars | Details |
|------|--|--|
| 1(a) | Name of the Mine | Mokhana Limestone Mine |
| 1(b) | Name of Inspecting Officer & Designation | Sanjay M. Girhe, Sr. Mining Geologist |
| 1(c) | Accompanying Mines Representatives | Sh. C.M.Diwedi, Geologist & Sh. D.Gaur,TQP |
| 1(d) | Type of Inspection | Review of Mining Plan |
| 1(e) | Date of Inspection | 03.04.2018 |
| 2 | Total Lease Area (Ha) with breakup of Non-forest and forest land | 107.69 Hectare (Non- Forest), Survey No-51/P |
| 3 | Mine Code | 38GUJ07045 |
| 4 | IBM Registration Number under rule 45 of MCDR, 1988 | IBM/437/2011 |
| 5 | Name of the lessee, Address, phone, email and fax number | Tata Chemicals Limited P.O.-Ranavav Quarries, Taluka-Ranavav, Dist- Porbandar, Gujarat – 360550 Ph No-+912801230381, Fax No-+912801230320 Email:cdwivedi@tatachemicals.com |
| 6 | Village | Mokhana |
| 7 | Taluka/Mandal | Bhanvad |
| 8 | District | Devbhumi Dwarka |
| 9 | Pincode | 360510 |
| 10 | State | Gujarat |
| 11 | Post office | Bhanvad |
| 12 | Nearest police station | Bhanvad |
| 13 | Nearest Railway station | Bhanvad |
| 14 | Date of Grant of Mining Lease | 05.07.1973 |
| 15 | Date of Execution | 24.12.1973 |
| 16 | Date of opening of Mine | - |
| 17 | Date of first Renewal, if applicable and its period & expiry | First renewal was applied on 21.12.1992 for next 10 yrs period. |
| 18 | Date of second Renewal, if applicable and its period & expiry | Second renewal was applied on 23.12.2002 for next 20 years |
| 19 | Date of submission of renewal application if Mining Operations are continuing under deemed extension | Lease period extended till 23/12/2023 vide Govt. order no. MCR- 1572- (T-77) 3499 CHH -1 dated 24/10/2017 |
| 20 | Name of the Nominated Owner with Address, phone, email, fax number and date of appointment | R. Mukundan Tata Chemicals Limited Bombay House, 24 Homy Modi Street, Mumbai – 400001, Maharastra |
| 21 | Name of the Mine Agent with Address, phone, email, fax number and date of appointment | C M Dwivedi P.O.-Ranavav Quarries, Taluka-Ranavav, Dist- Porbandar, Gujarat – 360550 Ph No-+912801230381, Fax No-+912801230320 Email:cdwivedi@tatachemicals.com |
| 22 | Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines | NA- (From 2013-14 to 2017-18 period mining operations was completely stopped by CGM, Gujarat on dtd 01.06.2013) |
| 23 | Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine | NA- (From 2013-14 to 2017-18 period mining operations was completely stopped by CGM, Gujarat on dtd 01.06.2013) |
| 24 | Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44. | NA |

| | | |
|----|---|---|
| 25 | Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any. | Approved vide letter No-682(23)(499)/94-MCCM (N)-UDP, dt- 25.09.1995 |
| 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-213/2003-MCCM (N) UDP, Dt- 06.11.2003, 682(23) CLP-54 /2005 MCCM (N) Udp, Dt- 14.03.2005 682(23)(MS-438)/2008-MCCM (N)-UDP , dt- 22.10.2008 682(23) CLP-159 /2014 MCCM (N) Udp, Dt- 02.09.15 |
| 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) | Mechanised. |
| 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 | Not Proposed | NA | NA |
| 1b | Exploration over lease area for Geological axis 1 or 2. | Not Proposed | NA | NA |
| 1c | Exploration Agency & Expenditure in lakh Rupees during the year | Not Proposed | NA | NA |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Not Proposed | NA | NA |
| 1e | Balance reserves as on 01.04.2018 | Proved (111)-3.88 (Million Ton) Resources(221&331)-10.80 Million Tonnes | 0 | NA |
| 1f | General remarks of inspecting officer on geology, exploration etc. | Entire lase area has been explored as per UNFC Guidelines & MEMC Rules 2015 | | |

2.0 Development

| SN | Item | Proposals(2017-18) | Actual work | Remarks |
|----|---|--|----------------|---------|
| 2a | Location of development w.r.t. lease area | No proposals | Not Applicable | |
| 2b | Separate benches in topsoil, overburden and mineral (Rule 15) | No proposals | Not Applicable | |
| 2c | Stripping ratio or ore to OB ratio | No proposals | Not Applicable | |
| 2d | Quantity of topsoil generation in m3 | No proposals | Not Applicable | |
| 2e | Quantity of overburden generation in m3 | No proposals | Not Applicable | |
| 2f | General remarks of inspecting officer on development of pit w.r.t. type of deposit etc. | <i>Mining operation stopped since June,2013 as mine closure notice was issued by District Geologist on 01.06.13 referring Hon'ble Gujarat High Court order about no mining operation to be done within 1km zone of Barda Sanctuary</i> | | |

3.0 Exploitation

| SN | Item | Proposals (2017-18) | Actual work | Remarks |
|----|--|---------------------|----------------|---------|
| 3a | Number of pits proposed for production | No proposals | Not Applicable | |

| | | | | |
|----|--|--|---|--|
| 3b | Quantity of ROM mineral production proposed | No proposals | Not Applicable | |
| 3c | Recovery of salable/usable mineral from ROM production | No proposals | Not Applicable | |
| 3d | Quantity of mineral reject generation | No proposals | Not Applicable | |
| 3e | Grade of mineral reject generation and threshold value declared | No proposals | Not Applicable | |
| 3f | Quantity of sub-grade mineral generation | No proposals | Not Applicable | |
| 3g | Grade of sub-grade mineral generation | No proposals | Not Applicable | |
| 3h | Manual / Mechanised method adopted for segregating from ROM | No proposals | Not Applicable | |
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject | No proposals | Not Applicable | |
| 3j | Provision of drilling & blasting in mineral benches | No proposals | Not Applicable | |
| 3k | Provision of mining machineries in mineral benches | No proposals | Not Applicable | |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | No proposals | Not Applicable | |
| 3m | Total area covered under excavation/pits | 12.4827 | 12.4827 | |
| 3n | Ore to OB ratio for the pit/mine during the year | NA | NA | |
| 3o | Total area put in use under different heads at the end of year | Pit- 12.4827Ha Waste/reject Others- 95.2073Ha | Pit- 12.4827Ha Waste/reject Others- 95.2073Ha | |
| 3p | Production of ROM mineral during last five-year period, as applicable | Yr- 2013-14 Yr- 2014-15 Yr- 2015-16 Yr- 2016-17 Yr- 2017-18 | 29039 0 0 0 0 | |
| 3q | General remarks of inspecting officer on method of mining etc. | <i>Mining operation stopped since June,2013 as mine closure notice was issued by District Geologist on 01.06.13 referring Hon'ble Gujarat High Court order about no mining operation to be done within 1km zone of Barda Sanctuary</i> | | |

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) | NA, No mines waste, concurrent use of top soil for plantation | NA, No mines waste, concurrent use of top soil for plantation | |
| 4b | Location of topsoil, OB & mineral reject dumps | No proposals | Not Applicable | |
| 4c | Number of dumps within lease area and outside lease area | No proposals | Not Applicable | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | No proposals | Not Applicable | |
| 4e | Number of active & alive dumps | No proposals | Not Applicable | |
| 4f | Number of dead dumps | No proposals | Not Applicable | |

| | | | | |
|----|---|--|----------------|---|
| 4g | Number of dumps stabilised | No proposals | Not Applicable | |
| 4h | Whether Retaining wall or garland drain all along dumps are there | No proposals | Not Applicable | |
| 4i | Length of Retaining wall or garland drain all along dump | No proposals | Not Applicable | |
| 4j | Number of settling ponds | 0 | 0 | 0 |
| 4k | Specific comments of inspecting officer | <i>Mining operation stopped since June,2013 as mine closure notice was issued by District Geologist on 01.06.13 referring Hon'ble Gujarat High Court order about no mining operation to be done within 1km zone of Barda Sanctuary</i> | | |

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 | No proposals | Not Applicable | |
| 5b | Area under backfilling of mined out area | No proposals | Not Applicable | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | No proposals | Not Applicable | |
| 5d | Total area fully reclaimed & rehabilitated | No proposals | Not Applicable | |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc | No proposals | Not Applicable | |

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. | Last day to submit Annual Return: 31 st July of every year | Yes submitted on 3 rd July 2017 | Lease is under temporary closure |
| 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 | 1 Hect. 1 500 500 Nil 180000 | 1 Hect. 1 500 500 Nil 235000 | Lease is under temporary closure |
| 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 | NA | NA | |

| | | | | |
|----|---|--|--|--|
| 6d | Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation | NA | NA | |
| 6e | Compliance of Environmental monitoring (core zone & buffer zone) | Core Zone with in limit – Ambient Air Quality, Surface water Quality, Ground water quality, Noise level, Noise vibration are with in limit | Core Zone with in limit – Ambient Air Quality, Surface water Quality, Ground water quality, Noise level, Noise vibration are with in limit | |
| 6f | General remarks of inspecting officer on PMCP compliance & progressive | Nil | | |

7.0 Mineral Conservation

| SN | Item | Proposals (2017-18) | Actual work | Remarks |
|----|--|---|---|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | 0 No Proposals | 0 Not Applicable | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical | Mechanical | Mechanical | |
| 7c | Different grade of mineral sorted out at mines | Chemical Grade +50 mm to – 100MM) Cement Grade – 0-50mm fines | Chemical Grade +50 mm to – 100MM) Cement Grade – 0 - 50mm fines | |
| 7d | Any beneficiation process at mines | No Proposals | Not Applicable | |
| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | <i>Mining operation stopped since June,2013 as mine closure notice was issued by District Geologist on 01.06.13 referring Hon'ble Gujarat High Court order about no mining operation to be done within 1km zone of Barda Sanctuary</i> | | |

8.0 Environment

| SN | Item | Proposals (2017-18) | Actual work | Remarks |
|----|---|---------------------|-------------------------------|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | Not Proposed | Concurrent use for plantation | |
| 8b | Concurrent use or storage of topsoil | Not Proposed | Nil | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Not Proposed | Nil | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Not Proposed | Nil | |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Yes and as per PMCP | Yes and per PMCP | |
| 8f | Baseline information on existence of plantation & additional plantation done (Rule 41) | Not Proposed | NIL | |
| 8g | Survival rate | 82% | 82% | |

| | | | | |
|----|---|---|----|-----|
| 8h | Water sprinkling on roads to control airborne dust | NA | NA | NIL |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines are | Under temporary closing of mine period basic works as per the proposals of PMCP like saplings plantation, fencing etc. carried out. | | |

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 -31.03.2018 A.R. submitted up to till date- 30.6.2017 | |

| 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 | NA | NA | <i>Mining operation stopped since June,2013 as mine closure notice was issued by District Geologist on 01.06.13 referring Hon'ble Gujarat High Court order about no mining operation to be done within 1km zone of Barda Sanctuary</i> |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Pit- 12.4827Ha Waste/reject Others- 95.2073Ha | Pit- 12.4827Ha Waste/reject Others- 95.2073Ha | |
| 9d | Scrutiny of Annual return on afforestation | NA | NA | |
| 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 | NA | NA | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost | NA | NA | |
| 9i | Scrutiny of Annual return on fixed assets | NA | NA | |
| 9k | Scrutiny of Annual return on mining machineries | NA | NA | |

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 19.09.2015.This inspection was carried out for in connection with Review of Mining Plan submitted by the lessee. During the inspection no violations were pointed out as Mining operation stopped since June,2013 as mine closure notice was issued by District Geologist on 01.06.13 referring Hon'ble Gujarat High Court order about no mining operation to be done within 1km zone of Barda Sanctuary.
