

MCDR INSPECTION REPORT

1.0 GENERAL

| SN | Particulars | Details |
|----|--|--|
| 1 | Name of the Mine | Ishwaria 'G' Limestone Mine |
| 2A | Inspecting officer with date, Type | G.Ram, DCOM, 11/4/2022 FN, MMP |
| 2B | Accompanying official | Sh.Mayank Srivastava, MM |
| 3 | Total Lease Area (Ha), Non-forest and forest | Total area-8.7Ha, Non-Forest land |
| 4 | Mine code & IBM Registration Number under rule 45 of MCDR, 17 | 38GUJ02177 & IBM/437/2011 |
| 5 | Name of the lessee, Address, phone, email and fax number | Tata Chemicals Limited, Regd.-Bombay House, 24 Homy modi street, Fort,Mumbai-400001, Works- Ranavav Quarries, Ranavav, Dist- Porbandar Gujarat – 360550, cmdwivedi@tatachemicals.com |
| 6 | Village | Ishwaria |
| 7 | Taluka/Mandal | Ranavav |
| 8 | District | Porbandar |
| 9 | Pin code | 360550 |
| 10 | State | Gujarat |
| 11 | Post office | Ranavav |
| 12 | Nearest police station | Ranavav |
| 13 | Nearest Railway station | Ranavav |
| 14 | Date of Grant of Mining Lease | 13.4.1970 |
| 15 | Date of Execution | 12.10.1970, Expiry- as per MMDR Act, 1957 is under process. |
| 16 | Date of opening of Mine | -- |
| 17 | Date of first Renewal, if applicable and its period & expiry | NA |
| 18 | Date of second Renewal, period & expiry | NA |
| 19 | Date of submission of renewal application / deemed extension if any | NA |
| 20 | Name of the Nominated Owner, Address, phone, email, fax , date of appointment | R. Mukundan, M/s Tata Chemicals Limited, Bombay House, 24 Homy Modi Street, Mumbai – 400001, Maharashtra |
| 21 | Name of the Mine Agent, Address, phone, email, fax & date of appointment | C M Dwivedi, Works- Ranavav Quarries, Ranavav, Dist- Porbandar Gujarat – 360550, cmdwivedi@tatachemicals.com |
| 22 | Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines | Rakesh Kumar Singh, Diploma (Mi) & SCC(R), Works- Ranavav Quarries, Dist- Porbandar Gujarat – 360550 WEF-08.12.2021 |
| 23 | Name of the ME, Qua. & Exp., Address, phone , email, fax, date of appointment | Rakesh Kumar Singh, Diploma (Mi) & SCC(R), Works- Ranavav Quarries, Dist- Porbandar Gujarat – 360550 WEF-08.12.2021 |
| 24 | Whether Geologist & ME appointed in mines satisfy the rule | C M Dwivedi, Works- Ranavav Quarries, Ranavav, Dist- Porbandar Gujarat – 360550, cmdwivedi@tatachemicals.com, |
| 25 | Date of Approval of Mining Plan /Modified Mining Plan with five-year period and specific condition in approval letter, if any. | 682(23)MS-527/09-MCCM(N), 16.10.2014 682(23)MS-527/09-MCCM(N)UDP, 26.07.2016, |
| 26 | Date of Approval of SOM/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any. | 684(4)(1)MP-260/2019-20-GNR/70,08.1.2020 for 2020-21 to 2024-25 684(4)(1)MP/397/2021-22/GNR Dated11.5.2022 for 2022-23 to 2024-25 |
| 27 | Mineral(s) granted in lease | Limestone |
| 28 | Method of Mining (O/C, U/G) | Opencast |
| 29 | Category (FM, Others or Manual) | A-Others (mechanised) |
| 30 | Captive/Non Captive | Captive |

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

1.0 Exploration

| SN | Item | Proposals 2021-22 | Actual work | Remarks |
|----|---|-------------------|---------------|---------|
| 1a | Backlog of previous year | Not proposal | Not done | |
| 1b | Exploration over lease area for Geological axis 1 or 2. | --- | G1 & G2 level | |
| 1c | Exploration Agency & Expenditure in lakh Rupees during the year | Lessee itself | | NA |

| | | | | |
|----|--|---|-----|-----|
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Not Proposed | NIL | NIL |
| 1e | Balance reserves as on 01.4.2022 (111, 121 & 122) | Total resources-0.774677Million tonne & reserves available 0.133467 Million Tonne as per approved MMP dated 11.5.22 | | |
| 1f | General remarks of inspecting officer | The most of lease area is developed by pit & explored in past. Entire mineral deposited is well exposed of chemical/Cement grade limestone. | | |

1.0 Development

| SN | Item | Proposals 2021-22 | Actual work | Remarks |
|----|---|---|---|---------|
| 2a | Location of development w.r.t. lease area | E/W597727-598183 N/2400784-2401064 | Partly done as proposed due to lagging in past. | |
| 2b | Separate benches in topsoil, overburden and mineral (Rule 15) | Proposed | Maintained separately benches. | |
| 2c | Stripping ratio or ore to OB ratio | 1:0.0 | 1:0.00 | |
| 2d | Quantity of topsoil generation in m3 | 2856T | 0T | |
| 2e | Quantity of overburden generation in m3 | NIL | 0T | |
| 2f | General remarks of inspecting officer on development of pit w.r.t. type of deposit etc. | Mining lease area is developed by forming opencast mine pit of chemical & cement grade limestone. | | |

2.0 Exploitation

| SN | Item | Proposals 2021-22 | Actual work | Remarks |
|----|--|--|--|---|
| 3a | Number of pits proposed for production (Plate no 5A to 5E) | Single Pit | Worked partly as legging in past in plan period. | |
| 3b | Quantity of ROM mineral production proposed | 65000T | 65000T | |
| 3c | Recovery of saleable/usable mineral from ROM production | 100% of ROM proposed | Entire ROM is utilising by proper sorting & sizing | Captive Consumption |
| 3d | Quantity of mineral reject generation | Not proposed | | Soda ash & Cement |
| 3e | Grade of mineral reject generation and threshold value declared | Above THV & below cut-off grade bauxite | THV-Cao-34% (Min) & Mgo-5% (Max) | |
| 3f | Quantity of sub-grade mineral generation | Not proposed | NIL | |
| 3g | Grade of sub-grade mineral generation | Not Proposed | NIL | |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Manual / mechanised | Manual / mechanised | |
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade/ mineral reject | Not Proposed | Not done | - |
| 3j | Provision of drilling & blasting in mineral benches | drilling & blasting as and when requires | As and when requires | - |
| 3k | Provision of mining machineries in mineral benches | Excavator-0.9M3 bucket capacity, Tippers - (17T) | Excavator-0.9M3 bucket capacity, Tippers | |
| 3l | Whether height of benches in OB & mineral suitable for method of mining proposed | mechanised working with regular bench height | Irregular bench height | |
| 3m | Total area covered under excavation/pits | 0.65Ha area proposed in plan period. | Total excavated area is about 7.3465Ha. | |
| 3n | Ore to OB ratio for the pit/mine during the year | 1:0.0 | 1:0.0 | |
| 3o | Total area put in use under different heads at the end of year | 0.65Ha area proposed in plan period. | Total excavated area is about 7.3465Ha. | |
| 3p | Production of ROM mineral during last five-year period, as applicable | 2017-18 -85275T 2018-19- 86275T 2019-20-65000T 2020-21-86000T 2021-22-65000T | 65000T 65000T 0T 47378T 65000T | Deviated due to lagging in ROM due to plant requirement /quality constraints. |
| 3q | General remarks of inspecting officer on method of mining etc. | Mechanised opencast method of mining with using HEMM & tipper combination & without J/H drilling & blasting. | | |

3.0 Solid Waste Management-Dumping

| SN | Item | Proposals 2021-22 | Actual work | Remarks | | |
|----|---|-------------------|--|-----------------------------------|--|--|
| 4a | Separate dumping of topsoil, OB/Mineral reject (Rule 32, 33) | 2856T | Proposed for utilised for plantation purposes. | No OB/Waste proposed & generated. | | |
| 4b | Location of topsoil, OB & mineral reject dumps | Not Proposed | Not generated, NIL | | | |
| 4c | Number of dumps within lease area and outside lease area | | | | | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | | | | | |
| 4e | Number of active & alive dumps | | | | | |
| 4f | Number of dead dumps | | | | | |
| 4g | Number of dumps stabilised | | | | | |
| 4h | Whether Retaining wall or garland drain all along dumps are there | | | | | |
| 4i | Length of Retaining wall or garland drain all along dump | | | | | |
| 4j | Number of settling ponds | | | | | |
| 4k | Specific comments of inspecting officer | | | | No overburden/waste is generated presently. Topsoil is utilising purely for plantation purposes. | |

4.0 Solid Waste Management-Backfilling

| SN | Item | Proposals 2021-22 | Actual work | Remarks |
|----|--|--|-------------|--|
| 5a | Status on part or full extraction of mineral from mined out area before starting backfilling | Not proposed | NIL | Entire ROM is utilising by proper blending as per quality requirement. |
| 5b | Area under backfilling of mined out area | | | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area | | | |
| 5d | Total area fully reclaimed & rehabilitated | | | |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc. | There are no OB/Waste generation. Hence no backfilling & reclamation proposed & not carried out. | | |

6.0 Progressive Mine Closure Plan

| SN | Item | Proposals 2021-22 | Actual work | Remarks |
|----|---|---|---|-----------|
| 6a | Whether Annual report on PMCP submitted on time correctly Rule 26 (2). | Proposed | Annual report on PMCP is submitted. | 22.6.2021 |
| 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 | Not Proposed | NIL | |
| 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 | Not Proposed | NIL | |
| 6d | Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation | 100 Nos. & 0.01Ha 280M fencing | 100 Nos. & 0.01Ha Embankment work done | |
| 6e | Compliance of Environmental monitoring (core zone/buffer zone) | monitoring as per IBM /MoEF | monitoring done as per IBM/MoEF | |
| 6f | General remarks of inspecting officer on PMCP compliance & progressive | PMCP report is submitted for the year. Periodical environment monitoring is being carried out by third party. | | |

7.0 Mineral Conservation

| SN | Item | Proposals 2021-22 | Actual work | Remarks |
|----|--|---|-------------------------------|---|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | 65000T | 65000T | Lessee is utilizing entire ROM by proper sorting & sizing as per plant requirement. |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical | Manual & Mechanised both | Manual & Mechanised both | |
| 7c | Different grade of mineral sorted out at mines | Stacking for sorting & sizing | Stacking for sorting & sizing | |
| 7d | Any beneficiation process at mines | Not required | NA | |
| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | Lessee is utilizing entire ROM by proper stacking, sorting & sizing as per plant requirement. | | |

8.0 Environment

| SN | Item | Proposals 2021-22 | Actual work | Remarks |
|----|--|---|-----------------------------------|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | Proposed for separate removal | Utilising for plantation purposes | |
| 8b | Concurrent use or storage of topsoil | NA | NA | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | NA | NA | |
| 8d | Use of OB, waste rock, rejects, fines dump for restoring land to original use | NA | NA | |
| 8e | Phased restoration, reclamation & rehabilitation of lands affected by mining operations (Pits, dumps etc.) | No proposal | Nil | |
| 8f | Baseline information on existence of plantation & additional plantation done | No proposal | Utilising for plantation purposes | |
| 8g | Survival rate | | About 85% | |
| 8h | Water sprinkling on roads to control airborne dust | | Regular water sprinkling is done. | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines are | Aesthetic beauty in and around mines area is degraded mining pits & natural grown shrubs & bushes observed. | | |

9.0 Compliance of Rule 45

| S.N | Item | COMMENTS | | Remarks |
|-----|---|--|-------------------------|---------|
| | Status of submission of Monthly and Annual returns | M.R. submitted up to –March 2022 & A.R. submitted up to- 2020-21 (25/5/2021) | | |
| S.N | Item | Details GIVEN in A.R. | Observation of I/O | Remarks |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist & Manager | Rakesh Kumar Singh, Dip (Mi) & SCC(R), CM Dwivedi, Geologist | | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Details Given as per AR | Details Given as per AR | NIL |
| 9d | Scrutiny of Annual return on afforestation | | | |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & quantity) | | | |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | | | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost | | | |
| 9i | Scrutiny of Annual return on fixed assets | | | |
| 9k | Scrutiny of Annual return on mining machineries | | | |

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:- Presently mine was inspected for MMP inspection & lessee is regular in submission of periodical returns. MMP approved on 11.5.22 & Online star rating evaluation validation done. Presently no significant violation observed.