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## MCDR INSPECTION REPORT

# 1<u>.0 **GENERAL**</u>

|    | <u>ENERAL</u>  | T  |
|----|--|--|
| SN | Particulars  |  |
| 1  | Name of the Mine   | Aniali Limestone Mine, (Sy. No.207/P)  |
| 2A | Inspecting officer with date, Type   | G.Ram, DCOM, 15/11/2022 AN, Star Rating  |
| 2B | Accompanying official  | Sh.Mayank Srivastava, MM   |
| 3  | Total Lease Area (Ha) Non-forest and forest land   | Total area-21.04 Ha, Non-Forest land   |
| 4  | Mine code, IBM Reg. under rule 45 of MCDR,17   | 38GUJ21097 & IBM/437/2011  |
| 5  | Name of the lessee, Address, phone, email and fax number   | Tata Chemicals Limited, RegdBombay House, 24 Homy modi street, Fort,Mumbai-400001, Works- Ranavav Quarries, Ranavav, Dist- Porbandar Gujarat – 360550, cmdwivedi@tatachemicals.com |
| 6  | Village  | Aniali   |
| 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  | 07.7.1966  |
| 15 | Date of Execution  | 23.12.1966, 50 Year, Expiry-31.3.2030 as per MMDR<br>Amendment Act,2015  |
| 16 | Date of opening of Mine  | 01.03.2017   |
| 17 | Date of first Renewal, if and its period & expiry  | 02.9.1985 period 20 Years  |
| 18 | Date of second Renewal, period & expiry  | 17.11.2005   |
| 19 | Date of submission of renewal application if any   | NA   |
| 20 | Name of the Nominated Owner with<br>Address, phone, email and date of<br>appointment             | R. Mukundan, M/s Tata Chemicals Limited, Bombay House, 24 Homy Modi Street, Mumbai – 400001, Maharastra  |
| 21 | Name of the Mine Agent, Address, phone, email, fax & date of appointment                         | C M Dwivedi, Works- Ranavav Quarries, Ranavav, Dist-<br>Porbandar Gujarat – 360550, cmdwivedi@tatachemicals.com  |
| 22 | Name of the Mines Manager with Address, phone, email, date of appointment in mines               | Mayank Srivastava, BE & FCC(R), Wef -15.12.2015 Works-Ranavav Quarries, Ranavav, Dist-Porbandar Gujarat – 360550   |
| 23 | Name of the ME, Qua. & Exp., Address, phone, email, fax, date of appointment                     | Mayank Srivastava, BE & FCC metal(R), Wef -15.12.2015<br>Works- Ranavav Quarries, Ranavav, Dist- Porbandar Gujarat – 360550  |
| 24 | Whether Geologist & ME appointed in mines satisfy the rule 55                                    | C M Dwivedi, Works- Ranavav Quarries, Ranavav, Dist-<br>Porbandar Gujarat – 360550, cmdwivedi@tatachemicals.com,   |
| 25 | Date of Approval of MP//MMP with five-<br>year period and specific condition, if any.            | 682(23)(337)/2003-MCCM(N)UDP, 1.11.2004  |
| 26 | Date of Approval of RMP with five-year period and specific condition in approval letter, if any. | 684(4)(1)MP-259/2019-20/GNR, 26.12.2019 for the period of 2019-20 to 2023-24   |
| 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)  |

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

| 1.0 Ex | 1.0 Exploration                  |                   |                |         |  |  |
|--------|----------------------------------|-------------------|----------------|---------|--|--|
| SN     | Item                             | Proposals 2021-22 | Actual work    | Remarks |  |  |
| 1a     | Backlog of previous year         | Not proposal      | Not done       | NIL     |  |  |
| 1b     | Exploration over lease area for  |                   | Entire ML area |         |  |  |
|        | Geological axis 1 or 2.          |                   | is in G1/G2    |         |  |  |
| 1c     | Exploration Agency & Expenditure | Lessee itself     |                | NA      |  |  |
|        | in lakh Rupees during the year   |                   |                |         |  |  |
| 1d     | Balance area to be explored to   | Not Proposed      | NIL            | NIL     |  |  |
|        | bring Geological axis in 1 or 2  |                   |                |         |  |  |

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|   | 1e | Balance reserves as on 01.4.2022 | 1.006 million tonne  |
|---|----|----------------------------------|--|
| 2 | 1f | General remarks of inspecting    | Entire lease area is developed by various pits & explored in past by |
|   |    | officer                          | drilling in G1/G2 level.   |

2.0 Development

|    | to be vereprised.                              |  |                                   |         |  |  |
|----|--|--|-----------------------------------|---------|--|--|
| SN | Item   | Proposals 2021-22  | Actual work                       | Remarks |  |  |
| 2a | Location of development w.r.t. lease area      | 2400627N-2400815N<br>585735E -585989E                      | Partly done due to legging in ROM |         |  |  |
| 2b | Separate benches in topsoil, OB and mineral    | Not Proposed   | Maintained separately             |         |  |  |
| 2c | Stripping ratio or ore to OB ratio             | 1:0.0  | 1:0.00                            |         |  |  |
| 2d | Quantity of topsoil generation in m3           | NIL  | 0T                                |         |  |  |
| 2e | Quantity of overburden generation in m3        | NIL  | 0T                                |         |  |  |
| 2f | General remarks of inspecting officer on       | Lease area developed by mining pits, Limestone is used for |                                   |         |  |  |
|    | development of pit w.r.t. type of deposit etc. | captive soda ash & cement plant.                           |                                   |         |  |  |

| <u>3.0 </u> Ex | ploitation  |   |  |  |
|----------------|---|---|--|--|
| SN             | Item  | Proposals 2021-22   | Actual work  | Remarks  |
| 3a             | Number of pits proposed for production  | Two Pit   | Single Pit   | Partly done due                                    |
| 3b             | Quantity of ROM production proposed   | 1,75,000 tonnes   | 42,750 Tonnes  | to legging in ROM                                  |
| 3с             | Recovery of saleable/usable mineral from ROM  | 100%  | 100%   |  |
| 3d             | Quantity of mineral reject generation   | 67,870T proposed  | OT   |  |
| Зе             | Grade of mineral reject generation and THV  | 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  | Manual / mech.  | Both   |  |
| 3i             | Any analysis or beneficiation study proposed  | Not Proposed  | Not done   | -  |
| 3j             | Provision of drilling & blasting in benches   | as and when requires  | As proposed  | -  |
| 3k             | Provision of mining machineries in benches  | Excavator-&<br>Tippers  | Excavator & Tippers  |  |
| 31             | Whether height of benches suitable for method   | As proposed   | Irregular bench<br>height  |  |
| 3m             | Total area covered under excavation/pits  | 14.9342 Ha  | About-6.1063 Ha  |  |
| 3n             | Ore to OB ratio for the pit/mine during the year  | 1:0.0   | 1:0.0  |  |
| 30             | Total area put in use under different heads   |   | Pit- 6.1063, Roads-<br>1.2926<br>Infrastructure-0.6000   |  |
| 3p             | Production of ROM mineral during last five-year period, as applicable (2022-23 till Oct'22) | 2018-19-1,75,000<br>tonne<br>2019-20-1,75,000<br>tonne<br>2020-21-1,75,000<br>tonne<br>2021-22-1,75,000<br>tonne<br>2022-23-1,75,000<br>tonne | 2018-19-42878 tonne<br>2019-20-41350 tonne<br>2020-21-42965 tonne<br>2021-22-42750 tonne<br>2022-23-30,400 tonne<br>(Oct 22) | Deviated due to lagging in ROM production in past. |
| 3q             | General remarks of IO on method of mining etc.  | Mech.O/C method wi  | th using HEMM & tippe  | r combination                                      |

4.0 Solid Waste Management-Dumping

| 1.0 | 4.0 John Waste Management Bumping           |                   |                |            |  |  |
|-----|---|-------------------|----------------|------------|--|--|
| SN  | Item  | Proposals 2021-22 | Actual work    | Remarks    |  |  |
| 4a  | Separate dumping of topsoil, OB/Mineral     | for plantation    | not reported   | No         |  |  |
|     | reject                                      | purposes          | /generated     | OB/Waste   |  |  |
| 4b  | Location of topsoil, OB & mineral reject    | Not Proposed      | NIL            | proposed & |  |  |
|     | dumps                                       |                   |                | generated. |  |  |
| 4c  | Number of dumps within lease area and       | None              | None           |            |  |  |
|     | outside                                     |                   |                |            |  |  |
| 4d  | Location of dumps w.r.t. ultimate pit limit | Not applicable    | Not applicable |            |  |  |
| 4e  | Number of active & alive dumps              | No proposal       | Not applicable |            |  |  |
| 4f  | Number of dead dumps                        | Nil               | Nil            |            |  |  |
| 4g  | Number of dumps stabilised                  | Not applicable    | NIL            |            |  |  |

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|   | 4h | Whether Retaining wall or garland drain   | NIL                | NIL                                    |  |
|---|----|---|--------------------|--|--|
| 2 |    | there                                     |                    |  |  |
|   | 4i | Length of Retaining wall or garland drain | Not applicable     | NIL                                    |  |
|   | 4j | Number of settling ponds                  | Not proposed       | NIL                                    |  |
|   | 4k | Specific comments of inspecting officer   | No OB/waste is ger | nerated presently. Topsoil is used for |  |
|   |    |   | plantation.        |  |  |

5.0 Solid Waste Management-Backfilling

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

**6.0** Progressive Mine Closure Plan

| <u>0.0</u> 11 | riogressive Mille Closure Flair                          |                     |                     |              |  |  |
|---------------|--|---------------------|---------------------|--------------|--|--|
| SN            | Item   | Proposals 2021-22   | Actual work         | Remarks      |  |  |
| 6a            | Whether Annual report on PMCP submitted on time          | Proposed            | Submitted on        |              |  |  |
|               | and correctly - Rule 26 (2).                             |                     | 13.6.2022           |              |  |  |
| 6b            | Management of worked/mined out benches i) Area           |                     |                     |              |  |  |
|               | available for rehabilitation (ha) ii) Afforestation done | 0.1 hect            | 2.1Hect.            |              |  |  |
|               | (ha) iii) No. of saplings planted during the year iv)    | 100                 | 2900 Nos.           |              |  |  |
|               | Cumulative no. of plants v) Any other specific method    |                     | 6695 Nos            |              |  |  |
|               | of rehabilitation vi) Cost incurred on watch & care      | Rs. 50,800          | Rs. 229324          |              |  |  |
|               | during the year  |                     |                     |              |  |  |
| 6c            | Compliance on reclamation and rehabilitation             | Not Proposed        | NIL                 |              |  |  |
|               | bybackfilling i) Voids available for backfilling (L X B  |                     |                     |              |  |  |
|               | X D) ii) Voidfilled by waste/tailings iii) Afforestation |                     |                     |              |  |  |
|               | on the backfilled area iv) Rehabilitation by making      |                     |                     |              |  |  |
|               | water reservoir v) Any other etc.                        |                     |                     |              |  |  |
| 6d            | Compliance of Rehabilitation of waste land within        | Not proposed        | Not done            |              |  |  |
|               | lease i) Afforestation ii) Area rehabilitated (ha) iii)  |                     |                     |              |  |  |
|               | Method of rehabilitation                                 |                     |                     |              |  |  |
| 6e            | Compliance of Environmental monitoring                   |                     | done                |              |  |  |
| 6f            | General remarks of IO on PMCP compliance &               | PMCP report is subi | nitted with in stip | ulated time. |  |  |
|               | progressive  |                     |                     |              |  |  |
|               |  |                     |                     |              |  |  |

## 7.0 Mineral Conservation

|   | SN | Item   | Proposals 2021-22                | Actual work        | Remarks       |
|---|----|--|----------------------------------|--------------------|---------------|
| 7 | 7a | ROM Mineral dispatch or grade-wise sorting     | 1,75,000 tonnes                  | 42,750 Tonnes      |               |
| 7 | 7b | Method of grade-wise sorting i.e. manual or    | Manual & Mech.                   | Manual &           |               |
|   |    | mech.  | Widiludi & Wiecii.               | Mec.               |               |
| 1 | 7c | Different grade of mineral sorted out at mines | sorting & sizing                 | Yes                |               |
|   | 7d | Any beneficiation process at mine              | Not required                     | NA                 |               |
|   | 7e | General remarks of inspecting officer on       | Lessee is utilizing entire RO    | M by proper stacki | ng, sorting & |
|   |    | Mineral conservation & beneficiation issues    | sizing as per plant requirement. |                    |               |

## 8.0 Environment

| SN | Itom  | Droposale 2021 22   | Actual work              | Domorles |
|----|---|---|--------------------------|----------|
|    | Item  | Proposals 2021-22   |                          | Remarks  |
| 8a | Separate removal and utilization of topsoil   | Proposed  | Utilising for            |          |
|    |   | Тюрозса   | plantation               |          |
| 8b | Concurrent use or storage of topsoil  | NA  | NA                       |          |
| 8c | Separate dumps for OB, waste rock, rejects, fines   | NA  | NA                       |          |
| 8d | Use of OB, waste rock, rejects and fines dumps for restoring the land to its original use | NA  | NA                       |          |
| 8e | Phased restoration, reclamation & rehabilitation of lands affected by mining operations   | No proposal   | Nil                      |          |
| 8f | Baseline information on existence of plantation   | No proposal   | Utilising for plantation |          |
| 8g | Survival rate   |   | About 85%                |          |
| 8h | Water sprinkling on roads to control airborne dust  | proposed  | Regular doing.           |          |
| 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. |                          |          |

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| _ | S. | Item                                     |                          | COMMENTS  | Remarks |  |
|---|----|--|--------------------------|---|---------|--|
| 2 | N  | Status of submission of Monthly and      | MD & AD au               | M.R. & A.R. submitted with in time for the year |         |  |
|   |    | Annual returns                           | 2021-22 (09/06/2         |   |         |  |
| Ī | S. | Item                                     | Details GIVEN            | Observation of I/O                              | Remarks |  |
|   | N  |  | in A.R.                  |   |         |  |
|   | 9b | Scrutiny of AR for information on ME,    | Details as per           | Sh.Mayank Srivastava, CM                        | NIL     |  |
|   |    | Geologist & Manager                      | given in AR              | Dwivedi, MSc (Geology) (Part)                   |         |  |
| ſ | 9c | Scrutiny of AR on land use pattern for   |                          | O/c– 6.106 ha, Afforestation – 2.1 ha           |         |  |
|   |    | area under pits, reclaimed , dumps etc.  |                          | Wire Fencing – 2200 mt                          |         |  |
| Ī | 9d | Scrutiny of Annual return -afforestation |                          | No of trees: 2900, survival-80%                 |         |  |
| ſ | 9e | Scrutiny of AR on mineral reject         |                          | There is no mineral rejects                     |         |  |
|   |    | generation                               |                          | generated                                       |         |  |
| Ī | 9f | Scrutiny of AR on ROM stock, graded      |                          | Chem- O/S-365.7 & C/S- 353.5 t                  |         |  |
|   |    | ore                                      |                          |   |         |  |
| Ī | 9g | Scrutiny of AR on sale value, Ex. Mine   |                          | Ex. Mine price–166.91Rs. /T                     |         |  |
|   |    | price & production cost                  | (Chemical) ,Captive used |   |         |  |
| Ī | 9i | Scrutiny of Annual return on fixed       | As per given in AR       |   |         |  |
|   |    | assets                                   |                          |   |         |  |
| Ī | 9k | Scrutiny of Annual return on mining      |                          | Excavator, loader Tipper,water                  |         |  |
|   |    | machineries                              |                          | tanker, Air compressor                          |         |  |

**<sup>10-</sup> Details of violations observed during current inspection and compliance position of earlier violation pointed out:-**Presently mine was inspected for MCDR/Star Rating & Online star rating evaluation done (4Star). Presently no significant violation observed & pointed out.