#### MCDR INSPECTION REPORT

#### 1.0 **GENERAL**

| SN       | Particulars  | Details   |
|----------|--|---|
| 1(a)     | Name of the Mine   | Shantipura Limestone Mines  |
| 1(b)     | Name of Inspecting Officer & Designation   | Sanjay M. Girhe, Sr. Mining Geologist   |
| 1(c)     | Accompanying Mines Representatives   | Sarmanbhai K Dharmanchotiya, Manager & Sh. Hitesh M. Solanki, ME  |
| 1(d)     | Type of Inspection   | Review of Mining Plan   |
| 1(e)     | Date of Inspection   | 28.07.2018  |
| 2        | Total Lease Area (Ha) with breakup of  | 19.9611 Ha. (Govt. Waste Land)  |
|          | Non-forest and forest land   | Forest- Nil   |
| 3        | Mine code  | 38GUJ08129  |
| 4        | IBM Registration Number under rule 45 of MCDR, 1988  | IBM/773/2011  |
| 5        | Name of the lessee, Address, phone, email and fax number   | Shri Arun Sukhdev Trivedi Legal Heir of Lessee (Late) Sukhdev Jayantilal Trivedi Address: Near Power House Circle, Housing Society, Dhrangadhra DistSurendranagar-363310, Gujarat (India) Phone-+91-9712985163, Email:- shivam_mining@yahoo.in                                  |
| 6        | Village  | Shantipura  |
| 7        | Taluka/Mandal  | Malia Hatina  |
| 8        | District   | Junagadh  |
| 9        | Pin code   | 362255  |
| 10       | State  | Gujarat   |
| 11       | Post office  | Gadu  |
| 12       | Nearest police station   | Malia Hatina  |
| 13       | Nearest Railway station  | Somnath   |
| 14<br>15 | Date of Grant of Mining Lease Date of Execution  | 04-09-1964<br>31-10-1964  |
|          |  | 01-11-1964  |
| 16<br>17 | Date of opening of Mine Date of first Renewal, if applicable and its                                       | 31-10-1984, 20 Years.   |
| 17       | period & expiry  | 30-10-2004  |
| 18       | Date of second Renewal, if applicable and its period & expiry  | 31-10-2004, 10 Years.<br>30-10-2014. However, it extended till 31-03-2020 as per<br>Section 8A (6) of the MMDR Amendment Act, 2015  |
| 19       | Date of submission of renewal application if<br>Mining Operations are continuing under<br>deemed extension | Second Renewal:01-09-2003,<br>Extended now upto 31-03-2020 (vide letter no. MCR-1583-<br>(T20)-7001-Chh-1 dated on 06.06.2017)  |
| 20       | Name of the Nominated Owner with<br>Address, phone, email, fax number and date<br>of appointment           | Shri Arun Sukhdev Trivedi Legal Heir of Lessee (Late) Sukhdev Jayantilal Trivedi Address:-Near Power House Circle, Housing Society, Dhrangadhra DistSurendranagar-363310, Gujarat (India) Phone-+91-9712985163, Email:- shivam mining@yahoo.in Date of Appointment – 03-10-2008 |
| 21       | Name of the Mine Agent with Address, phone, email, fax number and date of appointment                      | Shri Arun Sukhdev Trivedi Legal Heir of Lessee (Late) Sukhdev Jayantilal Trivedi Address:-Near Power House Circle, Housing Society, Dhrangadhra DistSurendranagar-363310, Gujarat (India) Phone-+91-9712985163, Email:- shivam_mining@yahoo.in Date of Appointment - 03-10-2008 |
| 22       | Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines          | Shri Sarmanbhai K Dharmanchotiya At-Chapri, Ta-Veraval, GirSomnath, Gujarat Phone- +91-963853399 Email:- shivam_mining@yahoo.in Date of Appointment - 01.01.2015  |

| 23 | Name of the Mining Engineer, Qualification     | Mr. Hitesh Merubhai Solanki                                 |
|----|--|---|
|    | and total experience with Address, phone,      | B.E. (Mining), Experience: 10 Months                        |
|    | email, fax number and date of appointment      | At : Kadwar, Ta: Sutrapada,                                 |
|    | in mine  | District: Gir Somnath Phone:- 9537892069                    |
|    |  | Email: - Solankihitesh1234@gmail.com                        |
|    |  | Fax:-N.A.   |
|    |  | Date of Appointment – 01-01-2018                            |
| 24 | Whether Geologist and Mining Engineer          | Yes, Geologist and Mining Engineer appointed as per rule 55 |
|    | appointed in mines satisfy the rule 55 &       | of MCDR,2017  |
|    | carrying out their duties as per rule 56 & 57. |   |
| 25 | Date of Approval of Mining Plan/Modified       | Date of Approval of Review of Mining Plan :- 10-09-2018     |
|    | Mining Plan with five-year period and          | Vide letter No. 684(4)(1)(MP-163)/2018-GNR                  |
|    | specific condition in approval letter, if any. | Period :- From 2018-19 to 2019-20                           |
| 26 | Date of Approval of Scheme of                  | NA  |
|    | Mining/Modified Scheme of Mining with          |   |
|    | five-year period and specific condition in     |   |
|    | approval letter, if any.                       |   |
| 27 | Mineral(s) granted in lease and proved for     | Limestone   |
|    | mining   |   |
| 28 | Method of Mining(Opencast, Underground)        | Opencast  |
| 29 | Category (Fully Mechanised, Others or          | Semi-Mechanised   |
|    | Manual)  |   |
| 30 | Captive/Non Captive                            | Non-Captive   |

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

| Expi | Exploration   |  |                           |  |  |  |  |
|------|---|--|---------------------------|--|--|--|--|
| SN   | Item  | Proposals<br>(2017-18)   | Actual work (2017-<br>18) | Remarks  |  |  |  |
| 1a   | Backlog of previous year  | NA   | NA                        | No Proposal in RY  |  |  |  |
| 1b   | Exploration over lease area for Geological axis 1 or 2.         | NA   | NA                        |  |  |  |  |
| 1c   | Exploration Agency & Expenditure in lakh Rupees during the year | NA   | NA                        |  |  |  |  |
| 1d   | Balance area to be explored to bring Geological axis in 1 or 2  | 1.4499 Ha (G2)<br>1.0587 Ha (G3)   | NA                        | Proposal for G1 level<br>exploration Given for<br>Year 2018-19 |  |  |  |
| 1e   | Balance reserves as on 01.04.2018                               | In Million tones   | In Million tones          | The difference due to  |  |  |  |
|      |   | Limestone (Both  | Limestone (Both           | lower production than the                                      |  |  |  |
|      |   | <u>Grade)</u>  | Grade)                    | proposed production  |  |  |  |
|      |   | Proved-4.085677  | Proved-4.419013           | during last 5 years  |  |  |  |
| 1f   | General remarks of inspecting                                   | Detailed Explorations was proposed in the entire area to ascertain the in-   |                           |  |  |  |  |
|      | officer on geology, exploration                                 | situ quantity of cement grade limestone available to meet the criteria/norms |                           |  |  |  |  |
|      | etc.  | of MEMC Rules,2015   |                           |  |  |  |  |

# 2.0 Development

| SN | Item  | Proposals  | Actual work  | Remarks  |
|----|---|--|--|--|
|    |   | (2017-18)  | (2017-18)  |  |
| 2a | Location of development w.r.t. lease area                           | Northwest-Southeast<br>& advancing in South-<br>West direction | Mine working done<br>over the proposed<br>location with very<br>minor variation. | Working carried out as per the proposed locations with minor deviation due to grade control. |
| 2b | Separate benches in topsoil,<br>overburden and mineral<br>(Rule 15) | No proposals for separate benches                              | Not applicable   | No Top soil &<br>Overburden encountered<br>in ML area  |
| 2c | Stripping ratio or ore to OB ratio                                  | Not Applicable   | Not Applicable   | No OB  |
| 2d | Quantity of topsoil generation in m3                                | Not Applicable   | Not Applicable   |  |
| 2e | Quantity of overburden generation in m3                             | Not Applicable   | Not Applicable   |  |

| 2f | General remarks of inspecting | Development of all working pits to be carried out in systematic manner as |
|----|-------------------------------|---|
|    | officer on development of pit | per the given proposals in approved MP                                    |
|    | w.r.t. type of deposit etc.   |   |

## 3.0 Exploitation

| SN | Item   | Proposals<br>(2017-18)   | Actual work (2017-18)  | Remarks   |
|----|--|--|--|---|
| 3a | Number of pits proposed for production   | In 3 (Three) pits as<br>earmarked on all<br>relevant plates  | Mine working is done as per<br>the proposals in 3 pits   |   |
| 3b | Quantity of ROM mineral production proposed  | Limestone- 2,00,000 tonnes   | Limestone-56,663 tonnes Production is lesser due to poor market demand and non-availability of labours                   |   |
| 3c | Recovery of salable/usable mineral from ROM production   | NA   | NA   |   |
| 3d | Quantity of mineral reject generation  | NA   | NA   |   |
| 3e | Grade of mineral reject generation and threshold value declared                                      | NA   | NA   |   |
| 3f | Quantity of sub-grade mineral generation   | NA   | NA   |   |
| 3g | Grade of sub-grade mineral generation  | NA   | NA   |   |
| 3h | Manual / Mechanised method<br>adopted for segregating from<br>ROM                                    | NA   | NA   |   |
| 3i | Any analysis or beneficiation<br>study proposed & carried out for<br>sub-grade mineral and reject    | NA   | NA   |   |
| 3j | Provision of drilling & blasting in mineral benches  | Hole Dia-<br>32mm,spacing -<br>1.5m,burden-1.5m,use<br>of slurry(both column<br>and base charge)   | The Rock breaker is used instead of Drilling and blasting  | As the in-situ rock is soft in nature, drilling and blasting was not adopted. |
| 3k | Provision of mining machineries in mineral benches   | 1. JCB (0.800 CUM,<br>75 HP)-03<br>2. TRACTOR WITH<br>TROLLEY SYSTEM<br>(5T, 20 HP) -02<br>3. TIPPERS (10T,<br>50HP)-08<br>4. JACK HAMMER<br>(32 mm dia, 50 HP)-03 | 1. JCB (0.800 CUM, 75<br>HP)-03<br>2. TRACTOR WITH<br>TROLLEY SYSTEM (5T,<br>20 HP) -02<br>3. TIPPERS (10T, 50HP)-<br>08 |   |
| 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   | 11.96 На.  | 10.6625 На.  | No new area is opened only existing pits got deepened.                        |
| 3n | Ore to OB ratio for the pit/mine during the year   | 1:0.0  | 1:0.0  | No OB   |
| 30 | Total area put in use under different heads at the end of year                                       | Pit- 11.96 ha.<br>Infrastructure, road-<br>0.31 ha.<br>Others (Mineral Stack<br>& Plantation)-0.8 ha.  | Pit- 10.6625 ha.<br>Infrastructure, road-0.5414<br>ha.<br>Others (Mineral Stack &<br>Plantation)-0.2678 ha.              |   |
| 3p | Production of ROM mineral during last five-year period, as   | 2013-14: 2,00,000 MT<br>2014-15: 2,00,000 MT   | 2013-14: 97,901MT<br>2014-15: 1,59,500 MT  | ROM-Limestone<br>(Chemical Grade  |

|    | applicable                       | 2015-16: 2,00,000 MT  | 2015-16: 1,78,796.55 MT  | + Cement Grade) |  |
|----|----------------------------------|---|--------------------------|-----------------|--|
|    |                                  | 2016-17: 2,00,000 MT  | 2016-17: 1,73,803.617 MT |                 |  |
|    |                                  | 2017-18: 2,00,000 MT  | 2017-18 : 56,663.061 MT  |                 |  |
| 3q | General remarks of inspecting    | Un-Systematic benching pattern noticed during the inspection. |                          |                 |  |
|    | officer on method of mining etc. |   |                          |                 |  |

# 4.0 Solid Waste Management-Dumping

| SN | Item   | Proposals (2017-18) | Actual work<br>(2017-18)  | Remarks   |
|----|--|---------------------|---|---|
| 4a | Separate dumping of topsoil,<br>OB & mineral reject (Rule 32,<br>33) | NA                  | Under sized<br>limestone Mineral<br>stacked formed to<br>further sell it to<br>nearby cement<br>plants        | Under sized limestone Mineral stacked formed to further sell it to nearby cement plants                         |
| 4b | Location of topsoil, OB & mineral reject dumps                       | NA                  | The U/S mineral<br>stacks from D1 to<br>D13 have been<br>shown on Surface<br>Plan                             | The U/S mineral stacks from D1 to D13 have been shown on Surface Plan   |
| 4c | Number of dumps within lease area and outside lease area             | NA                  | 13 No. of mineral<br>stacks are made<br>within the lease<br>area. Nothing is<br>disposed outside the<br>lease | The stacks are temporary in nature as the undersized mineral is regularly being sold to the nearby cement plant |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16)                | NA                  | Between E-<br>637300m to E-<br>637740m & N-<br>2325100m to N-<br>2325310m                                     | The stacks are temporary in nature as the undersized mineral is regularly being sold to the nearby cement plant |
| 4e | Number of active & alive dumps                                       | NA                  | Active & Alive: 13 mineral stacks   | do  |
| 4f | Number of dead dumps   | NA                  | NA  |   |
| 4g | Number of dumps stabilised   | NA                  | NA  |   |
| 4h | Whether Retaining wall or garland drain all along dumps are there    | NA                  | NA  |   |
| 4i | Length of Retaining wall or garland drain all along dump             | NA                  | NA  |   |
| 4j | Number of settling ponds   | NA                  | NA  |   |
| 4k | Specific comments of inspecting officer                              |                     | DB, mineral reject encoun<br>re indicate as "not applical   | tered during mining operation hence<br>ble"   |

## 5.0 Solid Waste Management-Backfilling

| SN | Item   | Proposals<br>(2017-18) | Actual work (2017-18) | Remarks                    |
|----|--|------------------------|-----------------------|----------------------------|
| 5a | Status on part or full extraction of mineral from mined out area before starting backfilling | Mineral extracted      | Mineral extracted     | No backfilling is proposed |
| 5b | Area under backfilling of mined out area   | NA                     | NA                    |                            |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)      | NA                     | NA                    |                            |

| 5d | Total area fully reclaimed &        | 0 Ha        | 0.04 Ha | By plantation in the |
|----|-------------------------------------|-------------|---------|----------------------|
|    | rehabilitated                       |             |         | green belt area      |
| 5e | General remarks of inspecting       | No comments |         |                      |
|    | officer on backfilling, reclamation |             |         |                      |
|    | etc                                 |             |         |                      |

## **6.0 Progressive Mine Closure Plan**

| SN | Item  | Proposals (2017-18)  | Actual work (2017-18)  | Remarks          |
|----|---|--|--|------------------|
| 6a | Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). Details should be given in the format as given in Annexure-20.  | Yes  | Report submitted within time limit as per prescribed format.       |                  |
| 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 | NA   | NA   |                  |
| 6с | 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                         | i) 0.0 Ha.<br>ii) 0.0 Ha.<br>iii) 0.0 Ha.<br>iv) 0.0 Ha.<br>v) Nil | i) 0.0 Ha.<br>ii) 0.0 Ha.<br>iii) 0.0 Ha.<br>iv) 0.0 Ha.<br>v) Nil |                  |
| 6d | Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation  | 0.01 ha by planting 20 sapling (developing green belt)             | 0.01 ha by planting 10 sapling (developing green belt)             |                  |
| 6e | Compliance of Environmental monitoring (core zone & buffer zone)  | Yes, Quarterly (Rs. 10,000)/Annum cost                             | Yes<br>(Rs. 10,000) /Annum<br>cost                                 |                  |
| 6f | General remarks of inspecting officer on PMCP compliance & progressive  | Environmental monitoring reports were produced dur                 | work entrusted to the outs   | ourced party and |

7.0 Mineral Conservation

| SN | Item   | Proposals<br>(2017-18) | Actual work<br>(2017-18)   | Remarks  |
|----|--|------------------------|--|--|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area   | NA                     | Production 56663.06<br>MT & 48627.688<br>Tonnes (Limestone<br>dispatch quantity) | Chemical grade<br>limestone:<br>27363.565 T &<br>Cement grade<br>limestone:<br>29299.496 T               |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical | Manual                 | Manual   | The ROM is subjected to manual sizing & sorting, the part of chemical grade limestone which is more than |

|    |  |  |                       | 55mm and less than<br>105mm is sold to<br>the Soda Ash Plant<br>whereas below<br>55mm is sold to the<br>Cement Plant for<br>cement<br>manufacturing. |
|----|--|--|-----------------------|--|
| 7c | Different grade of mineral sorted out at mines                                       | CaO >52 %<br>SiO2<10%  | CaO >52 %<br>SiO2<10% | do   |
| 7d | Any beneficiation process at mines   | NA   | NA                    |  |
| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | In view of mineral conservation manual sorting is being practised to get different grades of mineral and also conserved the undersized limestone for cement manufacturing. |                       |  |

| 8.0 I | Environment  |   |   |  |
|-------|--|---|---|--|
| SN    | Item   | Proposals<br>(2017-18)  | Actual work (2017-18)                     | Remarks  |
| 8a    | Separate removal and utilization of topsoil (Rule 32)  | Not Applicable  | Not Applicable                            | No top soil  |
| 8b    | Concurrent use or storage of topsoil   | Not Applicable  | Not Applicable                            | do   |
| 8c    | Separate dumps for overburden,<br>waste rock, rejects and fines<br>(Rule 33)   | Not Applicable  | Not Applicable                            | No, OB, Mineral reject   |
| 8d    | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use                    | Not Applicable  | Not Applicable                            | do   |
| 8e    | Phased restoration, reclamation<br>and rehabilitation of lands<br>affected by mining operations<br>(Pits, dumps etc) | Not Applicable  | Not Applicable                            | In future pits will be converted into water reservoir due to unavailability of the backfilled material |
| 8f    | Baseline information on existence of plantation & additional plantation done (Rule 41)                               | 20  | 10  |  |
| 8g    | Survival rate  | 92 %  | 50.0 %                                    |  |
| 8h    | Water sprinkling on roads to control airborne dust   | Yes   | Yes (Mechanically propelled water tanker) |  |
| 8i    | General remarks of inspecting officer on aesthetic beauty in and around mines area                                   | Environmental monitoring is being entrusted to the outsourced consultant & reports were produced during inspection. |   |  |

9.0 Compliance of Rule 45

| S.N | Item                       | COMMENTS                        | Remarks |
|-----|----------------------------|---------------------------------|---------|
|     | Status of submission of    | M.R. Submitted upto – July 2018 |         |
|     | Monthly and Annual returns | A.R. submitted upto- 2017-18    |         |

| S.N | Item                            | Details GIVEN in       | Observation of I/Officer | Remarks                |
|-----|---------------------------------|------------------------|--------------------------|------------------------|
|     |                                 | A.R.                   |                          |                        |
| 9b  | Scrutiny of Annual return for   | Sh. Hitesh M Solanki,  | Geologist and Mining     |                        |
|     | information on Mining           | ME                     | Engineer appointed as    | During the inspection  |
|     | Engineer, Geologist and         | Dt. of app. 01.01.2018 | per rule 55 of           | it was advised to      |
|     | Manager                         | Sh. Milind Kundal,     | MCDR,20107.              | Mine representative to |
|     |                                 | Geologist              |                          | submit the AR & MR     |
|     |                                 | Dt. of app. 01.01.2018 |                          | correctly for correct  |
| 9c  | Scrutiny of Annual return on    | Given                  | Pit- 10.6625 ha.         | cost of production &   |
|     | land use pattern for area under |                        | Infrastructure, road-    | Ex mine price as per   |

|    | pits, reclaimed area, dumps etc.  |  | 0.5414 ha.<br>Others (Mineral Stack &<br>Plantation)-0.2678 ha. | Further, violations for rules 26(2), 31(4), 35 (2), Rule 46 &45(5)(c) were pointed as discrepancies were observed in Annual Return filed for the year 2017-18. Violation letter was issued accordingly. |
|----|---|--|---|---|
| 9d | Scrutiny of Annual return on afforestation                                      | Given  | 0.04 ha by planting 40 sapling (developing green belt)          |   |
| 9e | Scrutiny of Annual return on<br>mineral reject generation<br>(Grade & quantity) | Not Applicable as no<br>grade wise generation<br>of material not<br>proposed | Not applicable  |   |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore                        | Not given  | Not given   |   |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost       | Given  | Limestone-Ex-mine price & cost of production Rs-300/MT          |   |
| 9i | Scrutiny of Annual return on fixed assets                                       | Given  | Given   |   |
| 9k | Scrutiny of Annual return on mining machineries                                 | Given  | Given   |   |

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 17.01.2018 and violations of rules 26(2), 33, &45(5)(c) were pointed out not complied. This inspection was carried out in connection with examination of Review of Mining Plan and during inspection violation of rules 26(2), 31(4), 35 (2), Rule 46 &45(5)(c) and accordingly violation letter was issued on 06.09.18 for its rectification.

\*\*\*