

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1(a)	Name of the Mine	Moraj Limestone Mine
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	Modified Mining Plan
1(e)	Date of Inspection	27.10.2018
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	16.1874 Ha. (Govt. Waste Land) Forest- Nil
3	Mine code	38GUJ08091
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/4582/2011
5	Name of the lessee, Address, phone, email and fax number	M/S Sorath Minerals, Address :- C/o Shivam Transport, Near Meenakshi Hotel, Veraval- Junagadh Highway, Veraval, District- Gir Somnath, Gujarat (India), Phone-+91-9825130999, Email:- shivam_mining@yahoo.in
6	Village	Moraj
7	Taluka/Mandal	Veraval
8	District	Gir Somnath
9	Pin code	362269
10	State	Gujarat
11	Post office	Veraval
12	Nearest police station	Somnath Marine Police Station
13	Nearest Railway station	Veraval Junction
14	Date of Grant of Mining Lease	09-07-1968
15	Date of Execution	06-01-1969
16	Date of opening of Mine	07-01-1969
17	Date of first Renewal, if applicable and its period & expiry	27-09-2002, Period: 06-01-1989 to 05-01- 2009 (20 Years), Expiry: 05-01- 2009
18	Date of second Renewal, if applicable and its period & expiry	NA. However, it is extended till 31-03-2020 as per Section 8A (6) of the MMDR Amendment Act, 2015
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Second Renewal: 26-12-2007, Extended now upto 31-03-2020 (vide letter no. MCR-1588-S-34-490-Chh.1 dated on 06.06.2017)
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Sarmanbhai J. Vala (Proprietor), Address :- C/o Shivam Transport, Near Meenakshi Hotel, Veraval- Junagadh Highway, Veraval. Dist.- Gir Somnath - 322265, Gujarat (India), Phone-+91-9825130999, Email:- shivam_mining@yahoo.in
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Sarmanbhai J. Vala (Proprietor), Address :- C/o Shivam Transport, Near Meenakshi Hotel, Veraval- Junagadh Highway, Veraval. Dist.- Gir Somnath - 322265, Gujarat (India), Phone-+91-9825130999, Email:- shivam_mining@yahoo.in
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	NA
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Hitesh Merubhai Solanki B.E. (Mining), At : Kadwar, Ta: Sutrapada, District: Gir Somnath Phone:- 9537892069 Email:- Solankihitesh1234@gmail.com Fax:-N.A.,Date of Appointment: 01-01-2018
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Yes, Geologist and Mining Engineer appointed as per rule 55 of MCDR,2017

25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Date of Approval of Mining Plan :- 03-02-2009 Vide letter No. 682(23)(614)/2008-MCCM(N)Udai Period :- From 2009-10 to 2013-14
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	1) Date of Approval of Mining Scheme with PMCP:- 30-09 2013, Vide letter No. 682(23)(614)/2008-MCCM(U)Udai Period :- From 2013-14 to 2017-18 2)Date of Approval of Mining Plan with PMCP:- 29-09-2016 Vide letter No. 682(23)(601)/2008-MCCM(U)Udai Period :- From 2016-17 to 2019-20
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanised, Others or Manual)	Category A (Other than Fully Mechanised)
30	Captive/Non Captive	Non-Captive

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

Exploration

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
1a	Backlog of previous year	NA	NA	No Proposal in FY. In past also no exploration carried out by the lessee. Based on working pits G1,G2 level of exploration is given
1b	Exploration over lease area for Geological axis 1 or 2.	NA	About 7.86Ha in G-1 & 6.49Ha in G-2 level	
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	NA	About 8.32 Ha area to be explored to bring in G1 level	.
1e	Balance reserves as on 01.04.2018	<u>In Million tones Limestone (Both Grade)</u> Proved- 5.019	<u>In Million tones Limestone (Both Grade)</u> Proved- 1.13	
1f	General remarks of inspecting officer on geology, exploration etc.	No Exploration was carried out by the lessee in the past. Violation of Rule 12(4A) of Amended MCDR,2018 was pointed out in order to carry exploration in stipulated time.		

2.0 Development

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
2a	Location of development w.r.t. lease area	Proposed development from the face formed at the end of previous year Bench wise excavation proposed from 122mRL to 110mRLs covering total 37992 Sq.M. area	Mine working not carried out at proposed area & in accordance with approved MMP.	For this deviation violation were pointed under provision of Rule 11 of MCDR,2017
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No separate benches proposed in top.	Not applicable	Top soil of 0.25 to 0.5m thickness encountered in the lease area
2c	Stripping ratio or ore to OB ratio	1:0.0012	Nil	As no top soil generated during the year
2d	Quantity of topsoil generation in m3	580 CuM	Nil	
2e	Quantity of overburden generation in m3	No proposal	Nil	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Developments of pits are not carried out in accordance with approved MMP proposals. For this deviations violations of rule 11(1), 31(4) & 46 of MCDR, 2017 were pointed for its rectification.		

3.0 Exploitation

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
3a	Number of pits proposed for production	No specific pits proposed for production	Pits are not developed during the year as working not done at proposed locations	
3b	Quantity of ROM mineral production proposed	Limestone- 9,11,800 tonnes	Limestone- 51,452.880 tonnes	Production is lesser than the proposed due to poor market demand and non-availability of labours
3c	Recovery of salable/usable mineral from ROM production	No Proposal	NA	
3d	Quantity of mineral reject generation	No Proposal	NA	
3e	Grade of mineral reject generation and threshold value declared	No Proposal	NA	
3f	Quantity of sub-grade mineral generation	No Proposal	NA	Whole ROM was proposed to be consumed
3g	Grade of sub-grade mineral generation	No Proposal	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Opencast Semi-mechanised	Opencast Semi-mechanised	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposals	NA	
3j	Provision of drilling & blasting in mineral benches	Hole Dia-32mm,spacing - 1.5m,burden-1.5m,use of slurry(both column 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, 75 HP)-03 2. TRACTOR WITH TROLLEY SYSTEM (5T, 20 HP) -02 3. TIPPERS (10T, 50HP)-08 4. JACK HAMMER (32 mm dia, 50 HP)-03	1. JCB (0.800 CUM, 75 HP)-03 2. TRACTOR WITH TROLLEY SYSTEM (5T, 20 HP) -02 3. TIPPERS (10T, 50HP)-08	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No proposals	NA	No OB encountered in the mining lease area.
3m	Total area covered under excavation/pits	13.50Ha	Pits-7.0939 Ha.	No new area is opened. Locations are also not cleared from where production is achieved.
3n	Ore to OB ratio for the pit/mine during the year	1:0.0012	Nil	No generation of top soil during the year
3o	Total area put in use under different heads at the end of year	Pit- 13.50 ha. Infrastructure- 0.05 ha, road-0.20 ha. Others (Plantation)- 0.02 ha.	Pit- 7.0939 ha. Infrastructure- 0.07 ha., road-0.4168 ha. Others (Mineral Stack & Plantation)-0.451 ha.	
3p	Production of ROM mineral during last two-year period, as applicable	2013-14:-100000MT	2013-14:-29599MT	ROM-Limestone production including
		2014-15:-100000MT	2014-15:-74152MT	

		2015-16:-100000MT	2015-16:-56740MT	(Chemical Grade + Cement Grade)
		2016-17:- 9,57,634 MT	2016-17:- 57,950 MT	
		2017-18:- 9,11,800 MT	2017-18:- 51,452.880 MT	
3q	General remarks of inspecting officer on method of mining etc.	Total 6 to 7 pits of small dimensions having maximum depth 1 to 2m depth have been noticed. Reported production quantities since beginning of mining operations & excavated pits areas so far not matching/ contradicting to each other.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	No Proposals	NA	Top soil generation is proposed for the year but separate dumping not proposed.
4b	Location of topsoil, OB & mineral reject dumps	No Proposals	NA	The U/S mineral stacks from MS 1 to MS 4 have been shown on Surface Plan
4c	Number of dumps within lease area and outside lease area	Nil	4 No. of mineral stacks are made within the lease area.	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-649186m to E-649034m & N-2321563m to N-2321447m	The stacks are temporary in nature as the undersized mineral is regularly being sold to the nearby cement plants.
4e	Number of active & alive dumps	NA	NA	Active & Alive: 4 mineral stacks
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	Except small quantity of top soil generation, no other proposals OB, mineral reject generation is proposed during plan period hence most of the items are indicate as "not applicable" (NA)		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals (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	No proposals	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposals	NA	Concurrent use of topsoil for plantation is proposed.
5d	Total area fully reclaimed & rehabilitated	No Proposals	0.01 Ha	By plantation in the green belt area
5e	General remarks of inspecting officer on backfilling, reclamation etc	Presently limestone is not exhausted completely in any of the pits. Hence, backfilling and rehabilitation is not applicable.		

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	Not proposed	NA	
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	Not Proposed	NA	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	0.02 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 (Rs. 10,000) /Annum cost	
6f	General remarks of inspecting officer on PMCP compliance & progressive	No workings have been carried out as per the approved proposals of PMCP as observed during mines inspection.		

7.0 Mineral Conservation

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NA	51,452.880 Tonnes (Limestone dispatch quantity)	Chemical grade limestone: 51,452.880 T & Cement grade limestone: 0 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 105mm is sold to the Soda Ash Plant whereas below 55mm is sold to the Cement Plant for cement manufacturing.

7c	Different grade of mineral sorted out at mines	CaO >52 % SiO ₂ <10%	CaO >52 % SiO ₂ <10%	Chemical & Cement grade limestone sorted separately.
7d	Any beneficiation process at mines	Not Proposed	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Mineral conservation is proposed by segregating Chemical & Cement grade limestone separately.		

8.0 Environment

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	580 CuM of proposed to be generated	Nil	No top soil generated
8b	Concurrent use or storage of topsoil	Proposed	Concurrent use of top soil for plantation purpose.	do
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	NA	No, OB, Mineral reject
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	NA	do
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	NA	In future pits will be converted into water reservoir due to un-availability 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	Lessee has not carried out the necessary environment protective measures as noticed during inspection & accordingly lessee was directed for its implementation.		

9.0 Compliance of Rule 45

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

S.N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sh. Hitesh M Solanki, ME, Dt. of app. 01.01.2018 Sh. Milind Kundal, Geologist Dt. of app. 01.01.2018	Geologist and Mining Engineer appointed as per rule 55 of MCDR,20107	During the inspection it was advised to Mine representative to submit the AR & MR correctly for correct cost of production &
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Pit- 7.0939 ha. Infrastructure- 0.07 ha., road-0.4168 ha. Others (Mineral Stack & Plantation)-0.451 ha.	
9d	Scrutiny of Annual return on afforestation	Given	0.01 ha by planting 10 sapling (developing green belt)	

9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Not Applicable as no grade wise generation of material not proposed	Not applicable	Ex mine price as per the guidelines in future.
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	<u>Given</u>	<u>Limestone</u> -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 10/10/2015 and violations of rules 13(1), 23E(2), 42(1)(C) & 45(5)(b) were pointed out. This inspection was carried out in connection with examination of Review of Mining Plan and during inspection violation of rules 11(1), 31(4) and 46 were pointed and accordingly violation letter was issued on 11.12.18. Further, based on the office records violation of rules 27(1) & 35(2) were observed & violation letters were issued and due non-compliance of rule 27(1) of MCDR,2017 mine was suspended on 20.08.18. Moreover, for the discrepancies observed during aforesaid inspection, letter was sent to Commissioner, Geology & Mining, Gandhinagar, Gujarat for taking necessary action at their end in this regard.
