## INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

## Inspection under SDF for star rating of mines REPORT

## Bangalore regional office

	Mine f	Eile No : KNT/GLB/LST-	52,	/BNG Mine code : 38KAR10023
	(i)	Name of the Inspecting Officer and ID No.	:	A101 ) ARUN KUMAR
	(ii)	Designation	:	Deputy Controller Mines
	(iii)	Accompaning mine Official with Designation	:	Sh. Kiran Naidu-Mines Manager
	(iv)	Date of Inspection	:	11/12/2020
	(v)	Prev.inspection date	:	20/11/2019
		PAI	RT-	I : GENERAL INFORMATION
1.	(a)	Mine Name	:	KODLA LIMESTONE MINE ML 2
	(b)	Registration NO.	:	IBM/960/2011
	(c) (d) (e) (f) (g) (h)	Category Type of Working Postal address State District Village Taluka Post office Pin Code FAX No. E-mail Phone Police Station First opening date Weekly day of rest		01462-228117 SHREEBWR@SHREECEMENTLTD.COI 01462-228101
2.		ess for espondance	:	KODLA VILLAGE SEDAM TALUK GULBARGA DISTRICT, KARNATAKA
3.	(a) (b) (c) (d)	Lease Number Lease area Period of lease Date of Expiry	::	
4.	Miner	al worked	:	LIMESTONE Main

- 5. Name and Address of the Lessee : SHREE CEMENT LTD. P B No. 33, Bangur Nagar Beawar P O BEAWAR RAJASTHAN Phone: FAX :
- 6. Date of approval of Mining : Modif.approved Mining Scheme 06/03/2020 Plan/Scheme of Mining

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
la	Backlog of previous year	No proposal	Nil	The whole potential mineralized area (517.61 ha) has already been explored at G1 level
1b	Exploration over lease area for geological axis 1 or 2	Gl	G1-517.61 Ha	Total of 122 core BH drilled at 200 Mts grid interval in the past
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	DMG Karnataka(Phase-1) & In house (Phase-2)	Expenditure incurred in the past- Rs.65,41,000/-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Nil	The whole potential mineralized area has been explored
le	Balance reserve as on 01/04/20	Nil	243 Million Tonnes (CaCO3-78.65% & SiO2- 13.7%)	As per AR submitted for FY 2019-20
lf	General remarks of inspecting officers on geology, exploration etc			The entire potential mineralized area has been explored in two phases in the past. Total of 122 core BH drilled at 200 Mts grid interval.

# Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	S310 - S930 , RWH Pit 1 :	RWH Pit 2 : Nil	Clarification sought for not developing the Rain Water Harvesting pit 2

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	proposed for Topsoil,	Separate Bench maintained for Top soil, Overburden and Mineral.	
2c	Stripping ratio or ore to OB ratio	1:0.15	1:0.21	Nil
2d	Quantity of topsoil generation in m3	85520 Tons	85650 Tons	Used for plantation purpose
2e	Quantity of overburden generation in m3	288630 Tons	341599 Tons	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development was carried out as per the proposal .Clarification sought for not developing the Rain Water Harvesting pit 2.

# Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One Main pit & 2 rain water harvesting pit proposed	Juli Juli Juli Juli Juli Juli Juli Juli	Nil
3b	Quantity of ROM mineral production proposed	1.90 million tonnes	1.61 million tonnes	Less production of ROM due to low market demand.
3c	Recovery of sailable/usable mineral from ROM production	100 %	100 %	Nil
3d	Quantity of mineral reject generation	No Proposal	Not Applicable	Complete ROM is used for Captive Consumption. No Reject material generated.
3e	Grade of mineral rejects generation and threshold value declared.	Limestone threshold value:CaO-34% (Min),MgO-5% (Max)	Not Applicable	Nil
3f	Quantity of sub grade mineral generation.	No Proposal	Not Applicable	Nil

3g	Grade of sub grade mineral generation	No proposal	Not Applicable	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	All the blasted material is proposed to be sent to crushers for further sizing	All the blasted material is sent to crushers for further sizing	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	No beneficiation study carried out as mineral is directly used for cement manufacturing	Nil
3j	Provision of drilling and blasting in mineral benches		Deep hole drilling & blasting carried out as per proposal	Drilling conducted by Two 6-inch Dia Drill Machine & Deep Hole Blasting done by Emulsion Explosive in Cartridge form. Shock Tubes (Nonel) used for detonation in hole and on surface for connection.
3k	Provision of mining machineries in mineral benches	Shovel dumper combination proposed	Mining is carried out by Shovel dumper combination	Machineries used on the day of inspection: Drills-01 Nos; Shovel-01 Nos; Dumpers-03 Nos; Water tankers- 01nos;
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of Bench in OB- 1 meter Height of Bench in Limestone - 12 meter proposed	Height of Bench in OB- 1 meter max. Height of Bench in Limestone -9- 12 meter	Nil
3m	Total area covered under excavation/pits	70.3 ha at theend of plan period	14.0 ha at the end of reporting year	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.15	1:0.21	In tonnes

30	Total area put in use under different heads at the end of year	Excavation:70. 3 ha, Rain Water Harvesting : 6.5 ha, Top Soil Stock - 0.8 ha, Waste Dump- 8.1 ha, Infra- 2.0 ha,Railway-3.2 ha, Plantation : 4.05, 25 MW Captive Solar Power Plant:71.8 Ha, undisturbed area: 350.86 Ha at the end of plan period	Excavation:14.0 ha, Waste Dump- 3.9 ha, Infrastructures & roads -5.2 Ha, Mineral Storage- 1.8 ha, work done under PMCP:2.84 Ha at the end of reporting year	Nil
3p	Production of ROM mineral during the last five year period as applicable	2015-16: 3.54 2016-17: 3.83 2017-18: 0.96 2018-19: 3.84 2019-20: 1.90	2015-16: Nil 2016-17: Nil 2017-18: Nil 2018-19: 0.62 2019-20: 1.61	All unit in Million Tons. Actual production is within the proposed limits
3q	General remarks of inspecting officers on method of mining etc.			Opencast method of mining with shovel dumper combination & deep hole drilling & blasting was practiced. Actual production is within the proposed limits

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	-	Separate dumping for OB carried out	Top soil was concurrently used for plantation

4b Location of Top Soil OB Dump no. 01 : E870-Top soil was topsoil, OB and stock: E1200-E1100, S30-S140, Dump concurrently used mineral reject E1300, S130no. 02 : E360-E610, for plantation dumps S180 , (ii) OB S130-S230, Dump no. 03 : Dump no. 01 : E1550-E1730, S20-50 E830-E1100, S30-S160, Dump no. 02 : E370-E620, S120-S240, Dump no. 03 : E1180-E1720, N20-S80 4c Number of dumps With In Lease With In Lease: 3 Nos. of Nil within lease Area : 01 No OB dumps are in active area and outside of Top Soil stage. of lease area dump & 3 Nos. Outside Lease Area : Nil of OB dumps Proposed Outside Lease Area : Nil 4d Location of Temporary Temporary dumps were Entire area is dumps w.r.t. dumps proposed made within UPL mineralized. Dumps ultimate pit within UPL are temporary in nature and will be limit (Rule 16) handled once area for backfilling at the conceptual stage of mining is ready 4e Number of active OB dump: 03 OB dump: 03 Nos. is in Nil and alive dumps. Nos. active & alive stage. 4f Number of dead Nil Nil No Proposal dumps. Number of dumps Nil No Proposal Nil 4q established. 4h Whether Retaining wall or garland drain all along dumps are there. 4i Length of Dump no. Retaining wall 01:RW-300 or garland drain Mts, GD-310 all along dumps mts, Dump no. 02 : RW-230 Mts,GD-240 mts, Dump no. 03 : RW-450 Mts,GD-470 mts 4j Number of Nil No Proposal Nil settling ponds

4k Specific comments of inspecting officer on waste dump management

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No Proposal	Nil	Mineral is not exhausted
5b	Area under backfilling of mined out area	No Proposal	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Concurrent use as well as stacking of Topsoil proposed	Top soil was concurrently used for plantation	Nil
5d	Total area fully reclaimed and rehabilitated	Not Proposed.	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No backfilling proposed in the plan period. Limestone persist at depth.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work		Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	on PMCP to be submitted before 1st	Submitted on	22.06.2020	Submitted on 22.06.2020
6b	Area available for rehabilitation (ha) .	No proposal	Nil		Nil

бс	afforestation done (ha).	No	proposal	Nil	Nil
6d	No. of saplings planted during the year	No	proposal	Nil	Nil
бе	Cumulative no .of plants	No	proposal	Nil	Nil
6f	Any other method of rehabilitation	No	proposal	Nil	Nil
бд	Cost incurred on watch and care during the year	No	proposal	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No	proposal	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No	proposal	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No	proposal	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No	proposal	Nil	Nil
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No	proposal	Nil	Nil

бm Compliance of 1650 saplings WML: 7114 saplings Plant Species are rehabilitation Outside Lease Area : : Pongamia, of waste land 20961 saplings Amaltas, Neem, within lease Gulmohar, Ficus (i)afforestation Religiosa, Peltophorm, Pongamia, Jacaranda, Alistonia, Conocorpus, Casia Semia, Rain Tree, Ashoka, Dubai Tree. бn Compliance of 0.66 Ha 2.84 Ha Nil rehabilitation of waste land within lease (ii)Area rehabilitation (ha) 60 Compliance of Proposed by Rehabilitation is being Nil rehabilitation plantation. done by plantation. of waste land within lease (iii)Method of rehabilitation бр Compliance of Quarterly AAQ & noise monitoring Environment monitoring of doing on monthly basis & environmental Monitoring monitoring (core air & noise, Water Quality parameters were zone and buffer half yearly monitoring doing on observed within monitoring of zone) Quarterly basis limits. Test water quality carried out by proposed in Vimta Labs the core & Limited, Hyderabad buffer zone General remarks PMCP activities as 6q of inspecting proposed were officers on PMCP being carried out. compliance and Monitoring of progressive environmental closure parameters was operations etc. done regularly.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Whole ROM generated to be Dispatched, no sorting proposed	Whole ROM generated is Dispatched, no sorting done.	captive consumption

7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	No Proposal	All the blasted material was transported to the crusher for further sizing	Crusher of 1200 TPH is installed for sizing
7c	Different grade of mineral sorted out at mines.	Direct ROM dispatched to crusher	Direct ROM dispatched to crusher having 1200 TPH capacity	Nil
7d	Any beneficiation process at mines	No Proposal	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Beneficiation of limestone is not required & entire ROM is being utilized in cement plant

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	removal and	Topsoil generated is utilized for Plantation concurrently.	Nil
8b	Concurrent use or storage of topsoil	Storage & concurrent use is proposed.	Concurrently used for Plantation	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	proposed for top soil : 01 No &	Overburden: 03 Nos. are being worked and maintained. No dumps of Waste Rock, rejects or fines.	Topsoil generated is utilized for Plantation
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	Nil

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling proposed at the conceptual stage of mining	Not Applicable	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2500 saplings per hectare	WML-7114 Saplings,OML- 20961 Saplings	Nil
8g	Survival rate	85 %	90 %	Nil
8h	Water sprinkling on roads to control airborne dust	sprinkling	Continuous sprinkling of Water with the help of Water Tanker was done on regular basis.	Water Tanker having capacity of 18 KL. Special type of sprinkling nozzles for creating Mist of water.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mine was good as lessee has carried out afforestation & water sprinkling measures as per proposal

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	up to November 2020	AR submitted on 30.06.2020	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Sh. Saddique Basha Geologist- Sh GNS Rangarao Manager- Kiran Mohan Naidu	Same officers were present during the inspection	

Scrutiny of 9c Excavation:14. Appears to be correct Annual return on 0 ha, Waste land use pattern Dump- 3.9 ha, for area under Infrastructure pits, reclaimed s & roads area, dumps etc. 5.2 Ha, Mineral Storage- 1.8 ha, work done under PMCP:2.84 Ha at the end of reporting year 9d Scrutiny of WML-7114 Appears to be correct Annual return on Saplings, OMLafforestation 20961 Saplings @90% survival rate 9e Scrutiny of Nil Nil Annual return on mineral reject generation (Grade and quantity) 9f Scrutiny of ROM Stock : Appears to be correct Annual return on Opening Stock ROM stock and/or & Closing graded ore Stock : Nil, Production : 1611294 Tons 9q Scrutiny of Sale Value & Appears to be correct Annual return on Ex Mine Price sale value, Ex. -Nil Mine price and Production production cost cost-Rs. 255.38/ton 9h Scrutiny of Industrial : Appears to be correct Annual return on Rs. 71225760 fixed assets Plant & Machinery : Rs. 61682097 Total : Rs. 132907857

9k	Scrutiny of Annual return on mining machineries		Appears	to	be	correct
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Details of violations observed during current inspection and compliance position of violation pointed out					
Violation observed Show couse position					
Rule 1	NO.	Issued on	Compliance on	Rule NO.	Issued on Compliance on
MCDR17	Rule 11(1)	03/02/2021			
MCDR17	Rule 26(1)	03/02/2021			
MCDR17	Rule 35(2)	03/02/2021			

Date :

#### (ARUN KUMAR)

Indian Bureau of Mines