# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### MCDR INSPECTION REPORT

#### Bangalore regional office

Mine file No: KNT/GLB/LST/17/BNG Mine code: 38KAR10003

(i) Name of the Inspecting: 130 ) PRASHANT S HEGDE

Officer and ID No.

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine : S/Shri. Rajesh Garg , Vice President (mines) and Ra

Official with Designation

(iv) Date of Inspection : 09/08/2017
(v) Prev.inspection date : 25/11/2015

PART-I : GENERAL INFORMATION

l. (a) Mine Name : INJEPALLI (ML 2417 AND 2475)

(b) Registration NO. : IBM/245/2011

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : KARNATAKA
District : GULBARGA
Village : INJEPALLI
Taluka : SEDAM
Post office : SEDAM
Pin Code : 585222

FAX No. : 033-221094 (F)

E-mail : mines@vasavadattacement.com
Phone : 08441-276005,EXT.406/524 00

(f) Police Station : Sedam

(g) First opening date : 09/12/1982

(h) Weekly day of rest : SUN

2. Address for : M/s KESORAM INDUSTRIES LIMITED, M/s Vasavadatta C

correspondance At & po-Sedam

Dist-Gulbarga, Karnataka-585 222

3. (a) Lease Number : KAR0099 (b) Lease area : 897.86

(c) Period of lease : 20

(d) Date of Expiry : 04/09/2023

4. Mineral worked : SHALE Associated

LIMESTONE Main

29/11/2016

5. Name and Address of the

Lessee : VASAVADATTA CEMENTS

SEDAM, GULBARGA, GULBARGA

KARNATAKA

Phone: 08441-676005,676277,676256

FAX :08441-676139,676408

Owner : Tridib Kumar Das

Birla Building, 8th Floor, 9/1, R.N Mukherjee Road, Kolkata KOLKATA WEST

BENGAL Phone: FAX:

Agent : Rajesh Garg

GULBARGA KARNATAKA

Phone: FAX:

Mining Engineer

Name : Rajesh garg, Full Time

Qualification : BE Mining Appointment/ : 16/12/2009

Termination date

Geologist

Name : B.S.VINAYAKA, Full Time

Qualification : M.SC GEOLOGY Appointment/ : 15/04/2013

Termination date

Manager

Name : RAVINDRA LAGVANKAR

Qualification :

Appointment/ : 09/02/2006

Termination date

6. Date of approval of Mining : Existing rule 11 MCDR1988 13/02/1992 Plan/Scheme of Mining Mining Scheme rule 12 MCDR1988 24/09/1996 Renewal under rule 22 MCR1960 27/11/2002 Fresh under rule 22 MCR1960 20/07/2004 Mining Scheme rule 12 MCDR1988 11/08/2006 Modif.approved Mining Scheme 22/04/2010 Mining Scheme rule 12 MCDR1988 04/01/2013

MP review under 17(1) MCR 2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	NIL	G1- 243.19 Ha G-2-181.92 Ha	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NIL	During year 2015- 16 the lessee had carried out 31 nos of CBHs with 1518 total meterage ( expenditure incurred was 47 lakhs ) by M/s Synergy Geotech Pvt. Ltd.
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	51 nos of CBHs with 2615 total meterage proposed during year 2020-21to 2021-22	G1- 243.19 Ha G-2-181.92 Ha covered under exploration so far
1e	Balance reserve as on 01/04/20		Limestone (Cement grade) 217.88 million tonnes (Av. Grade: CaO-38 to 50 %; MgO-1 to 2 %; SiO2- 8 to 28%; )	Based on approved RMP dated 29/11/2016
1f	General remarks of inspecting officers on geology, exploration etc			99 nos of CBHs with 3946 total meterage and 10 nos of DTH BHs with 378 total meterage were drilled so far. The G-1 level of exploration in remaining area was proposed in approved RMP dated 29/11/2016

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	(Section	Pit- A (Section ML.0.00 to ML.10.5)	As per approved SOM.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	-	One bench in top soil and 5 benches in ore	There is no OB except Top soil.
2c	Stripping ratio or ore to OB ratio	1:0.22	1: 0.058	V/L letter issued on 16/10/17
2d	Quantity of topsoil generation in m3	139450	196063	V/L letter issued on 16/10/17
2e	Quantity of overburden generation in m3	NA	NA	There is no OB except Top soil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			There is no overburden in this mine except top soil. V/L letter issued on 16/10/17 related to deviation in development.

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one	One (Dimension of existing pits are Pit A:1635X828X54m Pit B: 1337X491X59.5m Pit C: 269X88X11.8m	Single pit has been divided into Two ( A and B) by a Road to reduce the lead distance
3b	Quantity of ROM mineral production proposed	11.04 million tonnes of limestone	Limestone- 5.33 million tonnes	V/L issued on 16/10/17
3с	Recovery of sailable/usable mineral from ROM production	100 %	100 %	NIL
3d	Quantity of mineral reject generation	NIL	NIL	NIL

3e	Grade of mineral rejects generation and threshold value declared.	Limestone threshold value: CaO- 35% (Min); MgO- 4 %( Max); SiO2- 18% (Max) and Alkalies - 0.5 % (Max)	Entire ROM is being utilized in their Captive Plant.	High grade Limestone blended with siliceous limestone.
3f	Quantity of sub grade mineral generation.	There is no generation of sub-grade ore.	NIL	NIL
3g	Grade of sub grade mineral generation	Not applicable	NIL	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	No such proposals	The limestone from the pit faces is transported by 35 to 55 tonnes dumpers to crusher units located within ML. The crushed material (50 mm size) transported through conveyor belt to cement plant located about 2.5 km from ML.	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals	No such study carried out	NIL
3ј	Provision of drilling and blasting in mineral benches	Deep-hole drilling and blasting in ore zone (with 3 drills)	Deep-hole drilling and blasting in ore zone (with 3 drills)	NIL
3k	Provision of mining machineries in mineral benches		The machineries were deployed as proposed in approved SOM	NIL
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	( 1.5 to 2 mtr-Top soil bench), Ore benches of 10-12 m height	( 1.5 mtr-Top soil bench), Ore benches of 10 m height	12Mtr height permission from DGMS but maintaining a height of 10Mtr maximum
3m	Total area covered under excavation/pits	150.5 на	147.5 на	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1:0.22	1: 0.058	NIL

Remarks

30	Total area put in use under different heads at the end of year	: 11.43 ha	Pit -147.45 ha Dumps/top soil : 18.36 ha. Infra. & Road- 4.95 Ha Mineral storage: 4.61 Green Belt: 28.10	NIL
3p	Production of ROM mineral during the last five year period as applicable	Limestone: 2012-13 8.75 2013-14 8.78 2014-158.7 2015-16 11.03 2016-17-11.04	Limestone: 2012-13- 4.36 2013-14- 4.36 2014-15-4.75 2015-165.45 2016-17-5.33	Unit: million tonnes
3q	General remarks of inspecting officers on method of mining etc.			The lower side deviation of exploitation was due to less demand of cement in the market. Besides, 56,371 tonnes of shale (minor Mineral) produced during year 2016-17 against proposals of 0.66 million tonnes. The V/L letter has been issued on 16/10/17 for necessary clarifications.
	Solid Waste Manage	ment - Dumping:		

Propasals Actual work

Sl.No.

Item

4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	There is a proposal of separate stacking topsoil. There is no OB & mineral reject in this limestone mine. The top soil generated will be used for construction bund along the ML boundary/acquired land boundary.	Actual work done as per the proposals.	NIL
4b	Location of topsoil, OB and mineral reject dumps	Top soil utilized for construction of bund along lease boundary/acquired land boundary.	Top soil utilized for construction of bund along lease boundary/acquired land boundary.	NIL
4c	Number of dumps within lease area and outside of lease area	4 nos of top soil bunds (within ML) and NIL Out-side ML.	4 nos of top soil bunds (within ML) and NIL Out-side ML.	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Near to ML boundary as entire ML is mineralized	Near to ML boundary as per the proposals.	NIL
4e	Number of active and alive dumps.	1 bund	1 bund	NIL
4f	Number of dead dumps.	3	3	NIL
<b>4</b> g	Number of dumps established.	3 bunds stabilized by plantation	3 bunds stabilized by plantation	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	No such proposals	Garland drain all along the bunds with proper fencing.	NIL
4i	Length of Retaining wall or garland drain all along dumps	No such proposals	Garland drain provided	NIL
4j	Number of settling ponds	No such proposals	NIL	NIL

4k Specific -----Total area covered comments of by the top soil inspecting dumps/bunds was officer on waste about 18.36 Ha and major part of dump dump management area stabilized by afforestation. The management of top soil dumps/bunds was carried out as per the proposals.

### 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 such proposals as waste materials were not available in this mine except small quantity top soil.	NIL	NIL
5b	Area under backfilling of mined out area		5.23 ha area is converted into water reservoir or artificial lake	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable as no back-filling proposals and generation of top soil proposed used for construction of bund along the lease boundary /acquired land boundary and afforestation.	Actual work done as per the proposals.	NIL
5d	Total area fully reclaimed and rehabilitated	Proposed to convert the mined out area into water reservoir or artificial lake	5.23 ha area is converted into water reservoir or artificial lake, so far.	NIL

5e	General remarks of inspecting officers on backfilling and reclamation etc.	 	The part of existing pit is converted into water reservoir or artificial lake as per the proposals as three was no waste generation

### 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).	To be submitted before 1st July of every year.	Annual report received on 29/5/17	NIL
6b	Area available for rehabilitation (ha) .	No such proposal	Part of existing pit (5.23 ha) is being utilized as water reservoir.	NIL
6c	afforestation done (ha).	NIL	NIL	
6d	No. of saplings planted during the year	NIL	NIL	NIL
6e	Cumulative no .of plants	NIL	NIL	NIL
6f	Any other method of rehabilitation	NIL	NIL	NIL
6g	Cost incurred on watch and care during the year	NIL	NIL	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No such proposal as waste not available for backfilling.	5.23 Ha area under water reservoir	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	NIL

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	NIL	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Proposal of water reservoir	5.23 Ha area under water reservoir	NIL
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	fresh +1500 Gap	6994 nos saplings (3804fresh +3190 Gap plantation)	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	2.5 HA	4.24 HA	NIL
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation	Afforestation	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	ambient air	Season-wise environmental monitoring of ambient air quality, water quality, dust fall rate, soil sample analysis and noise level are being carried out and all parameters are within limit.	NIL

6q General remarks ----of inspecting
officers on PMCP
compliance and
progressive
closure
operations etc.

The lessee had carried out PMCP proposals as per the proposals. Area afforested within ML was 28.85 Ha with cumulative 1,43,000 nos saplings

### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Direct ROM Mineral dispatch to their captive cement plant.	Direct ROM Mineral dispatch to their captive cement plant of having 7.75 mtpa clinker production capacity.	NIL
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	No such proposals	Bench wise blending as per their requirement.	NIL
7c	Different grade of mineral sorted out at mines.	No such proposals	Bench wise blending as per their requirement.	NIL
7d	Any beneficiation process at mines .	No mineral Beneficiation proposals.	No mineral beneficiation carried out except crushing.	Crusher unit having capacity 1400 TPH & stand-by crusher unit of 800TPH capacity.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Beneficiation of Limestone is not required as entire ore produced are being utilized with proper blending in their cement plant.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks

8a	Separate removal and utilization of topsoil (Rule 32)	generated will be utilized for making bund along the lease	196,063 m3 of top soil generated during year 2016-17 and utilized for making bund along the lease boundary/acquired land boundary and afforestation purpose.	NIL
8b	Concurrent use or storage of topsoil		196,063 m3 of top soil generated during year 2016-17 and utilized for making bund along the lease boundary/acquired land boundary and afforestation purpose.	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There is no waste rock, reject and fines except top-soil O/B.	Separate dumping of top- soil is being carried out.	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals as there was no overburden, waste rock, rejects and fines dumps except top soil.	NIL	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	It is planned to Rehabilitation of part of mined out pit by making water reservoir	5.23 Ha area has been used as water reservoir	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Afforestation of 6994 nos saplings in 4.2 ha area was carried out during year 2016-17 Area afforested within ML was 28.85 Ha with cumulative 1,43,000 nos saplings	NIL
8g	Survival rate	80%	80%	Year 2016-17

8h	Water sprinkling on roads to control airborne dust	Proposed	Static water sprinklers are provided on haul road, unloading area, ramps & view point, NIVIS Dust suppression system & Two No's Pressurized water tankers are used in Mines. Belt curtain is provided in Hopper	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around mine is good as lessee had carried out huge afforestation and other environmental protective measures as per approved SOM.

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto July -17 A.R. submitted upto 2016-17	Regular	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri Rajesh Garg, Mining Engineer and Shri. Vinayak B.S., Geologist	Shri Rajesh Garg, Mining Engineer and Shri. Vinayak B.S., Geologist	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	147.45 Ha Soil Dump Area = 18.36 Ha Water	Actual also same	NIL
9d	Scrutiny of Annual return on afforestation	6,994 nos (WML) 18,946 nos (OML)	Actual also same	NIL

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL	NIL	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	<pre>per tonne = cost of production per</pre>	Appeared to be correct as captive mine.	NIL
9h	Scrutiny of Annual return on fixed assets	Rs 14,36,28,000	Appeared to be correct as plant located outside ML.	NIL
9k	Scrutiny of Annual return on mining machineries	2 nos of Crushers, 2 nos of Dozers, 22 nos of Dumpers (35to 55 tonnes), 2 nos of Front end loaders, 3 nos of water tankers, 6 nos of Hydraulic Shovel and 2 nos of blast hole drills	Same as mentioned in AR	NIL

# Details of violations observed during current inspection and compliance position of violation pointed out

Violation	n observed	Show couse position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on
MCDR17 Rule 11(1)	16/10/2017		

Date :

(PRASHANT S HEGDE)

Indian Bureau of Mines