

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT 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 : **S006**) **SURESH PRASAD**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Shiojee Roy - Mines Manager, Raghavendra A - Mining E
Official with
Designation
- (iv) Date of Inspection : 27/12/2022
- (v) Prev.inspection date : 19/10/2021

PART-I : GENERAL INFORMATION

1. (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 0**
- (f) **Police Station** : **Sedam**
- (g) **First opening date** : **09/12/1982**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **M/s KESORAM INDUSTRIES LIMITED,M/s Vasavadatta C**
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

5. Name and Address of the

Lessee : VASAVADATTA CEMENTS
 SEDAM, GULBARGA, GULBARGA
 KARNATAKA
 Phone:08441-676005,676277,676256
 FAX :08441-676139,676408

Owner : P Radhkrishna , Nominated owner
 Birla Building, 8th Floor,
 9/1, R.N. Mukherjee Road,
 Kolkata - 700001 KOLKATA
 WEST BENGAL
 Phone:
 FAX :

Agent : RAVINDRA LAGWANKAR
 Vasavadatta Cement Sedam-
 585222 kalburgi GULBARGA
 KARNATAKA
 Phone: 03322435453, 9449876640
 FAX :

Mining Engineer

Name : RAGHVENDRA A,Full Time
 Qualification : B.E.MINING
 Appointment/ : 04/03/2022
 Termination date

Geologist

Name : C NAGA SUBBAIAH,Full Time
 Qualification : M.Sc GEOLOGY
 Appointment/ : 04/03/2022
 Termination date

Manager

Name : SHIOJEE ROY
 Qualification : BE Mining, First Class Mines manager Cer
 Appointment/ : 01/05/2018
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Existing rule 11 MCDR1988	13/02/1992
		Mining Scheme rule 12 MCDR1988	24/09/1996
		Mining Scheme rule 12 MCDR1988	21/08/2000
		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	29/11/2016
		MP modif under 17(3) MCR 2016	15/12/2017
		MP review under 17(1) MCR 2016	17/01/2022

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	105 holes	25	Lessee representative stated that the backlog is due to land acquisition & permission issue resulting inability to drill the proposed exploratory bore holes. However, Violation issued for the deviation observed.
1b	Exploration over lease area for geological axis 1 or 2	G2 to G1	G1- 464.21 Ha. G2- 265.35 Ha. G3- 168.30 Ha	Reported as on Sept '2022.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	40.05 Lakh	26.50 Lakh	As reported by the lessee in the AR.
1d	Balance area to be explored to bring Geological axis in 1 or 2	FY 20-21 & 21-22	FY 20-21	As per Approved Modified & Review of Mining Plan.
1e	Balance reserve as on 01/04/20	Limestone-263.0MMT & Shale-53.00 MMT.	Limestone-263.0MMT & Shale-53.00 MMT.	As per Annual Return FORM-H-8 of FY 2021-22.
1f	General remarks of inspecting officers on geology, exploration etc			Against the proposal of 105 holes only 25 holes were carried out. Lessee representative stated during the field inspection that the backlog is due to land acquisition & permission issue resulting inability to drill the proposed exploratory bore holes. However, violation has been pointed out.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	2 Pits proposed Pit-A-NE Coroner, G-G' to H-H' (N-1174 to 87 & E - 1130 to 1517) Pit-B-NE-Coroner, G-G To H-H' N(-) 106 to (-) 206 & E - 694 to 992).	Pit-A-NE Coroner, G-G' to H-H' (N-1150 to 80& E - 1115 to 1500) Pit-B-NE-Coroner, G-G To H-H' N(-) 103 to (-) 195& E - 685 to 980).	Benches in OB-1 & Mineral-5 as per Modification and review of mining plan
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB & Mineral proposed.	Separate benches for OB & Mineral	
2c	Stripping ratio or ore to OB ratio	1:0.056	1:0.099	Working of Top Benches
2d	Quantity of topsoil generation in m3	182534	272219	OB for the FY 2021-22
2e	Quantity of overburden generation in m3	182534	272219	OB for the FY 2021-22
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			There is a huge backlog in exploration and is reportedly due to land acquisition & permission issue resulting inability to drill the proposed exploratory bore holes. Violation issued.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

3a	Number of pit proposed for production	<p>2 Pits proposed</p> <p>Pit-A-NE RL - 427.65 to 371.78</p> <p>Coroner, F-F' to H-H' (N-1151 to 130& E - 905 to 1498)</p> <p>Pit-B-NE-Coroner. RL - 424.59 to 371.78 section E-E' (N-19 to (-) 194& E - 655 to 955).</p>	<p>2 Pits Pit-A-NE- RL 427 to 370 Coroner, F-F' to H-H' (N-158 to 1150& E - 920 to 1450)</p> <p>Pit-B-NE-Coroner, RL-424 to 370 section E-E' (N-60 to (-) 190& E - 655 to 955).</p>	<p>Actual working was carried out in Pit-A (NE Corner) & Pit-B (NE Corner) of ML Area. Bench development is not as per the approved MP. Bench height and width deviated due to land acquisition & permission issue resulting in reduction in bench width and achieving the required production. Violation issued.</p>
3b	Quantity of ROM mineral production proposed	<p>Lst - 87,48,722 Tons, Shale - 5,01,357 Tons = 9250079 Tons</p>	<p>Lst - 68,56,136 Tons, Shale - 1979 Tons = 68,58,115 Tons</p>	<p>Captive Mine: Production is as per plant requirement which is reportedly low during the RY. Violation issued.</p>
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	<p>No sub grade or Mineral rejects. Entire ROM is utilized in Cement Manufacturing.</p>
3d	Quantity of mineral reject generation	No proposal	NIL	<p>The mineral produced are above the threshold value. There is no mineral reject generated in mine.</p>
3e	Grade of mineral rejects generation and threshold value declared.	<p>Threshold value CaO : Min 34% Mgo :Max 5 %</p>	<p>Mine produces CaO: > 34% Mgo: < 5%</p>	<p>The mineral produced are above the threshold value. There is no mineral reject generated in mine.</p>
3f	Quantity of sub grade mineral generation.	No proposal	NIL	<p>No sub-Grade Mineral generated.</p>
3g	Grade of sub grade mineral generation	No proposal	NIL	<p>No sub-Grade Mineral generated.</p>

3h	Manual / Mechanised method adopted for segregating from ROM	No proposal for segregating from ROM	Not Required		All the blasted limestone from the face is transported to the crusher within ML.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Not Required		There is no Sub- Grade Mineral available in our mines.
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting proposed in Mineral benches.	Deep hole drilling & blasting carried out.		Drilling by sandvik DI 500 (150mm) and blasting by slurry explosive in conjunction with ANFO and NONEL.
3k	Provision of mining machineries in mineral benches	Shovel dumper combination in No's. Excavator: 04 Loader: 04 Dumper: 20	Excavator: Loader: Dumper: Drill: 02No's Dozer :	07 No's 02 No's 20No's 02	Fully Mechanized mines
		Drill: 02 Dozer : 02			
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB: 1 to 2 Mtr Mineral: Bench height - 10Mtr & Bench width 50 Mtrs.	OB: 1.5 Mtr Mineral: Bench height - 10Mtr & Bench width 30 Mtrs.		Bench height and width deviated due to land acquisition & permission issue resulting in reduction in bench width and achieving the required production. Violation issued.

3m	Total area covered under excavation/pits	178.69 Ha at the end of plan period.	158.00Ha. (The end of FY 2021-22)	Captive Mine: Production is as per plant requirement and excavation in not as per the approved MP due to land acquisition & permission issue resulting in inability to extend the pit into those areas. Violation issued
3n	Ore to OB ratio for the pit/mine during the year.	1:0.056 (Limestone)	1:0.099 (Limestone)	Stripping Ratio increased due to land constraint. Violation issued.
3o	Total area put in use under different heads at the end of year	At the end of plan period Area under Mining-178.69 Ha, Storage for top soil - 19.72 Ha, Mineral Storage - 2.26 Ha, Infrastructure - 2.95 Ha, Roads 7.41 Ha, Mineral Separation plant (Crusher) 0.61 Ha, Others (Green belt)- 11.33 Ha.	Covered under current (O/C) Workings- 158 Ha, R&R(Hydro Reclamation)- 5.23 Ha, Used for waste disposal (Black Cotton Soil)- 19.20 Ha, Occupied by plant, buildings, residential, welfare buildings & roads- 13.470 Ha, Plantation 0.50 Ha	Proposal is for 5year and actual is upto 2021-22

3p	Production of ROM mineral during the last five year period as applicable	2016-17: 11.69 2017-18: 09.25 2018-19: 09.25 2019-20: 09.25 2020-21: 09.25 2021-22 :09.25	2016-17: 05.40 2017-18: 05.02 2018-19: 06.32 2019-20: 05.50 2020-21: 05.10 2021-22: 06.85	For the Year 2021-22, it was proposed to produce 87,48,722 Tons of Limestone & Shale 5,01,357. However, 6856136 Tons of limestone & only 1979 Tones of Shale Production with (-) 22 % & (-) 99 % (Production Lst& Shale) is achieved thereby deviating from the proposed quantities.
3q	General remarks of inspecting officers on method of mining etc.			Method of Mining is fully mechanized method with shovel dumper combination. Excavation in not as per the approved MP due to land acquisition & permission issue resulting in inability to extend the pit into proposed areas. Violation issued.

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 of OB is proposed	Separate dumping of OB carried out.	Bund Formation along NW side near new magazine & of the Lease Boundary.
4b	Location of topsoil, OB and mineral reject dumps	Dump within 50 Mtrs - E210 to 355. N-(-)285 to (-) 200. Location of dump near nallha. E 135 to 205 & N590 to 665.	Dump within 50 Mtrs E-210 to 355N(-)285 to (-)200.	Bund Formation along NW side near new magazine & of the Lease Boundary.

4c	Number of dumps within lease area and outside of lease area	WLA-4 OLA-0	WLA-4 OLA-0	Dumping is done along ML boundary for Green Belt development.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Inside the UPL	Inside the UPL	Entire area is mineralized and it is reported that part of the dump will be re handled in the next plan period.
4e	Number of active and alive dumps.	1	1	-
4f	Number of dead dumps.	3	3	3 dumps stabilized with plantation.
4g	Number of dumps established.	3	3	3 dumps stabilized with plantation.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	Garland drain is made at foot of Dump.
4i	Length of Retaining wall or garland drain all along dumps	No proposal	NIL	Retaining wall 378 Mtrs Proposed for 2018-19 is completed Garland drain - 380 Mtrs for 2018-19 is completed
4j	Number of settling ponds	No proposal	NIL	Retaining wall 378 Mtrs Proposed for 2018-19 is completed Garland drain - 380 Mtrs for 2018-19 is completed
4k	Specific comments of inspecting officer on waste dump management			Waste dump management is as per the Approved Mining Plan.

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	There is no waste for Backfilling as no part of the lease area is fully mined out. The Generated OB is Used for Bund Formation along the Lease Boundary.
5b	Area under backfilling of mined out area	No proposal	NIL	There is no waste for Backfilling as no part of the lease area is fully mined out. The Generated OB is Used for Bund Formation along the Lease Boundary.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil generated is proposed for bund making along the acquired mine boundary.	NIL	There is no waste for Backfilling as no part of the lease area is fully mined out. The Generated OB is Used for Bund Formation along the Lease Boundary.
5d	Total area fully reclaimed and rehabilitated	No proposal	NIL	So far 5.23 Ha is converted into water reservoir.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			There is no proposal for back filling as mineral persist at depth. The part of the existing pit is converted into water reservoir.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Annual report on PMCP to be submitted before 1stJuly every year	PMCP report submitted dtd. 22.06.2022.	-

6b	Area available for rehabilitation (ha) .	No proposal	NIL	-
6c	afforestation done (ha).	0.44 Ha	0.50 Ha	-
6d	No. of saplings planted during the year	Within ML 3000 (1500 fresh & 1500 Gap Planation) saplings proposed.	Within ML Area Fresh Plantation: 2110 Gap filling: 1150 Total 3260. Outside ML Area : 1630	-
6e	Cumulative no .of plants	155089	165384	-
6f	Any other method of rehabilitation	--	-	-
6g	Cost incurred on watch and care during the year	Rs.15,30,000	Rs.16,62,600	As per PMCP report 2021-22.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No Proposal	NIL	part of the existing pit 5.23 Ha is being utilized as water reservoir
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	NIL	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No Proposal	NIL	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	NIL	-

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	NIL	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	-	-	There is no waste land in ML area
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	-	-	There is no waste land in ML area
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	-	-	There is no waste land in ML area
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed in core and buffer zone.	Done regularly in core and buffer zone.	Environmental monitoring by M/s BS Envi Tech Hyd.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The leasee has carried out PMCP activities as per the proposal. 4890 no's of sampling planted in the lease area.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	All the ROM Mineral are dispatch for captive consumption	Direct ROM dispatched to crusher.	For their captive cement plant of 6.00 million ton clinker capacity.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Bench wise blending of limestone and shale done as per requirement of plant	-
7c	Different grade of mineral sorted out at mines.	No proposal	Bench wise blending of limestone and shale done as per requirement of plant	-

7d	Any beneficiation process at mines .	No proposal	Not Required	Crusher capacity of 1400 TPH and stand by crusher of 800 TPH
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Beneficiation of limestone is not required as entire limestone excavated is being utilized with proper blending in the cement manufacturing plant and conservation of mineral is taken care of.

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	The top soil generated is proposed to be utilized for bund making along the lease boundary.	0.03 Million cubic meter of top soil is generated during the year 2021-22 was utilized for bund making as proposed.	100 % utilization of BC Soil for Green belt development within in and outside mining Lease.
8b	Concurrent use or storage of topsoil	Top soil generated was proposed to stacked and utilized for bund making	Bund was made along the acquired boundary with plantation on the top of bund.	100 % utilization of BC Soil for Green belt development within in and outside mining Lease.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden proposed	Separate dumps for overburden carried out	100 % utilization of BC Soil for Green belt development within in and outside mining Lease.

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Overburden dumped in safety barrier of lease area.	Overburden dumped in safety barrier of lease area.	100 % utilization of BC Soil for Green belt development within in and outside mining Lease.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	NIL	100 % utilization of BC Soil for Green belt development within in and outside mining Lease.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed to Plant 3000 no's (1500 Fresh plants & 1500 Gap Filling)	Within ML Area Fresh Plantation: 2110 Gap filling: 1150 Total 3260. covering an area of 0.60 Ha.	As per the proposals for the year 2021-22
8g	Survival rate	65%	65%	Drip system adopted
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul roads proposed to control airborne dust.	Regular water sprinkling is carried out static water sprinklers are provide on haul road, unloading station, ramps & view point.	NIVIS dust suppression system & Three water tankers of 18KL each provided with rain gun and pressurized sprinkler arrangements and drip irrigation system.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mine is good as lease has carried out afforestation and other environmental protective measures as per the proposals.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to Oct 2022 A.R. Submitted up to 2021-2022		A.R. submitted up to 2021-22 On 30.06.2022.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager mining: Shiojee Roy Mining Engineer: Raghavendra Pujari Geologist: C Naga Subbaiah	Appears to be correct	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land Use Pattern Current (O/C) Workings 158.00 Reclamation 5.23 Dumps 19.20 Roads/Infrastr ucture 13.470 Others (Green Belt) 0.60	Appears to be correct	As per Annual Return 2021-22
9d	Scrutiny of Annual return on afforestation	WML- 3260 No's @ 65% survival rate OML - 1630 No's @ 65% survival rate.	Appears to be correct	-
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	Mineral OS ROM - Dispatch CS Limestone 539711 6856136 6856136 539711 Shale 1021 1979 3000 0		As on 01.04.2022

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost & Ex-mine price Rs. 176.08 per MT for Limestone Rs. 265.48 per MT for Shale.	-	No sale value this is a captive mine.As per part VII of the Annual Returns submitted, DMF & NMET paid details have not been furnished and accounted for arriving at the cost of Production. Violation issued.
9h	Scrutiny of Annual return on fixed assets	Rs. 2411.33 Lakhs including plant machinery and transport equipment's.	-	Under value of Fixed Assets, depreciation of Land value of Rs.1,24,67,000/- during the year reported is foundnot in order as generally land values do not depreciate. Advised to correct Cost of Production under Part-VII if the same have to be revised if this is accounted for. Accordingly violation issued.

9k	Scrutiny of Annual return on mining machineries	Excavator: No's Loader: 02 No's Dumper: 20 No's Dozer: 02No's Drill: 02No's Water Tanker: 03No's NIVIS water system: 01No's Bulk Mixing & Delivery Truck: 01No's	Appears to be correct	-
----	--	---	-----------------------	---

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17 Rule 11(1)	18/01/2023		Rule 45(7)(i)	18/01/2023	
Rule 45(7)(i)	18/01/2023				

Date :

(SURESH PRASAD)

Indian Bureau of Mines