

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

Inspection under SDF for star rating of mines REPORT

Bangalore regional office

Mine file No : KNT/GLB/LST/17/BNG

Mine code : 38KAR10003

- (i) Name of the Inspecting : **M003**) **G C MEENA**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 14/12/2018
- (v) Prev.inspection date : 19/01/2017

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.coi**
- 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 : Tridib Kumar Das
 Birla Building, 8th Floor,
 9/1, R.N Mukherjee Road,
 Kolkata KOLKATA WEST
 BENGAL
 Phone:
 FAX :

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

Mining Engineer

Name : SHIOJEE ROY,Full Time
 Qualification : BE Mining, First Class Mines manager Cer
 Appointment/ : 01/05/2018
 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 Plan/Scheme of Mining	:	Existing rule 11 MCDR1988	13/02/1992
		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	29/11/2016
		MP modif under 17(3) MCR 2016	15/12/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Exploration work proposed in the FY 2020-21 & 2021-22
1b	Exploration over lease area for geological axis 1 or 2	Nil	G1- 258.58 Ha. G2- 409.30 Ha. G3- 229.98 Ha	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	G1- 243.19 Ha. G2- 031.05 Ha. Proposed during 2020-21 & 2021-22
1e	Balance reserve as on 01/04/20		Limestone-287.07 MMT, Shale-53.41MMt as on 01.04.2018	As per Annual Return 2017-18
1f	General remarks of inspecting officers on geology, exploration etc			243.19 Ha has been explored at G1 level & 31.05 Ha has been proposed during 2020-21 & 2021-22 to bring G2 to G1 level

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	section lines: C-C' & D-D' RL-422.15-419.28	Development done as per proposal	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches for OB & Mineral proposed	Maintained Separate benches for OB & Mineral	OB-1 & Mineral-5 benches
2c	Stripping ratio or ore to OB ratio	0.0095	0.046	Higher Stripping Ratio due to less production & advancement of OB bench
2d	Quantity of topsoil generation in m3	Nil	Nil	-

2e	Quantity of overburden generation in m3	88,066MT	2,28,680MT	Advancement of OB bench
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development was carried out in the earmarked place as per the proposal

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2Pits	2Pits	-
3b	Quantity of ROM mineral production proposed	92,50,000 Tons	50,23,109 Tons	Captive Mine: Production is as per plant requirement
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	All the material extracted is sent to the crusher
3d	Quantity of mineral reject generation	No proposal	Nil	-
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Nil	-
3f	Quantity of sub grade mineral generation.	No proposal	Nil	-
3g	Grade of sub grade mineral generation	No proposal	Nil	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Mechanized method adopted	Only crushing for size reduction
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	-

3j	Provision of drilling and blasting in mineral benches	Drilling & blasting proposed	Drilling & blasting is carried out	Deep Hole Drilling by sandvik DI 500 of 150mm dia and Blasting by slurry explosive with delay detonators.
3k	Provision of mining machineries in mineral benches	Use of Mining machineries provided	Using Mining machineries in mineral benches	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB: 1.5Mtr Mineral: 10Mtr	OB: 1.5Mtr Mineral: 10Mtr	12mtr height permission from DGMS but maintaining a height of 10mtr maximum
3m	Total area covered under excavation/pits	178.69 Ha	150.00Ha.	-
3n	Ore to OB ratio for the pit/mine during the year.	0.0095	0.046	Stripping Ratio increased due to less production of mineral against the proposal
3o	Total area put in use under different heads at the end of year	Under Mining-178.69 ha, Reclaimed-5.23 Ha, Waste Disposal (BC)-19.72 Ha, Infrastructure-13.23 ha, PMCP (Green Belt)-2.20 ha	Under Mining-150.00 Ha, Reclaimed-5.23 ha, Waste Disposal (BC)-16.32 ha, Infrastructure-11.09 ha, PMCP (Green Belt)-0.50 ha	-
3p	Production of ROM mineral during the last five year period as applicable	2013-14: 09.30 2014-15: 09.20 2015-16: 11.70 2016-17: 11.69 2017-18: 09.25	2013-14: 04.36 2014-15: 04.75 2015-16: 05.45 2016-17: 05.40 2017-18: 05.02	All units in Million Tons. Actual production within the permissible limits
3q	General remarks of inspecting officers on method of mining etc.			Exploitation is done as per the approved document using deep hole drilling & blasting & mining machineries

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB is proposed	Separate dumping of OB done	-
4b	Location of topsoil, OB and mineral reject dumps	Bund Formation along NW side near new magazine of the Lease Boundary	Carrying out as per the approved document	Top soil is used for green belt development within ML & outside ML Area.
4c	Number of dumps within lease area and outside of lease area	WML-4 OML-0	WML-4 OML-0	Soil dumps along lease area 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
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.	Proposed	RW & GD made	Garland drain & RW is made at foot of Dump.
4i	Length of Retaining wall or garland drain all along dumps	325 mtsX1MtsX1Mts	GD & RW constructed as per the plan	-
4j	Number of settling ponds	No proposal	Nil	-
4k	Specific comments of inspecting officer on waste dump management			Waste dump management is as per the proposal envisaged in the approved document.

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	-

5b	Area under backfilling of mined out area	No proposal	Nil	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	nil	-
5d	Total area fully reclaimed and rehabilitated	No proposal	nil	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			There is no waste for Backfilling. The Generated OB is Used for Bund Formation along the Lease Boundary & dug out 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).	Yes	Submitted vide letter no. VC/WS/MINE/VBS/120/2018-19/207 dtd. 18.07.2018	-
6b	Area available for rehabilitation (ha) .	No proposal	Nil	-
6c	afforestation done (ha).	0.44	0.50	-
6d	No. of saplings planted during the year	3000	4075	With in lease area
6e	Cumulative no .of plants	NA	158179 Nos	-
6f	Any other method of rehabilitation	No proposal	nil	-
6g	Cost incurred on watch and care during the year	No proposal	nil	-

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	nil	-
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	No proposal	nil	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	nil	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	nil	-

6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring in the core zone & buffer zone proposed	Environmental monitoring is done regularly in all 4 seasons by M/s BS Envi Tech Hyd., (NABL).	Parameters within the permissible limits
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities including environmental monitoring is done as per the approved document

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch proposed	ROM dispatched	No sorting done
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	o proposal	nil	Only crushing & size reduction
7c	Different grade of mineral sorted out at mines.	No proposal	nil	-
7d	Any beneficiation process at mines	No proposal	nil	Crushed limestone sent to plant thru belt conveyor
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			All the ROM extracted from the mines is fed to the crusher where reduction in size takes places & is transported to the plant thru belt conveyors

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal & utilization of top soil proposed	Concurrent usage of top soil done	-
8b	Concurrent use or storage of topsoil	Proposed	Concurrent usage of top soil done	soil is being utilized for making bund and afforestation
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden proposed	Separate dumps for overburden made	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Overburden proposed to be dumped in safety barrier of lease area.	Overburden dumped in safety barrier of lease area.	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	Converting dug out pits into water reservoir
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)	4075 no's plants were planted	-
8g	Survival rate	65%	65%	-
8h	Water sprinkling on roads to control airborne dust	Proposed	Permanent water sprinkler are provided on haul road & view point, NIVIS dust suppression system & Three water tankers provided with rain gun and pressurized sprinkler arrangements.	Total 04 Nos of water tankers apart from permanent and drip irrigation system
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mine is maintained. Dug out pits converted into water reservoirs.

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 Nov 2018 A.R. Submitted up to 2017-2018	A.R. submitted on 29.06.2018
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Rajesh Garg Manager: Ravindra Lagwankar Geologist: Vinayaka B S	Mining Engineer: Shivji Roy Manager: Shivji Roy Geologist: Vinayaka B S	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Current (O/C) Workings- 150.00 Ha, Reclamation -5.23 Ha, Dumps-16.32 ha, Roads/Infra structure- 11.09 ha, Others (Green Belt) 0.50 ha	Appears to be correct	
9d	Scrutiny of Annual return on afforestation	WML- 4075 No's @ 65% survival rate OML- 21245 No's @ 65% survival rate	Appears to be correct	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	nil	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Mineral OS ROM Dispatch CS Limestone 638335 5004730 5018651 624414 Shale 0 18379 18379 0	Appears to be correct	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost Rs. 169.61 per MT for Limestone Rs. 143.21 per MT for Shale	Captive mines
9h	Scrutiny of Annual return on fixed assets	Rs. 1,443.12 Lakhs	Appears to be correct
9k	Scrutiny of Annual return on mining machineries	Excavator: 06 No's, Loader: 02 No's, Dumper: 19 No's, Dozer: 02 No's, Drill: 02 No's, Soil Compactor: 1 No, Mobile Hyd Crane: 01 No, Diesel Bouzer: 01	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

Date :

(G C MEENA)

Indian Bureau of Mines