MCDR-MiFLOLST/10/2023-BNG-IBM_RO_BNG INDIAN BUREAU OF MINES

MINERALS DEVELOPMENT AND REGULATION DIVISION

1/29267/2024

MCDR inspection REPORT

Bangalore regional office

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

(i) Name of the Inspecting : 277) GANGADHAR BHAKAT

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : Ravindra Lagwankar-Agent, Venu Gopal Reddy - Mines Ma

Official with Designation

(iv) Date of Inspection : 29/11/2023

(v) Prev.inspection date : 27/12/2022

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 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 ML No 2417 & 2475

(b) Lease area : 897.86 Ha

(c) Period of lease : 20 50 Years, up to 08/12/2032

(d) Date of Expiry : 04/09/2023 08/12/2032

4. Mineral worked : SHALE Associated

LIMESTONE Main

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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

 $\mbox{Name} \qquad \qquad : \qquad \mbox{C NAGA SUBBAIAH,Full Time}$

Qualification : M.Sc GEOLOGY Appointment/ : 04/03/2022

Termination date

Manager

Name : VENU GOPAL REDDY

Qualification :

Appointment/ : 01/11/2023

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 Mining Scheme rule 12 MCDR1988 21/08/2000 27/11/2002 Renewal under rule 22 MCR1960 20/07/2004 Fresh under rule 22 MCR1960 Mining Scheme rule 12 MCDR1988 11/08/2006 Modif.approved Mining Scheme 22/04/2010 04/01/2013 Mining Scheme rule 12 MCDR1988 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

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal.	NIL	-
1b	Exploration over lease area for geological axis or 2	34 Core boreholes up 1 to 1630m.	25 Core boreholes up to 1151m.	Violation pointed out.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	-	Rs 31.21 Lakh	In-house exploration carried out.
1d	Balance area to be explored to bring Geological axis in 1 or 2	-	G2- 265.35 Ha. G3- 168.30 Ha.	
1e	Balance reserve as on 01/04/20		Limestone Reserves- 426.97MMT & Shale Reserves-34.94 MMT as on 1.04.2023.	
1f	General remarks of inspecting officers on geology, exploration etc			Drilling of the proposed exploratory boreholes has not been carried out. It is stated that the backlog of exploration is due to land acquisition issues to drill the proposed exploratory bore holes. Therefore, the violation has been pointed out.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	-	Pit-A;	Only One Pit - Pit-A; N-1900093- 1898555. E- 745382- 746871.	

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	OB to Ore ratio proposed. 1: 81.90 (in tons)	OB to Ore ratio 1:12.82 (in Tons)	Ore:6328632 Tons OB:493539 Tons
2d	Quantity of topsoil generation in m3	67000m3	312367m3	Violation pointed out.
2e	Quantity of overburden generation in m3	67000m3	312367m3	Violation pointed out.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			During the year 2022-23 the OB quantity is increased due to re-handling of old soil bunds.

Exploitation:

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Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One Pit proposed.	One Pit - Pit-A	Working carried out within the proposed location.
3b	Quantity of ROM mineral production proposed	Proposed Limestone - 8779556 Tons, Shale - 30,000 Tons	Limestone - 6328632 Tons, Shale - 9900 Tons	Less production carried out. Hence, Violation pointed out.
3с	Recovery of sailable/usable mineral from ROM production	100%	100%	-
3d	Quantity of mineral reject generation	No proposal.	NIL	No mineral reject generated during the year 2022-23 as per submitted AR.
3e	Grade of mineral rejects generation and threshold value declared.	Threshold value CaO: Min 34%	Mine produces CaO: > 34%	No mineral reject generated during the year 2022-23 as per submitted AR.
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	No proposal for segregating from ROM	NIL	All the blasted limestone from the face is transported to the crusher within ML area.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal.	NA	-
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting proposed in Mineral benches.	Carried out as per proposal.	Drilling by sandvik DI 500 (150mm) dia and Blasting by slury explosive in conjunction with ANFO and NONEL.
3k	Provision of mining machineries in mineral benches	Shovel dumper combination in No's. Excavator: 07 Loader: 02 Dumper: 16	Excavator: 05 No's Loader: 02 No's Dumper: 3No's Drill:02. Dozer: 02.	Fully Mechanized mines.
		Drill: 01 Dozer: 02		
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	height - 12	OB: 1.5 Mtr Mineral: Bench height - 10 to 12 Mtr & Bench width 20 to 25 Mtrs.	12mtr height permission from DGMS but maintaining a height of 10mtr maximum.
3 m	Total area covered under excavation/pits	176.10Ha at the end of the plan period.	160.00Ha. (The end of FY 2022- 23)	Captive Mine: Production is as per plant requirement.
3n	Ore to OB ratio for the pit/mine during the year.		OB to Ore ratio 1:12.82 (in Tons)	Ore:6328632 Tons OB:493539 Tons

Total area put At the end of Covered under current in use under plan period (O/C) Workings - 160 Ha, different heads Area under R&R(Hydro Reclamation) at the end of Mining-167.10 5.23 Ha, Used for waste Ha, Storage disposal (Black Cotton year for top soil - Soil) - 19.20 Ha, 24.02 Ha, Occupied by plant, Mineral buildings, residential, Storage - 2.26 welfare buildings & roads- 13.470 Ha, Infrastructure Plantation 0.50 Ha - 2.95 Ha, Roads 7.41 Ha, Mineral Separation plant (Crusher) 0.61 Ha, Others (Green belt) - 11.33 Ha. Production of For Limestone: For Limestone: 3р ROM mineral 2018-19: 8.75 2018-19: 6.27 2019-20: 8.75 2019-20: 5.48 during the last five year period 2020-21: 8.75 2020-21: 5.06 as applicable 2021-22 :8.75 2021-22: 6.85 2022-23 : 8.75 2022-23: 6.328 For Shale: For Shale: 2018-19: 0.50 2018-19: 0.051 2019-20: 0.50 2019-20: 0.015 2020-21: 0.50 2020-21: 0.03 2021-22: 0.50 2021-22: 0.0019 2022-23: 0.03 2022-23: 0.009 (In MMT) (In MMT)

3q General remarks of inspecting officers on method of mining etc.

Mining was carried in One pit with 100% recovery. HEMM were used for Mine operations in combination with drilling and blasting. The violation has been pointed out for less production.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
		<u>F</u>		

4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping for OB is proposed	Separate dumping of OB carried out.	No mineral reject generation.
4b	Location of topsoil, OB and mineral reject dumps	N1898754,18986 54 E744763,744915	N 1898735, 744798. E 1898666, 744897.	-
4c	Number of dumps within lease area and outside of lease area	WML-4 OML-0	WML-4 OML-0	All the 04 dumps are within the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Inside the UPL.	Inside the UPL.	Entire lease 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.	YES	YES	Garland drain is made at foot of Dump.
4i	Length of Retaining wall or garland drain all along dumps	Garland drain 530 Mtrs proposed.	Carried out as per proposal.	Garland drain - 550 Mtrs for 2022- 23 constructed.
4j	Number of settling ponds	No proposal.	NIL	-
4k	Specific comments of inspecting officer on waste dump management			There is no specific comment 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 has not yet been exhausted.

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)	Proposed.	Carried out as per the proposal.	
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).	on PMCP to be submitted before 1stJuly	PMCP report submitted on 26.06.2023.	
6b	Area available for rehabilitation (ha) .	No proposal.	NIL	
6c	afforestation done (ha).	0.50 Ha	0.55 Ha	
6d	No. of saplings planted during the year	Within ML 1250Nos of saplings proposed.	Within ML Area Fresh Plantation: 1950Nos Gap filling: 430Nos Total 2380Nos. Outside ML Area: 2749Nos	
6e	Cumulative no .of plants	166274 Nos	167764 Nos	
6f	Any other method of rehabilitation	No proposal.	NIL	
6g	Cost incurred on watch and care during the year	Rs. 4,81,250/-	Rs. 12,13,800/-	As per PMCP report 2022-23.

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 matured & it 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) Afforestati on on backfilled area		NIL	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal.	NIL	_
61	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	-
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No Proposal.	NIL	-

6р	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed in core and buffer zone.	Environmental monitoring carried out regularly in core and buffer zone by M/s UNIVERSAL ENVIRO ASSOCIATES.	All the environmental monitoring parameters are within the permissible limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The lessee has carried out PMCP activities as per the proposal. 5129 no's of sampling planted within the Mining lease area & outside the mining 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 plant via crusher hopper.	Limestone and shale produced were used 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.	NIL	Bench wise blending of limestone and shale done as per requirement of plant.
7c	Different grade of mineral sorted out at mines.	No proposal.	NIL	_
7d	Any beneficiation process at mines .	No proposal.	NIL	Crusher capacity of 1525 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.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	generated is	0.31 Million cubic meter of top soil is generated during the year 2022-23 was utilized for bund making.	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.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)		Separate dumps for overburden carried out	
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.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	NIL	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed to Plant 1250 No's.	Within ML Area: Fresh Plantation: 1950 Nos, Gap filling: 430Nos, Total 2380Nos. Outside ML Area: 2749Nos.	As per AR submitted for the year 2022-23.
8g	Survival rate	65%	65%	Drip irrigation system adopted.
8h	Water sprinkling on roads to control airborne dust	sprinkling on	Regular water sprinkling is carried out static water sprinklers are provide on haul road, unloading station, ramps & view point.	Three water tankers capacity of 18000 Ltr. Each.

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 2023 A.R. Submitted up to 2022- 2023.				M.R. Submitted on 07/11/ 2023 A.R. submitted up to 2022-23 on 27.06.2023.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: A Raghavendra Geologist: C Naga Subbaiah	Appear	to be	correct.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		Appear	to be	correct.	As per submitted annual return for the year 2022-23.
9d	Scrutiny of Annual return on afforestation	WML- 1540 No's survival rate 65% OML - 1791 No's survival rate 65%	Appear	to be	correct.	_
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	Appear	to be	correct.	-

9f	Scrutiny of Annual return on ROM stock and/or graded ore		Appear to be correct.	Captive consumption.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost & Ex-mine price Rs. 195.15 per MT for Limestone Rs. 284.55 per MT for Shale.		The expenditure incurred towards exploration is not accounted for arriving the cost of Production. Hence, violation pointed out.
9h	Scrutiny of Annual return on fixed assets	Fixed assets value of Rs. 5,16,506/-	_	Capitalised expenditure for pre-production exploration is not accounted for the exploration carried out during the year 2022-23. Violation pointed out.
9k	Scrutiny of Annual return on mining machineries		Appear to be correct.	

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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)	30/01/2024				

Date :

(GANGADHAR BHAKAT)

Indian Bureau of Mines