INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

Review and updation of Mining Plan REPORT

Bangalore regional office

Mine file No : KNT/GLB/LST-42/BNG Mine code: 38KAR10018

Name of the Inspecting : S19) SANDEEP KUMAR SINGH

Officer and ID No.

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine : Sri S. Raghuram, Mine Manager, Sri V. Shivakumar, Mini

Official with

Designation

(iv) Date of Inspection : 24/02/2022 Prev.inspection date : 28/02/2020 (v)

PART-I : GENERAL INFORMATION

(a) Mine Name : FEROZABAD LIMESTONE MINE

(b) Registration NO. : IBM/18549/2014

(C) Category : A Fully Mechanised

(d) Type of Working Opencast

(e) Postal address

> State : KARNATAKA District GULBARGA Village FEROZABAD Taluka GULBARGA Post office : FEROZABAD Pin Code : 585308

FAX No. : 080-40302844 (F),

E-mail : v.shivakumar@zcltd.com, gcl Phone : 080-41194408 (O), 9449267

(f) Police Station : Farthabad First opening date : 30/09/2014 (g)

Weekly day of rest (h) : SUN

Address for : M/S.GULBARGA CEMENT LIMITED,

correspondance ADVENTZ CENTRE , 2nd&3rd flooor, No 28,

CUBBON RD BANGALORE.

3. : KAR1484 Lease Number (a) (b) Lease area : 989.89

Period of lease : 20 (C)

(d) Date of Expiry : 04/10/2027

Mineral worked 4. : LIMESTONE Main 5. Name and Address of the

Lessee : GULBARGA CEMENT LIMITED

Adventz Centre, 3rd Floor (North Wing), No. 28, Cubbon Road, Bangalore BANGALORE KARNATAKA

Phone:

FAX :080-40302844

Owner : S.Sundaram, Director and Nominated owner

Adventz Centre , 2 nd and 3rd floor No 28, Cubbon rd, Bangalore BANGLORE URBAN

KARNATAKA

Phone: 08041194408 FAX : 08040302844

Agent : S SUNDARAM

ADVENTZ CENTRE, 2nd AND 3rd FLOOR, NO 28, CUBBON rd,

BANGALORE GULBARGA

KARNATAKA

Phone: 08041194408 FAX : 08040302844

Geologist

Name : Jyotirmayee Mohanty, Full Time

Qualification : Master of Science (Applied Geology)

Appointment/ : 05/08/2021

Termination date

Manager

Name : S.Raghuram

Qualification : FCC

Appointment/ : 21/02/2022

Termination date

Manager

Name : SHIVAKUMAR V

Qualification : B E MINING WITH SECOND CLASS MINE MANAGE

Appointment/ : 30/09/2017

Termination date

6. Date of approval of Mining : MP review under 17(1) MCR 2016 27/01/2017 Plan/Scheme of Mining : MP review under 17(1) MCR 2016 25/06/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	40 nos. of boreholes with total meterage of 2000 m proposed for the year 2020-21 & 40 nos. of boreholes with total meterage 2000 m proposed for the year 2021-22.	Only 8 nos. of exploratory boreholes drilled with total meterage.	Violation issued under Rule 11(1) of MCDR 2017.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No mentioned.	M/sEarth&Environment.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	G-1- 327.59 ha, G-2- 272.45 ha, G-3- 165.18 ha	G-1- 327.59 ha, G-2- 272.45 ha, G-3- 165.18 ha	No major Exploratory drilling carried out to upgrade G-3 area to G-1/G2. Violation issued under Rule 11(1) of MCDR 2017.
le	Balance reserve as on 01/04/20	412.09million Tons as on 01.02.2020	412.07million Tones as on 01.04.2021	After depleting production for the year 2019-20 & 2020-21. Avg Grade of Reserve -Cement + subgrade as mentioned in the approved document. The details of Mineral Reserves and Resources estimated at the end of the year under different UNFC codes are not reported correctly in ''tonnes'', under Part-V, Sec-3 of AR-2020-21 as per the last approved document. Violation issued under Rule 45(7) of MCDR 2017.

1f General remarks of inspecting officers on geology, exploration etc

i)80 nos. of total core boreholes with total meterage of 4000 m were proposed to be drilled till year 2021-22 against which till date only 8 nos. exploratory boreholes have been drilled. Violation issued under Rule 11(1) of MCDR 2017.

ii) The holder of a mining lease shall on or the 8 boreholes before the 30th day of June every year submit a year 2021-22 were digital copy along with a print copy of the surface geological plans and sections maintained under rule 32 along with inspection as per the annual return. The surface geological plans this rule. and sections have not been submitted as per the provision of this rule. Violation issued under Rule 33 of MCDR 2017.

iii) The record of drilled during the not found, maintained in Form-''J'' during the site the provision of Violation issued under Rule 48(1) of MCDR 2017. iv) Part-V: a) The details of Mineral Reserves and Resources estimated at the end of the year under different UNFC codes are not reported correctly in ''tonnes'', under Sec-3 of AR 2020-21 as per the last approved document. Violation issued under Rule 45(7) of MCDR 2017.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	to 695300,E	•	Development carried out within the proposed extent
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benchesare proposed in Topsoil/OB Soil and Mineral.	Separate bencheshavebeen Maintained for topsoil/OB Soil &Mineral.	There are 3BenchesforOB & 1 bench is forLimestone. Average bench Height of bench in OB-4m and in Mineral-5m currently.

2c	Stripping ratio or ore to OB ratio	1: 7.81 proposed (In cum)	1:7.80 (In cum)	For the year 2020- 21. OB- 99,874 tons~ 62421 Cum Ore-20,000 tons~8000 Cum As reported by the Lessee during inspection.
2d	Quantity of topsoil generation in m3	7352.5 Cum proposed	7275 Cum handled	Nil
2e	Quantity of overburden generation in m3	55146.5 Cum proposed	55146.5Cum handled	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development in the mine carried out within the proposed extent as per the proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit Proposed	One Pit	Nil
3b	Quantity of ROM mineral production proposed	20000 Tons Proposed	20000Tons actual production	For the year 2020- 21. As reported by the Lessee during inspection.
3с	Recovery of sailable/usable mineral from ROM production	100% proposed	100% achieved	Nil
3d	Quantity of mineral reject generation	No proposal	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	NIL	NIL
3f	Quantity of sub grade mineral generation.	No proposal	NIL	NIL
3g	Grade of sub grade mineral generation	No proposal	NIL	NIL

3h	Manual / Mechanised method adopted for segregating from ROM	Only crushing and sizing proposed within ML area.	No Crushing and sizing carried out since Rom is being stacked within the lease as the captive plant has not come up yet	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	Deep hole drilling and blasting proposed.	Deep hole drilling and blasting carried out.	Drill Machine of115mmdiameter&Bl asting withSlurryExplosiv es withElectric delay detonator.
3k	Provision of mining machineries in mineral benches	HEMM proposed i)Hydraulic Excavator- 6.5 Cum-2 nos. ii)Drill-150 mm-1 no. iii)Tipper-55 tons- 6 nos. iv) Water tanker- 2 nos.	HEMM deployed i)Hydraulic Excavator- 0.9 Cum-1 no. ii)Drill-115 mm-1 no. iii)Tipper-25 tons- 2 nos. iv) Water tanker- 4KL-1 no	The drill machine details have not been reported in Part-V-Sec (5) of AR 2020-21. Violation issued under Rule 45(7) of MCDR 2017.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height in mineral proposed 9m.	Average benchheight inMineral is 5meters and inOB 4meters. There are 3Benches for OB & 1 bench is for Limestone.	The mine has started recently and the benches are under development. The bench height of 9m for mineral will be maintained once the mineral bench is completely developed.
3m	Total area covered under excavation/pits	7.90 ha till end of plan period (2021-22).	5.88 ha as on 1.04.2021.	As reported in AR 2020-21.
3n	Ore to OB ratio for the pit/mine during the year.	1:4.99 (In tons)	1:4.99 (In tons)	For the year 2020- 21. OB- 99,874 tons- 62421 Cum Ore-20,000 tons- 8000 Cum As reported in AR 2020-21.

30	Total area put in use under different heads at the end of year	Mining- 7.90 Ha Waste dump & Top soil storage- 5.47 ha Infrastructure &Roads- 11.3 Ha (Till end of plan period, 31.03.2022)	Mining- 5.88 Ha Waste dump & Top soil storage- 6.55 ha Infrastructure & Roads- 1.7 Ha (As on 1.04.2021)	The land use (area in ha) as given in Part-I (12) under 12(iv) i.e., used for waste disposal,12(v) i.e., Occupied by plant, buildings, residential, welfare buildings & roads & 12(vi), Other Purpose have not been reported correctly in accordance with approved land use pattern. Violation issued under Rule 45(7) of MCDR 2017.
3р	Production of ROM mineral during the last five year period as applicable	2015- 16=3,003,135 2016-17=Nil 2017-18=Nil 2018-19=24000 2019-20=Nil 2020-21=20000 (intonnes)	2015-16=24000 2016-17=Nil 2017-18=Nil 2018-19=Nil 2019-20=Nil 2020-21=20000 (intonnes)	Mines was undertemporarydisc ontinuancefrom 20.07.2017 to 14.06.2019. Notice of commencement of mine after temporary discontinuance on 15.06.2019. In the year 2019-20 only development work carried out.
3q	General remarks of inspecting officers on method of mining etc.			The production proposals inside the mine carried out as per the proposal.

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 proposed for Topsoil & OB.	Separate dump maintained for Topsoil & OB.	NIL

4b	Location of topsoil, OB and mineral reject dumps	Topsoil- N- 1892250 to 1892280 E- 695700 to 695750 OB dump- N- 1892753 to 1892873, E- 695533 to 695629	Top soil dumping carried out as per the proposal. ii) It was observed during site inspection that waste dumping at Southern extent of waste dump D-1 across Sec D-D' is carried out beyond the proposed extent.	Violation issued under Rule 11(1) of MCDR 2017.
4c	Number of dumps within lease area and outside of lease area	3 dumps within Lease area (D-1, D-2 & D-3)& 1 Top soil dump.	3 dumps within Lease area (D-1, D-2 & D-3)& 1 Top soil dump.	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	All dumps withinUPL	All dumps withinUPL	NIL
4e	Number of active and alive dumps.		3 active waste dumps and 1 Topsoil dump.	D-1, D-2 & D-3- Waste dump & 1 Top soil dump.
4f	Number of dead dumps.	NIL	NIL	NIL
4g	Number of dumps established.	No proposal	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	& Garland	Garland drain maintained along the dump. Retaining wall construction along the dump not carried out as per the proposal.	Violation issued under Rule 11(1) of MCDR 2017.
4i	Length of Retaining wall or garland drain all along dumps	* 933 m of garland drain construction	Garland drainconstruction carried out as per the proposal. The construction of 932 m Retaining Wall for the year 2020-21 & 281 m for the year 2021-22 are proposed at the waste dump against which no work has been carried out till date.	Violation issued under Rule 11(1) of MCDR 2017.
4j	Number of settling ponds	No Proposal	NIL	NIL

4k Specific comments of inspecting officer on waste dump management

i) i)It was observed during site inspection that waste dumping at Southern extent of waste dump D-1 across Sec D-D' is carried out beyond the proposed extent. Violation issued under Rule 11(1) of MCDR 2017. ii) The construction of 932 m Retaining Wall for the year 2020-21 & 281 m for the year 2021-22 are proposed at the waste dump against which no work has been carried out till date. Violation issued under Rule 11(1) of MCDR 2017.

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	NIL
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)	No Proposal	NIL	NIL
5d	Total area fully reclaimed and rehabilitated	No Proposal	NIL	NIL

5e General remarks of inspecting officers on backfilling and reclamation etc.

No Backfilling proposals.

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 PMCP report to be submitted before 1st of July every year.	Annual PMCP report for the year 2020-21 submitted on 25.06.2021.	
6b	Area available for rehabilitation (ha).	0.45 ha proposed in safety zone .	0.45 ha afforestation done in safety zone.	
6c	afforestation done (ha).	0.45Ha afforestation proposed.	0.45 Ha afforestation carried out.	In safety zone.
6d	No. of saplings planted during the year	675 nos. saplings proposed with 80 % survival rate.	687nos. saplings planted with 95% survival rate within lease area.	As reported in AR 2020-21.
6e	Cumulative no .of plants	Not mentioned.	1038 nos. of saplings cumulative.	As reported in Annual PMCP report 2020-21.
6f	Any other method of rehabilitation	No Proposal	NIL	NIL
бд	Cost incurred on watch and care during the year	32,000 Rs. For afforestation.	Rs.4,41,000.	As reported by Lessee during inspection.
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
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.45 ha proposed.	0.45 ha carried out.	Afforestation within safety zone.
бп	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.45 ha proposed 0.45 ha carried out Afforestation within safety zone.		
бо	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	0.45 ha afforestation proposed.	0.45 ha afforestation carried out	Afforestation within safety zone.
бр	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed.	Environmental monitoring carried out. Air quality, Surface Water, Ground water, Noise level & Dust monitoring carried out. All parameters are within Limits.	Environmental monitoring Report of Dec-20 to Feb-2021 available during inspection and checked.

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

The PMCP proposals have been implemented in the mine as per the proposal.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Only crushing and sizing proposed within ML area.	No Crushing and sizing carried out. Rom is being stacked within the lease as the captive plant has not come up yet.	No dispatch.Only ROM stocking within ML area at designated place.
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	No sorting proposed	NIL	NIL
7c	Different grade of mineral sorted out at mines.	No sorting proposed	NIL	NIL
7d	Any beneficiation process at mines .	No proposal	NIL	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No specific comments.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	and utilization	topsoil	7275 Cum of topsoil generated and stored at the earmarked location.	NIL
d8	Concurrent use or storage of topsoil	topsoil	7275 Cum of topsoil generated and stored at the earmarked location.	NIL

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump proposed for OB. No Reject generation.	Separate dump for OB maintained as per the proposal. It was observed during site inspection that waste dumping at Southern extent of waste dump D-1 across Sec D-D' is carried out beyond the proposed extent.	Violation issued under Rule 11(1) of MCDR 2017.
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)	No Proposal	NIL	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Not mentioned.	Cumulative plantation 1038 till 2020-21.	As reported in Annual PMCP report 2020-21.
8g	Survival rate	80% proposed within ML.	95% achieved within ML.	NIL
8h	Water sprinkling on roads to control airborne dust	sprinkling	Water sprinkling carried out. 1 no of water sprinkler of capacity 4 KL used for water sprinkling at mines.	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			It was observed during site inspection that waste dumping at Southern extent of waste dump D-1 across Sec D-D' is carried out beyond the proposed extent. Violation issued under Rule 11(1) of MCDR 2017.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks	
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto January2022 on dated04.02.202 2 A.R.Submittedu pto2020-21ondated30/06/2021.			
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	i)Mining Engineer- Shri V. Shivakumar ii)Manager- Shri V. Shivakumar iii)Geologist- Nil	Appears to be correct.	Ms. Jyotirmayee Mohanty, Geologist appointed on 05.08.2021.	
Эс	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Waste dump & Top soil storage- 6.55 ha	Part-I: The land use (area in ha) as given in Part-I (12) under 12(iv) i.e., used for waste disposal,12(v) i.e., Occupied by plant, buildings, residential, welfare buildings & roads & 12(vi), Other Purpose have not been reported correctly in accordance with approved land use pattern.	Violation issued under Rule 45(7) of MCDR 2017.	
∂d	Scrutiny of Annual return on afforestation	687 nos. of saplings planted with 95 % survival rate within the ML area.	Appears to be correct.	NIL	
е			Appears to be correct.	NIL	
θf	Scrutiny of Annual return on ROM stock and/or graded ore	- ,	Appears to be correct.	NIL	
		Production- 20,000 tons C/s- 44,000 tons.			

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Rs. 210.60 Ex. Mine	Appears to be correct.	The mine is a captive mine.
9h	Scrutiny of Annual return on fixed assets	Rs. 264650400/-	Appears to be correct.	NIL
9k	Scrutiny of Annual return on mining machineries	Excavator- 0.9 Cum-1 no.	The drill machine details have not been reported in Part-V-Sec (5).	Violation issued under Rule 45(7) of MCDR 2017.

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

Violation observed			Show couse position		ion	
Rule NO	ο.	Issued on	Compliance on	Rule NO.	Issued	on Compliance o
MCDR17	Rule 11(1)	14/03/2022		MCDR17 Rule	45(7)14/03/2	2022
MCDR17	Rule 33	14/03/2022				
MCDR17 R	ule 48	14/03/2022				
MCDR17 R	ule 45(7)(a)	14/03/2022				

Date: (SANDEEP KUMAR SINGH)

Indian Bureau of Mines