

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

MCDR inspection REPORT

Goa regional office

Mine file No : KNT/BJP/LST-62/GOA

Mine code : 38KAR26059

- (i) Name of the Inspecting : **SP01**) **SURESH PRASAD**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : S/SHRI. DEEPAK KALLA, GM, PAWANKUMAR DESHMUKH, MM & H
Official with
Designation
- (iv) Date of Inspection : 03-MAR-20
- (v) Prev.inspection date : 07-AUG-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **HALKI(2344)**
- (b) **Registration NO.** : **IBM/418/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BAGALKOT**
- Village : **HALKI**
- Taluka : **MUDHOL**
- Post office : **NINGAPUR**
- Pin Code : **587313**
- FAX No. : **08350-289001**
- E-mail : **factory.muddapur@jkcement.co**
- Phone : **08350-289000**
- (f) **Police Station** : **LOKAPUR**
- (g) **First opening date** : **01-DEC-07**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **J.K.CEMENT WORKS, MUDDAPUR**
(UNIT: J.K.CEMENT LTD)
Mudhol, Dist-Bagalkot, Karnataka
3. (a) **Lease Number** : **KAR1525**
- (b) **Lease area** : **124.29**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **20-NOV-18**
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : J.K.CEMENT LTD
 KAMLA TOWER KANPUR UP
 KANPUR UTTAR PRADESH
 Phone:0512-2371478
 FAX :0512-2399854

Owner : K. N. Khandelwal
 Kamla Tower KANPUR URBAN
 UTTAR PRADESH
 Phone:
 FAX : 05122399854

Agent : Mr.R.B.M.Tripathi
 J.K.Cement Works, Muddapur
 Mudhol Tq, Bagalkot-Dist
 Karnataka-587122 BAGALKOT
 KARNATAKA
 Phone: 08350289000
 FAX : 08350289001

Mining Engineer

Name : K.VENKATESHWARLU,Full Time
 Qualification : B.TECH (MINING) WITH 14 YRS. EXPERIENCE
 Appointment/ : 15-APR-16
 Termination date

Geologist

Name : Madhusudana S.B.,Full Time
 Qualification : MSc-Geology
 Appointment/ : 04-MAR-15
 Termination date

Manager

Name : K.Venkateshwarlu
 Qualification : FCC Certificate
 Appointment/ : 01-MAY-11
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Fresh under rule 22 MCR1960	01-DEC-06
		Modif.of approved Mining Plan	16-JAN-09
		Mining Scheme rule 12 MCDR1988	22-AUG-11
		MP modif under MCR 1960	03-MAR-16

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	30 Nos. (1745m)	83 Nos. (5753.20m)	Details provided for 2018-19
1b	Exploration over lease area for geological axis 1 or 2	31 Nos. (1770m)	Nil	Completed in FY 2018-19
1c	Exploration Agencies and Expenditure in lakh rupees during the year		M/s Synergy Geotech, Nagpur Rs. 1,06,64,781/-	Details are for FY 2018-19
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	Exploration work completed upto G1 level
1e	Balance reserve as on 01/04/20	45.321 MT	48.077 MT Up to Feb-2020	Reserve calculated by considering actual Production up to Feb-2020.
1f	General remarks of inspecting officers on geology, exploration etc		Exploration work completed upto G1 level	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Waste E : 525935 to E :526390 & N : 1794126 to N : 1794355 Dolomitic Limestone E : 528108 to E :528425 & N : 1793444 to N : 1793605	Waste E : 526198 to E :526454 & N :1794393 to N :1794119 Dolomitic Limestone E : 526469 to E :525991 & N :1794366 to N :1794393	Dolomitic Limestone has not been consumed during 2019-20 till DOI.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	NIL	NIL	Topsoil thickness is very less between 0.5 to 1m
2c	Stripping ratio or ore to OB ratio	1:0.046	1:0.038	Less overburden encountered as compared to the proposal

2d	Quantity of topsoil generation in m3	1500	1802.5	Topsoil as generated used for afforestation purpose
2e	Quantity of overburden generation in m3	95500	42501.5	Less overburden encountered as compared to the proposal
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Development of Mines of pit observed in good shape.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 Pits	1 pit mainly.	Second pit could not be developed due to land acquisition problem and other local issues. However, actual production during Mine plan period was less than the proposals, so pit 1 has been developed as per proposal without any deviation.
3b	Quantity of ROM mineral production proposed	2.0 MT	1.15 MT Up to Feb 2020	As the mine is captive, limestone production depends on plant requirement
3c	Recovery of sailable/usable mineral from ROM production	2.0 Million Tons(MT)	1.15 MT Up to Feb 2020	As there is no beneficiation required, recovery will be 100%
3d	Quantity of mineral reject generation	NIL	NIL	Cutoff grade of consumption and TLV is 35%CaO, so no mineral rejects.
3e	Grade of mineral rejects generation and threshold value declared.	NIL	Not applicable	Cutoff grade/TLV is 35%CaO.

3f	Quantity of sub grade mineral generation.	NIL	NIL	Limestone above TLV are consumed by plant.
3g	Grade of sub grade mineral generation	NIL	NIL	
3h	Manual / Mechanised method adopted for segregating from ROM	Not applicable	Not applicable	ROM send to plant for processing.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NIL	
3j	Provision of drilling and blasting in mineral benches	YES	Provided	Deep hole drilling and controlled blasting adopted.
3k	Provision of mining machineries in mineral benches	Provided	Provided	2 Drills, 2 Excavators, 1 Dozer and 1 Rock Breaker deployed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8m	8m	The height of bench in Mineral and OB are same and as per MP/SOM
3m	Total area covered under excavation/pits	28.64 Ha.	25.87 Ha.	Limestone Production is as per the captive plant requirement. hence excavated area is lesser than proposed.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.046	1.:0.038	Less OB generated during mining operations
3o	Total area put in use under different heads at the end of year	69.89 Ha.	69.23 Ha.	Limestone Production is as per the captive plant requirement. hence excavated area is lesser than proposed.

3p	Production of ROM mineral during the last five year period as applicable	Tonnes	In	In tonnes	
		2015-16-		2015-16-	1933291
		1964000		2016-17-	1993338
		2016-17-		2017-18-	544059
		1999995		2018-19-	1133375
		2017-18-		2019-20-	1151905
		1999995			(till Feb 2020)
		2018-19-			
		1999995			
		2019-20-			
		1999995			
3q	General remarks of inspecting officers on method of mining etc.			Mines is working with deployment of HEMM with deep hole blasting.	Systematic bench formation observed in the pit.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top Soil proposed in use for plantation. Dumping of OB proposed No Mineral Rejects generated	Top Soil is being used for plantation. Dumping of OB is done on Waste dumps No Mineral Rejects generated.	
4b	Location of topsoil, OB and mineral reject dumps	Waste dump: CS 2.5-2.5' to 3.5-3.5' RL 620- 610 m Dolomitic Dump: CS9.5-9.5' to 10.5-10.5' RL 610- 602 m	Waste dump: C-S 0.5-0.5' to 1.0-1.0' RL 610- 595 m C-S 2.5-2.5' to 3.5-3.5' RL 615- 609 m Dolomitic Dump: CS 10.5-10.5' to 11.5-11.5' RL-596.7-592.1	No dolomitic limestone material handled. during 2019-20
4c	Number of dumps within lease area and outside of lease area	Lease area = 02 Non Lease area = Nil	Lease area = 02 Non Lease area = Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside ultimate Pit Limit	Outside ultimate Pit Limit	
4e	Number of active and alive dumps.	02	02	01 Waste Dump and 01 Dolomitic dump formed .

4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Provided	
4i	Length of Retaining wall or garland drain all along dumps	104m Retaining wall & 204m garland drain	104m Retaining wall & 204m garland drain	
4j	Number of settling ponds	01	02	Settling ponds are formed to arrest the silt.
4k	Specific comments of inspecting officer on waste dump management		Observed satisfactory.	

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.	Nil	NIL	Mineral are not exhausted from the pit and hence not matured for backfilling.
5b	Area under backfilling of mined out area	nil	Mineral are not exhausted from the pit and hence not matured for backfilling.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	nil	Mineral are not exhausted from the pit and hence not matured for backfilling.	
5d	Total area fully reclaimed and rehabilitated	nil	nil	Mineral are not exhausted from the pit and hence not matured for backfilling.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Mineral are not exhausted from the pit and hence area is not matured for backfilling.	

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	Yes	Year 2018-19 already submitted.
6b	Area available for rehabilitation (ha) .	NIL	NIL	Mineral are not exhausted from the pit and hence not matured for backfilling/rehabilitation.
6c	afforestation done (ha).	0.52ha	0.52 Ha.	Species such as Neem, Gulmohar, Karanj, Tapsi, Guava, Tamarind, Hunge, were planted. for green belt dev. and in office area.
6d	No. of saplings planted during the year	1300 no.	1310nos.	
6e	Cumulative no .of plants		26075 Nos.	Species such as Neem, Gulmohar, Karanj, Tapsi, Guava, Tamarind, Hunge, were planted
6f	Any other method of rehabilitation	NIL	NIL	
6g	Cost incurred on watch and care during the year		No specific given. In house care done.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	Not applicable	Minerals not exhausted from the pit and backfilling and R&R activities are not proposed/executed.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NIL	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NIL	NIL	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Monitering is being done	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		The Mining operation not reached upto the ultimate depth of the minerals.	Therefore, progressive closure towards R&R are not proposed/executed.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral dispatch	ROM mineral dispatch	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	ROM mineral dispatch	ROM mineral dispatch	ROM mineral dispatch to Plant for captive consumption.
7c	Different grade of mineral sorted out at mines.	NIL	NIL	Above THV used for captive consumption.
7d	Any beneficiation process at mines	NIL	NIL	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	ROM mineral dispatch to Plant for captive consumption.	Above THV minerals are being used for consumption.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposal made for separate removal and utilization for green belt development.	Yes	
8b	Concurrent use or storage of topsoil	Utilization	Utilized	For afforestation purpose in the area proposed for plantation in FY 2019-20
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed for OB and Dolomitic Limestone Dump	Waste dump: C-S 0.5-0.5' to 1.0-1.0' RL 610- 595 m C-S 2.5-2.5' to 3.5-3.5' RL 615- 609 m	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NIL	NIL	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	NIL	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Existing Plantation- 24765 FY 2019-20- 1310 Nos	Within Mining Lease area

8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	yes	Complied	Water tanker deployed and sprinkler also installed in some part of the haul road area.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Green belt development progress are observed to be in lagging w r t proposal.	Violation issued.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR Submitted up to = Jan 2020 AR Submitted up to = FY 2018-19	MR Submitted up to = Jan 2020 AR Submitted up to = FY 2018-19	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Furnished	Found in order.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Furnished	THE scrutitiny of Annual Returns for the year 2018-19 are already carried out during previous date of inspection (7.8.2019) by this office. Hence, monthly returns are checked.	The MR informations are found in order.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Furnished	Found in order	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price furnished in MR.	Limestone is used for captive consumption only. The ex mine price as reported is found in order.	

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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	17-MAR-20			

Date :

(SURESH PRASAD)

Indian Bureau of Mines