

## **MCDR INSPECTION REPORT**

### **1.0 GENERAL**

SN	Particulars	Details
1	Name of inspecting office & designation	Shri R. K. Das Sr. Asstt. Controller of Mines, Indian Bureau of Mines, Raipur
2	Date of inspection	20.09.2019
3	Name of the Mine	M/s JK Lakshmi Cement Ltd
4	Total Lease Area (Ha) with breakup of Non-forest and forest land	267.695Ha
5	Mine Code	38CHG05017
6	IBM Registration Number under rule 45 of MCDR, 1988	IBM/4816/2011
7	Name of the lessee, Address, phone, email and fax number	Shri B.L. Bhati (Senior General Manager, Mines) Malpuri-Khurd, Khasadih, Post- Ahiwara, Tehsil- Dhamdha District - Durg, Chhattisgarh-490036
8	Village	Malpuri-Khurd & Khasadih
8	Taluka/Mandal/District	Durg
10	State	Chhattisgarh
11	Post office & PIN	Ahiwara & 490036
12	Nearest police station	Nandini Nagar
13	Nearest Railway station	Power House
14	Date of Grant of Mining Lease	19/07/1994
15	Date of Execution	19/07/1994
16	Date of opening of Mine	01/07/2011
17	Date of first Renewal, if applicable and its period & expiry	19.7.1994 to 18.7.2014 (20 Years)
18	Date of second Renewal, if applicable and its period & expiry	19.07.2014 to 18.07.2034 & as per section 8A upto 18.07.2044 (50 Years)
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	04.03.2015
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	<b>Shri Sushil Kumar Wali</b> <b>Address-Nehru House 4 , Bahadur Shah Zafar Marg, New Delhi-110002, Phone- 01123311112, Email- <a href="mailto:skwali@jkm.com">skwali@jkm.com</a>,</b> Date of Appointment :-06/11/2008
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	<b>Shri D K Mehta</b> Address :- JK Lakshmi Cement Ltd. Vill- MalpuriKhurd, Khasadih, PO- Ahiwara, Dist- Durg. Chhattisgarh-490036., Phone : 7000976556 Email : <a href="mailto:dkmehta@jkm.com">dkmehta@jkm.com</a> Date of Appointment :-01/02/2012
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri B L Bhati Address :- JK Lakshmi Cement Ltd. Vill- MalpuriKhurd, Khasadih, PO- Ahiwara, Dist- Durg. Chhattisgarh-490036., Phone : 9752094049.

Email : [blbhati@durg.jkmail.com](mailto:blbhati@durg.jkmail.com),  
Date of Appointment :- 15/06/2009

23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri B L Bhati Address :- JK Lakshmi Cement Ltd. Vill- MalpuriKhurd, Khasadih, PO- Ahiwara, Dist- Durg. Chhattisgarh-490036.,Phone : 9752094049. Email : blbhati@durg.jkmail.com Date of Appointment :- 15/06/2009
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55& carrying out their duties as per rule 56&57.	Shri VRINDESH KUMAR SINGH appointed as geologist and Shri BABU LAL BHATI appointed as Mining Engineer under rule 42 Duties carried out as per rule43,44.
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	23.01.2015
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	21-07-2016
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Open cast, Underground)	Open cast mining
29	Category (Fully Mechanised, Others or Manual)	A Category
30	Captive/Non Captive	Captive
31	Existing EC Limit and validity	4.8 Million tonnes (For both mines)
32	Status of Financial Assurance	103,36,000/-.

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –

### **1.0 Exploration**

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year			
1b	Exploration over lease area for Geological axis 1 or 2.	Under G1 Category: <b>267.695 Ha</b>	Under G1 Category: <b>267.695 Ha</b>	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	N/A	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserves as on 01.04.2019 (in Million Tonnes)	Under (111): 130.31Million Tonnes	Under (111): <b>130.901</b> Million Tonnes	
1f	General remarks of inspecting officer on geology, exploration etc.	The Deposit is bedded deposit striking almost EW. The general slope of the area is 2-3 degree. The entire area is broadly explored in G1.		

### **2.0 Development**

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area (Range in UTM/Local Coordinate/Plot No./Location)	N 2367920 to 2368150 E 541365 to 541965	N 2367938 to 2368255 E 541268 to 542012	
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	2 to 9 m	2 to 9 m	

2c	Stripping ratio or ore to OB ratio	1:0.10	0.0062	
2d	Quantity of topsoil generation in m3	51940	14829	
2e	Quantity of overburden generation in m3	106104	Nil reported	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The development is broadly within proposed area and pit 2 developments are in lower side.		

### **3.0 Exploitation**

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	2	2	
3b	Quantity of ROM mineral production proposed	2399975.00 Tonn	2384208.57	
3c	Recovery of salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	0.000	0.000	
3e	Grade of mineral reject generation and threshold value declared	CaO – <34 MgO - >5%	CaO – <30 to 34% MgO - >5%	
3f	Quantity of sub-grade mineral generation	Nil	Nil reported	High MgO stack is observed in mine
3g	Grade of sub-grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	mechanised	mechanised	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	NA	NA	
3j	Provision of drilling & blasting in mineral benches	Deep hole Drilling & Blasting	Deep hole drilling & blasting is in practice. Spacing: 4/5mtrs. Burden: 3.0/4mtrs. Depth: 9.5 mtrs. Dia : 100 mm	
3k	Provision of mining machineries in mineral benches	yes	yes	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	yes	yes	
3m	Total area covered under excavation/pits	28.63 Ha.	30.970 Ha.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.10	0.0062	

3o	Total area put in use under different heads at the end of year	Pit- 28.63 Ha. Waste/reject Others-	30.970 Ha.	
3p	Production of ROM mineral during last five-year period, as applicable (in Metric Tonnes)	Yr- 2014-15: 1740000 Metric Tonnes Yr- 2015-16: 2400000 Metric Tonnes Yr- 2016-17: 2399985 Metric Tonnes Yr- 2017-18: 2399975 Metric Tonnes Yr- 2018-19: 2399948 Metric Tonnes	Yr- 2014-15: 437418.65 Metric Tonnes Yr- 2015-16 1448333.00 Metric Tonnes Yr- 2016-17: 1699171.08 Metric Tonnes Yr- 2017-18: 2259822.76 Metric Tonnes Yr- 2018-19: 2384208.57 Metric Tonnes	
3q	General remarks of inspecting officer on method of mining etc.	Mining is done with fully Mechanization with Back-hoe & Tipper Combination and deep hole drilling blasting.		

#### **4.0 Solid Waste Management-Dumping**

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	Shown in Plan	As per planed	
4b	Location of topsoil, OB & mineral reject dumps (Range in UTM/Local Coordinate/Plot No./Location)	One dump for Sub grade & one dump for top soil	2 dumps for SubGrade one dump for Top Soil&1 temp. Dump for High Grade LST.	
4c	Number of dumps within lease area and outside lease area	2	4	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 14)	As per plan	As per plan	
4e	Number of active & alive dumps	2	4	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilised	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Nil	Garland drain made all along dumps.	
4i	Length of Retaining wall or garland drain all along dump	Nil	2400 mtrs.	
4j	Number of settling ponds	Nil	2 existing	
4k	Specific comments of inspecting officer on waste dump management	There is no major dump and top soil is used for afforestation and subgrade stack is exist in ML area and as mentioned protective measures taken.		

#### **5.0 Solid Waste Management-Backfilling**

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Nil	Nil	
5b	Area under backfilling of mined out area	n/a	n/a	

5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	NA	7.5Mtr top soil part dump in Lease boundary for plantation & safety uses.	
5d	Total area fully reclaimed & rehabilitated	n/a	n/a	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Area not matured for backfilling.		

## **6.0 Progressive Mine Closure Plan**

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23. Details should be given in the format as given in Annexure-20.	yes	Yes, Annual report submitted on PMCP as given Format in Annexure-20.	
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	Nil	Nil	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Nil	NA	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i). 1000 ii) 1.0 Ha. III) plantation	1785 1.3 Ha. plantation	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Sampling station fixed in core zone and buffer zone.	Complied <b>Core Zone:-</b> Near Mines office. <b>Buffer Zone:-</b> 1. Hardi Village 2. Ghikuria Village 3. Nandini-Khundini 4. Pitora Village.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	PMCP proposal broadly complied.		

## 7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral grade-wise sorting within lease area.	ROM Mineral grade-wise sorting within lease area.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	
7c	Different grade of mineral sorted out at mines	yes	yes	
7d	Any beneficiation process at mines	nil	nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Low grade blend with high grade to get desirable grade therefore 2 pits working.		

## 8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 36)	yes	Utilised for plantation along the lease boundary.	
8b	Concurrent use or storage of topsoil	yes	yes	As per plan
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	yes	yes	As per plan
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 & additional plantation done (Rule 44)	A few number of plant existed before mining operation started.	Total 14965 plants planted within lease area	.
8g	Survival rate	70	65	
8h	Water sprinkling on roads to control airborne dust	yes	yes	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	No adverse impact observed.		

## 9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks

Status of submission of Monthly and Annual returns	M.R. Submitted upto- AUG.2019 A.R. submitted upto- 2018-19	
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S. N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	yes	Shri B.L.Bhati, Mining Engineer & Manager, Shri Vrindesh Kumar Singh		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	30.97 under O/C working, 3.3 ha. infrastructure,		
9d	Scrutiny of Annual return on afforestation	1785 nos saplings within lease area			
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil			
9f	Scrutiny of Annual return on ROM stock and/or graded ore	55670.25 tons of cement grade			
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-Mine price & cost of production reported Rs 242/-	Captive mine		
9i	Scrutiny of Annual return on fixed assets	Rs526748104/-	526748104		
9k	Scrutiny of Annual return on mining machineries				
		<b>Machineries</b>	<b>Capacity</b>	<b>No. of m/c</b>	<b>Electrical/ Non Electrical</b>
		BACK HOE	1.4 CUM	7	Non Electrical
		DOZER	380 HP	1	Non Electrical
		BLAST HOST DRILL	110 MM	2	Non Electrical
		CRUSHER	800 T/H	1	Electrical
		JEEP/TRACTOR	30 HP	1	Non Electrical
		WATER TANKER	20 KL	1	Non Electrical
		EXPLOSIVE VAN	7 TONNE	1	Non Electrical
		TIPPER	16 CUM	15	Non Electrical
		PUMPS (ELEC.)	2000 L/MN	2	Electrical

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:  
During the current inspection following violation pointed out:

Rule	Nature of Violation observed
11(1)	Mining operations should have been undertaken in accordance with the approved Mining Plan. The Modified Mining Plan was approved vide letter no. दुर्ग / चूप / खयो-355/नागपुर/2016/31-रायपुर dated 21.07.2016 and following deviation was observed during inspection

	<p>There is no proposal of stacking of subgrade material in mine but during mine visit it was observed and also reflected in updated plan that sub grade material is generated and stack. The information about subgrade material is not furnished in Annual return of 2018-19. In the document it is proposed to generate OB/IB/SB of 35368/year from 2016-17 to 2018-19 but during mine visit it was observed there is no separate OB/IB/SB dump and OB is mixed with either Subgrade material or top soil.</p>
45(5)(c) (i)	<p>During the scrutiny of Annual return for 2018-19 it was observed that cost of production and Ex-mine price is furnished Rs242/- whereas while scrutiny of Monthly returns for the financial year 2018-19 it was observed that Ex-mine price given from Dec'18 to march'19 is Rs242/- and from Aug'18 to Nov'18 it is furnished Rs238/- and from April'18 to July'18 is Rs 237/-. Therefore the overall Ex-mine price should be less than Rs242/-.</p>

Date of Last Inspection, Name and Designation of the Inspecting Officer: The last inspection carried out on 10/12/2018 by Shri S.Kartikeya,JMG and the violations pointed out complied

**(Rajesh Kumar Das, Senior Assistant Controller of Mines)**