

MCDR INSPECTION REPORT

S. N.	Particulars	Details
1	Name of the Mine	Yerekatte Limestone mine (ML No. 2620)
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	305.54
3	Mine code	38KAR19006
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/398/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Heidelberg Cement India Ltd. 9 th floor, Infinity tower C, DLF Cyber city, Phase II, Gurgaon Haryana-122 002 Phone: 8800577222 E-Mail: sk.tiwari@heidelbergcement.in Fax: 01244147698
6	Village	Doddarampura & chikkarampura
7	Taluk/Mandal	C.N Halli
8	District	Tumkur
9	Pin code	572 211
10	State	Karnataka
11	Post office	V.P.Colony
12	Nearest police station	C.N Halli
13	Nearest Railway station	Ammasandra
14	Date of Grant of Mining Lease	24/02/1960
15	Date of Execution	24/02/1960
16	Date of opening of Mine	24.09.1961
17	Date of first Renewal, if applicable and its period & expiry	20 years from 24.02.1980
18	Date of second Renewal, if applicable and its period & expiry	28.01.2010, 20 years from 24.02.2000
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not applicable
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Sushil Kumar Tiwari 9 th floor, Infinity tower C, DLF Cyber city, Phase II, Gurgaon Haryana-122 002 Phone: 8800577222 E-Mail: sk.tiwari@heidelbergcement.in Fax: 01244147698
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Jitendra Kumar M/s Heidelberg Cement India Ltd. P.O Ammasandra, Pin code 572 211 Tumkur District, Karnataka Email: jitandar.kumar@heidelbergcement.in Date of appointment: 11.12.2012

22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	P.Satya Saibaba Yerekatte Limestone mines M/s Heidelberg Cement India Ltd. P.O Ammasandra, Pin code 572 211 Contact: 9480724406 Email: satya.pasupuleti@heidelbergcement.in Date of appointment: 13.04.2013
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Narayan Khannur B.E- Mining, 10 yrs of experience M/s Heidelberg Cement India Ltd. P.O Ammasandra, Pin code 572 211 Contact: 8746066333 Date of appointment: 13.08.2012
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Manjunath Gajula M.Sc in Applied Geology, 5yrs. of Experience Date of appointment: 22.05.2015
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Approved vide letter no. MP/TMK/Lst-123/SZ dated 01.02.2008 No specific conditions were imposed.
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Approved vide letter no. KNT/MS/TMK/Lst-162/SZ dated 11.02.2011 No specific conditions were imposed.
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanized, Others or Manual)	Category A, Fully mechanized
30	Captive/ Non captive	Captive
31	Date of inspection	19.06.2015
32	Name of accompanying mine officials with designation	S/Shri P.Satya Saibaba- mines manager, Narayan Khannur- mining engineer & Manjunath Gajula- Geologist.

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	25 nos. of core boreholes have been drilled during previous scheme period (2010-11 to 2014-15).	Total 60nos. of boreholes are drilled in the ML area as on date of inspection.
1b	Exploration over lease area for Geological axis 1 or 2.	G1 & G2	G1 & G2	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not specified	M/s Tecdatum infoservices Pvt. Ltd. Hyderabad. Expenditure: Rs. 57.5 lakh	

1d	Balance area to be explored to bring Geological axis in 1 or 2	Not specified	G1 & G2	
1e	Balance reserves as on <u>01.04.2015</u>	No proposal	Cat. 111: 6827.8 Cat. 122:2395 (in 000 tonnes)	As per the approved Scheme of Mining (2010-11 to 2014-15) dated 11.02.2011
1f	General remarks of inspecting officer on geology, exploration etc.	No deviation w.r.t exploration is observed during the course of MCDR inspection on 19.06.2015.		

Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	SW part of the lease	SW part of the lease	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	O/B: 2- 3nos. Mineral: 8nos.	O/B: 3- 4nos. Mineral: 7nos.	
2c	Stripping ratio or ore to OB ratio	1: 0.3	1: 0.24	
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	180,375 tonnes	45,923 tonnes	Ore production & subsequent development is found to be less during 2013-14, stripping ratio is found to be maintained.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	No deviation w.r.t development is observed during the course of MCDR inspection on 19.06.2015.		

Exploitation

S.N.	Item	Proposals (2014-15)	Actual work (2014-15)	Remarks
3a	Number of pits proposed for production	Single pit	Pit 1 (active pit) 1100m (L) x350m (W) x 110m (D), located west of the nala	Two pits are present in the ML area
3b	Quantity of ROM mineral production proposed	601,250 tonnes	193,472 tonnes	
3c	Recovery of salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	Not Applicable	Nil	

3f	Quantity of sub-grade mineral generation	60,125 tonnes	27,800 tonnes	
3g	Grade of sub-grade mineral generation	35 to 41% CaO 3.5 to 5% MgO	35% CaO, 6 to 8% MgO	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	Sub-Grade is bendable with higher grade.
3j	Provision of drilling & blasting in mineral benches	DTH drill is proposed	DTH holes	
3k	Provision of mining machineries in mineral benches	Hydraulic excavator: 3 nos. Tipper: 7nos.	Hydraulic excavator: 2 nos. Tipper: 3nos.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height : 10m, width >10m	Bench Height : 8 to 10m, width: 10m	
3m	Total area covered under excavation/pits	49 Ha.	48.5 Ha.	Dimensions of Pit 1 & Pit2 are: 1100m (L) x 350m (W) x 110m (D) & 500m x 200m x 80m respectively.
3n	Ore to OB ratio for the pit/mine during the year	1: 0.3	1:0.24	
3o	Total area put in use under different heads at the end of year	Mining-49.00 Dumps-23.00 Roads- 3.00 Mineral storage- 1.50 (in Ha.)	Mining-48.50 Dumps- 28.00 Roads- 1.50 Mineral storage- 1.50 (in Ha.)	
3p	Production of ROM mineral during last five-year period, as applicable	2010-11: 600,000 2011-12: 600,250 2012-13: 600,088 2013-14: 601,200 2014-15: 601,250 (in tonnes)	2010-11: 208,008 2011-12:337,815 2012-13: 259,302 2013-14:167,616 2014-15: 193,472 (in tonnes)	Production deviation was – (minus) 67.8% during 2014-15. However, stripping ratio is found to be maintained.
3q	General remarks of inspecting officer on method of mining etc.	No deviation w.r.t exploitation is observed during the course of MCDR inspection on 19.06.2015.		

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	No separate dump for top soil is proposed	Nil	No top soil & mineral reject generation during 2014-15.
4b	Location of topsoil, OB & mineral reject dumps	Waste dump location: 1600-1800 W & 1200-1400N (Dump no.1)	No change in dumping location.	
4c	Number of dumps within lease area and outside lease area	05 dumps within ML	05 dumps within ML	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL	
4e	Number of active & alive dumps	02 nos.	02 nos.	Dump nos. 1 & 2 are active dumps
4f	Number of dead dumps	03 nos.	03nos.	Dump nos. 3, 4 & 5 are in-active dumps
4g	Number of dumps stabilized	Not specified	02	
4h	Whether Retaining wall or garland drain all along dumps are there	Not specified	Retaining wall is found to be constructed along the toe of dump 2 & dump 3.	
4i	Length of Retaining wall or garland drain all along dump	Not specified	Length of retaining wall of Dump 2 & dump 3 are 700m & 200m respectively.	
4j	Number of settling ponds	Not specified		
4k	Specific comments of inspecting officer on waste dump management.	Complete retaining wall is not found constructed along the toe of Dump no. 1 (1600-1800 W, 1200-1400N) to prevent escape of material form the dump. Violation of Rule 33(2) is issued the lessee.		

Solid Waste Management-Backfilling

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Not Applicable	
5b	Area under backfilling of mined out area	No proposal	Not Applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposal	Not Applicable	
5d	Total area fully reclaimed & rehabilitated	No proposal	Not Applicable	

5e	General remarks of inspecting officer on backfilling, reclamation etc	This chapter is not applicable, because mineral is not found exhausted in the working pits & hence backfilling is not necessary as of now.
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Progressive Mine Closure Plan

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	1 st July of every year.	Annual report of 2013-14 is found to be submitted by the lessee as per prescribed format dated 30.06.2014.	
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	i) Not specified ii) 0.5Ha. iii) 500 iv) 15000 v) Not specified vi) Not specified	i) Not applicable. ii) 0.5 Ha. iii) 500 nos. inside ML iv) 17000 v) Nil vi) Rs. 25,000.	
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	No Proposal	Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No proposal	Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	One Season Ambient Air Quality , Surface Water monitoring and noise monitoring	Ambient Air Quality, Surface Water monitoring, noise monitoring found to be carried out on monthly basis.	

6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	No deviation w.r.t PMCP compliance is observed during the course of MCDR inspection dated 19.06.2015.
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Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral dispatch	ROM mineral dispatch to the captive plant	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines	BF/ cement grade limestone	BF/ cement grade limestone	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No deviation w.r.t mineral conservation is observed during the course of MCDR inspection dated 19.06.2015.		

Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	Mining area is devoid of any Topsoil
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB to be stacked separately	OB Stacked Separately	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB & Waste will be used during Final Mine Closure for back filling	Not applicable	Mineral is not found exhausted in the working pits
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Will be complied during Final Mine Closure	Not applicable	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	No natural vegetation is seen within the ML area except	500 nos. of plantation is carried out inside the ML area during 2014-15.	

		bushes & shrubs. Additional Plantation proposed in 0.5 Ha. area during the scheme period ending 2014-15.		
8g	Survival rate	75%	60-70%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Complied with using water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	The aesthetic beauty in and around mine is good as lessee had carried out afforestation and other environmental protective measures as per approved SOM.		

Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to May 2015 A.R. Submitted up to 2013-2014		Annual Return of 2014-15 was not submitted by the lessee as on date of inspection.
S.N.	Item	Details GIVEN in A.R. 2013-14	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri Narayana Khannur Manager: Shri Satya Sai Baba Geologist: Shri S. Gaikwad	No change in respect of Mining Engineer & Manager. Geologist: Shri Manjunath Gajula, Appointed on 22.05.2015	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under current O/C working: 55.0 Ha. Dump: 30.0Ha.	Area covered under current O/C working: 48.50 Ha. Dump: 28.0Ha.	Party is advised to correct the land use pattern in future Annual Returns.
9d	Scrutiny of Annual return on afforestation	500 nos. within ML area	No change	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	71, 975 tonnes (35% CaO, 6 - 7% MgO)	Mineral reject was bended with high grade material for captive consumption	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Cement grade stack: 59,879 tonnes	ROM stack (cement grade) at mine head 26,946 tonnes	As per monthly return of May 2015.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex mine price: Rs. 354.72/ tonne Production cost: Rs. 354.72/ tonne	Appear to be correct	ROM is used for captive consumption only.

9i	Scrutiny of Annual return on fixed assets	Fixed assets: Rs. 652,879.94 lakh	Office building, Mining machineries & transport equipment are found to be present within the ML area.	
9k	Scrutiny of Annual return on mining machineries	02 Hydraulic excavator (4 M ³), 01 Dozer (17 tonnes), 01 Loader, 04 dumpers, 06 trippers, 01 compressor.	No change in mining machineries	

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

1. During present inspection on 19.06.2015, Rule **33(2)** is found violated and the same was pointed out to the party vide letter no. KNT/TMK/LST-1/BNG dated 16/07/2015. During last MCDR inspection dated 14/06/2014 by Shri V.D. Jalnapurkar- Regional Mining Geologist no violation was pointed out.
2. Boundary pillars are **found to be constructed** as per the specifications prescribed vide CCOM's Circular No. 2/2010(addendum) dated 21/09/2011

Sd/-
KRISHNENDU CHATTERJEE
Junior Mining Geologist

(Name of inspecting officer with designation and date)
