

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

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/YTL/LST--35/NGPIII

Mine code : 38MSH26009

- (i) Name of the Inspecting : **KQ13**) **KEWAL KRISHAN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Sandeep Singh, Shri Chandresh Bohra
Official with
Designation
- (iv) Date of Inspection : 05/10/2018
- (v) Prev.inspection date : 12/10/2017

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SINDOLA**
- (b) **Registration NO.** : **IBM/256/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MAHARASHTRA
District : YEOTMAL
Village : SINDOLA
Taluka : WANI
Post office : SINDOLA MINES CEMENTNAGAR
Pin Code : 442502
FAX No. : 07172--75165
E-mail :
Phone : 07172--75026
- (f) Police Station :
- (g) First opening date : 01/01/1985
- (h) Weekly day of rest : WED
2. Address for :
correspondance
3. (a) Lease Number : MSH0016
(b) Lease area : 840.83
(c) Period of lease :
(d) Date of Expiry : 31/03/2030
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : M/S CHANDA CEMENT WORKS (ACC)
 CEMENT NAGAR, DISTT.
 CHANDRAPUR (MS) - 442 502
 CHANDRAPUR MAHARASHTRA
 Phone:07172 - 75026
 FAX :07172 - 75165

Owner : Shri M.L.Narula, Director.
 M/s Associated Cement Co
 GREATER BOMBAY MAHARASHTRA
 Phone:
 FAX :

Agent : Shri S.Nandakumar
 PO- Sindola Mines Distt.
 Yavatmal (MS) YEOTMAL
 MAHARASHTRA
 Phone: 07172- 75178
 FAX :

Mining Engineer

Name : Shri S.Natraj Iyer, Full Time
 Qualification : B.E. Mining
 Appointment/ :
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	08/01/2001
Plan/Scheme of Mining		Modif.approved Mining Scheme	02/12/2003
		Modif.approved Mining Scheme	10/09/2005
		Mining Scheme rule 12 MCDR1988	16/08/2010
		Mining Scheme rule 12 MCDR1988	16/10/2015

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	nil	nil	
1b	Exploration over lease area for geological axis 1 or 2	nil	nil	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	nil	nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal	nil	Leesee has been advised to carry out exploration as per rule 12 of MCDR 2017
1e	Balance reserve as on 01/04/20	reserves/reserves as on 01/04/2018	24.88MT -- 111 2.94 MT --122 12.47 MT 211 40.24 MT 221 4.0 MT 333	
1f	General remarks of inspecting officers on geology, exploration etc			There are three band of limestone in the area. Area has explored area under G1 and G2 and G3 category . Leesee has been advised to do the exploration as per rule 12 of MCDR 2017.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	western shale ML56 to ML69 Flaggy Limestone ML54 to M 57 and ML 66 to ML 69 Silicious Limestone ML 54 to ML57	as per proposal	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	yes	as per proposal
2c	Stripping ratio or ore to OB ratio	1:1.63	1:0.83
2d	Quantity of topsoil generation in m3	4365	as per proposal
2e	Quantity of overburden generation in m3	237535	85296
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Limestone is occurring in three separate bands in between shale. Pit is developed accordingly. Quantity of ROM and grade is maintained as per the requirement of cement plant.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one pit	as perposal	
3b	Quantity of ROM mineral production proposed	600000T	255271T	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	164000m3	64000m3	
3e	Grade of mineral rejects generation and threshold value declared.	<34 Cao	as per proposal	

3f	Quantity of sub grade mineral generation.	No such proposal	28741
3g	Grade of sub grade mineral generation	no proposal	>34 Cao to <40 Cao
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	as per proposal
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, Rock Drill of IR make (ICM260), having 115 mm .Drill holes for 8-9 with 5% subgrade drilling with application of wet drilling methods to avoid any dust. 70% of the blast holes are being charged with explosives and rest 30% are being filled and stemmed with soil for effective blasting.	as per proposal
3k	Provision of mining machineries in mineral benches	Loading-Volvo EC700 & hauling-HD465	as per proposal

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Ht of benches -8 mtrs Width of benches-20 mtrs	as per proposal
3m	Total area covered under excavation/pits	As per the approved mining plan for the period 2015-16 to 2019-20, area under excavation/pits as on 1.4.2015 was 67.38 ha , additional requirement during the five year proposal period was 5.14 ha . Net area under excavation/pits as per proposal made will be 72.52ha	As per the Annual returns submitted for the year 2017-18, area covered Under excavation/ pits is 71.80
3n	Ore to OB ratio for the pit/mine during the year.	1:1.25	1:0.83
3o	Total area put in use under different heads at the end of year		Mining: 71.80 ha, building and Roads etc: 7.340 ha, , OB/ Waste Dump: 25.31ha, other works at mine 1.5ha
3p	Production of ROM mineral during the last five year period as applicable	2017-18 600000T 2016-17 600000 T 2015-16: 600000 T 2014-15: 600000 T 2013-14: 600000	2017-18 255271 T 2016-17:564875 T 2015-16 570758 T 2014-15:567079 T 2013-14:366512

3q General remarks of inspecting officers on method of mining etc. Method of mining is A category, opencast and is fully mechanised, which justifies in terms of capitalexpenditure , production requirement for feeding the cement plant.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	yes	yes	
4b	Location of topsoil, OB and mineral reject dumps	Top Soil Stack: ML98-ML101 Mineral Rejects Stacks: ML66-ML70 & ML84-ML89 Waste Dumps: ML53-ML55, ML61-ML66, ML75-ML78, ML90-ML92, ML91-ML92, ML92-ML93, ML93-ML94, ML93-ML95, ML96-ML99, ML55-ML58, ML71-ML75, ML76-ML81 & ML95-ML101	as per proposal	
4c	Number of dumps within lease area and outside of lease area	Total 16 dumps all within lease area Top Soil- 1 Mineral rejects- 2 Waste Dumps-13	as per proposal	

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	3 dumps are located within pit limits which are Proposed to be shifted to outside UPL .	as per proposal	
4e	Number of active and alive dumps.	All 16 dumps are active and alive	All dumps/stacks are Active	
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.	yes	yes	
4i	Length of Retaining wall or garland drain all along dumps	nil	800m	
4j	Number of settling ponds	nil	nil	
4k	Specific comments of inspecting officer on waste dump management			All waste dumps are within lease area. Few dumps are within the pit limits and are proposed to be shifted outside pit limits in next 5 years period. Protective works in form of Garland drains and retaining walls are constructed along the toe of the dumps and being maintained.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	nil	nil
5b	Area under backfilling of mined out area	nil	nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	nil	nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.		At the conceptual stage, dumps are proposed for reclamation and rehabilitation and the mined out area is proposed to be converted into water reservoir.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	yes	yes	
6b	Area available for rehabilitation (ha) .	nil	nil	
6c	afforestation done (ha).	1.35ha	1.35 ha	
6d	No. of saplings planted during the year	3500	4000	
6e	Cumulative no .of plants	190665	190665 approxi	

6f	Any other method of rehabilitation	nil	nil	
6g	Cost incurred on watch and care during the year	5 lacs	5 lacs	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	No such proposal	nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposals and no area is available for rehabilitation	nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	yes	yes	environmental parameters are monitor in the core and buffer zone

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise dispatch	yes as per proposal	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical crushing for size reduction	
7c	Different grade of mineral sorted out at mines.	Cement grade Limestone	Cement grade Limestone	

7d	Any beneficiation process at mines .	No Beneficiation only size by mechanically.	as per proposal	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The only beneficiation process at mine is mechanical size reduction where Limestone is being crushed to a size of -75 mm in and after crushing, complete material is dispatched to the Cement Plant.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	yes	yes	
8b	Concurrent use or storage of topsoil	wherever required for plantation, rest top Soil is stacked separately.	as per proposal	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	yes	yes	Separate dump yards are maintained for Subgrade & reject
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	No proposal	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Pits are proposed for conversion into Water Reservoir after exhaustion of mineral and Dumps are proposed for stabilization through plantation.	yes as per proposal	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	yes	yes	Plantation includes neem.pelt farm ,karanjee, sysum
8g	Survival rate		84%	
8h	Water sprinkling on roads to control airborne dust	yes	yes	1.Part of the roads are covered with fixed sprinklers. 2.10 kl water tanker used for water spraying also
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Apart from degradation due to mining activities, the area is having forest cover of more than 190 ha. Lessee has also planted saplings in the area and most of the plantation done has survived and the overall aesthetic beauty in and around the area is good.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R. Submitted upto - August 2018 A.R. submitted for the year 2017-2018	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	yes	provided	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	yes	provided	
9d	Scrutiny of Annual return on afforestation	yes	Provided	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	yes	Proveded	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	yes	provided	

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

Date :

(KEWAL KRISHAN)

Indian Bureau of Mines