

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

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/YTL/LST- 43 /NGP

Mine code : 38MSH26013

- (i) Name of the Inspecting : **B014**) **CHANDRESH BOHRA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri Suresh Wandre, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 08-Sep-21
- (v) Prev.inspection date : 08-Feb-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GOVARI**
- (b) **Registration NO.** : **IBM/256/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : MAHARASHTRA
- District : YEOTMAL
- Village : GOVARI
- Taluka : WANI
- Post office : SINDOLA MINES 445 307
- Pin Code : 445307
- FAX No. : 07239 - 236272
- E-mail : sindola_cd@accement.com
- Phone : 07239 - 236272
- (f) Police Station :
- (g) First opening date : 28-Jan-88
- (h) Weekly day of rest : WED
2. Address for : P.O. CEMENT NAGAR
correspondance : DISTT. - CHANDRAPUR
442 502
3. (a) Lease Number : MSH0017
- (b) Lease area : 558.9
- (c) Period of lease : 50
- (d) Date of Expiry : 31-Mar-30
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 : Neeraj Akhouri
 MD & CEO , ACC Ltd ACC Ltd,
 Cement House 121,MK Road
 Mumbai MUMBAI (SUBURBAN)
 MAHARASHTRA
 Phone: 02233024321
 FAX : 02266317407

Agent : K. Vamsidhar Reddy
 Director Plant, Chanda
 Cement Works CHANDRAPUR
 MAHARASHTRA
 Phone: 07172285026
 FAX : 07172285165

Mining Engineer

Name : SHRI M.K. MEHTA, Full Time
 Qualification : B.E. MINING
 Appointment/ Termination date : 16-Aug-02

Mining Engineer

Name : Kanchan Kumar, Full Time
 Qualification : B.E. Mining
 Appointment/ Termination date : 22-Nov-03

Geologist

Name : Gopinath Rengasamy, Full Time
 Qualification : Msc. Geology
 Appointment/ Termination date : 15-Oct-02

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	03-Oct-01
		Modif. approved Mining Scheme	02-Dec-03
		Modif. approved Mining Scheme	21-Oct-05
		Modif. of approved Mining Plan	21-Oct-05
		FMCP under 23C(1)	29-Oct-05
		Mining Scheme rule 12 MCDR1988	15-Dec-05
		Modif. approved Mining Scheme	06-Mar-09
		Mining Scheme rule 12 MCDR1988	11-Nov-11
		MP modif under MCR 1960	19-Aug-16
		MP review under 17(1) MCR 2016	17-Dec-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration has been proposed, in the present plan period	No exploration has been carried out, in the present plan period	Lessee has already explored, entire mineralized area under G-1 level of exploration
1b	Exploration over lease area for geological axis 1 or 2	Not proposed	Nil	Total lease area is 558.90 Ha, out of which 167 Ha is mineralized zone. and entire mineralized area is explored under G-1 level, approximately in 100M x 100M, grid interval.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposal	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Entire mineralized area is explored, under G-1 level.
1e	Balance reserve as on 01/04/20	Reserves/resources (As on Nov-2015) as per approved document. Proved Mineral Reserves (111) - 32.89 MillionTonnes , Feasibility M Resources (211) - 14.96 Million Tonnes, Total (Reserves+Resources) - 47.85 Million Tonnes.	Reserves/resources, as on 01.04.2020. Proved Mineral Reserves (111) - 20.33Million Tonnes, Feasibility M Resources (211) - 14.96 Million Tonnes, Total (Reserves+Resources) - 14.96 Million Tonnes	

1f	General remarks of inspecting officers on geology, exploration etc	Limestone deposit of Govari area belongs to Penganga series, which is equivalent to Cuddapah system. Total four ore bands are present in the lease area and each band is separated by shale formation. Total mineralised area is 167 Ha and entire mineralised area is explored under G-1 level by drilling 322 boreholes.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In the year 2020-21, development was proposed between the sections, ML 6 ML 14 & ML 11to ML 12	The development and production is carried out as per the proposal.	Lessee has worked in four limestone bands, LSt I to Lst-IV to maintain the quality of ore as per the requirement of cement plant and for conservation of mineral
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes proposed	Separate benches were made in ore and OB. Total six benches were made, two in OB and four in Ore.	Height of the bench was kept 6 to 8 mtr, in Ore & OB and width of the bench was maintained 15 to 20 mtr, both in Ore and OB. Topsoil is removed completely by scrapping using Dozers and no benches were made in the topsoil.
2c	Stripping ratio or ore to OB ratio	1: .89	1: .89	

2d	Quantity of topsoil generation in m3	48306 in the year 2020-21	35800 n the year 2020-21	
2e	Quantity of overburden generation in m3	108188 in the year 2020-21	958850 in the year 2020-21	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development has been carried out has per the proposals. Working has been carried out at different locations having different gardes to maintain the quality. Lessee is dispatching ROM by blending low grade ore with high grade as per the requirement of the plant.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01 No.	01 No.	
3b	Quantity of ROM mineral production proposed	27,86,620 tonnes, in the year 2020-21	2476233 tonnes, in the year 2020-21.	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	Lessee is using entire ROM, by blending high grade ore with low grade, as per the plant requirement.
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	Nil	Nil	
3f	Quantity of sub grade mineral generation.	Nil	Nil	

3g	Grade of sub grade mineral generation	Nil	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised crushing	Feeding ROM to crusher and crushing to the size of minus 75 mm size	Lessee is doing only mechanical size reduction at sindola mines.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	Yes, ROC-L8 drill of 115mm is proposed for drilling and ANFO, kelvex 600extra, power gel boost is proposed for explosive.	Drilling and blasting is being carried out as per the proposal.	Lessee is using, two ROC-L8 drill of 115mm drilling machines, for drilling. Maintaining drill pattern, 5 to 6 m (spacing) x 3m(burden) and depth 8.5mtr. Further, using rock breakers for breaking oversized boulders. Scientific study is also undertaken with the agency CIMFR for control blsting as mining is reaching within 300 metres of village.
3k	Provision of mining machineries in mineral benches	Yes, proposed excavators of different capacity ranging, from 4.0 CUM to 7.2 CUM, Dumpers of 60T capacity, Drilling machines and rock breaker	One excavator having 7.2 CUM and One excavators of 4.0CUM, Dumpers of 60T capacity, Drilling machine and water tanker are working on the day of inspection.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8 to 10 mtr bench height is proposed	Bench height is maintained as per the proposal.	Bench height is commensuration with the digging height of excavators adopted for mining .

3m	Total area covered under excavation/pits	116.45 ha	116 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.89	1:0.89	
3o	Total area put in use under different heads at the end of year	area under mining-116 .45ha, storage of top soil- 2.60 ha, waste dump-41.07 ha, infrastructure - 8.1 ha, green belt- 3 ha	area under mining-116 ha, storage of top soil- 1.19 ha, waste dump-41 ha, infrastructure- 4.27 ha, green belt- 3 ha	
3p	Production of ROM mineral during the last five year period as applicable	2016-17- 2777780 Tons 2017-18- 2786195 Tons 2018-19- 2784460 Tons 2019-20- 2781270 Tons 2020- 21=2787680 Tons	2016-17-2054077 Tons 2017-18-2688727 Tons 2018-19-2705567 Tons 2019-20-2731916 Tons 2020-21=2476233Tons	
3q	General remarks of inspecting officers on method of mining etc.			The mine is being worked by mechanised opencast method and using combination of Heavy Earth Moving Machinaries and 60T dumpers for development and production. Proper height and width is maintained in bench formation. Only one pit existing in the lease area covering an area of 116.5Ha. Working is being carried out at different locations in the same pit to maintain the quality as per the requirement of the 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, separate dumping was proposed for topsoil and OB.	Topsoil and OB dumping was made as per the proposal.	Mineral reject generation and dumping was not proposed in the present plan period.
4b	Location of topsoil, OB and mineral reject dumps	In the year 2020-21, top soil dump was proposed between sections, ML 21 to ML 24 & waste dumping between ML 08 to ML 17, ML 23 to ML 24 & ML 21 to ML 26.	work was done at proposed location	
4c	Number of dumps within lease area and outside of lease area	Four waste dump and one topsoil dump was proposed in the present plan period and all are within the lease area	Four OB dumps and one Topsoil dump is existing within the lease area.	Locations of the dumps are as follows. Dump No1, between ML-8 to 13, Dump no-2, between ML 09 to 17, Dump No-03 between ML 22 to ML 25 (Eastern side) & Dump No04, between ML 21 to ML 26 (western side) and topsoil dump is existing between ML 21 to 23. Further Dump 01 and 2 are almost jointed and appears like single dump.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side the UPL.	All the dumps are located out side the Ultimate pit limit.	
4e	Number of active and alive dumps.	Four,three waste dumps and one topsoil dump.	Four dumps are active as per the proposal.	
4f	Number of dead dumps.	One waste dump is dead.	one dump which is located between the section ML 22 to Ml 25 is dead and afforested.	

4g	Number of dumps established.	One.	One waste dump which is located between the section ML 22 to ML 25 is stablized by afforestation.	
4h	Whether Retaining wall or garland drain all along dumps are there.	In the present plan period only garland drains are proposed along the toe of the dump.	Garland drains were made all along the toe of existing waste dumps, covering total length of around 3000 mtrs and a retaing wall measuring 300m length is made at the bottom of the waste dump existing between section ML 10 to ML 13.	
4i	Length of Retaining wall or garland drain all along dumps	Garland drains were proposed at the toe of all the four dumps	Garland drains were made all along the toe of existing waste dumps, covering total length of around 3000 mtrs and a retaing wall measuring 300m length is made at the bottom of the waste dump existing between section ML 10 to ML 13	
4j	Number of settling ponds	Not proposed	Nil	One settling tank was already constructed before discharge of pit water.
4k	Specific comments of inspecting officer on waste dump management			Waste dumping was made as per the proposal. Total five dumps are existing within the lease area. Four waste dumps and one topsoil dump. Out of four waste dump, one is inactvie and afforested. All the dumps are made in the non-mineralized zone and out of Ultimate Pit Limit. Garland drains are made along the toe of the dumps to avoid wash off. Lessee has made one retaing wall at the toe of the waste dump.

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.	Backfilling is proposed in the mined out area from which mineral is fully extracted.	As per the proposal mineral was fully extracted from the mined out area between ML11-13 and backfilled in the year 2020-21.	
5b	Area under backfilling of mined out area	2.4 ha	2.4 ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Plantation purpose	Plantation purpose	
5d	Total area fully reclaimed and rehabilitated	11.9 ha	11.9 ha	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Total area backfilled is 11.9Ha up to 2020-210. Since backfilling is under progress no plantation is made on the backfilled area.

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).	Before 1st July of every year.	Lessee has submitted yearly report on PMCP for the year 2020-21	
6b	Area available for rehabilitation (ha) .	2.4 ha area was proposed for backfilling and plantation.	2.4 ha backfilled and planted.	

6d	No. of saplings planted during the year	3000 nos	3000 nos.
6e	Cumulative no .of plants	15000 saplings in proposed plan period from 2015-16 to 2020-21.	15000 saplings planted during last plan period
6f	Any other method of rehabilitation	No such proposal	Nil
6g	Cost incurred on watch and care during the year	No such proposal	approx 6 lakh per annum
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No such proposal	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposal	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	3000 saplings planted	3000 saplings planted
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposal	Nil

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No such proposal	Nil
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM is despatched to plant directly	ROM is despatched to plant directly	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No such proposal	Nil	
7c	Different grade of mineral sorted out at mines.	Cement grade	Cement grade	
7d	Any beneficiation process at mines .	No such proposal	Nil	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The mine is captive to M/s chanda Cements works, and lessee is simultaneously working at different locations in the same pit to maintain the quality as per the requirement of the plant. The only beneficiation done is mechanical size reduction. The ROM limestone is crushed to a size of minus 75mm. Approximate quantity of fines generated during crushing is 5% and entire crushed material along with fines is transported to the cement plant.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	seperate removal of top soil and utilization in plantation proposed	work done as per proposal	
8b	Concurrent use or storage of topsoil	For plantation	For plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps for OB/waste proposed. no proposal for fines and rejects	dumping of waste/OB done as per proposal	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	For backfilling	waste used for backfilling	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	backfilling of excavated pit by waste ob dumps rehabilitation by plantation	backfilling done and plantation on dumps carried out	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Yes. The information has been furnished in the mining plan document	In present plant period 15000 saplings planted	Total plantation made so far is 1,11,000
8g	Survival rate	Not proposed	60-70%	
8h	Water sprinkling on roads to control airborne dust	yes proposed	Regularly, spraying water on the mine Haul road, transportation road, dump area, etc	Using one BEML water tanker of 28KL capacity for water spraying and fixed sprinkler on permanent road
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			One big pit is made in the lease area, covering an area of 116ha. Benches are systematically made. Developed green belt in the waste land by huge number of plantation. Provided one retaining wall and garland drains along the toe of dumps

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	A monthly return shall be submitted before the tenth day of every month in respect of the preceding month and an annual return shall be submitted before the 1st day of July each year for the preceding financial year.	Lessee is regularly submitting monthly and annual returns.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer Mr. Kan chan Kumar, Geologist Mr. Go pinath Rengasamy and Manager Mr. Sure sh Madhukar Wandhare	The details of mining enginner , Geologist & Manager given in the annual returns are found correct.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	area under mining-116 ha, top soil storage- 1.19 ha, waste dump- 41 ha, infrastructure - 1.27 ha, roads -7 ha, green belt- 3.6 ha, garland drain- 3.6 ha	information seems correct
9d	Scrutiny of Annual return on afforestation	3000 nos.	information furnished are correct
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Information furnished are correct
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil no stock at pit head	Correct

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	290 Rs/T	Information furnished are correct
9h	Scrutiny of Annual return on fixed assets	rs 6019213	It seems correct
9k	Scrutiny of Annual return on mining machineries	SHOVEL (HYDRAULIC) 4.000 CUM 3 Non Electrical Opencast SHOVEL (HYDRAULIC) 7.200 CUM 1 Non Electrical Opencast DUMPER 60.000 TONNE 5 Non Electrical Opencast ROCK DRILL (NON-ELEC.) 115.000 MM 2 Non Electrical Opencast DOZER 320.000 HP 2 Non Electrical Opencast BACK HOE 4.500 CUM 1 Non Electrical Opencast WATER TANKER 28000.000 LITRE 1 Non Electrical Opencast MOTOR GRADER 240.000 HP 1 Non Electrical Opencast PUMPS (NON-ELEC.) 18900.000 L/MN 1 Non Electrical Opencast PUMPS (NON-ELEC.) 11340.000 L/MN	Information are correct

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 :

(CHANDRESH BOHRA)

Indian Bureau of Mines