

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

Mining Plan Modification REPORT

Bangalore regional office

Mine file No : KNT/GLB/LST-54/BNG

Mine code : 38KAR10019

- (i) Name of the Inspecting : **278**) **KRISHNENDU CHATTERJEE**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Shri K. Arunachalam, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 14/12/2017
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ITAGI LIMESTONE MINE**
- (b) **Registration NO.** : **IBM/20026/2015**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : KARNATAKA
- District : GULBARGA
- Village : ITAGI & MOGLA
- Taluka : CHITTAPUR
- Post office : MALKHED ROAD
- Pin Code : 585211
- FAX No. : 040-23688754, orientmines@
- E-mail : chittapur.mines@orientceme
- Phone : 040-23688600 ,0674-2396:
- (f) Police Station : CHITTAPUR
- (g) First opening date : 12/08/2015
- (h) Weekly day of rest : SUN
2. Address for : M/S ORIENT CEMENT LIMITED,
correspondance Village: Itagi and Mogla,Post: Malkhed,
Taluk: Chittapur, District: Gulbarga-585211
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : M/S ORIENT CEMENT LIMITED
 5-9-22/57/D, 2nd & 3rd
 Floor, G P Birla Centre,
 Adarsh nagar Hyderabad
 HYDERABAD ANDHRA PRADESH
 Phone:040-23688600
 FAX :040-23688754

Owner : DESH DEEPAK KHETRAPAL
 M/S ORIENT CEMENT LIMITED
 5-9-22/57/D, 2nd & 3rd
 FLOOR, ADARSH NAGAR,
 HYDERABAD HYDERABAD
 TELANGANA
 Phone:
 FAX :

Agent : PRAMOD KUMAR SINGHANIA
 M/S ORIENT CEMENT LIMITED
 CHITTAPUR, GULBARGA
 GULBARGA KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : M. Amarnath Reddy, Full Time
 Qualification : BE (Mining)
 Appointment/ : 24/09/2015
 Termination date

Geologist

Name : Abdulhafeez Shaikh, Full Time
 Qualification : M.Sc.(Geo.)
 Appointment/ : 28/10/2015
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : MP modif under MCR 1960 28/09/2015

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	15 nos of core boreholes with 750 total meterage during year 2016-17.	22 nos of core boreholes with 1200 total meterage were drilled during 2016-17.	Total Boreholes drilled 71 nos. in the ML area from 2010-11 to 2016-17.
1b	Exploration over lease area for geological axis 1 or 2	Entire ML under G-1	As on 1/4/2017 G-1: 223.41 Ha G-2: 112.22 Ha G-3: 183.37 Ha	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	M/s Holtech Consultancy Pvt. Ltd. and Expenditure Rs 40.25 lakhs.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Entire Mine under G-1	G-2: 112.22 Ha G-3: 183.37 Ha	
1e	Balance reserve as on 01/04/20	Not specified	93.6 million tonnes (as on 1/4/2017)	cement grade
1f	General remarks of inspecting officers on geology, exploration etc			22 nos of core boreholes with 1200 total meterage were drilled so far, against 51 nos of boreholes with 2550 total meterage. 29 nos. boreholes has been proposed during F.Y. 2017-18 in approved modification to the approved mining plan, approved dated 12.01.2018.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	One pit in South central part	No change.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in topsoil and mineral.	Separate benches in topsoil and mineral.
2c	Stripping ratio or ore to OB ratio	1:0.06	1: 0.2
2d	Quantity of topsoil generation in m3	57,025	173,561
2e	Quantity of overburden generation in m3	Nil	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The violation related to deviation in development (topsoil waste generation) and their location of stacking was pointed out on 23/8/2017. Mod. in approved mining plan with changes in proposals in respect of stripping ratio and stacking location was approved dated 12.01.2018.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit in South central part	One pit in South central part	
3b	Quantity of ROM mineral production proposed	2.17 million Tonnes	2.12 million Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	100% recovery	100% recovery	
3d	Quantity of mineral reject generation	Nil	Nil	

3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Nil
3f	Quantity of sub grade mineral generation.	No proposal	Nil
3g	Grade of sub grade mineral generation	No proposal	Not applicable.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised - Crushing	Mechanised -Crushing
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Such proposals	Nil
3j	Provision of drilling and blasting in mineral benches	Controlled deep -hole drilling and blasting with DTH Drill machines and conventional blasting using ANFO & High explosives	No change.
3k	Provision of mining machineries in mineral benches	Open-cast mechanised mining method with heavy machineries Viz. excavators, Dumpers/tippers	The machineries were deployed as proposed in Modified MP
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height 10 m for ore and width is more than height.	No change.
3m	Total area covered under excavation/pits	23.7 Ha.	18.03 Ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.06	1: 0.2

3o	Total area put in use under different heads at the end of year	Pit/mining- 23.7 Ha Overburden/dump: 1.3 Ha Infrastructure s/plant- 10.79 Ha.	Pit/mining- 18.03 Ha Overburden/dump: 1.3 Ha; Infrastructures/plant- 10.79 Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2015-16 - 1,798,125 MT 2016-17 - 2,171,000 MT	2015-16 - 621,947 MT 2016-17 - 2,121,251 MT	Mining Operation started on 12/08/2015
3q	General remarks of inspecting officers on method of mining etc.			Mining Operation started on 12/08/2015. The violation related to deviation in development (topsoil waste generation) and their location of stacking was pointed out on 23/8/2017.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Dumping topsoil waste separately proposed	Topsoil waste was dumped separately	
4b	Location of topsoil, OB and mineral reject dumps	Southern side lease boundary	West-central part near to Seasonal Nala	Mod. proposal of dumping was approved on 12.01.2018
4c	Number of dumps within lease area and outside of lease area	One Topsoil waste dump within ML	One Topsoil waste dump within ML	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste dump proposed outside of UPL.	Waste dumped outside the UPL.	
4e	Number of active and alive dumps.	One active dump	One active dump	
4f	Number of dead dumps.	No proposal	Nil	
4g	Number of dumps established.	No proposal	Nil	

4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain all along dumps proposed	Garland drain all along the dump was constructed.	
4i	Length of Retaining wall or garland drain all along dumps	0.40 Ha. area	0.43 Ha.	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			Total area covered by the dump was about 1.3 Ha and the management as per the proposals and is 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.	No such proposals as mined out pits were not matured for back-filling	Nil	
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil utilised for plantation purpose.	Top soil utilised for plantation purpose.	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Mined out pit is not matured for back-filling

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Proposed	The Annual Report on PMCP submitted on 20/7/2017.
6b	Area available for rehabilitation (ha) .	No proposal	Nil
6c	afforestation done (ha).	0.7 Ha.	1 Ha.
6d	No. of saplings planted during the year	700 on waste dump	800 nos.
6e	Cumulative no .of plants	1700 on dump	1700 on dump
6f	Any other method of rehabilitation	No proposal	Nil
6g	Cost incurred on watch and care during the year	No proposal	1.6 lakhs
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	Not applicable as no backfilling proposed	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	Nil	No waste land within ML area.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Season-wise Environmental monitoring	Season-wise Environmental monitoring were carried out and parameters are within the permissible limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Mined out pit is not matured for back-filling . About cumulative of 6000 nos of saplings were planted 3.65 Ha area of the mine.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM proposed to be crushed at crusher of 1200TPH capacity	ROM is being crushed at crusher of 1200TPH capacity	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised Crushing	Mechanised Crushing	

7c	Different grade of mineral sorted out at mines.	The low grade and high grade limestone blended as per the cross belt analyser report.	The low grade and high grade limestone blended as per the cross belt analyser report.	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The lessee had captive cement plant having 2 million tonnes clinker capacity.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and utilization/stacking of topsoil for plantation purpose.	Separate removal and utilization/stacking of topsoil for plantation purpose.	
8b	Concurrent use or storage of topsoil	Separate removal and utilization/stacking of topsoil for plantation purpose.	Separate removal and utilization/stacking of topsoil for plantation purpose.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Nil as no overburden waste except top-soil waste	Nil as no overburden waste except top-soil waste	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals	Not applicable as ore not exhausted	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	NIL Mined out pit is not matured for back-filling and water reservoir	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Entire ML area is non-forest. There is proposal of planation of 3000 nos of saplings in 2 Ha area within ML during year 2016-17	About 6000 nos of saplings were planted so far.	
8g	Survival rate	50 to 60%	50%	
8h	Water sprinkling on roads to control airborne dust	Proposed	The regular dust suppression by sprinkling of water is being made in the mine	
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 Modified MP.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R. Submitted up to Nov. 2017 A.R. submitted upto - FY 2016-17	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer & Manager: Shri M. Amarnath Reddy Geologist: Shri Praveen Kumar Singh	ME: Shri M. Amarnath Reddy Geologist: Shri Abdulhafeez Shaikh	Notice of appointed of Geologist received.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit/Mining: 18.52 Ha; Dumps: 1.9 Ha Infrastructure/plant/buildings: 10.79 Ha	Pit/Mining: 18.52 Ha; Dumps: 1.9 Ha Infrastructure/plant/buildings: 10.79 Ha	No change.
9d	Scrutiny of Annual return on afforestation	4,780 nos		No change.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil		No mineral reject generation.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil		Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine Price and cost of production: Rs 164.72 per tonne as captive mine.		Appear to be correct.
9h	Scrutiny of Annual return on fixed assets	Rs 1585,01,33,480 /-		Appeared to be correct including plant.
9k	Scrutiny of Annual return on mining machineries	Excavator (2.1 Cum): 3 nos; Dumpers/ Tipper (10 cum): 13nos Dozser-1 nos; Water Pump: 1 nos Water Tanker : 1 nos Rock Drill: 1 nos (152 mm)		No change.

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 :

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines