

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

Review and updation of Mining Plan REPORT

Hyderabad regional office

Mine file No : AP/NLG/LST-7A/HYD

Mine code : 38APR14023

- (i) Name of the Inspecting : **M029**) **MADHU SUDHAN YADAV M**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sri N.Hari Prasad Rao, Mines Manager & Sri. P.R. Mishr
Official with
Designation
- (iv) Date of Inspection : 18-DEC-21
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SITAPURAM LEASE- II**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : **TELANGANA**
- District : **NALGONDA**
- Village : **DONDAPADU**
- Taluka : **KODAD**
- Post office : **DONDAPADU**
- Pin Code : **508246**
- FAX No. : **08683235229**
- E-mail : **svclspm@zcltd.com**
- Phone : **08683235333**
- (f) Police Station : **SITAPURAM**
- (g) First opening date : **10-MAR-93**
- (h) Weekly day of rest : **SUN**
2. Address for : **SITAPURAM, DONDAPADU**
correspondance : **MELLACHERVU MANDAL**
NALGONDA DISTRICT-508246
3. (a) Lease Number : **APR0068**
- (b) Lease area : **776.49**
- (c) Period of lease : **20**
- (d) Date of Expiry : **02-MAY-05**
4. Mineral worked : **LIMESTONE** Main

5. Name and Address of the

Lessee : ZUARI CEMENT
 HALL 10TH MAIN ROAD
 JEEVANBHEEMANAGAR BANGLORE
 URBAN KARNATAKA
 Phone:0805207610
 FAX :0805207622

Owner : KRISHNA SRIVATSAVA
 ZUARI CEMENT LTD
 JEEVANBHEEMA NAGAR
 BANGALORE BANGALORE
 KARNATAKA
 Phone: 080-5207610
 FAX : 080-5207622

Agent : N. SITA RAMA RAO
 ZUARI CEMENT LIMITED (SRI
 VISHNU CEMENT WORKS)
 DONDAPADU, NALGONDA DIST.
 NALGONDA TELANGANA
 Phone: 08683 - 235333
 FAX : 08683 - 235229

Mining Engineer

Name : Y.MADHU BABU,Full Time
 Qualification : B.TECH MINING ENGG
 Appointment/ : 02-JAN-09
 Termination date

Geologist

Name : V.B.K.PRABHAKARA RAO,Full Time
 Qualification : M.SC (GEO)
 Appointment/ : 19-JAN-95
 Termination date

Manager

Name : D.SESHA REDDY
 Qualification : MSC(GEOLOGY) FCC
 Appointment/ : 14-OCT-02
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	30-JUL-10
Plan/Scheme of Mining		Renewal under rule 24 MCR1960	13-SEP-13
		MP review under 17(1) MCR 2016	09-DEC-16
		MP modif under 17(3) MCR 2016	09-SEP-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil	
1b	Exploration over lease area for geological axis 1 or 2	2020-21 - 10 Nos. 2021-22 - 77 Nos.	2020-21 - 21 Nos. 2021-22 - 66 Nos.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	----	Exploration agency : Synergy Geotech Pvt. Ltd., Nagpur & JP Core drilling, Hyderabad Rs. 16866500/- (reported by lessee) for drilling 87 Nos. coreboreholes of 8530m.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	-----	Entire lease is converted into G1 level of exploration.	
1e	Balance reserve as on 01/04/20	---	Reserves as on 31/10/2021 - 379.05 million Tonnes (111) & 12.31 million Tonnes (121)	
1f	General remarks of inspecting officers on geology, exploration etc			Entire lease is converted into G1 level of exploration by drilling 87 Nos. of boreholes in the year 2020-21 & 2021-22.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N 1859900 - 1860020 E 394690 - 394780 & N1859810 - 1859920 E394800 - 394950	Work done within proposed co-ordinates	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No topsoil and OB benches proposed, Mineral benches proposed to work	Only mineral benches developed	
2c	Stripping ratio or ore to OB ratio	No proposal	Nil	
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	No proposal	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			In the Review of Mining Plan submitted, lessee has proposed to develop the mine as per the common mine boundary permission obtained from DGMS.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	2020-21 - 30000 Tonnes 2021-22 - 30000 Tonnes	2020-21- 7650 Tonnes 2021-22 - Nil Production (till Nov'21) but despatched old blasted material of 13000 Te(Till Nov'21).	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable	Nil	

3f	Quantity of sub grade mineral generation.	No proposal	Nil
3g	Grade of sub grade mineral generation	Not applicable	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting proposed in mineral benches.	Wagon drill machine being used from drilling blast hole dia of 9m, spacing of 6 meters and burden of 4 meters. Blasting is carried out with ANFO & slurry explosives with NONELS as initiating system.
3k	Provision of mining machineries in mineral benches	It was proposed to use wagon drills, exvators & dumpers for drilling, loading & transporting of ore to crushing plant.	Wagon drills, dumpers & excavators are being used for drilling, loading & transportation of ore to crushing plant
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	It was proposed to maintain the bench height of 9 meters	During inspection it was noticed that the bench height is being maintained 9 m and digging height of the excavators are compatible with bench height.
3m	Total area covered under excavation/pits	15.17 Ha	8.70 Ha
3n	Ore to OB ratio for the pit/mine during the year.	No proposal	Nil

3o	Total area put in use under different heads at the end of year	22.38 Ha	21.95 Ha
3p	Production of ROM mineral during the last five year period as applicable	2016-17- 200025 MT 2017-18- 594990 MT 2018-19- 594990 MT 2019-20- 594990 MT 2020-21- 30000 Tonnes	2016-17- 1,77,225 MT 2017-18- 1,88,105 MT 2018-19- 3,33,101 MT 2019-20- Nil 2020-21 - 7650 Tonnes

3q	General remarks of inspecting officers on method of mining etc.	Mining is carried out in common lease boundary with Sitapuram Limestone Mine-1, by obtaining permission from DGMS.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal	Nil	No topsoil, OB and mineral rejects generated in the mining area.
4b	Location of topsoil, OB and mineral reject dumps	Not applicable	Nil	
4c	Number of dumps within lease area and outside of lease area	No proposal	Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal	Nil	
4e	Number of active and alive dumps.	Nil	Nil	
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.	No proposal	Nil	
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			No topsoil, overburden and mineral rejects generated in the mining area. Hence no dumps established in the lease area.

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 proposal	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)	No proposal	Nil	
5d	Total area fully reclaimed and rehabilitated	No proposal	No proposal	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No area of teh mine is excavated upto the ultimate pit limit to start backfilling.

Progressive Mine Clousre Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted	Submitted	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	2020-21 - 1.1 Ha	2020-21 - 0.5 Ha	Lessee has developed dense afforestation (Miyawaki plantation).
6d	No. of saplings planted during the year	2020-21 - 1100 Nos.	2020-21 - 1100 Nos.	
6e	Cumulative no .of plants	---	5930 Nos. upto 2012-21.	
6f	Any other method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch and care during the year	No proposal	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	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	
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)	Quarterly environmental monitoring of core and buffer zone.	Quarterly environmental monitoring carried out during 2020-21 and all the parameters are within the permissible limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No area of pit has reached its ultimate pit limit to start Reclamation and Rehabilitation and backfilling activities.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Entire ROM to be utilised directly for captive purpose, hence no grade-wise sorting proposed within the ML.	Entire ROM utilised directly for cement plant.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Nil	
7c	Different grade of mineral sorted out at mines.	No proposal	Nil	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No sub grade is been generated in the mine. Beneficiation is not required as the entire ROM mineral is utilised for captive plant.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	No topsoil generated during the year 2020-21.
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	Nil	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1100 Nos. saplings over 1.1 Ha in the year 2020-21.	1100 Nos. saplings over 0.5 Ha in the year 2020-21.	
8g	Survival rate	80%	85%	
8h	Water sprinkling on roads to control airborne dust	Water Tankers to be provided for dust suppression.	Water tanker & sprinklers provided for dust suppression.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Greenbelt development is well developed within the lease area to maintain the aesthetic beauty.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	To be submitted in time	Submitted in time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager - Sri. Hari Prasad Mining Engineer - Sri. Ramesh Kumar Geologist - Sri. Jaganath Rao.	Manager - Sri. Hari Prasad Mining Engineer - Sri. Ramesh Kumar Geologist - Sri. Jaganath Rao.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Opencast working - 8.7 Ha Roads and Infrastructure - 24.81 Ha Plantation - 3.4 Ha	Opencast working - 8.7 Ha Roads and Infrastructure - 8.91 Ha Plantation - 3.4 Ha	Lessee has reported that clerical error occurred while entering the details of roads & infrastructure in the annual returns. Advised to correct the annual returns since it has been referred back by the MMS division.
9d	Scrutiny of Annual return on afforestation	1100 Nos.	Broadly as submission and same quantity is verified in afforestation register maintained.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	
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	Cost of production is reported as Rs.459.35/-	Total depreciation and over head cost are not matching with the cost per tonne calculation. Advised to correct the annual returns since it has been referred back by the MMS division	
9h	Scrutiny of Annual return on fixed assets	The value of fixed assets reported by the lessee in annual returns is Nil.	Information submitted in another mine's (38APR14008) annual returns.	
9k	Scrutiny of Annual return on mining machineries	Excavator - 1 No. Dumpers - 2 Nos. Drilling machine - 1 No.	Same as submission.	

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

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

Date :

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines