

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/CDP/LST-6/HYD

Mine code : 38APR04008

- (i) Name of the Inspecting : **M029**) **MADHU SUDHAN YADAV M**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri K.V.S. Sharma Mine Manager
Official with
Designation
- (iv) Date of Inspection : 16/01/2020
- (v) Prev.inspection date : 24/10/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ZUARI**
- (b) **Registration NO.** : **IBM/996/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : **ANDHRA PRADESH**
District : **CUDDAPAH**
Village : **VALASAPALLI**
Taluka : **KAMALAPURAM**
Post office : **KRISHNA NAGAR**
Pin Code : **516311**
FAX No. : **08563 - 275106**
E-mail : **SK.TIWARI@HEIDELBERGCEMENT**
Phone :
- (f) Police Station : **YERRAGUNTLA**
- (g) First opening date : **14/05/1982**
- (h) Weekly day of rest : **SUN**
2. Address for : **M/S ZUARI CEMENT**
correspondance : **KRISHNA NAGAR, YERRAGUNTLA**
CUDDAPAH DIST-516 311
3. (a) Lease Number : **APR0023**
- (b) Lease area : **656.68**
- (c) Period of lease : **20**
- (d) Date of Expiry : **14/05/2022**
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 : SUSHIL KUMAR TIWARI
 KRISHNA NAGAR VALASAPALLI
 VILLAGE YERRAGUTLA MANDAL
 CUDDAPAH ANDHRA PRADESH
 Phone: 8800577222
 FAX :

Agent : K V S SHARMA
 M/S ZUARI CEMENT KRISHNA
 NAGAR VALASAPALLI
 VILLAGE, YERRAGUNTLA MAN
 CUDDAPAH ANDHRA PRADESH
 Phone: 9676404562
 FAX :

Mining Engineer

Name : S RAGHURAM, Full Time
 Qualification : B TECH MINING
 Appointment/ : 26/03/2012
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	19/12/1996
Plan/Scheme of Mining		Fresh under rule 22 MCR1960	26/06/2001
		Modif.of approved Mining Plan	11/10/2004
		Modif.of approved Mining Plan	22/08/2005
		Modif.approved Mining Scheme	15/11/2007
		MP review under 17(1) MCR 2016	05/01/2017

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	No proposal	G1 Scale: 536.12 Ha	
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 proposal	121.12 Ha	
1e	Balance reserve as on 01/04/20	No proposal	Proved (111): 327.56 Million Tonnes as on 01/04/2018	
1f	General remarks of inspecting officers on geology, exploration etc			

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N1509-2629, E504-1726	N1800-2907, E310-1726	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No OB mineral in the proposed working area. Only 1. mtr thickness of top soil will be removed and stacked sperately.	Top soil of an average thickness 1.5 mtr and 10mtr width and no OB mineral in the present working area	
2c	Stripping ratio or ore to OB ratio	Not applicable	Not applicable	
2d	Quantity of topsoil generation in m3	1,19,457 Cum	72,435 Cum (Till Dec 2019)	

2e	Quantity of overburden generation in m3	Not applicable	Not applicable
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Deviation found in the developmen area w.r.t to the proposal made the approved mining plan.	Submitted Modified Mining Plan for changes in the Developmental area

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	53,83,530 Tonnes	2532979 ton. (till Dec'2019)	
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.	No proposal	Nil	
3f	Quantity of sub grade mineral generation.	No proposal	Nil	
3g	Grade of sub grade mineral generation	No proposal	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 machine, dia 150 mm, staggered v-pattern with spacing of 8 m and burden 5m and depth 9.5m, holes charged with ANFO and slurry explosives. Using ultra-modern detonators like NONEL. MCD: 125kg.	Drilling machine, dia 150 mm, staggered v-pattern with spacing of 8 m and burden 5m and depth 9.5m, holes charged with ANFO and slurry explosives. Using ultra-modern detonators like NONEL. MCD: 125kg
3k	Provision of mining machineries in mineral benches	Combination of 7.2 Cu.m shovel and 35 T & 60 T dumpers for excavation and transportation	Combination of 7.2 Cu.m shovel and 60 T dumpers for excavation and transportation
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	1.50 meters thickness of topsoil and 9 meters height of limestone bench	1.50 meters thickness of topsoil and 9 meters height of limestone bench
3m	Total area covered under excavation/pits	148.94 Ha	154.40 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	As per proposed total area put in use at the end of Dec 2019 1.current working (O/C) = 148.94 Ha 2.occupied by plant, building, residential, roads & welfare buildings =14.240 Ha 3. other purpose(plantation and topsoil dump) = 26.08 Ha	As per proposed total area put in use at the end of Dec 2019 1.current working (O/C) = 154.40 Ha 2.occupied by plant, building, residential, roads & welfare buildings =14.240 Ha 3. other purpose(plantation and topsoil dump) = 26.08 Ha
3p	Production of ROM mineral during the last five year period as applicable	2015-16: 5385375 2016-17: 5385802 2017-18: 5385060 2018-19: 5385510 2019-20: 5383530	2015-16: 3455001 2016-17: 4150000 2017-18: 3450000 2018-19: 4425000 2019-20: 2532979(till Dec 2019)
3q	General remarks of inspecting officers on method of mining etc.	Proposed area of excavation is 148.94 Ha	Area covered for excavation was increased 154.40 Ha. Submitted Modified Mining Plan for changes in the excavation area.

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Topsoil to be stacked in the dump located in non-mineral zone	Topsoil is stacked in the dump located in non-mineral zone	
4b	Location of topsoil, OB and mineral reject dumps	N2400-2567 & E1516-1684	Work done as per proposal	No site deviation found during Inspection.

4c	Number of dumps within lease area and outside of lease area	3	3	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	N2400-2567 & E1516-1684	Work done as per proposal	Top doil dump proposed outside of UPL.
4e	Number of active and alive dumps.	1	1	
4f	Number of dead dumps.	1	1	
4g	Number of dumps established.		3 top soil dump established	
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall was proposed	Retaining wall not constructed as per proposal.	Retainig wall not constructed and the same is proposed in the Modified Mining Plan.
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall was proposed in the plan period	Nil	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			Retaining walll and garland drain is proposed to be carried out in the Modified Mining Plan period.

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	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.		

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).	Annual report to be sent	Submitted in time	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	No proposal	Nil	
6d	No. of saplings planted during the year	No proposal	Nil	
6e	Cumulative no .of plants	No proposal	Nil	
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)	Proposal submitted for air, water and noise monitoring	Monitoring carried out as per proposal	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Plantation carried out along the lease boundary near the view point area.

 Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal for sorting	Nil
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		

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separately stacked in topsoil dump and used for plantation	Using for plantation and stacking	
8b	Concurrent use or storage of topsoil	For plantation purpose	Top soil is used for plantation purposes	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	Nil	No waste is generated in the mine.
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)	Proposed Plantation: 1500	1165 Sapling Planted till end of Dec 2019
8g	Survival rate		80%
8h	Water sprinkling on roads to control airborne dust		01 no. of 30 KL water tanker & 01 no. of 20 KL water tanker engaged and water sprinkling arranged on middle of haul road
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and annual returns submitted in time.		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining Engineer - 3Nos, Geologist - 1Nos & Manager-1Nos.	Mining Engineer - Sri. S. Raghuram Geologist - Sri. P.Raghavendra Kumar	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Under current working pit = 150.190 Ha Plant, building, roads = 14.240 Ha Topsoil dump & plantation = 24.05 Ha	Approval for changes submitted in the Review of Mining plan	

9d	Scrutiny of Annual return on afforestation		
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No proposal	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM production is 4.425 million tonnes	As per submission
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost reported as Rs. 175.59/-	
9h	Scrutiny of Annual return on fixed assets		
9k	Scrutiny of Annual return on mining machineries	Shovel(6.5 Cum) - 1No, Shovel(7.2Cum) -1No, Dumper(55 ton)-7No, Explosive Van(10 Ton)-1No, Explosive Va(7 Ton)-1No, Blast Host drill (150mm)-1No, Dozer(420HP)-1No., Motor Grader(80HP)-1No, Water Tanker(3KL)-1No, Water Tanker(2KL)-1No, Jeep/Tractor(6 OHP)-1No, Road Roller (2 Ton//0-1No.	Shovel, dumper, road grader, water sprinkler, drill machine are 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
MCDR17	Rule 11(1)	08/11/2019	26/05/2020				
MCDR17	Rule 36(1)	08/11/2019	26/05/2020				

Date :

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines