

**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 : **M015**) **MANISH K. MAINDIRATTA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 28/10/2017
- (v) Prev.inspection date : 14/10/2016

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ZUARI**
- (b) **Registration NO.** : **IBM/996/2011**
- (c) Category : A 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 : **K.SRIVATSAVA@ZCLTD.COM**
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 : **13/04/2022**
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 : KRISHNA SRIVATSAVA
 ZUARI CEMENT LTD
 JEEVANBHEEMA NAGAR
 BANGALORE BANGALORE
 KARNATAKA
 Phone: 080-5207610
 FAX : 080-5207622

Agent : Y.S.RAO
 KRISHNANAGAR VILLAGE KADAPA
 DISTRICT CUDDAPAH ANDHRA
 PRADESH
 Phone:
 FAX :

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	Nil	Nil	
1b	Exploration over lease area for geological axis 1 or 2	9 boreholes were proposed in 2016-17	No borehole has been done . It has been submitted that exploration proposal for 2013-14 to 2016-17 was 39 and the entire boreholes have been completed in 2014-15.	However as per the approved document balance exploration is only 8 boreholes
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	G1- 518.61 hectare G2- 10.86 hectare G3 - 127.384 hectare	
1e	Balance reserve as on 01/04/20		As on 30-/9/2016= 330481602 T Prod'n Oct'16 to March'17= 1964339 T As on 1/4/17=328517263 Tonnes	
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	Between grid lines N1000-N2500, E300-E1500	As proposed	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Only 1.5m top soil	Top soil removed and separately stacked.	
2c	Stripping ratio or ore to OB ratio		1:0	
2d	Quantity of topsoil generation in m3	190897	190994	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	NA
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	5385802 Tonnes	4150000 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	NA	NA	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	
3f	Quantity of sub grade mineral generation.	NA	NA	
3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	NA	NA	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NA	NA	
3j	Provision of drilling and blasting in mineral benches	150mm drill machine proposed	is being used. staggered V Pattern with spacing of 8m and burden 5m . Anfo:slurry is used with nonel detonating system	

3k	Provision of mining machineries in mineral benches	Combination of 7.2 cu.m shovel and 35T & 60T dumpers.	Combination of 7.2 cu.m shovel and 35T & 60T dumpers.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	1.50 meters thickness of top soil and 9 meters height of limestone bench.	1.50 meters thickness of top soil and 9 meters height of limestone bench.
3m	Total area covered under excavation/pits	137.41 hectare	126 ha
3n	Ore to OB ratio for the pit/mine during the year.	NA	1:0
3o	Total area put in use under different heads at the end of year	Lease area put in use at the end of the year 2016-17. 1. Current working (O/C) = 125.410 ha 2. Occupied by plant, building = 14,240 ha 3. Other purpose = 20,380 ha.	Lease area put in use at the end of the year 2016-17. 1. Current working (O/C) = 125.410 ha 2. Occupied by plant, building = 14,240 ha 3. Other purpose = 20,380 ha.
3p	Production of ROM mineral during the last five year period as applicable	2013-14 - 5385285 T 2014-15 - 5385038 T 2015-16 - 5385375 T 2016-17 - 5385802 T 2017-18 - 5385060 T	2013-14 - 3735000 T 2014-15 - 3810000 T 2015-16 - 3455001 T 2016-17 - 4150000 T 2017-18 - 1866444 T (upto 27th Oct 2017)

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top soil is stacked in the dump located in non-mineral zone	Top soil is stacked in the dump located in non-mineral zone	
4b	Location of topsoil, OB and mineral reject dumps	N 2380 - N2840 E 1250 - E 1500	As proposed.	

4c	Number of dumps within lease area and outside of lease area	3 dumps within lease area	3 dumps within lease area	D1= 92 x 22 x 9 mht D2 102x 40 X 8 m ht D3 = 240 x 145 6 m ht
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)		out of UPL	
4e	Number of active and alive dumps.	1	1	
4f	Number of dead dumps.	2	2	
4g	Number of dumps established.	NA	dumps are partly stabilized	
4h	Whether Retaining wall or garland drain all along dumps are there.		No	
4i	Length of Retaining wall or garland drain all along dumps	No proposal	NIL	
4j	Number of settling ponds		NIL	

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.	NA	Area is not mature for backfilling as of now.	
5b	Area under backfilling of mined out area	NA	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NA	used for plantation purpose and also send to topsoil stack.	
5d	Total area fully reclaimed and rehabilitated	NA	NIL	

5e General remarks NA NA
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).		Submitted as on 15.06.2017	
6b	Area available for rehabilitation (ha) .		Area is not mature for the purpose	
6c	afforestation done (ha).	no proposal	Area is not mature for the purpose of rehabilitation. afforestation for rehabilitation purpose is not applicable.	
6d	No. of saplings planted during the year	Area is not mature for the purpose	Area is not mature for the purpose of rehabilitation. afforestation for rehabilitation purpose is not applicable.	
6e	Cumulative no .of plants	No proposal	Area is not mature for the purpose of rehabilitation. afforestation for rehabilitation purpose is not applicable.	
6f	Any other method of rehabilitation	No proposal	---	
6g	Cost incurred on watch and care during the year	---	----	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Area is not mature for the purpose of backfilling.	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Area is not mature for the purpose of backfilling.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal	Area is not mature for the purpose of backfilling and afforestation.	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir		Area is not mature for converting into reservoir at present., as the pit is a working pit.	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	---	----	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No proposal	No waste land	Status of plantation on safety barrier zone/ dump 2016-17 - 4150 saplings 2017-18 till oct 2017)= 1350 saplings
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposal	No waste land	
6p	Compliance of environmental monitoring (core zone and buffer zone)		complied	

Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	NA	NA
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA
7c	Different grade of mineral sorted out at mines.	NA	NA
7d	Any beneficiation process at mines	NA	NA
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	NA

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separately stacked in top soil dump and used for plantation.	Using for plantation and stacking.	
8b	Concurrent use or storage of topsoil		being undertaken as proposed for plantation as well as stacked separately.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)		No overburden, minerla reject or fines generation is there	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	Not applicable at present
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2016-17 = 4000 saplings proposed 2017-18 = 1500 saplings proposed	2016-17 = 4150 saplings proposed 2017-18 = 135000 saplings proposed (till October 2017)
8g	Survival rate		80%
8h	Water sprinkling on roads to control airborne dust	-	01 30 KL water tanker & 01 no of 20 KL water tanker engaged.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR submitted up to September 2017 AR submitted up to year 2016-17.		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		As per submissions	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Under current working pit = 125.410 ha plant building roads = 14.240 ha top soil dump = 20.380 ha	as submitted	
9d	Scrutiny of Annual return on afforestation	4150 saplings with 85% survival	4150 saplings with 85% survival	

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	4150000T	4150000T
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		Cost reported as Rs. 145.60 PMT

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 :

(MANISH K. MAINDIRATTA)

Indian Bureau of Mines