

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

**MCDR inspection REPORT
Hyderabad regional office**

Mine file No : AP/CDP/LST-22/HYD

Mine code : 38APR04015

- (i) Name of the Inspecting : **M029**) **MADHU SUDHAN YADAV M**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sri. K.Sudhakar, Mine Manager, Sri. Prabakar Reddy, G
Official with
Designation
- (iv) Date of Inspection : 14-SEP-21
- (v) Prev.inspection date : 20-FEB-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BHARTHI CEMENT**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : ANDHRA PRADESH
District : CUDDAPAH
Village : Nallalingayapalli
Taluka : Kamalapuram
Post office : Nallalingayapalli
Pin Code : 516289
FAX No. : (0430009770)
E-mail : bharathicement.com
Phone : (040)30006999
- (f) Police Station : KAMALAPURAM
- (g) First opening date : 02-FEB-09
- (h) Weekly day of rest : SUN
2. Address for : 269/S/98, Sagar Society
correspondance Road No.2, Banjara Hills,
Hyderabad-500 034
3. (a) Lease Number : APR2536
(b) Lease area : 632.28
(c) Period of lease : 30
(d) Date of Expiry : 28-MAR-36
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : Raghuram Cement Ltd
 269/S/98,Sagar Society ROAD
 NO.2,Banjara
 Hills,Hyderabad HYDERABAD
 TELANGANA
 Phone:
 FAX :

Owner : RAGHURAM CEMENTS LTD
 269/S/98,SAGAR SOCIETY ROAD
 NO.2, BANJARA HILLS
 HYDERABAD CUDDAPAH ANDHRA
 PRADESH
 Phone:
 FAX :

Agent : SRI M.SAI RAMESH SR VICEPRESIDENT (WORKS)
 NALLALINGAYAPALLI(V)KAMALAP
 URAM(M) YSR(KADAPA)DIST
 ANDHRAPRADESH CUDDAPAH
 ANDHRA PRADESH
 Phone: (08563)200400,200411
 FAX : -

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	23-MAR-06
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	22-JAN-07
	:	FMCP under 23C(1)	04-JUL-11
	:	Modif.of approved Mining Plan	29-JUL-11
	:	Mining Scheme rule 12 MCDR1988	04-SEP-13
	:	MP review under 17(1) MCR 2016	29-NOV-17
	:	MP modif under 17(3) MCR 2016	28-MAY-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	No proposal	Nil	Entire mineralised area is converted into G1 scale of exploration by drilling 207 Nos. of core boreholes and 55 Nos. of DTH holes.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Entire mineralised area is converted into G1 scale of exploration.
1e	Balance reserve as on 01/04/20	----	Proved Reserves as on 01/04/2021 - 188 million 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	E 4670-4462 to E 4462-4506 N 10616-10652 to N 11165-11163 E 4845-4843 to E 5639-5640 N 10426-10423 to N 10363-10842	Work done within the proposed co-ordinates.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed seperate benches in topsoil, overburden and minerals.	Developed seperate benches in topsoil, overburden and minerals.
2c	Stripping ratio or ore to OB ratio	1:0.149	1:0.09
2d	Quantity of topsoil generation in m ³	2020-21 - 99231 cu.m	2020-21 - 78980 cu.m
2e	Quantity of overburden generation in m ³	2020-21 - 299604 cu.m	2020-21 - 207854 cu.m
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Topsoil of around 1m thickness is removed seperatedly and OB is removed by forming seperate bench as proposed in the MMP approved on 28/05/2020.

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 - 5000450 Te	2020-21 - 3685807 Te	
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 is proposed in mineral benches.	During inspection it was observed that Wagon drill being used for drilling with a blast hole dia of 150 mm & depth of 9 m, spacing of 8 meters and burden of 5 meters. Blasting with slurry explosives & ANFO with NONELS as initiating system.
3k	Provision of mining machineries in mineral benches	Machinery proposed in mineral benches	During inspection, it was observed that 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	Maximum height of 8m bench height is proposed	During inspection it was noticed that the bench height is being maintained between 8 m and digging height of the excavators are compatible with bench height

3m	Total area covered under excavation/pits	2020-21 - 131.87 Ha	2020-21 - 100.26Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.149	1:0.09	
3o	Total area put in use under different heads at the end of year	Total area put to use for different purpose was 183.78 hectare by the end of 2022-23.	The total area put to use under different heads is 146.8 hectare till 2020-21.	
3p	Production of ROM mineral during the last five year period as applicable	2016-17 - 5002379 T 2017-18 - 5095099 T 2018-19 - 5035502 T 2019-20 - 5001025 T 2020-21 - 5000440 T	2015-16 - 2788500 T 2016-17 - 3120500 T 2017-18 - 4038306 T 2018-19 - 4611806 T 2019-20 - 3707491 T 2020-21 - 3685807 T	
3q	General remarks of inspecting officers on method of mining etc.			Top soil working benches are not found to be sufficiently apart and found mixing with the mineral. Violation issued as per rule.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Seperate dumping is proposed for topsoil.	Top soil dump is developed and maintained.	
4b	Location of topsoil, OB and mineral reject dumps	Top soil stacking is proposed at location - E5663-N10007, E5711-N10115, E5650-N10150 & E5600-N10077	Topsoil is stacked in the proposed location.	

4c	Number of dumps within lease area and outside of lease area	Within lease - 1 dump	Within lease -1 dump Outside lease - 1 dump	One old dump already existing near the crusher and office area since the beginning of the lease.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed outside UPL	Dump developed outside the UPL.	
4e	Number of active and alive dumps.	One	One	
4f	Number of dead dumps.	One	One	
4g	Number of dumps established.	No proposal	No dumps established during 2020-21	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal for 2020-21	Nil	
4i	Length of Retaining wall or garland drain all along dumps	No proposal for 2020-21	Nil	
4j	Number of settling ponds	No proposal for 2020-21	Nil	
4k	Specific comments of inspecting officer on waste dump management			One mineral dump is developed outside the lease area near crusher and office. It was reported by the lessee that the dump is lying since the beginning of the lease.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Backfilling proposed after full extraction of mineral	Backfilling carried out in mined out area.	
5b	Area under backfilling of mined out area	2.30 Ha	0.36 Ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed to use for plantation and stacking the remaining quantity.	Used for plantation and remaining quantity is being stacked.	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Calcerous material is occurring in the area which is being stacked and used for backfilling and stablisation of the part of excavated 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).	To be submitted in time as per rule.	Submitted in time.	
6b	Area available for rehabilitation (ha) .	2.3 hectare of waste land was proposed to be rehabilitated by afforestation	0.36 Ha area of afforestation done	
6c	afforestation done (ha).	2020-21 - 0.6 Ha	2020-21 - 1.0 Ha.	

6d	No. of saplings planted during the year	2020-21 - 400 Nos	2020-21 - 5000 Nos.
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 in 2020-21	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal in 2020-21	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No proposal in 2020-21	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal in 2020-21	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal in 2020-21	Nil

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal in Nil 2020-21	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal in Nil 2020-21	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal in Nil 2020-21	
6p	Compliance of environmental monitoring (core zone and buffer zone)	It was proposed to carry out Environmental monitoring in Core & Buffer Zone every quarter	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.		Backfilling carried out in the mined out area i.e., southern side of the mining lease area and plantation done in the southern side of the lease boundary.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal	Entire ROM produced is utilised 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 has been generated. 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)	Topsoil to be excavated separately and used for plantation and remaining quantity to be stacked.	Topsoil excavated separately but not stacked in the proposed area.	Violation issued for not stacking the topsoil in the proposed area.
8b	Concurrent use or storage of topsoil	Topsoil to be used for plantation and remaining quantity is stacked.	Topsoil used for plantation.	
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	Overburden generated to be used for backfilling.	Overburden generated is used for backfilling.
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)	400 Nos. of saplings to be planted in 2020-21.	5000 Nos. of saplings planted in 2020-21 covering an area of 1.0 Ha.
8g	Survival rate	90%	90%
8h	Water sprinkling on roads to control airborne dust	It was proposed to carry out control of dust generation by using water sprinkles	Water spinkling was done with water tanker.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Plantation has been carried out along the lease boundary and near view point to maintain the aesthetic beauty.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	MR and AR to be submitted in time.	Submitted in time.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager & Mining Engineer : Sri K. Sudhakar Geologist: Sri V Vijaya Bhaskar	Manager & Mining Engineer : Sri K. Sudhakar Geologist: Sri Prabhakar Reddy (appointed on 04/08/2021)
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings 100.26 ha Reclaimed/Rehabilitated 6.53 ha Occupied by plant, buildings, residential, welfare buildings & roads - 7.3 ha.	Broadly as per submission.
9d	Scrutiny of Annual return on afforestation	Within lease - 5000 Nos.	Broadly as submission and same quantity is verified in afforestation records 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	Ex-mine price reported as Rs.151.02/-	Depreciation, over-head cost and royalty per tonne reported in this part is inconsistent with data given in various parts of this annual returns. Advised to correct the annual returns since it has been referred back by the MMS division.	Annual returns has been referred back to the lessee by MMS division.
9h	Scrutiny of Annual return on fixed assets	Rs.2368646587/ -	Annual returns referred back to the lessee by the MMS division. Advised to correct the fixed assets details.	
9k	Scrutiny of Annual return on mining machineries	SHOVEL (HYDRAULIC),4. 500 CUM - 1 SHOVEL (HYDRAULIC),6. 500 CUM - 1 BACK HOE,6.500 CUM - 1 WHEEL LOADER,6.500 CUM - 1 DUMPER,5.000 TONNE - 10 DOZER,308.000 HP - 1 WATER TANKER,10000.0 00 LITRE - 1 AIR COMPRESSOR,600 .000 CUM/MN - 1 AIR COMPRESSOR,325 .000 CUM/MN - 1 EXPLOSIVE VAN,6.000 TONNE - 1 ROAD ROLLER,11.000 TONNE - 1	Same was available in the mine during inspetion.	

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
MCDR17	Rule 11(1)	21-SEP-21			
MCDR17	Rule 13(1)	21-SEP-21			

Date :

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines