

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/GNR/LST-50/HYD

Mine code : 38APR07066

- (i) Name of the Inspecting : **M017**) **MANISH K MAINDIRATTA**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Sri V Venkataramana, and Shri Prasad
Official with
Designation
- (iv) Date of Inspection : 17/01/2020
- (v) Prev.inspection date : 30/10/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KCP LIMESTONE DEPOSIT-II**
- (b) **Registration NO.** : **IBM/680/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ANDHRA PRADESH
- District : GUNTUR
- Village : MANDADI BLOCK II RF
- Taluka : DURGI
- Post office : DURGI
- Pin Code : 522612
- FAX No. : 08642-222350
- E-mail : cement.macherla@kcp.co.in
- Phone : 08642-222303
- (f) Police Station : Macherla
- (g) First opening date : 08/07/2016
- (h) Weekly day of rest : SUN
2. Address for : M/s KCP Cements,
correspondance Macherla-522426
Guntur District, Andhra Pradesh
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 K.C.P.LTD
 MACHERLA CEMENT UNIT
 MACHERLA GUNTUR ANDHRA
 PRADESH
 Phone:
 FAX :

Owner : V L Dutt
 M/s KCP Cements Ramakrishna
 Buildings Crescent Road,
 Egmore CHENNAI CITY TAMIL
 NADU
 Phone:
 FAX :

Agent : B V P S Chowdhary
 M/s KCP Cements Macherla-
 522426 Andhra Pradesh
 GUNTUR ANDHRA PRADESH
 Phone: 08642-222303
 FAX : 08642-222350

Mining Engineer

Name : K Hima Vamsi, Full Time
 Qualification : B Tech Mining
 Appointment/ : 16/03/2019
 Termination date

Geologist

Name : Ajith babu, Full Time
 Qualification : Msc Geology
 Appointment/ :
 Termination date

Manager

Name : V Venkata Ramana
 Qualification : B Tech Mining
 Appointment/ :
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : MP modif under 17(3) MCR 2016 02/05/2019

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	2018-19= 7 CBH 2018-19- No further exploration required.	Already completed in 2017-18 and cognizance thereof has been taken in the MMP Entire area was covered under G1 level of exploration	Form I submitted on 30/5/2017
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Entire area was covered under G1 level of exploration	
1e	Balance reserve as on 01/04/20	Reserves/ Resource reassessed on 10/3/2019= 111=5.57mT 211=0.828mT	Depletion 10/3/2019- 31/3/2019= 111=5.57mT 211=0.828mT Balance Reserves/ Resource reassessed on 1/4/2019= 111=5.57mT 211=0.828mT	
1f	General remarks of inspecting officers on geology, exploration etc		The general lithological succession in the lease area is grey limestone followed by pink limestone. The grey limestone is useable in the cement plant but pink limestone is not entirely useable.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	It was proposed to start the mining operation from west of lease to east. But for execution of mining operation from east of lease lessee as per Modification approved on 2/5/2019.	During the inspection, the development is found towards eastern and southern side as proposed in MMP	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	It was proposed to generate 8893 Cu.M of topsoil during 2018-19.	The Actual topsoil which was generated and reported was 9000 Cu.m.	
2c	Stripping ratio or ore to OB ratio	2018-19 is the third year of operation so Stripping ratio of 1:0.038 (ore: soil= 1cu m:0.038 cu m was assessed	1:0.034	No overburden is there except for the soil.
2d	Quantity of topsoil generation in m3	8,893 Cu M (2018-19)	8900 CuM (2018-19)	
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 top bench is having thick pocket of intercalated soil.	The mining was proposed with three nos. of 6 m high benches but during inspection 10m high benches have been observed in western part of the pit and work is done in two benches with floor at 143 mRL.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	1 pit	1 pit	
3b	Quantity of ROM mineral production proposed	5,77,893 tonne	4,00,000 tonne	
3c	Recovery of sailable/usable mineral from ROM production	99%	No waste generation reported. Entire mineral is utilized.	Top layer is calcareous with morrum
3d	Quantity of mineral reject generation	No mineral reject generation anticipated in 2018-19	Nil generated in 2018-19	
3e	Grade of mineral rejects generation and threshold value declared.	-	Not Applicable	
3f	Quantity of sub grade mineral generation.	200093 T was assessed to be generated	NIL generation	
3g	Grade of sub grade mineral generation	-	Not Applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	-	Not Applicable	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Not Applicable	
3j	Provision of drilling and blasting in mineral benches	115mm dia drill holes with blasting using ANFO Slurry and Nonel initiating system proposed	Practiced as per proposal	Presently working is at a distance about 350m from the temple. So controlled blasting needs to be done after studies.
3k	Provision of mining machineries in mineral benches	Mechanized mine proposed using excavator - tipper combination.	1.7 cu m back hoe type excavator along 5 nos of tippers of 17 cu m are being used along with 1 dozer and 1 drill machine and a compressor.	Shared machinery is being used for four mines.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM		Bench height being not maintained as per proposal. The maximum bench height of 10m has been observed in the western part of the first bench. So the bench height need to be reduced.
3m	Total area covered under excavation/pits	8.295 hectare proposed under pits till 2020-21	5.7 Ha under pit till 31/3/2020
3n	Ore to OB ratio for the pit/mine during the year.	2018-19=1:0.038	2018-19= 1:0.034
3o	Total area put in use under different heads at the end of year	8.295 hectare proposed under pits till 2020-21 as per MMP	5.7 Ha under pit till 31/3/2020 1.1 ha under dumps 0.003 ha. Under road
3p	Production of ROM mineral during the last five year period as applicable	2016-17=589716T 2017-18=585201T 2018-19=577893T	2016-17=127000 T 2017-18=410000 T 2018-19=400000 T
3q	General remarks of inspecting officers on method of mining etc.		

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Nil	Yes three soil dumps are there in the North of the pit.	
4b	Location of topsoil, OB and mineral reject dumps	As per latest approved MMP three dumps are approved.	Presently two temporary dumps are observed in the North of approach road (Mandadi- Terala Mines) in the North west part of lease and one in the North east part of the lease.	

4c	Number of dumps within lease area and outside of lease area	Three temporary soil dumps Within lease area	Three temporary soil dump are there Within lease area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Nil	Beyond UPL
4e	Number of active and alive dumps.	Nil	3
4f	Number of dead dumps.	Nil	Nil
4g	Number of dumps established.	Nil	Nil
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil
4j	Number of settling ponds	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	Nil	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.	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. The mining was Nil proposed with three nos. of 6 m high benches but during inspection 10m high benches have been observed in western part of the pit and work is done in two benches with floor at 143 mRL.

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).	proposed to be submitted as per rule 26(2) of MCDR 2017	Not submitted	
6b	Area available for rehabilitation (ha) .	No proposal for rehab. of worked out benches	Not done	North western benches can now be taken up for plantation.
6c	afforestation done (ha).	No proposal for rehab. of worked out benches	Not done	
6d	No. of saplings planted during the year	No proposal for rehab. of worked out benches	Not done	
6e	Cumulative no .of plants	No proposal for rehab. of worked out benches	750 saplings planted over 0.15 ha area in 2018-19. In total about 600m x 7.5m (0.45 hectare) area is under plantation within lease. The plantationis done along the eastern part of lease boundary.	
6f	Any other method of rehabilitation	----	----	

6g	Cost incurred on watch and care during the year	-----	Watch and ward has been provided .
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal for rehab. By backfilling	Not done
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal for rehab. By backfilling	Not done
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal for rehab. By backfilling	Not done
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal for rehab. By water reservoir immediately except for the use of bottom bench for harvesting water	Bottom bench is being used for water harvesting.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	----	----
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	880 saplings over 0.264 ha proposed in 2018-19	750 saplings planted over 0.15 ha area in 2018-19
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	880 saplings over 0.264 ha proposed in 2018-19	750 saplings planted over 0.15 ha area in 2018-19

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	-----	-----
6p	Compliance of environmental monitoring (core zone and buffer zone)		Environmental monitoring is done regularly
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		North western benches have reached the UPL as such the buffer zone near it and the top bench can now be taken up for plantation.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal	No grade wise limestone sorting is undertaken.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Not applicable	
7c	Different grade of mineral sorted out at mines.	No proposal	Not Applicable	
7d	Any beneficiation process at mines	No proposal	Only sizing is done and that too at the crusher installed in Mandadi Lst Mine which is about 6km from this mine and then dispatched to plant located about 6 km at Macherla by aerial ropeway.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No proposal	No grade wise limestone sorting is undertaken. Only the intercalated soil is segregated during the process of excavation by the machine	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Generated & utilised	
8b	Concurrent use or storage of topsoil	Proposed	Stacked as well as used	MMP approved
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump of soil was proposed	Separate dump is their for the purpose.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not done	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not done	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	883 saplings over 0.26 ha proposed in 2018-19	750 saplings planted over 0.15 ha area in 2018-19. In total about 600m x 7.5m (0.45 hectare) area is under plantation within lease. The plantation is done along the eastern part of lease boundary.	
8g	Survival rate		About 90% survival is there	
8h	Water sprinkling on roads to control airborne dust		12 KL water tanker used for Water sprinkling	
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	M.R. Submitted up to Dec 2019 A.R. Submitted up to 2018-19		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- K.Hima vamsi, Geologist - M.Ajith Babu , Manager Mines- V.Venkata Ramana	K Hima Vamsi is not having 5 years experience as required under MCDR for statutory mining engineer	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	5.7 Ha under pit till 31/3/2020 1.1 ha under dumps 0.003 ha. Under road	Broadly as per submission.	
9d	Scrutiny of Annual return on afforestation	750 saplings planted within lease area and 500 saplings outside the lease area	Broadly as per submission	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	As per submission. The lessee has used the entire limestone by simultaneous blending.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	O/B- Nil Prod- 400000 T C/B- Nil	As per submission	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	CoP has been submitted as 325.60 Rs PMT with mining cost as 200.50 Rs PMT and ex mine price also submitted as 325.60 Rs PMT	It has been understood that CoP includes the transportation cost upto the plant. So the reporting of exmine price as equal to CoP is not correct in the case.	
9h	Scrutiny of Annual return on fixed assets	Submitted		
9k	Scrutiny of Annual return on mining machineries	submitted	Common machinery is being used in all the mines.	

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)	27/02/2020			
MCDR17	Rule 26(2)	27/02/2020			
MCDR17	Rule 38	27/02/2020			
MCDR17	Rule 55(1)(3)	27/02/2020			
MCDR17	Rule 45(7)(a)	27/02/2020			

Date :

(MANISH K MAINDIRATTA)

Indian Bureau of Mines