

INDIAN BUREAU OF MINES
MINERALS DEVELOPEMNT 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 : 25) SHRI IBRAHIM SARIF
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sri Venkataramana, Sr GM
Official with
Designation
- (iv) Date of Inspection : 16/03/2022
- (v) Prev.inspection date : 17/01/2020

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 : MP modif under 17(3) MCR 2016 02/05/2019
 Plan/Scheme of Mining : MP review under 17(1) MCR 2016 20/11/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No back log exploration is pending	F.Y : 2020-21- Nil during the year	
1b	Exploration over lease area for geological axis 1 or 2	F.Y 2020-21 : No proposal during the year	Nil	Entire lease area has been explored in G1 scale by 26 no. of bore holes with 484 meterage.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	F.Y 2020-21 : No proposal during the year	Nil	Exploration was carried out by M/s MECL, M/s National Resource Development Corporation (NRDC), Hyderabad and Lessee. Total expenditure incurred for exploration so far is Rs. 3,10,550/-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No area is available for further exploration	Nil	Entire lease area has been explored in G1 scale.
1e	Balance reserve as on 01/04/20	Reserves as on 01.10.2020 111- 5.971 Million Tonnes Reserves proposed to be depleted due to production during the years Balance 2020-21 : 2,60,000 Tonnes 2021-22 : 5,40,125 Tonnes Balance Reserves : 5.17 Million Tonnes	Reserves as on 01.10.2020 111- 5.971 Million Tonnes Reserves depleted due to production during the years Balance 2020-21 : 2,60,000 Tonnes 2021-22 : 3,28,000 Tonnes Balance Reserves :	

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. Entire lease area has been explored in G1 scale by drilling 7 core bore holes and 4 DTH bore holes by lessee and 15 core bore holes by MECL.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	It was proposed to carryout mining operation in between the grid lines N-1816390 to 1816604 E- 332729 to 332904	Mining Operations are being carried out within approved proposals during the year 2020-21	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No such proposal of top soil /Overburden benches to be maintained. Only mineral benches to develop wherein intercalated waste is observed in mineral bench which has to be seperat during excavation	Only Mineral benches are developed which contain intercalated waste which is being seperated during excavation	

2c	Stripping ratio or ore to OB ratio	1 : 0.08	Nil during the year	
2d	Quantity of topsoil generation in m ³	F.Y. 2020-21 : Nil	Nil during the year	
2e	Quantity of overburden generation in m ³	F.Y 2020-21 : Nil	Nil DURING the year	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The mining is being carried out as per the proposals made in approved Mining plan.	The top bench is having thick pocket of intercalated soil.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 pit is proposed for produccion	1 pit is developed for production	
3b	Quantity of ROM mineral production proposed	F.Y 2020-21 : 5,40,125 Tonne	F.Y 2020-21 : 3,28,000 Tonnes	Less production due to less demand/ intake from Cement Plant
3c	Recovery of sailable/usable mineral from ROM production	F.Y 2020-21 : 100%	F.Y 2020-21 : 100%	
3d	Quantity of mineral reject generation	No mineral reject generation anticipated in F.Y 2020-21	Nil generated in F.Y 2020-21	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not Applicable	
3f	Quantity of sub grade mineral generation.	No sub grade mineral generation anticipated in F.Y 2020-21	Nil	
3g	Grade of sub grade mineral generation	No proposal	Not applicable	

- 3h Manual / Mechanised method adopted for segregating from ROM No proposal of any segregation of ROM Not applicable Except intercalated waste which can be separate in the bench itself remaining entire ore is being utilised. Hence there is no segregation
- 3i Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. F.Y 2020-21 : No study done. No such study was proposal to be carried out during the year
- 3j Provision of drilling and blasting in mineral benches Drilling operations are to be carried out by 115mm drioll hole dia Machines by maintaining Burden of 3 meters and Spacing of 5 meters and Blasting is to be carried out by using ANFO Slurry explosives with Nonel initiating system proposed Drilling and Blasting operations are being carried out as per proposals. As per the direction of DGMS, no drilling & Blasting within 140 meters distance from temple is proposed in the recent approved mining plan. further control blasting is being adopted and is being monitored regularly
- 3k Provision of mining machineries in mineral benches Mechanized mine proposed using 1.7 cu m back hoe type excavator- 2 nos. 5 nos of tippers of 17 Cum capacity, are used along with 1 dozer and 1 drill machine and a compressor. HEMM as per proposals are deployed to carry out Mining operation.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Boom length of 1.7 cum capacity Excavator is suitable to maintain bench height of 6 meters in Mineral	Yes 1.7 cum capacity excavator is suitable for mechanised method with bench height of 6 meters
3m	Total area covered under excavation/pits	14.0 hectare area is proposed under pits till 2025-26	7.3 Ha under pit.
3n	Ore to OB ratio for the pit/mine during the year.	1 :0.08	Nil
3o	Total area put in use under different heads at the end of year	16.36 hectare proposed till 2025-26 as per RMP	About 10 .0 Ha of total area is put to use for mining and allied activities up to F.Y 2020-21
3p	Production of ROM mineral during the last five year period as applicable	2016-17=589716T 2017-18=585201T 2018-19=577893 T 2019-20 =6,00,038 T 2020-21 : 5,60,019 T	2016-17=127000 T 2017-18=410000 T 2018-19=400000 T 2019-20=1,47,000 T 2020-21 =328000 T
3q	General remarks of inspecting officers on method of mining etc.		Fully mechanised opencast Mining is being carried out by deploying HEMM with Deep hole Drilling and Blasting.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Three soil dumps are there in the North of the pit.	Yes Two 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 on Northern side of lease.	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)	Within UPL	Within UPL but beyond working of present plan period	
4e	Number of active and alive dumps.	Three dumps are active	Three dumps are active	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	F.Y 2020-21 : No proposal of dump establishment during the year	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes proposals are given to construct during the year 2020-21	Nil	Vioaltn pointed out
4i	Length of Retaining wall or garland drain all along dumps	F.Y 2020-21 : Yes ,550m x 1.5 m x 1.0 meters retaining wall all along bottom periphery of waste dump to be constructed	Not constructed	
4j	Number of settling ponds	F.Y 2020-21 : No proposal	Nil	

4k	Specific comments of inspecting officer on waste dump management	Three temporary waste dumps are there in the lease area, once pit reaches UPL, the same being used for backfilling. At present excavation is not yet reached UPL. 550m x 1.5 m x 1.0 meters retaining wall is not constructed. Violation was pointed out for the same.
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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 for backfilling.	Not applicable	No area is matured for backfilling
5b	Area under backfilling of mined out area	No proposal	No area is under backfilling at present.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Top Soil generation is anticipated during the year hence no proposal for simultaneous use in plantation	Nil during the year	
5d	Total area fully reclaimed and rehabilitated	No proposal during the year 2020-21	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No backfilling done as no area is matured

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Annual report on PMCP for the year 2020-21 to be submitted.	Annual report on PMCP submitted during the year 2020-21	
6b	Area available for rehabilitation (ha) .	No area is available for rehabilitation for the year 2020-21	Not applicable	
6c	afforestation done (ha).	F.Y 2020-21 : No proposal for rehab. of worked out benches	Nil during the year	No benches are reached UPL
6d	No. of saplings planted during the year	No proposal of plantation for rehab. of worked out benches during the F.Y 2020-21	Not done	
6f	Any other method of rehabilitation	No such proposal is made in the approved document	Not applicable	
6g	Cost incurred on watch and care during the year	No proposal for rehab. By backfilling	Not done	No area is matured for backfilling
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	F.Y 2020-21 : No proposal for rehab. By backfilling	Not applicable	No area is matured for backfilling
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal for rehab. of by backfilling	Not applicable	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	No proposal of afforestation on backfilled area	Not applicable	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	F.Y 2020-21 : Not applicable No proposal for rehabilitation by making water reservoir.	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	F.Y 2020-21 : Not applicable No proposal of reclamation and rehabilitation	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	0.185 ha proposed to be afforested during the year 2020-21	About 0.5 Ha area planted during the year 2020-21
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	460 saplings to be planted during the year 2020-21	665 sapplings planted during the year 2020-21
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	F.Y 2020-21 : Not applicable No proposal of rehabilitation during the year 2020-21	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly monitoring is to be carried out for AAQ, WQ, Noise, Blast induced Vibration etc	Quarterly monitoring is being carried out regularly and results are within permissible limit..
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Pit is not yet reached UPL so far, hence no reclamation and rehabilitation is applicable at present.

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 produced to be dispatched during the year 2020-21	Entire ROM produced had been dispatched	
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	Nil	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 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)	No generation of TOP soil is anticipated during the year 2020-21	No Top soil generated during the year	
8b	Concurrent use or storage of topsoil	No proposal during the year	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Three temporary Soil dumps are proposed to be maintained	Teo temporary soil dumps are there on Northern side of lease area.	

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 for Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	460 saplings over 0.185 ha proposed in 2020-21	665 saplings planted over 0.5 ha area in 2020-21. In total about 600m x 7.5m (0.50 hectare) area is under plantation within lease. The plantation is done along the eastern part of lease boundary.
8g	Survival rate	No such proposal in approved document	About 85% survival is there
8h	Water sprinkling on roads to control airborne dust	12 KL water tanker to be deployed for dust suppression	12 KL water tanker used for Water sprinkling
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Plantation is being carried out to improve arsthetic beauty.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Annual return up to 2020-21 and Monthly return up to February 2022 shall be submitted	Annual return for the year 2020-21 and Monthly return for the month February 2022 submitted in time	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- S Prasad, Geologist - M.Ajith Babu , Manager Mines- V.Venkata Ramana	Mining Engineer- S Prasad, Manager Mines- V.Venkata Ramana, Geologist Sri Ajith Babu, are employed in the mines
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	7.3 Ha under pit/ Excavation 1.31 ha under dumps 0.4 ha. Under road 1.13 HA green belt	Broadly as per submission.
9d	Scrutiny of Annual return on afforestation	665 saplings planted within 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- Nil C/B- Nil	O/B- Nil Prod- Nil C/B- Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	CoP and Ex mine price has been submitted as 239.66 Rs PMT	As reported by lessee.
9h	Scrutiny of Annual return on fixed assets	Rs. 37231516	As reported by lessee
9k	Scrutiny of Annual return on mining machineries	BACK HOE (1.7 CUM)-1 No., TIPPER (17 CUM)-5 No.,AIR COMPRESSOR (450 CUM/MN)-1 No.,ROCK DRILL ((NON-ELEC.)115 MM)-1no.,WATER TANKER(12000.00 LITRE)-1 No.	Above machines are deployed in the lease area

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

Date :

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines

