

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/KSN/LST-26/HYD

Mine code : 38APR10027

- (i) Name of the Inspecting : 160) kalmata.M.K
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Sri B. Anilkumar, MinesManager.
Official with
Designation
- (iv) Date of Inspection : 14-MAR-23
- (v) Prev.inspection date : 07-NOV-20

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : MUKTYALA (368.35 HA)
- (b) **Registration NO.** : IBM/680/2011
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : ANDHRA PRADESH
- District : KRISHNA
- Village : MUKTYALA
- Taluka : JAGGAYYAPETA
- Post office : MUKTYALA
- Pin Code : 521175
- FAX No. : 08654-296009
- E-mail : mines.rkpuram@kcp.co.in
- Phone : 08654-296006
- (f) **Police Station** : MUKTYALA
- (g) **First opening date** : 10-AUG-07
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : M/S KCP LIMITED MUKTYALA VILLAGE
JAGGAIHPET MANDAL
KRISHNA DISTRICT
3. (a) **Lease Number** : APR1734
- (b) **Lease area** : 368.35
- (c) **Period of lease** : 50
- (d) **Date of Expiry** : 20-FEB-52
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 : DR.V.L.DUTT,C&MD
2,P.V. CHERIAN CRESCENT,
CHENNAI,TAMIL NADU.
CHENNAI CITY TAMIL NADU
Phone: 4466772600
FAX : 4466772620

Agent : V Madhusudana Reddy
KCP Cement Muktyala
village,Jaggayyapeta
mandal,krishna district
KRISHNA ANDHRA PRADESH
Phone: 9491373671
FAX : 08654 296009

Mining Engineer

Name : B.ANIL KUMAR,Full Time
Qualification : B.E.(MINING) DATE OF APPOINTMENT ON 10
Appointment/ : 10-AUG-07
Termination date

Geologist

Name : T. Hemasunder Rao,Full Time
Qualification :
Appointment/ : 01-MAR-11
Termination date

6. Date of approval of Mining	:	PMCP under 23B(2) for Existing	06-JUL-11
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	03-JAN-12
		Mining Scheme rule 12 MCDR1988	14-DEC-12
		MP modif under 17(3) MCR 2016	29-DEC-16
		MP review under 17(1) MCR 2016	13-DEC-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	None.	None.	Entire mineralized area is explored under G-1 level and no exploration proposal is given in the present plan period.
1b	Exploration over lease area for geological axis 1 or 2	None.	None.	Entire mineralized area is explored under G-1 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None.	None.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	None.	None.	Entire Mineralized area is explored under G-1 level.
1e	Balance reserve as on 01/04/20	Reserves/resources as per the approved document dated 14.12.2021 is as follows (unit in million tonnes) (as on 30.09.2021) Mineable Reserves : 321.522 Remaining Resources : 49.07 Total : 370.592	Reserves/ resources as on 01.04.2022 (unit in million tonnes) Mineable Reserves : 320.042 Remaining Resources : 49.07 Total : 369.112	Updated by depelting the production carried out for the period oct 2021 to March 2022.
1f	General remarks of inspecting officers on geology, exploration etc		The deposit is belongs to Cuddaph and Kurnool group of formation. The strike of the formation is NNE to SSW and dip 35 degree towards east. Entire mineralized area is explored under G-1 level of exploration and Grade of limestone varies fro 34 to 50% Cao.	

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In the year 2022-23, there was a proposal to work in two pois and details are as follows, Pit No.1:- between the co-ordinates N1861678 to N1863218 and E 400003 to E400788. In pit No.2 working was proposed between the Co-ordinates N1862453 to N 1862743 and E 401218 to 401368.	In the year 2022-23(Upto feb 2023) working has been carriedout as follows. Pit No.1, between the co-ordinates:- N1862878 to N 1863208 and E 400118 to E 400888. Pit No.2: between co-ordinates N1862540 to N 1862745.	There was a small deviation in the proposed working locations. Since the working has been carriedout within the proposed limit and working is still going for the finanacial year no violation is pointed out.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benchese were proposed in ore only.	Benches were existing in ore only.	Recovery is 100 percent and no waste generation is proposed in the year 2022-23.
2c	Stripping ratio or ore to OB ratio	1:0	1:0	No OB generation is proposed in the year 2022-23.
2d	Quantity of topsoil generation in m3	Nil in the year 2022-23.	Nil.	
2e	Quantity of overburden generation in m3	Nil in the year 2022-23.	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The formation is bedded type deposit and strata is hard. Bench height is maintained at 6.00 to 7.00 mtrs height. Woking was going on in the proposed locations only.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	Two pits.	Two pits.	Dimension of the pits is as follows: Pit No.1:- 1080m(l) x 410m(w) x 40m(h) Pit No.2:- 500m(l) x 166m(w) x 14m (h)
3b	Quantity of ROM mineral production proposed	4500037 tonnes in the year 2022-23.	2761830 tonnes (up to Feb 2023)	Achieved 61.37% of production up to Feb-2023.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	None.	None.	
3e	Grade of mineral rejects generation and threshold value declared.	Threshold value declared is Cao 34% Minimum and Mgo 55 Maximum.	Grade of the ore available in the mine as per exploration data is 34 to 50% Cao.	
3f	Quantity of sub grade mineral generation.	None.	None.	
3g	Grade of sub grade mineral generation	Not applicable.	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical	Mechanical	Lessee is doing only crushing to reduce the size as per the requirement of the plant.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None.	None.	
3j	Provision of drilling and blasting in mineral benches	Yes proposed.	Yes as per the proposal.	Using drilling machine of 115mm for drilling holes. Using slurry explosives for blasting.

3k	Provision of mining machineries in mineral benches	Proposed combination of excavators and dumpers for production and development.	Deployed Excavators of 2.10 and 1.40 Cum capacity and tippers of 12.6Cum Capacity.	Additionally lessee is using Blast hole drilling machine and air compressor for drilling blasting holes.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed 7.5 mtr bench height.	Maintained bench height 6.00 to 7.00 Height.	The proposed method of mining is fully mechanized and benches proposed and formed are suitable to the method of mining proposed and machineries deployed in the mines.
3m	Total area covered under excavation/pits	54.26Ha	52.61Ha.	PitNo-1, 44.29Ha and PitNo.2:- 8.32Ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	
3o	Total area put in use under different heads at the end of year	Area under mining- 54.26Ha, Infrastructure :- .67Ha.Roads:- 2.92Ha.	Area under Mining:- 52.61Ha, Infrastructure: .67Ha, Roads:2.92Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2022-23 4500037T 2021-22 4500187T 2020-21 4501012T 2019-20 4500900T 2018-19 4502250T	2022-23 2761830T 2021-22 3141500T 2020-21 2583500T 2019-20 2020000T 2018-19 2400000	The latest approved document is approved for the period 2022-23 to 2026-27, in the first year of the present plan period production was achieved 61.37% (up to Feb 2023)

3q	General remarks of inspecting officers on method of mining etc.	Lessee is adopted fully mechanized method for mining operation. Using combination of excavators and tippers for production and development. Doing deephole drilling and blasting for loosening of the strata. The bench height is maintained at 6.00 to 7.00 mts and it is suitable for the method of mining adopted.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	None.	None.	None. Generation of OB, Topsoil and Minral Reject is nil in the year 2022-23.
4b	Location of topsoil, OB and mineral reject dumps	None.	None.	None.
4c	Number of dumps within lease area and outside of lease area	None.	None.	None.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not applicable.	Not applicable.	Not applicable.
4e	Number of active and alive dumps.	None.	None.	None.
4f	Number of dead dumps.	None.	None.	None.
4g	Number of dumps established.	Not applicable.	Not applicable.	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed.	Nil	
4i	Length of Retaining wall or garland drain all along dumps	Not applicable.	Not applicable.	
4j	Number of settling ponds	None.	None.	

4k	Specific comments of inspecting officer on waste dump management	Generation of Topsoil, OB and Mineral Reject is nil in the year 2022-23, so no dumping was made in the year 2022-23. Further, no old dumps(alive/dead) are existing within the lease area.
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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 backfilling is proposed in the present plan period.	No backfilling is made in the present plan period.	Mineral is not extracted up to the proved depth, so, no backfilling was proposed and made in the present plan period.
5b	Area under backfilling of mined out area	No such proposals were given in the approved document.	None.	No area is matured for backfilling.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	None.	None.	None.
5d	Total area fully reclaimed and rehabilitated	None.	None.	None.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Mineral is not extracted upto the proved depth and no area is matured for backfilling, so no backfilling was proposed and made in the year 2022-23.	

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).	Before 1st july of every year.	Lessee has submitted PMCP report for the year 2021-22.	Submitted PMCP report for the year 2021-22, within the time limit. Submitted yearly report on 15.04.2022.
6b	Area available for rehabilitation (ha) .	None.	None.	None.
6c	afforestation done (ha).	0.25Ha inthe year 2022-23.	0.25Ha in the year 2022-23.	
6d	No. of saplings planted during the year	375 in the year 2022-23.	400 saplings in the year 2022-23	
6e	Cumulative no .of plants	1890 in the present plan period (2022-23 to 2026-27)	400 sapling in the year 2022-23.	Total 8400saplings were planted in last five years.
6f	Any other method of rehabilitation	None.	None.	None.
6g	Cost incurred on watch and care during the year	Not proposed.	Approximately 50,000 in the year 2022-23.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	None.	None.	None.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	None.	None.	None.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	None.	None.	None.

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None.	None.	None.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	None.	None.	None.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.25 Ha with 375 number saplings in the year 2022-23.	0.25Ha with 400 saplings in the year 2022-23.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	None.	None.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	None.	None.	None.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed regular monitoring of Air, water and noise in the core and buffer zone.	Lessee has carried out Environmental monitoring in t for Air, Water and Noise and all the parameters are found within permissible limit.	Environmental monitoring was carried out by Ecomen Laboratories Pvt.Ltd., Bangalore.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Only plantation was proposed in the year 2022-23 and plantation was made as per the proposal. Submitted yearly report on PMCP for the year 2021-22. Carried out environmental monitoring in the core and buffer zone and results are within the permissible limits.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposed dispatching of Cement grade ore.	Cement grade ore is dispatched to plant as per the proposal.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical.	Mechanical.	Only size reduction by crusher.
7c	Different grade of mineral sorted out at mines.	Cement Grade.	Cement Grade.	
7d	Any beneficiation process at mines	None.	None.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Lessee is using entire ROM by blending lowgrade with the high grade as per the requirement of the plant. As a part of beneficiation lessee is doing only crushing for size reduction.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	None.	None.	No topsoil generation is proposed in the year 2022-23. Topsoil removed earlier was utilized for plantation within the lease area.
8b	Concurrent use or storage of topsoil	None.	None.	Topsoil removed earlier is utilized for plantation within the lease area.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	None.	None.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	None.	None.	None.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	None.	None.	None.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Yes, provided base line information in the approved document. additionally lessee has made ...	
8g	Survival rate	None.	40 to 50%.	The survival rate is very low due to rocky surface.
8h	Water sprinkling on roads to control airborne dust	Yes, proposed.	Regularly spraying water on the working benches, Haul road etc.	Two water tankers of 16,000 ltr capacity is in use for dust suppression.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Benches and haulage roads were maintained systematically. Deployed two water tankers for sprinkling water in the working area and on the haulage roads. Plantation was made in the 7.5 mtr safety zone, waste land available within the lease area and near magazine area. Engaged manpower for monitoring plantation.	

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	A monthly returns shall be submitted before 10 th day of every month in respect of preceding month and an annual returns shall be submitted before 1st day of july of each year for the preceding financial year.	Lessee is regularly submitting monthy and annual returns within the time limit.	Submitted Monthly returns up to February 2023 and annual returns 2021-22.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Name of the Manager & Mining Engineer:- Shri B.Anil Kumar, Geologist:- Sri T.Hemasundar Rao	The data furnished in the annual returns submitted for the year 2021-22 is found correcte.	Submitted notice of appointment to this office.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under workings:- 50.250Ha, Infrastructure :- 24.570Ha, Afforestation: - 5.25Ha.	The area furnished for infrastructure is not matching with the details of land use pattern given in the approved document and field .	Showcause notice is issued for the same under Rule 45(7) of MCDR 2017.
9d	Scrutiny of Annual return on afforestation	2500 saplings with survival rate 40%.	The information furnished in the Annual returns is found correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	None.	None.	No mineral reject was generated in the year 2021-22.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Opening and closing stock: zero and production :3141500T and grade wise production and dispatch:- Cement Grade:- Opening and closing stock , zero and production and dispatch- 3141500 tonnes.	The information furnished in the annual returns is found correct.	Entire ROM was segregated under Cement grade and was trasported to Captive plant.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value Nil: Ex-mine price and cost of production:- 240.94/T	The details of cost of production and Ex-mine price furnished in the annual returns is found correct.	
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset is shown as Rs: 95674663	For Industrial and plant and machinery Rs mentioned as at the beginning of the year is not match with the figures of net closing balance of previous year. Further, The details of Long term loans outstandings, Interest paid during the year etc. are morethan the net closing balance.	Value of fixed asset need to be furnished for mine, beneficiation plant, mine - workshop, power and water installation etc. However, it appears other aspects like cement plant also coverd for calculation of fixed asset. Showcause notice is issued for the same under Rule45(7) of MCDR 2017.
9k	Scrutiny of Annual return on mining machineries	Backhoe -2.10 cum capacity 03nos, 1.40 cum capacity-02, Tippers of 12.60CUM capacity-18, Dozer-01., Blast drill hol;e-03, air compressor-02.	The details of mining machineries given in the annual returns submitted for the year 2021-22 is found correct.	

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 :

(kalmata.M.K)

Indian Bureau of Mines