

Indian Bureau of Mines
Minerals Development and Regulation Division
MCDR Inspection Report
Hyderabad Regional Office.

Mine File No: AP/KNL/LST-181/Hyd

Mine Code: 38APR11132

1) Name of Inspecting officer:	Shri. M.K. Kalmata
2) Designation	Regional Mining Geologist
3) Accompanying mine official with designation	Mr.Ramanjula Reddy, Mines Manager.
4) Date of Inspection	03.11.2023.

Part-I: General

S.No.	Particulars	Details
1	Name of the Mine	Petnikota Limestone mine (912.797Ha)
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	912.797Ha (Non-Forest Land)
3	Mine code	38APR11132
4	IBM Registration Number under rule 45 of	IBM/441/2011
5	Name of the lessee, Address, phone, email and fax number	The Ultratech Cement Ltd., B Wing, Ahura Center, 2nd Floor Mahakali Caves Road Andheri (East), Maharashtra-400093. Ph:-022-66917800, E-mail:-vishnu.vasu@adityabirla.com.
6	Village	Petnikota
7	Taluka/Mandal	Kolimigundla
8	District	Nandyal (Earlier Kurnool).
9	Pin code	518123
10	State	Andhra Pradesh
11	Post office	Petnikota
12	Nearest police station	Kolimigundla
13	Nearest Railway station	Tadipatri
14	Date of Grant of Mining Lease	NA
15	Date of Execution	27.04.2004
16	Period	50 years, Valid up to 26-04-2054.

17	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Name: V Vijaya Bhaskar, Ultra tech Cement Ltd., Bhogasamudram (V&P), Tadipatri (M), Anantapur (Dt) Andhra Pradesh – 515413 Phone: 8500060617 Email : vijayabhaskar.vutti @adityabirla.com
18	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	K.Naga Sidda Reddy, Ultra tech Cement Ltd., Bhogasamudram (V&P), Tadipatri (M), Anantapur (Dt) Andhra Pradesh-515413 D.O.A:-17-02-2021. Ph: 7039023088 Email : kns.reddy@adityabirla.com
19	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines, qualification	Shri Y.Ramanjula Reddy, Ultra tech Cement Ltd., Bhogasamudram (V&P), Tadipatri (M), Anantapur (Dt) Andhra Pradesh-515413 D.O.A:-13-10-2023. Ph: 9948663206 Email : ramanjulareddy.v@adityabirla.com
20	Name of the Mining Engineer & Geologist, Qualification and date of appointment in mine,	Mining Engineer : .Mr.Y.Ramanjula Reddy Qualification: Dip.in mining with First Class certificate D.O.A.: 13.10.2023 Geologist : shri. Dileep thumpati Qualification:- Msc, Geology. DOA : 13.10.2023
21	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Latest approved document Review of Mining plan AP/KNL/LST-214/HY D, dt:- 14-103-2023 for the period 2022-23 to 2023-24.
22	Name of the Mineral	Limestone
23	Method of Mining(Open cast, Underground)	Open cast
24	Category (Fully Mechanized, Others or Manual)	Category – A (Fully Mechanized)
25	Captive/Non Captive	Captive

PART-II**Exploration :**

Sl. No.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year	There was a proposal to drill 05 exploratory boreholes in the year 2023-24.	Exploration was not commenced up to 03.11.2023.	Lessee has mentioned that exploration will be completed before 31.03.2024.
1b	Exploration over lease area for geological axis 1 or 2	Exploration was proposed for gap filling and to know the quality of ore.	Exploration was not commenced up to 03.11.2023.	Lessee has mentioned that exploration will be completed before 31.03.2024.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed any particular agency for exploration.	None in the year 2023-24 up to 03.11.2023.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Exploration was proposed for gap filling and to know the quality of ore.	None in the year 2023-24 up to 03.11.2023.	Total lease area is 912.7970Ha; out of which 572.2770ha is mineralized and entire mineralized area is explored under G-1 level by drilling 226 exploratory boreholes to a total depth of 5710 mtrs. And remaining 340.52 Ha is non-mineralized.

1e	Balance reserves as on 01/04/2017	Reserves/resources as per the approved document dated 14-03-2023 (as on 31.12.2022) is as follows. (In million tonnes) Proved Mineral Reserves (111) - 182.465 Feasibility Mineral Resources (211) - 111.433 Total: 293.898	Reserves/resources as on 01.04.2023 is as follows. (In million tonnes) Proved M Reserves (111) - Reserves (111) - 182.464 Feasibility Mineral Resources (211) - 111.433 Total:- 293.897	Production carried out in the year 2022-23 is 500 tonnes only (In the month of March 2023) and reserves/resources were updated by depleting the same.
1f	General remarks of inspecting officers on geology, exploration etc.		The rock formation in the region belongs to the Kurnool system which is equivalent to lower vindhyans. The following sequence has been established in the limestone deposit on Petnikota area. Soil Upper Shale & Quartzite Flaggy Limestone Massive limestone Chert, Conglomerates, shale & Lower Quartzite The older formations viz lower quartzite & Shale, conglomerates and cherty occurs in North	Total lease area is 912.7970Ha, out of which 572.2770ha is mineralized and entire mineralized area is explored under G-1 level by drilling 226 exploratory boreholes to a total depth of 5710 mtrs. And remaining 340.52 Ha is non-mineralized.

			Eastern part of the ML area where as flaggy limestone is noticed mostly along the South-West boundary. The intervening area is occupied by massive limestone, which is the main unit of interest. The upper shale & quartzite are met with in the surrounding hills all around the area. The strike of the beds in the ML area is generally 330 -150 azimuth. Dip of the beds from 2 - 20.	
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Development :				
Sl.No.	Item	Proposals	Actual Work	Remarks
2a	Location of development w.r.t. lease area	In the year 2022-23, there was a proposal to work between the co-ordinates N1667875 to 1667900 and E 183525 to 183550.	Actual working is carried out between the co-ordinates N 1667880 to 1667905 and E 183523 to 183540	Working is carried out within the proposed co-ordinates only.
2b	Separate benches in topsoil, overburden	Only one bench (In mineral) is proposed in the	Bench existed in the ore only.	No OB handling was proposed in the year 2022-23 and

	and minerals (Rule-15)	year 2022-23.		topsoil is removed by scraping.
2c	Stripping ratio of ore to OB ratio	1:0	1:0	No OB was proposed and removed in the year 2022-23.
2d	Quantity of topsoil generation in m3	1000	416.667	
2e	Quantity of overburden generation in m3	None.	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc.		The mine is started working recently and produced only 500 tonnes in the year 2022-23. One small pit (25m x15m) having only one bench is made by the present lessee and depth of the pit is 1.5 to 2.00 mtrs only.	By present lessee, mining operations are not commenced up to march 2023, due to Mining Lease Transfer delayed. So only small pit is developed by present lessee. However, earlier the mine was worked for slabs by locals and about 12 irregular slab quarry pits are existing within the lease area.
Exploitation :				
Sl.No.	Item	Proposals	Actual Work	Remarks

3a	Number of pit proposed for production	One in the year 2022-23.	One in the year 2022-23.	Dimension of the pit made by present lessee is 25m (L) x 15m (W) x 1.5 to 2.00mtr (H). Further, about 12 pits of different dimensions covering an area of 7.07Ha.
3b	Quantity of ROM mineral production proposed	1000 tonnes in the year 2022-23.	500 tonnes in the year 2022-23.	
3c	Recovery of saleable / usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	None in the year 2022-23.	None in the year 2022-23.	
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	Not applicable.	
3f	Quantity of subgrade mineral generation.	None in the year 2022-23.	None in the year 2022-23.	
3g	Grade of subgrade mineral generation.	Not applicable.	Not applicable.	
3h	Manual / Mechanized method	None.	None.	

	adopted for segregating from ROM			
3i	Any analysis or beneficiation study proposed and carried out for subgrade mineral and rejects	None.	None	
3j	Provision of drilling and blasting in mineral benches	Yes, proposed.	No drilling and blasting is carried out in the year 2-22-23.	Production achieved in only 500 tonnes. Topsoil is removed by scarping and mineral is removed directly by shovel.
3k	Provision of mining machineries in mineral benches	Yes proposed combination of Excavators and tippers.	Using Excavators of 2.1 CUM capacity and tippers of 20 CUM .	The mine is started working recently and produced only 500 tonnes in the year 2022-23, so only one excavator and tippers are used for production and development.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed bench height of 4.00 mtr benches in ore.	1.5 to 2.00 mtr bench height is maintained.	The production achieved is only 500 tonnes in the year 2022-23, so only 1.5 to 2.00 mtr bench height was achieved.

3m	Total area covered under excavation / pits	Area under Mining:- 8.23 Ha up to 2022-23.	Area under Mining:- 7.19Ha (As on 3.11.2023)	
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	Recovery is 100% and no OB is removed in the year 2022-23.
3o	Total area put in use under different heads at the end of year	Area under Mining:- 8.23 Ha, Old Mineral reject dumps- 20.04Ha, Infrastructure:- 4.50Ha up to 2022-23.	Area under Mining:- 7.19Ha, Old Mineral reject dumps- 20.04Ha, Infrastructure:- 1.13Ha (As on 3.11.2023)	
3p	Production of ROM mineral during the last five year period as applicable	2022-23 -1000 tonnes and No proposals from 2014-15 onwards to 2021-22.	500 tonnes in the year 2022-23.	The mine was non-working and under suspension, in 2022 the said lease was transferred to M/s Ultratech Cement Ltd from Grasim cements and M/s ultratech ltd. submitted the RMP for the remaining period of 2022-23 and 2023-24.
3q	General remarks of inspecting officers on method of mining etc.		The mine was not working up to 2021-22 and was under suspension and there were no valid	

documents for the period 2014-15 to 2021-22. The said lease was transferred to M/s ultratech cement Ltd from Grasim cements. And M/s ultratech ltd submitted the RMP for the remaining period of 2022-23 and 2023-24. In 2022-23 proposal was given to produce 1000 tonnes only and against 1000 tonnes proposals lessee has produced only 500 tonnes. So one small pit is developed by present lessee having one bench of 1.5 to 2.00 mtr height. However, many old slab quarry pits are existing within the lease area which were operated by locals earlier.

Solid Waste Management - Dumping :

SL.N o.	Item	Proposals	Actual Work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32, 33)	None in the year 2022-23.	No waste dumping was made in the year 2022-23.	The topsoil removed is utilized for plantation purpose as per the proposal.
4b	Location of topsoil, OB and mineral reject dumps	None in the year 2022-23.	None in the year 2022-23.	However, 27 Old slab quarries reject dump are existing within the lease area and quantity and quality of the same is not assessed by State DMG. Advised lessee to utilize the existing dumps in consultation with State Government as per applicable Act and Rules .
4c	Number of dumps within lease area and outside of lease area	None in the year 2022-23.	None in the year 2022-23.	27 Old slab quarries reject dump are existint within the lease area. Further, few dumps are existing outside the lease area also.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	None in the year 2022-23.	None in the year 2022-23.	Old slab quarry reject dumps are existing within UPL also.

4e	Number of active and alive dumps.	None in the year 2022-23.	None in the year 2022-23.	Old slab quarry reject dumps are existing within the lease area and present lessee is not doing any dumping.
4f	Number of dead dumps.	None in the year 2022-23.	None in the year 2022-23.	Old slab quarry reject dumps are existing within the lease area and present lessee is not doing any dumping and presently they are dead dumps.
4g	Number of dumps established.	None.	None.	
4h	Whether retaining wall or garland drains all along dumps are there.	None.	None.	
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 officers on waste dump management .		Old slab quarry reject dumps are existing within the lease area and present lessee is not doing any dumping and presently they are dead dumps and quantity and quality of the same is not assessed by State DMG. Advised lessee to utilize the existing dumps in consultation with State Government as per applicable Act and Rules .	
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Solid Waste Management - Backfilling :

Sl.N o.	Item	Proposals	Actual Work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling	Not proposed.	Nil	No backfilling is proposed in the present plan period.
5b	Area under backfilling of mined out area	Not proposed.	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitatio	Not proposed.	Nil	

	n of mined out area (Rule 32)			
5d	Total area fully reclaimed and rehabilitated	Not proposed.	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Present working is not reached up to the proved depth and no proposals were made for reclamation and rehabilitation in the present plan period.	
Progressive Mine Closure Plan :				
Sl.No.	Item	Proposals	Actual Work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 26(2)	Before 1st July of every year.	Submitted yearly report on PMCP within the prescribed time limit.	PMCP report submitted on 23.06.2023 along with the Annual returns submitted for the year 2022-23.
6b	Area available for rehabilitation (ha)	None.	None	
6c	Afforestation done (ha)		0.2Ha in the year 2022-23	
6d	No. of saplings planted during the year	500 in the year 2022-23	500 saplings in the year 2022-23.	

6e	Cumulative no. of plants	500	500 saplings only.	The mine is started working recently and only 500 saplings were planted.
6f	Any other method of rehabilitation	None.	None	
6g	Cost incurred on watch and care during the year	None.	approximately Rs 50000	For saplings and caring.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (LxBxD)	Nil	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	
6j	Compliance on reclamation and rehabilitation	Nil	Nil	

	n by backfilling (iii) Afforestation on backfilled area			
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Nil	Nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Nil	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii)	Nil	Nil	

	Area rehabilitation (ha)			
6o	Compliance of rehabilitation of waste land within lease (ii) Method of rehabilitation	Nil	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes, Air, Water and Noise monitoring was proposed in Core and Buffer zone.	Environmental monitoring in the core and buffer zone is carried out as per the proposal and results are within permissible limits.	Environmental monitoring is carried out by J.N. Environet Pvt.Ltd. Gurugram.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		The mine was not working up to 2021-22 and was under suspension and there was no valid document for the period 2014-15 to 2021-22. The said lease was transferred to M/s ultratech cement Ltd from Grasim cements. and M/s ultratech ltd submitted the RMP for the period 2022-23 to 2023-24. In the year 2022-3 only plantation proposal was given under PMCP.	

			Accordingly, lessee has planted 500 saplings in the safety zone.	
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Mineral Conservation:-

Sl.N o.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	Proposed dispatch of Cement grade ROM to Captive Cement Plant.	Lessee is dispatching Cement grade ROM to Captive plant as proposed.	Lessee is not doing any processing at mine site.
7b	Method of grade wise mineral sorting i.e. manual or mechanical	None.	None.	Sending ROM to Captive Cement plant without any processing.
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 officers on mineral conservation and beneficiation issues.		Lessee is not doing any mineral processing at the mine site at present and Dispatching ROM (Cement grade) to Captive Cement plant linked with the mine.	

Environment:-

Sl.No	Item	Proposals	Actual Work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Yes, proposed.	Removed topsoil separately by scraping.	About 416.667 CUM topsoil was generated in the year 2022-23.
8b	Concurrent use or storage of topsoil	Concurrent use	Concurrent use.	Used topsoil for plantation work in the 7.5mtr safety zone.
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.	
8e	Phased restoration, reclamation and rehabilitation of land affected by mining operations (pits, dumps etc.)	None.	None.	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information was furnished in the mining plan. Additional plantation proposals are being given in the Mining Plan documents.	Additionally lessee has planted about 500 saplings within the lease area. The mine is started working recently and Proposal is given to plant more plants in coming block periods.	
8g	Survival rate	90% in the year 2022-23.	90% in the year 2022-23.	
8h	Water sprinkling on roads to control airborne dust	Yes proposed.	Regularly spraying water on the working benches, Haul road etc.	One water tanker of 10,000 Itr capacity is in use for dust suppression.
8i	General remarks of inspecting officers on aesthetic beauty in and around mine areas.		The mine is started recently and lessee has made only one small pit in the year 2022-23. However, about 27Ha of land is degraded by mining activities (Pits and dumps) by locals for slab quarry. In the some part of non broken up area agriculture is also going on.	

Compliance of Rule 45 :

Sl.No.	Item	Proposals	Actual Work	Remarks
9a	Status of submission of monthly and annual	A monthly return shall be submitted before the tenth day	Submitting Monthly and Annual returns within the time limit.	Submitted Annual returns for the year 2022-23 on

	returns	of every month in respect of the preceding month and an annual return shall be submitted before the 1st day of July each year for the preceding financial year.		23-06-2023.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	As per the annual returns submitted for the year 2022-23, details of Mining Engineer and Geologist are as follows. Mining Engineer:- Mr.B.Ramesh. Geologist:- Mr.G.Mannohar Reddy. Mines Manager:- Mr.G.Mannohar Reddy.	The details furnished in the Annual returns submitted for the year 2022-23 is found correct.	However, the details of Mining Engineer and Geologist observed on the day of inspection are as follows. Mining Engineer & Mines Manager:- Y.Ramanjula Reddy. Geologist:- Shri Dileep Thumpati.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under current workings 7.19Ha, Dumps-20.040Ha, Infrastructure:- 1.13Ha.		

9d	Scrutiny of Annual return on afforestation	500 saplings in the year 2022-23 and survival rate 90%.	The information furnished in the annual returns is found correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	None.	None.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Opening and closing stock-Nil, Production:-500 tonnes. Cement garde:- Opening and closing stock-Nil and production and dispatch-500 tonnes.	The information furnished in the annual returns is found correct.	However, 27 Old slab quarries reject dump are existing within the lease area and quantity and quality of the same is not assessed by State DMG. Since the dump was made by local during old working for slab quarry same was not shown in Annual returns. Advised lessee to approach State Government in this regard.
9g	Scrutiny of Annual return on Sale value,	Sale value-0, Cost of production and ex-mine price:- Rs	The information furnished in the annual returns is found	The cost of production is very high due to less

	Ex Mine price and production cost	3860.15/ton	correct.	production carried out and since the mine opened recently maintenance cost is more. The cost of production will be reduced once mines started working in full fledge
9h	Scrutiny of Annual return on fixed assets	Value of fixed assets is mentioned as Rs 240679711	The information furnished in the annual returns is found correct.	
9k	Scrutiny of Annual return on mining machineries	Shovel:- 2.1 CUM- 01, tippers of 20 CUM capacity - 04, Dumpers of 55 tonnes capacity-04, Dozer-01.	The information furnished in the annual returns is found correct.	However, the mine was not working on the day of inspection and no machineries were observed in the field.

Date:-

(KALMATA.M.K)

Indian Bureau of Mines