

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

**MCDR inspection REPORT
Hyderabad regional office**

Mine file No : AP/RR/LST-3/HYD

Mine code : 38APR23002

- (i) Name of the Inspecting : 160) kalmata.M.K
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Shri Chaitanya Nalamatta, Mines Manager.
Official with
Designation
- (iv) Date of Inspection : 28-SEP-22
- (v) Prev.inspection date : 17-SEP-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : SANGAMKALAN NO. 1
- (b) **Registration NO.** : 613/2011
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : TELANGANA
- District : RANGAREDDY
- Village : SANGAMKALAN
- Taluka : TANDUR (MANDAL)
- Post office : MALKAPUR
- Pin Code : 501157
- FAX No. :
- E-mail : mkp_mines@indiacements.co.:
- Phone : 08411242324
- (f) **Police Station** : TANDUR
- (g) **First opening date** : 15-OCT-98
- (h) **Weekly day of rest** : SUN
2. **Address for** : M/S INDIA CEMENTS LIMITED
correspondance 93, KARPAGAM AVENUE
CHENNAI, TAMIL NADU
3. (a) **Lease Number** : APR1350
- (b) **Lease area** : 112.68
- (c) **Period of lease** : 50
- (d) **Date of Expiry** : 03-SEP-48
4. **Mineral worked** : LIMESTONE Main

5. Name and Address of the

Lessee : THE INDIA CEMENTS LTD
DHUN BUILDING 827, ANNA
SALAI CHENNAI CHENNAI CITY
TAMIL NADU
Phone:282521526
FAX :28520638

Owner : Mrs laxmi Aparna Srikumar
Coromandal tower, 93,
Santhome High Avenue, raja
Annamalaipuram, Chennai
CHENNAI CITY TAMIL NADU
Phone:
FAX :

Agent : S. Dakshinamoorthy
The India Cements Ltd,
Malkapur Tandur(Mandal),
Vikarabad dist Telangana-
501158 MAHBUBNAGAR
TELANGANA
Phone: 7095597888
FAX :

Mining Engineer

Name : T MURALIDHAR, Full Time
Qualification : BTECH MINING
Appointment/ :
Termination date

Geologist

Name : B.Prithvi Raj, Full Time
Qualification : Msc, Geology.
Appointment/ : 13-DEC-21
Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 23-SEP-98
Fresh under rule 22 MCR1960 24-AUG-00
Modif.approved Mining Scheme 07-DEC-03
Mining Scheme rule 12 MCDR1988 07-MAR-08
Mining Scheme rule 12 MCDR1988 12-FEB-14
MP modif under 17(3) MCR 2016 02-FEB-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration is proposed in the present plan period.	Nil.	Entire mineralized area is explored under G-1 level.
1b	Exploration over lease area for geological axis 1 or 2	None.	None.	
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 approved document dated 02.02.2018 Mineable Reserves - 27.49 MT Remaining Resources - 38.59MT Total:- 66.08MT	Reserves/resources as on 01.04.2022 Mineable Reserves - 26.82 MT Remaining Resources - 38.59MT Total - 65.41 T	Reserves/resources were updated by depleting about 0.66 MT of ROM produced in the present plan period up to 31.03.2022.
1f	General remarks of inspecting officers on geology, exploration etc		The deposit belongs to Kurkunta limestone of Bhima series. The kurkunta limestone mines consists of limestone of varying types and average thickness of limestone within the lease area is about 45 to 50 mtrs. The entire mineralized area is explored under G-1 level by drilling 53 exploratory boreholes.	

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In the year 2021-221, Production and development was proposed between the co-ordinates S 990 to S 1312 and W 1190 to W 1285, S 910 to S925 and W 770 to W 1170 and S 560 to S 900 and W 1370 to W 1450.	Working has been carried out between the co-ordinates S 750 to 1300 and W 1200 to 1380.	Working has been carried out within the proposed co-ordinates.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches were proposed in the mineral only.	Benches were formed in mineral only.	No OB handling is proposed in the present plan period. and topsoil is completely removed by scraping and no benches were formed.
2c	Stripping ratio or ore to OB ratio	Nil	Nil	No OB generation is proposed in the present plan period.
2d	Quantity of topsoil generation in m3	11,200, in the year 2021-22.	9166 cum	
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 working has been carried out within the proposed area. Benches were systematically formed in the mineral and topsoil was completely removed by scraping without formationof benches. Bench height is maintained	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

3a	Number of pit proposed for production	One.	One.	Additionally few quarry pits were observed in the Northern side of the lease area, near lease boundary. Pits are existing within the lease and some are extended beyond lease boundary. an enquiring about the pits lessee has informed that the pits were made by some other for slabs. In this regard, letter is written State Government for action.
3b	Quantity of ROM mineral production proposed	1,00,00,000 Tonnes in the year 2021-22.	81,275 Tonnes.	Due to lack of demand for cement , plant was under shutdown so production is decreased.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	Nil.	Nil.	
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	Not applicable.	
3f	Quantity of sub grade mineral generation.	None.	Nil.	
3g	Grade of sub grade mineral generation	Not applicable.	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	None.	None.	Lessee is dispatching entire ROM to plant connected with this mine for captive consumption.

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.	The drilling is being carried out by wagon drill of 115mm dia and blasting by slurry explosives and ANFO.	Drilling and blasting is being carried out as per the proposal.
3k	Provision of mining machineries in mineral benches	Yes proposed	Lessee has deployed combination of Excavators and dumpers for production and development.	Lessee has deployed Excavator of 1.00cum capacity and tippers of 15.00cum capacity for production and development.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed benches of 8.00 mtrs height in mineral.	Bench height was maintained at 6.00 to 8.00 mtrs.	Strata is hard and the bench height proposed and maintained is suitable for method of mining adopted.
3m	Total area covered under excavation/pits	40.87 Ha in the present plan period. up to 31.03.2023.	36.00 Ha	Additionally in the northern side of the lease area near lease boundary 1.22 Ha of area is covered by slab quarries, Lessee has mentioned that slab quarries are old workings carried out by some others. It appears working has been extended beyond the lease boundary and same is communicated to DMG, Telangana, for further necessary action.
3n	Ore to OB ratio for the pit/mine during the year.	None.	None.	
3o	Total area put in use under different heads at the end of year	Area under mining:- 40.87Ha, Storage of topsoil- 4.34ha, Roads- 0.4Ha.	Area under mining- 36.00Ha, Topsoil- 3.05Ha, Roads-0.4Ha.	Additionally about 1.2Ha is covered by old quarry slab working.

3p	Production of ROM mineral during the last five year period as applicable	2022-23 10,000,00 T 2021-22 10,000,00 T 2020-21 10,000,00 T 2019-20 10,000,00 T 2018-19 10,000,00 T	2022-23 ----- 2021-22 81,275 T 2020-21 1,05,000T 2019-20 4,77,995T 2018-19 6,31,414T
----	--	--	---

3q	General remarks of inspecting officers on method of mining etc.	The mine is opertaing by fully mecahnised opencast method. The benches are maintained systematically. Lessee is doing drilling and blasting for loosening the strata. Lessee has formed only one pit. Earlier, in southern side woking has been carried out beyond the lease boundary and same was shown in the Lease sketch authenticated by Asst. Director of Mines of Geology so no action has been initiated by this office.
----	---	--

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes proposed storage of topsoil.	The soil removed during the plan period is utilized for plantation within the lease area.	No dump formation was proposed for OB and Mineral rejects.
4b	Location of topsoil, OB and mineral reject dumps	Topsoil dump was proposed in northern part of the lease area near Bondary pillars- 36,37 and 38.	No topsoil dumps were formed during the present plan period. The entire topsoil generated was utilized for plantation.	On old reclaimed inactive topsoil dump is existing North-Eastern part of the lease near BP Nos- 41 and 42.

4c	Number of dumps within lease area and outside of lease area	One.	One old topsoil dump is existing within the lease area.	Few scattered waste dumps were observed in the northern side of the lease boundary and it appears some dumps are extended beyond the lease boundary. During inspection lessee has mentioned that , the dumps are old dumps made by someothers during slab quarry working. Letter is written to State Government for examination of the same.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL	
4e	Number of active and alive dumps.	One	Nil	
4f	Number of dead dumps.	None.	One	One inactive topsoil dump is existing within the lease area. Further some inactivedumps were observed in the northern side of the lease which were made by som other party during slab quarry mining and same is communicated to State DMG for verification.
4g	Number of dumps established.	None.	One.	One topsoil dump is stabilized by plantations.
4h	Whether Retaining wall or garland drain all along dumps are there.	None.	None.	
4i	Length of Retaining wall or garland drain all along dumps	None.	None.	
4j	Number of settling ponds	None.	None.	

4k Specific comments of inspecting officer on waste dump management

No dumping was proposed and made in the present plan period. One old topsoil dump which is existing in the eastern part of the lease area is stabilized by plantations. Some scattered dumps were observed in the southern part of the lease area which were made by someone else person during slab quarry working and same was communicated to State Government for verification.

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	None.	None.	No area is matured for backfilling.
5b	Area under backfilling of mined out area	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.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	None.	None.	
5d	Total area fully reclaimed and rehabilitated	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 present plan period.	

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).	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 prescribed time.
6b	Area available for rehabilitation (ha) .	None.	Nil in the year 2021-22.	About 3.5Ha old topsoil dump is reclaimed by plantation.
6c	afforestation done (ha).	0.45Ha in the year 2021-22.	0.70Ha in the year 2021-22.	
6d	No. of saplings planted during the year	500 in the year 2021-22.	1550 saplings within the lease area.	
6e	Cumulative no .of plants	2500 in the present plan period up to 2022-23.	3500 sapling are planted in the present plan period up to 2021-22.	
6f	Any other method of rehabilitation	None.	Nil.	
6g	Cost incurred on watch and care during the year	None.	Approximately 25 to 30 thousand for taking care of plantation.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	None.	Nil.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	None.	Nil.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	None.	Nil.	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None.	Nil.	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	None.	Nil.	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	None.	Nil.	
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.	
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 is regularly monitoring, Air, water, noise in the core and buffer zone and results were within permissible limit.	Environmental monitoring was carried out in the month of july 2022 submitted copy of report to this office.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		About 3.05Ha old topsoil dump is reclaimed by plantation. Lessee has planted about 3500 saplings in the present plan period. The plantation was made more than the proposal. Lessee is regularly monitoring air, water and noise and all the parameters were found within the permissible limits.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposed Cement grade dispatch.	Entire ROM produced is dispatched to plant as cement grade for captive consumption.	Lessee is dispatching cement grade ore by blending lowgrade with high grade as per the requirement of the plant.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Not proposed.	Nil.	Entire ROM is dispatched as cement grade by blending.
7c	Different grade of mineral sorted out at mines.	Cement Grade.	Cement Grade.	
7d	Any beneficiation process at mines	None.	Nil.	
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. Lessee is not doing any beneficiation within the lease area. However, doing only size reduction by crushing plant outside the lease area before feeding to cement plant.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposed.	Topsoil is removed separately.	About 18,280 cum of topsoil is removed against the proposal of 84700 cum in the present plan period.
8b	Concurrent use or storage of topsoil	Proposed storage.	Utilized for plantation.	About 18,280 Cum topsoil was removed and entire quantity is utilized for plantation work 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	Not proposed.	Nil.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed.	Nil.	About 3.05Ha of old topsoil dump is reclaimed by planatation during the previous plan period.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Yes, information was given in the approved mining plan. Additionally lessee has planted about 3500 saplings . within the lease area during present plan period.	
8g	Survival rate	70%	65 to 70%	Lessee is monitoring the plantation by regular maintence and watering by deploying man power.
8h	Water sprinkling on roads to control airborne dust	Yes proposed.	Regularly sprying water on the working benches, haul road etc.	One water tanker of 10,000 ltr capacity is in use for dust supression.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Benches and haulage roads were maintained systematically. One water tanker is deployed for sprinking water in the working area and on the haulage roads. Plantation was made in the 7 .5 mtr safety zone and engaged manpower for monitoring plantation.	

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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 has submitted Annual returns for the year 2021-22 within the time limit and submitted monthly returns up to Aug 2022. However, submission of monthly returns for the month of oct, Dec-2021 and January and february 2022 were delayed by one day.	Violation is pointed out by this office for the same under Rule 45 (5) (b) (i) of MCDR 2017. So no fresh violation is issued. Lessee is regularly submitting monthly and annual returns.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer:- Shri T. Muralidhar, Geologist:- Shri B. Prithivi Raj, Manager:- Shri Chaitanya Nalamatta.	The details of Mining engineer, Geologist given in the annual returns are correct.	Lessee has 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 mining:- 34.040Ha, Exploited and anandoned by opencast working:- 0.88Ha, Old topsoil dump- 3.05Ha, Infrastructure :-0.4Ha.	The information given in the AR is found correct.	Lessee has shown old non working quarry pits as abandoned pits.
9d	Scrutiny of Annual return on afforestation	1550 saplings with surviaval rate of 70%.	The information furnished in the annual returns submitted for the year 2021-22 on aforestation is found correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	None.	No mineral reject was generated in the year 2021-22 and information furnished is correct.	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Opening and closing stock:- Nil, and production:- 81,275 T.	The details furnished in the AR submitted for the year 2021-22 is found correct.	Entire ROM has been sorted out under Cement grade and dispatched to cement plant linked to the mine for captive use.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price and cost of production:- Ex-mine price and cost of production is shown as Rs- 253.86/T	The details of Exmine price and cost of production given in the annual returns submitted for the year 2021-22. is found correct.	Since it is the captive mine and lessee is consuming entire ROM for captive consumption. Cost of production and exmine price will be same. Since materail was dispatched for cpative use sale value is shown as zero.
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset is shown as Rs 30833972	The details given in the returns is found correct.	
9k	Scrutiny of Annual return on mining machineries	Back Hoe- 01, Tippers-, Rock drill-, Air compressor-01.	The details furnished in the AR is found correct.	

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 :

(kalmata.M.K)

Indian Bureau of Mines