

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT 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 : **M029**) **MADHU SUDHAN YADAV M**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sri.Mallikarjun Reddy, Mines Manager, Sri.Chaitanya N
Official with
Designation
- (iv) Date of Inspection : 11/12/2020
- (v) Prev.inspection date : 13/11/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SANGAMKALAN NO. 1**
- (b) **Registration NO.** :
- (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 : **NIL**
- Phone : **46324**
- (f) **Police Station** : **Karankote**
- (g) **First opening date** : **15/10/1998**
- (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** : **03/09/2048**
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 : R.K.DAS
 DHUN BLDG 827,ANNASALAI
 CHENNAI CITY TAMIL NADU
 Phone: 04428521526
 FAX : 04428520638

Agent : K.SUBRAMANYAM
 MALKAPUR TANDUR MANDAL
 RANGAREDDY DISTRICT
 RANGAREDDY TELANGANA
 Phone: 08411-242302
 FAX :

Geologist

Name : N.JANARDHANREDDY, Full Time
 Qualification : M.SC. (GEOLOGY)
 Appointment/ : 26/04/2017
 Termination date

Manager

Name : T.S.GANESH RAO
 Qualification : AMIE,M.A,MBA
 Appointment/ : 02/07/2001
 Termination date

Manager

Name : A.SIVAKUMAR
 Qualification : B.TEC MININING
 Appointment/ : 26/04/2017
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	23/09/1998
Plan/Scheme of Mining	:	Fresh under rule 22 MCR1960	24/08/2000
	:	Modif.approved Mining Scheme	07/12/2003
	:	Mining Scheme rule 12 MCDR1988	07/03/2008
	:	Mining Scheme rule 12 MCDR1988	12/02/2014
	:	MP modif under 17(3) MCR 2016	02/02/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Not applicable	
1b	Exploration over lease area for geological axis 1 or 2	Nil	53 holes drilled from 1998-2018 to cover the entire mineralised area to G1 level of exploration.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Entire lease area is explored under G1 level of exploration.
1e	Balance reserve as on 01/04/20	----	Proved Reserves as on 01/04/2020 - 26.22 million Tonnes.	
1f	General remarks of inspecting officers on geology, exploration etc			Lease area is having a flat deposit with grey limestone on the top followed by siliceous limestone.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed working co-ordinates: S964 to S646 and W1272 to W1367 S944 to S674 and W1281 to W1341 S924 to S764 and W1257 to W1321 S1223 to S955 and W1137 to W1165	Work done within the proposed co-ordinates.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separated benches for topsoil and mineral is proposed.	The topsoil existing in the working area is not being excavated separately.	Violation issued as per rule.

2c	Stripping ratio or ore to OB ratio	Not applicable	Nil	No OB generated in the mining area.
2d	Quantity of topsoil generation in m3	2019-20 - 20000 cu.m	2019-20 - 7973 cu.m	
2e	Quantity of overburden generation in m3	Not applicable	Nil	No OB generated in the mining area.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			No OB is generated in the proposed mining area and the limestone is found just below the top soil horizon of around 1.5m thickness.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	2019-20 - 1000000 Te 2020-21 - 1000625 Te	2019-20 - 477944.93 Te 2020-21 - 64746 Te (Till Nov'20)	Lessee has reported that less production due to less market demand.
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	Nil	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Not applicable	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal	Nil	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting proposed in the mineral benches.	During inspection it was observed that Wagon drill being used for drilling with a blast hole dia of 115 mm & depth of 9 m, spacing of 5 meters and burden of 4 meters. Blasting with slurry and emulsion explosives with NONELS as initiating system.
3k	Provision of mining machineries in mineral benches	It was proposed to use wagon drills, exvators & dumpers for drilling, loading & transporting of ore to crushing plant.	During inspection, it was observed that wagon drills, dumpers & excavators are being used for drilling, loading & transportation of ore to crushing plant
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	It was proposed to maintain the bench height of 8-9 meters	During inspection it was noticed that the bench height is being maintained between 8-9 m and digging height of the excavators are compatible with bench height.
3m	Total area covered under excavation/pits	40.87 Ha till 2022-23.	33.24 Ha till 2019-20.
3n	Ore to OB ratio for the pit/mine during the year.	Not applicable	Nil
3o	Total area put in use under different heads at the end of year	46.49 Ha till 2022-23.	37.57 Ha till 2019-20.

3p	Production of ROM mineral during the last five year period as applicable	2015-16 -	2015-16 - 561976 tonnes
		1600000 tonnes	2016-17 - 553540 tonnes
		2016-17 -	2017-18 - 841570 tonnes
		1600000 tonnes	2018-19 - 631414 tonnes
		2017-18 -	2019-20 - 477995 tonnes
		1600000 tonnes	2020-21- 64473 tonnes
		2018-19 -	(till Nov'20)
		1000000 tonnes	
		2019-20 -	
		1000000 tonnes	
	2020-21-		
	1000625 tonnes		

3q	General remarks of inspecting officers on method of mining etc.	Mining is carried out in common lease boundary with Sangamkalan Limestone Mine-2, which is in northwest direction of the lease by obtaining permission from DGMS.
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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)	Top soil dumping is proposed. No proposal for OB and mineral reject.	Topsoil generated has been used for plantation.	
4b	Location of topsoil, OB and mineral reject dumps	S250 to S400 W1100 to W980	No topsoil dump is established as per proposal. Topsoil generated is utilised for plantation in the 7.5m safety zone along the lease boundary.	
4c	Number of dumps within lease area and outside of lease area	One	One	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Topsoil dump proposed outside the UPL.	Topsoil produced is utilised for plantation.	
4e	Number of active and alive dumps.	Nil	Nil	
4f	Number of dead dumps.	One	One	

4g	Number of dumps established.	One	One	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil	
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			Old dump of developed at the time of opening of mine is existing in the lease area.

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)	Proposed	Topsoil is being utilised as and when generated.	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The pit is not mined out upto its ultimate pit limit to start backfilling.

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).	To be submitted	Submitted	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha) .	2019-20 - 0.45 Ha 2020-21 - 0.45 Ha	2019-20 - 0.05 Ha 2020-21 - Nil	
6d	No. of saplings planted during the year	2019-20 - 500 Nos. 2020-21 - 500 Nos.	2019-20 - 500 Nos. 2020-21 - Nil	Violation issued for not carrying out plantation during the year 2020-21.
6e	Cumulative no .of plants	-----	122315 No.s	
6f	Any other method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch and care during the year	No proposal	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal	Nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No proposal	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposal	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposal	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly environmental monitoring of core and buffer zone.	Quarterly environmental monitoring carried out during 2019-20 and all the parameters are within the permissible limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No area of pit has reached its ultimate pit limit to start Reclamation and Rehabilitation and backfilling activities.

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 to be utilized directly for captive purpose, hence no grade wise sorting is proposed within the ML.	2019-20 - 477995 Te	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Nil	
7c	Different grade of mineral sorted out at mines.	No proposal	Nil	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No sub grade has been generated. Beneficiation is not required as the entire ROM mineral is utilised for captive plant.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Topsoil generated and utilised for plantation.	
8b	Concurrent use or storage of topsoil	Proposed	Topsoil used for plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	Nil	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 Nos. saplings over 0.45 Ha in the year 2019-20.	500 Nos. saplings over 0.05 Ha in the year 2019-20.	
8g	Survival rate	90%	75%	
8h	Water sprinkling on roads to control airborne dust	Water Tankers to be provided for dust suppression.	Water tanker is provided for dust suppression.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation is done in the 7.5m safety zone.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	To be submitted in time	Submitted in time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager - Sri.Mallikarjun Reddy Mining Engineer - Sri. Ragahavendra Geologist - Sri.Vinod Kumar	Manager - Sri.Mallikarjun Reddy Mining Engineer - Sri. Muralidhar Geologist - Sri.Vinod Kumar	Mining Engineer is not updated in the Annual Returns submitted. Instructed to carry out corrections in the returns.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	O/C workings - 33.24 Ha Plants, buildidings and roads - 0.4 Ha Top soil dump - 3.05 Ha	Same as submitted.	
9d	Scrutiny of Annual return on afforestation	500 Nos.	Broadly as submission and same quantity is verified in afforestation register maintained.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject generated in the mine.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production is reported as Rs.173.10/-	The details of DMF and NMET have not been furnished in the cost of production calculation.	Violation issued as per rule.
9h	Scrutiny of Annual return on fixed assets	The value of fixed assets reported by the lessee in annual returns is Rs.29743702/-	----	
9k	Scrutiny of Annual return on mining machineries	Drill machine - 01 No. Excavator - 02 Nos. Tippers - 05 Nos. Water Tanker - 01 No. Jeep- 01 No.	Machineries found in the mining 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
MCDR17	Rule 11(1)	22/12/2020			
MCDR17	Rule 31(1)	22/12/2020			
MCDR17	Rule 36(1)	22/12/2020			
MCDR17	Rule 45(7)(a)	22/12/2020			

Date :

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines