INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

Review and updation of Mining Plan REPORT

Hyderabad regional office

Mine file No : AP/CDP/L.ST-4/HYD

Mine code : 38APR04001

Name of the Inspecting : K007) SHAIVAL KARTIKEYA Officer and ID No.

(ii) Designation

: Senior Mining Geologist

(iii) Accompaning mine * : Shri M. Venugopal Reddy, Managar (Mines)

Designation

(iv) Date of Inspection : 03-DEC-21

(v) Prev.inspection date :

PART-I : GENERAL INFORMATION

(a) Mine Name : COROMANDAL

(b) Registration NO.

(c) Category : A Mechanised

(d) Type of Working : Opencast (e) Postal address

State : ANDHRA PRADESH District

: CUDDAPAH Village : CHILAMKUR Taluka : YERRAGUNTLA Post office : CHILAMKUR Pin Code

: 516310 FAX No.

: 08563-76155 E-mail : ccp_mines@indiacements.co..

Phone 08563-276152,276201

(f) Police Station :

(g) First opening date : 01-OCT-82

Weekly day of rest (h) : SUN

2. Address for : COROMANDAL LIMESTONE MINE correspondance M/S THE INDIA CEMENTS LTD

CHILAMKUR(PO) CUDDAPAH DT.

3. (a) Lease Number : APR0021

Lease area (b) : 601.96 (C)

Period of lease : 20

(d) Date of Expiry : 17-NOV-01

Mineral worked : LIMESTONE Main 5. Name and Address of the

THE INDIA CEMENTS LTD Lessee

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

: P MUNI REDDY

CHILAMKUR 516310 CUDDAPAH

ANDHRA PRADESH

Phone: FAX :

Mining Engineer

Sri L. SOMASEKHARREDDY, Full Time

Qualification :

B.E, (MINING) IInd CLASS MANAGER"CERTIFIC

04-AUG-11 Appointment/ :

Termination date

Manager

N.K.MITRA Name

Qualification : D.M.E. & FCMMC

Appointment/ : 31-AUG-01

Termination date

6. Date of approval of Mining Plan/Scheme of Mining

29-APR-92 : Existing rule 11 MCDR1988 24-NOV-98 Existing rule 11 MCDR1988 26-NOV-98 Existing rule 11 MCDR1988 Mining Scheme rule 12 MCDR1988 04-MAR-03 27-APR-07 Mining Scheme rule 12 MCDR1988 30-NOV-12 Mining Scheme rule 12 MCDR1988 Mining Scheme rule 12 MCDR1988 05-DEC-16 MP modif under 17(3) MCR 2016 20-JAN-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration:

Sl.No.	Item	Proposals	Actual work	Remarks
la	Backlog of previous year	F.Y. 2020-21: 23 nos. of core boreholes with cumulative depth 1163.0 meters. F.Y. 2021-22: 33 nos. of core boreholes with cumulative depth of 1035.0 meters.	F.Y. 2020-21: 23 nos. of core boreholes with cumulative depth 1243.0 meters. F.Y. 2021-22: 33 nos. of core boreholes with cumulative depth of 1459.0 meters.	20 to 2021-22 total 84 nos. of core boreholes have been drilled
1b	Exploration over lease area for geological axis 1 or 2	Proposed to convert 471.337 Ha. mining lease area in to G1 level during F.Y. 2019-20 to 2021-22.	471.337 Ha. mining lease area has been explored under G1 level.	-do-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not mentioned in the approved document.	M/s Natural Resources Indetification, Development and Management Consultancy Organizatioin, Hyderabad. Rs. 5679300.00 (F.Y. 2019-20 to 2021-22)	-do-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Total 471.337 Ha. in to G1 level.	Total 471.337 Ha. in to G1 level has been converted.	-do-

le Balance reserve as on 01/04/20

As on 01.04.2021:

As on 01.04.2021:

Average Grade of

30 011 017 017 20

Under (111):

Under (111): 127.900 Million Tonnes Under (122): 49.83 CaO: 45.95% SiO2: 12.73%

Million Tonnes

125.647

Under (122): 49.83 Million

Tonnes

Million Tonnes

MgO: 0.95%

Limestone:

of inspecting officers on geology, exploration etc

The limestone deposit is simple, tablubar, undisturbed stratigraphic horizon of the Jammaladugu Series of Kurnool System and is commonly known as Narji Limestone. Kurnool System is equivalent to Semri Series of the Vindhyan System and Narji limestone is roughly correlated to Kajarhat Limestone in the Sone Valley. The Limestone formation bears a general strike of NW-SE and gently dips at an angle of 1 degree to 5 degree towards NE.

Development :

Sl.No. Item

Propasals

Actual work

Remarks

Development and

development Mineral/Ore Mineral/Ore Production: Production has w.r.t.lease area Production: In In between local cobeen carried out between local ordinates in the proposed co-ordinates locations. No (i) North Block: N0191 major deviation (i) North to N1084 and E0249 to has been found. Block: N0191 E1312 to N1084 and E0249 to E1312 (ii) South Block: N1654 to N2028 and E610 to (ii) South E869 Block: N1654 to N2028 and Topsoil: E610 to E869 (i) North Block: N0145 to N0931 and E0964 to Topsoil: E1332 (i) North (ii) South Block: N1613 to N2036 and E0731 to Block: N0145 to N0931 and E0918 E0964 to E1332 (ii) South Block: N1613 to N2036 and E0731 to E0918 2b Separate benches Separate Separate benches of in topsoil. benching of Topsoil and Mineral/Ore overburden and Topsoil and have been developed and minerals (Rule Mineral/Ore maintained. 15) have been proposed Topsoil: 01 no. Topsoil: 01 Mineral/Ore: 04 nos. Mineral/Ore: 04 nos. Stripping ratio 2c 1:0.09 Not Applicable. No waste/OB/IB/SB or ore to OB has been generated ratio during F.Y. 2020-21. 2d Quantity of 132712.0 CuM 16653.0 CuM Less topsoil has topsoil been generated due generation in m3 to less production and development during F.Y. 2020-21.

F.Y. 2020-21: F.Y. 2020-21:

2a

Location of

2e Quantity of overburden generation in m3 generated

will be

during F.Y. 2020-21

No overburden No overburden has been generated during F.Y. 2020-21

2f General remarks of inspecting officers on development of pit w.r.t. type of deposit etc The development and production is being done through fully mechanized means. Consent to Operate is awaited for Limestone production capacity of 5.5 Million Tonnes Per Annum.

Gl Area: 548.423 Ha. and Non-mineralised: 53.714 Ha.

Exploitation:

		550 92V		D
Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	02 nos.	02 nos.	-
3b	Quantity of ROM mineral production proposed	F.Y. 2020-21: 3600000.00 Metric Tonnes	F.Y. 2020-21: 1347000.00Metric Tonnes	Less production due to no CTO for enhanced production capacity and lack of market demand.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No mineral reject will be generated during plan period.	No mineral reject has been generated during F.Y. 2020-21.	

3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	NIL	-
3f	Quantity of sub grade mineral generation.	No mineral sub-grade will be generated during plan period.	No mineral sub-grade has been generated during F.Y. 2020-21.	-
3g	Grade of sub grade mineral generation	No proposal	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 beneficiation study has been proposed during plan period.	Not applicable.	8
3ј	Provision of drilling and blasting in mineral benches	Mineral/Ore: Dia.: 115 mm Spacing: 6.0 m Burden: 4.0 m Depth: 8.0 m Explosive: ANFO	Mineral/Ore: Dia.: 115 mm Spacing: 6.0 m Burden: 4.0 m Depth: 8.0 m Explosive: ANFO	-

3k Provision of mining machineries in mineral benches

1. Hydraulic 1. Hydraulic Drill Drill Machine Machine 01 no. with 115 04 nos. with mm dia bit capacity. 115 mm dia bit 2. Air Compressor 01 capacity. nos. with 550 CFM 2. Air capacity. Compressor 02 3. Back Hoe 01 no. with nos. with 550 2.8 CuM bucket capacity. CFM capacity. 4. Dozer 01 no. with 212 3. Excavator/ H.P. capacity. Shovel 06 nos. 5. Dumpers 9 nos. with with 3.75 CuM 35.0 Tonnes (08 nos.) bucket and 40.0 Tonnes (01 no.) capacity. capacity. 4. Tippers 34 6. Explosive Van 01 no. nos. with 25.0 with 3.020 Tonnes (15 nos.) and capacity. 35.0 (19 nos.) 7. Excavator/ Shovel 03 Tonnes nos. with 3.70 CuM capacity. bucket capacity. 5. Dozer 01 8. Pump (Electric) 01 no. with 212 no. with 240 Liters/Min HP capacity. capacity. 6.Explosive 9. Water Tanker 01 nos. Van 01 no. with 10000 Liters with 10.0 capacity Tonnes capacity. 7. Water Tanker 03 nos. with 10000 Liters capacity. 8. Pay Loader 01 no. with 5.7 CuM bucket size. 9. Mobile Lighting Tower 05 nos. with 5 KW capacity.

31 Whether height Topsoil: 2.50 of benches in m to 3.50 m overburden and Mineral/Ore: mineral suitable 2.0 to 8.0 m for method of mining proposed in MP/SOM

3m Total area covered under

Topsoil: 2.50 Topsoil: 2.50 m to 3.50 m to 3.50 m m

Mineral/Ore: Mineral/Ore: 2.0 to 8.0 m m

131.35 Ha. up 114.10 Ha. up to end of to end of F.Y. F.Y. 2020-21 2021-22

mechanized means using conventional method of drilling

and blasting.

Ore to OB ratio 1: 0.22 Not Applicable. No waste/OB/IB/SB for the pit/mine has been generated during the year. during F.Y. 2020-21. Total area put Pit- 131.35 Pit- 114.100 Ha. in use under Ha. Waste/reject- 59.910 Ha. different heads Others- 7.62 Ha. Waste/rejectat the end of 68.42 Up to end of F.Y. 2020-Others- 16.18 21 year Ha. Up to end of F.Y. 2021-22 3p Production of Yr. 2016-17: Yr. 2016-17: 1504496.00 Metric Tonnes ROM mineral 1900001.00 during the last Metric Tonnes Yr. 2017-18: 1465350.00 five year period Yr. 2017-18: Metric Tonnes as applicable 1999940.00 Yr. 2018-19: 1865000.00 Metric Tonnes Metric Tonnes Yr. 2018-19: Yr. 2019-20: 1527900.00 1998320.00 Metric Tonnes Metric Tonnes Yr. 2020-21: 1347000.00 Yr. 2019-20: Metric Tonnes 1997774.00 Metric Tonnes Yr. 2020-21: 3600000.00 Metric Tonnes 3 q General remarks Mining is being of inspecting carried out officers on through the method of mining opencast method with fully etc.

Solid Waste Management - Dumping:

Sl.No. Item Propasals Actual work Remarks

4a of topsoil, OB and mineral rejects (Rule 32,33)

document for separate stacking of topsoil in the earmarked locations

within lease area. Mainly over nonmineralized

Separate dumping Proposal has Stacking of Topsoil is been given in being done in the the approved earmarked locations within mining lease area. Mainly over nonmineralized area.

Location of topsoil, OB and mineral reject dumps

4b

Topsoil: Within local co-ordinates:

area.

E0982

Topsoil: Within local co-ordinates:

North Block: in between N1289 to N1382

N1289 to N1382 and E0832 to E0982

and E0832 to South Block: N0221 to N0382 and E0027 to E0205

North Block: in between

South Block: N0221 to N0382 and E0027 to E0205 With maximum height of 7.0 m.

4c Number of dumps within lease area and outside of lease area

Within lease area:

Within lease area:

nos. of temporary dumps. South Block: 9

nos. of temporary dumps.

North Block: 6 nos. of North Block: 6 temporary dumps. South Block: 9 nos. of temporary dumps.

4d Location of dumps w.r.t. ultimate pit limit (Rule 16)

F.Y. 2021: North Block: Proposed temporary

dumping within ultimate pit limit.

F.Y. 2021: North Block: Dumping has been done within ultimate pit limit.

South Block: Dumping has been done over nonmineralized area. Beyond ultimate pit limit.

nonmineralized area. Beyond ultimate pit limit.

South Block:

Proposed over

Number of active 02 nos. and alive dumps.

02 nos.

4f Number of dead dumps.

4e

Temporary topsoil dumps

temporary dumps.

Temporary topsoil dumps

North Block: 6 temporary dumps. nos. of temporary dumps. South Block: 9 nos. of

North Block: 6 nos. of South Block: 9 nos. of temporary dumps.

Topsoil will be utilized for ground restoration of the ground during conceptual stage.

4a Number of dumps No proposal. NIL established.

Whether 4h Retaining wall or garland drain the approved all along dumps are there.

Proposal has Partly constructed. been given in document for of

Toe/Retaining

Wall: 2000.0 m to arrest spill out/soil erosion at northern part of South Block in between local co-

Garland Drain: 100.0 m

along lease boundary at construction northern part of South Block.

Garland Drain: Retaining Wall: 150.0 m All along the along lease boundary at stacking area. northern part of South Block.

Deviation has bee pointed out.

Revised proposal has been incorporated in the Review of Mining Plan.

Construction of Garland Drain and Toe/Retaining Wal is under progress

ordinates (i) N0817 to N1529 and E0052 to E1903 (ii) S0205 to S0244 and E1337 to E1648.

Length of Retaining wall all along dumps

4i

Garland Drain: Garland Drain: 100.0 m All along the along lease boundary at or garland drain stacking area. northern part of South Block.

> Toe/Retaining Wall: 2000.0 m Retaining Wall: 150.0 m along lease boundary at to arrest spill out/soil northern part of South Block. erosion at northern part of South Block in between local coordinates (i) NO817 to N1529 and E0052 to E1903 (ii) S0205 to S0244 and E1337 to E1648.

-do-

4j Number of No proposal. 01 no. of settling pond has been constructed at northern part of the South Block.

4k Specific comments of

4k Specific comments of inspecting officer on waste dump management

No overburden and waste have been generated during F.Y. 2020-21.

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 during F.Y. 2020-21.	NIL, Area not matured for the reclamation and the rehabilitation.	ATT.
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)	No Proposal	NIL	
5d	Total area fully reclaimed and rehabilitated	No Proposal	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			NIL

Progressive Mine Clousre Plan:

			A SALES OF THE SAL		
Sl.No.	Item	Propasals	Actual work	Remarks	

6а	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Submitted before due date.	Information has been cross verified during inspection.	NIL
6b	Area available for rehabilitation (ha) .	No Proposal	NIL	-
6c	afforestation done (ha).	No Proposal	NIL	_
6d	No. of saplings planted during the year	No Proposal	NIL	-
6e	Cumulative no .of plants	No Proposal	NIL	-
6f	Any other method of rehabilitation	No Proposal	NIL	7
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) Afforestati on on backfilled area	No Proposal	NIL	-

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	NIL	
61	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	1000 nos.	1200 nos.	-
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	1.0 Ha.	0.50 Ha.	
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	By plantation	By plantation	-
6p	Compliance of environmental monitoring (core zone and buffer zone)			All the parameters are within the permissible limits.
		buffer zone.		
6q	General remarks of inspecting officers on PMCP			NIL

compliance and progressive

operations etc.

closure

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal.	ROM mineral is being directly dispatched to the crusher erected adjacent to the lease boundary. No grade wise sorting has been done.	Average grade of Limestone with 44% to 46% Cao has been dispatched to the captive plant.
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	No proposal	-do-	-do-
7c	Different grade of mineral sorted out at mines.	No proposal	-do-	-do-
7d	Any beneficiation process at mines	No proposal	NIL	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			In view of the Mineral conservation, the entire produced Limestone with 34% CaO and above is being utilized in the Captive Cement Plant.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks	

8a of topsoil (Rule of topsoil 32)

Separate removal F.Y. 2020-21: F.Y. 2020-21: 16653.0 and utilization 132712.0 CuM CuM of topsoil has been stacked in

will be stacked in

North Block: In between local co-ordinates N1289 North Block: to N1382 and E0832 to

In between local co-

E0982

ordinates and E0832 to

South Block: In between N1289 to N1382 local co-ordinates N0221 to N0382 and E0027 to

E0982

E0205

South Block: In between local coordinates N0221 to N0382 and E0027 to E0205 With maximum height of 7.0 m.

8b Concurrent use or storage of topsoil

over 53.714 Ha. nonmineralised

area.

Topsoil will Topsoil has been be utilized utilized for plantation for plantation over 53.714 Ha. nonmineralised area.

8c Separate dumps for overburden, waste rock, rejects and fines (Rule 33)

132712.0 CuM of topsoil will be

stacked in

F.Y. 2020-21: F.Y. 2020-21: 16653.0 CuM of topsoil has been stacked in

North Block: In between local coNorth Block: In between local co-ordinates N1289 to N1382 and E0832 to E0982

ordinates and E0832 to E0982

South Block: In between N1289 to N1382 local co-ordinates N0221 to N0382 and E0027 to

E0205

South Block: In between local coordinates N0221 to N0382 and E0027 to E0205 With maximum height of 7.0 m.

8d Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use

8e

Topsoil will be utilized over 53.714 Ha. nonmineralised

area.

Topsoil has been utilized for plantation for plantation over 53.714 Ha. nonmineralised area.

Phased restoration, rehabilitation of lands affected by mining operations (Pits, dumps etc)

1.0 Ha. area at 7.5 m and zone along mining lease boundary of South Block will be by 1000 nos. of plants.

0.50 Ha. area at 7.5 m and 105.0 m buffer zone reclamation and 105.0 m buffer along mining lease boundary of South Block has been rehabilitated by 1200 nos. of plants.

> In between local corehabilitated ordinates: N1353 to N1649 and W0641 to W0588

In between local coordinates: N1353 to N1649 and W0641 to W0588

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	sapling will be plated over 1.0 Ha. at 7.5	1200 nos. of saplings have been plated over 0.50 Ha. area at 7.5 m and 105.0 m buffer zone along lease boundary.	=
8g	Survival rate	Not mentioned in the approved document.	Approx 90%	-
8h	Water sprinkling on roads to control airborne dust	been given in	Being done as per proposal.	* - .
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			NIL

Compliance of Rule 45:

S1.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	up to November	A.R. Submitted up to	NIL

9b Scrutiny of Manager: Shri Manager: Shri M. NIL Annual return M. Venugopal Venugopal Reddy for information Reddy on Mining Mining Engineer: Shri L. Engineer, Mining Somasekhar Reddy Geologist and Engineer: Shri L. Somasekhar Geologist: Shri M. Nanta Manager Reddy Kumar Geologist: Shri M. Nanta Kumar 9c Scrutiny of Pit- 114.100 Pit- 114.100 Ha. NIL Annual return on Ha. Waste/reject- 59.910 Ha. land use pattern Waste/reject- Others- 7.62 Ha. for area under 59.910 Ha. pits, reclaimed Others- 7.62 area, dumps etc. Ha. 9d Scrutiny of Within Lease Within Lease Area: 1200 NII. Annual return on Area: 1200 nos. with 90% Survival nos. with 90% rate. afforestation Survival rate. Outside Lease Area: NIL Outside Lease Area: NIL 9e Scrutiny of Mineral Mineral Reject: NIL No mineral reject Annual return on Reject: NIL Grade: NIL has been generated Grade: NIL mineral reject during F.Y. 2020generation (Grade and Incorrect grade of quantity) mineral reject has been mentioned. Deviation has been pointed out. 9f Scrutiny of Closing Stock Closing Stock NIL Annual return on ROM stock and/or ROM: NIL ROM: NIL graded ore Graded Ore: Graded Ore: 56300.00 56300.00 Metric Tonnes Metric Tonnes

9g	Scrutiny of Annual return on		Sale Value: NIL	NIL
	sale value, Ex.		Ex Mine Price: Rs.	
	Mine price and production cost		211.94 Per Metric Tonne	
		Metric Tonne	Cost of Production: Rs. 211.94 Per Metric Tonne	
		Cost of Production: Rs. 211.94 Per Metric Tonne		
9h	Scrutiny of Annual return on fixed assets		Rs. 2400343642 /-	NIL
9 k	Annual return on		Cross verified from the field logbooks	NIL

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. _ A Issued on Compliance on

(SHAIVAL KARTIKEYA)

Indian Bureau of Mines

Date :