

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

Review and updation of Mining Plan REPORT

Hyderabad regional office

Mine file No : AP/KSN/LST-15/HYD

Mine code : 38APR10015

- (i) Name of the Inspecting : **M001**) **S K MUDULI**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Sri Jani Reddy, Rep. of Lessee
Official with
Designation
- (iv) Date of Inspection : 22/11/2019
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JAYANTHIPURAM MS NO 71**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ANDHRA PRADESH
- District : KRISHNA
- Village : JAYANTHIPURAM
- Taluka : JAGGAYYAPET
- Post office : KUMARASWAMYRAJA NAGAR
- Pin Code : 521457
- FAX No. : 08654-222532
- E-mail : mcljpm@madrascements.co.in
- Phone : 08654-224400 to 09
- (f) Police Station : CHILLAKALLU
- (g) First opening date : 16/05/1986
- (h) Weekly day of rest : SUN
2. Address for : JAYANTIPURAM LIMESTONE MINE
correspondance : JAYANTIPURAM, CHILLAKALLU (M)
KRISHNA DIST.
3. (a) Lease Number : APR0125
- (b) Lease area : 18.64
- (c) Period of lease : 20
- (d) Date of Expiry : 19/08/2011
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : THE RAMCO CEMENTS LTD
KUMARASWAMY RAJANAGAR
JAGGAYAPET MANDAL KRISHNA
ANDHRA PRADESH
Phone:08654-224400
FAX :08654-222532

Owner : P.R.VENKATRAMA RAJA
AURAS CORPORATE CENTRE, Vth
FLOOR, Dr.RADHAKRISHNA
ROAD,MYLAPORE, CHENNAI
CHENNAI CITY TAMIL NADU
Phone: 044-28478666
FAX : 044-28478676

Agent : P JANI REDDY
KUMARASWAMY .RAJA.NAGAR,
JAYATNTHIPURAM KRISHNA
DISTRICT KRISHNA ANDHRA
PRADESH
Phone: 08654-224400
FAX : 08654-222532

Mining Engineer

Name : KHAJA ASHRAF ALI,Full Time
Qualification : B.E(Mining)
Appointment/ : 01/08/2017
Termination date

Geologist

Name : P.SURYANARAYANA MURTHY,Full Time
Qualification : M.Sc
Appointment/ : 11/06/1992
Termination date

Manager

Name : S.VENKATESWARA REDDY
Qualification : FCC
Appointment/ : 01/08/2017
Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	13/05/2002
Plan/Scheme of Mining		Modif.of approved Mining Plan	18/06/2003
		Renewal under rule 24 MCR1960	07/04/2006
		Modif.approved Mining Scheme	17/10/2014
		MP modif under 17(3) MCR 2016	22/09/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There was no proposal for exploration during 2018-19	No exploration carried out during 2018-19	-
1b	Exploration over lease area for geological axis 1 or 2	None	None	G1 area 156.54 Ha. and the remaining area is non mineralized area
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None	None	None
1d	Balance area to be explored to bring Geological axis in 1 or 2	None	None	None
1e	Balance reserve as on 01/04/20	---	36.34 Million tonnes	-
1f	General remarks of inspecting officers on geology, exploration etc	-	-	The total potentially mineralised area is covered under G1 scale of exploration. The lease area is slightly undulating with dip of 12-15 degrees.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	It was proposed to work between E405600-N1866100 and E406200 and N1865700 for pit-1 and E404800-N186630 and E405200-N186200 for pit-2. 1st and 2nd Bench	It was observed that the development of mine is as per the proposals submitted in the approved mining plan.	-

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB were proposed with a height of 8 meters	Two benches in OB with a height of 8 meters observed during inspection.	3 no's of Benches Over Burden and 3 no's of Benches Limestone
2c	Stripping ratio or ore to OB ratio	1:0.47(01.04.2018 to 31.08.2018) 1:0.83(01.09.2018 to 31.03.2019)	1:0.35 (For Period 01.04.2018 to 31.08.2018) 1:0.69 (For Period 01.09.2018 to 31.03.2019)	
2d	Quantity of topsoil generation in m3	No proposal was there in 2018-19.	No topsoil was generated during the year 2018-19	-
2e	Quantity of overburden generation in m3	639362 m3	375970 m3	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	The Mining operations are being carried out by way of opencast, fully mechanised method. There are two pits.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	It was proposed to work in one pit	During the inspection it was observed that excavation is being carried out in single pit only	
3b	Quantity of ROM mineral production proposed	1875300 tonnes	1778440 tonnes	-
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	Captive Consumption
3d	Quantity of mineral reject generation	62900cu.m 157250 tonnes	26956 m3 67390 tonnes	
3e	Grade of mineral rejects generation and threshold value declared.	Above 18% SiO2/ CaO% between 34% to 41% SiO2% below 18%.	Threshold Value Declare- CaO%>34% and MgO%<5% Above 18% SiO2 Below 40% CaO	

3f	Quantity of sub grade mineral generation.	Not applicable	Not applicable	
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	-
3h	Manual / Mechanised method adopted for segregating from ROM	No segregation of ore is required. Hence, not proposed.	Not applicable	Not carried out
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	-
3j	Provision of drilling and blasting in mineral benches	115 mm dia crawler mounted drilling machine, Spacing=4 m. Burden=3 m. Depth=8 m.	During the inspection the same was observed.	
3k	Provision of mining machineries in mineral benches	Type of Machinery Capacity of each unit Backhoe Excavators 2.0 Cu.m Tippers 20 MT Cabin Drills 115 mm dia., 550 cfm (air compressor) Bull Dozer 320HP Water ranker 10 KL Jeep ---	Type of Machinery Capacity of each unit Backhoe Excavators 2.0 Cu.m Tippers 20 MT Cabin Drills 115 mm dia., 550 cfm (air compressor) Bull Dozer 320HP Water ranker 10 KL Jeep ---	During the 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 meters	During the inspection it was noticed that the bench height is being maintained below 8 m and digging height of the excavators are compatible with bench height as per MMR, 1961	-
3m	Total area covered under excavation/pits	90.88 Ha.	90.50Ha.	

3n	Ore to OB ratio for the pit/mine during the year.	1:0.47(01.04.2018 to 31.08.2018) 1:0.83(01.09.2018 to 31.03.2019)	1:0.35 (For Period 01.04.2018 to 31.08.2018) 1:0.69 (For Period 01.09.2018 to 31.03.2019)	-
3o	Total area put in use under different heads at the end of year	161.85 Ha.	160.97 Ha.	-
3p	Production of ROM mineral during the last five year period as applicable	2014-15 - 1.40 million tonnes 2015-16 - 1.39 million tonnes 2016-17 - 1.34 million tonnes 2017-18 - 1.41 million tonnes 2018-19 - 1.87 million tonnes	2014-15 - 0.85 million tonnes 2015-16 - 0.63 million tonnes 2016-17 - 0.79 million tonnes 2017-18 - 1.40 million tonnes 2018-19 - 1.77 million tonnes	-
3q	General remarks of inspecting officers on method of mining etc.	-	-	There is no deviation in the production of mineral during the year 2018-19. Mechanised opencast mining method has been adopted with deep hole drilling and blasting techniques for ore fragmentation. For loading & haulage, Hydraulic excavators, backhoe & dumpers are being used.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate waste dumps are proposed	OB and Mineral Reject dumps are maintained separately	-

4b	Location of topsoil, OB and mineral reject dumps	OB Dump-1: E405400 to E405800 & N1866100 to N1865700 OB Dump-2: E 406400 to E406900 and N1864900 to N1865500 OB Dump-3 : E405400 to E405900 and N1866100 to N1865700 Mineral Reject dump-4 : E406100 to E406400 and N1865350 to N1865650	Three active and one inactive dumps were observed during the inspection. The passive dump was stabilised with plantation.	Dump-1: E405400 to E405800 & N1866100 to N1865700 (Being Rehandled) Dump-2: E 406400 to E406900 and N1864900 to N1865500 Dump-3 : E405400 to E405900 and N1866100 to N1865700 Mineral Reject dump-4 : E406100 to E406400 and N1865350 to N1865650
4c	Number of dumps within lease area and outside of lease area	4 dumps within lease area	4 dumps within lease area	No dumps are there in outside ML area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side the UPL	Out side the UPL	-
4e	Number of active and alive dumps.	3 active and 01 inactive	3 active and 01 inactive	-
4f	Number of dead dumps.	01	01	-
4g	Number of dumps established.	1	1	-
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Retaining wall was constructed	-
4i	Length of Retaining wall or garland drain all along dumps	3600 m x 2 x 1.5 m (Retaining Wall)	3838 x 2 x 1.5m (Retaining Wall) 2657m*2m*1.5m (Garland Drain)	-
4j	Number of settling ponds	None	None	-
4k	Specific comments of inspecting officer on waste dump management	-	-	One inactive dump was established.

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.	it was proposed to backfill the mined out area during the year 2018-19.it was proposed to backfill 0.68 ha.	1 ha was backfilled during 2018-19	-
5b	Area under backfilling of mined out area	0.68 ha proposed for backfilling during 2018-19.	1 ha partially backfilled during 2018-19	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	The OB generated is proposed to be used in backfiling	The same was observed during the inspection.	-
5d	Total area fully reclaimed and rehabilitated	--	Till 31.3.2019 a total of 12.91 ha has been partially backfilled.	Earlier 3.40ha. has been back filled followed by Plantation
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	About 12.91 ha has been partially backfiled over the area.

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).	It was proposed to submit all the statutory returns on time.	Submitted in time	-
6b	Area available for rehabilitation (ha) .	—	1.00Ha area partially backfilled from 35 RL to 45RL and 35RL to 15 RL	
6c	afforestation done (ha).	0.70Ha	1.63Ha	Plantation done at other virgin area

6d	No. of saplings planted during the year	1000 (2018-19)	1780 (2018-19)	-
6e	Cumulative no .of plants	--	140067 Nos	Survival 118790 nos as reported.
6f	Any other method of rehabilitation	Not proposed	Nil	-
6g	Cost incurred on watch and care during the year	---	Rs.2,71,000/-	Included Labour. Water, Saplings cost and Maintenance
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	---	105m X 65m X 15m	--
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable	Not applicable	---
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	---	---	Appx. Back filled Ad -Level 35 RL to 45RL and 35 RL to 15 RL
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)	It was proposed to carry out environmental monitoring in core and buffer zone every quarter.	Quarterly monitoring of the environmental parameters such as Air/Noise/Water etc. are being carried out regularly and all the parameters are within the permissible limits.	An expenditure of Rs.4,75,000/- incurred during 2018-19
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	The proposal made in the PMCP for plantation and environmental monitoring are being carried out regularly.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	There was no proposal for gradewise sorting within lease area.	Total ROM being consumed in the captive plant of lessee.	-
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	-	-	As on date of inspection beneficiation is not warranted.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There is no generation of topsoil. So no proposal was made.	Nil	-
8b	Concurrent use or storage of topsoil	No proposal.	Nil	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping for waste rock and Mineral reject proposed.	Separate dumping being carried out	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	It was proposed to use the OB generated for backfilling	The OB generated is being used for backfilling the mine out area	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	0.68 ha during 2018-19	1.00 ha of partially backfilling during 2018-19 was carried out.	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	It was proposed to plant about 1000 saplings during the year 2018-19	Besides, plantation done by lessee, few shrubs are observed in the mining lease area. During the year about 1780 saplings were planted by the lessee.	-
8g	Survival rate	85%	85%	-

8h	Water sprinkling on roads to control airborne dust	It was proposed to carry out control of dust generation by using water sprinklers	One mobile water sprinkler and permanent water sprinklers is deployed for dust suppression on haul roads	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Separate OB dumps are proposed and phase wise reclamation is being carried out. For dust suppression water sprinkling carried out.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	To be submitted timely.	In timely submitted	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	--	As per the Annual return 2018-19, it was ereported that Sri p Vidya Kiran is the Mining Engineer and Sri P Suryanarayana Murthy is the Geologist.	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	---	Covered under current workings: 90.50Ha. Used waste disposal: 36.61Ha. Occupied by Plants and buildings &Roads:20.63Ha. Others(GBD) :63.82 Ha.	-
9d	Scrutiny of Annual return on afforestation	1780 Nos of plants	1780 Nos of plants	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	104625MT	104625MT (41850 m3)	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	-	As per the Annual return 2018-19 the total ROM was reported as 1.77 Million tonnes	-

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production Cost-Rs 184.07 Ex Mine Price: Rs.184.07	Production Cost-Rs 184.07 Ex Mine Price: Rs.184.07	-
9h	Scrutiny of Annual return on fixed assets	—	As per annual return 2018-19 the value of fixed assets reported was Rs.200202638.00.	-
9k	Scrutiny of Annual return on mining machineries	--	Hydraulic Shovel - 3 No.s Dozer - HP 1No.s Air compressor - 12.75 Cu.meters -1 water tanker - 10000 litre- 1 no. Wagon drill- 115mm dia - 1 no. Backhoe 2.10 cum-3 no.s Dumpers-10 no.s	

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 :

(S K MUDULI)

Indian Bureau of Mines