

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/CTD/LST/24/BNG

Mine code : 38KAR07027

- (i) Name of the Inspecting : **257**) **Prashant S Hegde**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Sri Nagamalleswara Rao, AGM and other mine officials
Official with
Designation
- (iv) Date of Inspection : 17/12/2019
- (v) Prev.inspection date : 17/07/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MATHOD (M.L.2342)**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : KARNATAKA
- District : CHITRADURGA
- Village : MATHODU
- Taluka : HOSADURGA
- Post office : MATHOD
- Pin Code : 577533
- FAX No. : 08199-240314
- E-mail : mathod_mines@ramcocements.co
- Phone : 08199-240111/112
- (f) Police Station : SRIRAMPURA
- (g) First opening date : 07/10/1987
- (h) Weekly day of rest : SUN
2. Address for : The Ramco Cements Limited,
correspondance : Method works Hosadurga Taluk,
Chitradurga Dist, Karnataka-577533
3. (a) Lease Number : KAR1103
- (b) Lease area : 388.5
- (c) Period of lease : 20
- (d) Date of Expiry : 06/05/2003
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : THE RAMCO CEMENTS LIMITED
 "Auras Corporate Centre",
 Dr. Radhakrishna Salai,
 Mylapore, CHENNAI CITY
 TAMIL NADU
 Phone:044-28478666
 FAX :+91 4428478676

Owner : P.R.Venketrama Raja,
 The Ramco Cements Limited,
 Auras Corporate Centre",
 Dr. RadhakrishnaSalai,
 Mylapore, CHENNAI CITY
 TAMIL NADU
 Phone: 044-28478666, 0
 FAX : 044-28478676 (

Agent : SVRK Murthy Rao
 The Ramco Cements Limited
 Mathod Works, Tq-Hosadurga
 CHITRADURGA KARNATAKA
 Phone: 08199-240111
 FAX : 08199-240314

Mining Engineer

Name : Thayaraj M.P,Full Time
 Qualification : BE - Mining
 Appointment/ : 16/04/2013
 Termination date

Manager

Name : SRI NAMA NAGAMALLESWAR RAO
 Qualification : Diploma in Mining Engg,First Class Mines
 Appointment/ : 01/08/2017
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	13/08/2004
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	10/04/2007
		Modif.approved Mining Scheme	11/11/2009
		Mining Scheme rule 12 MCDR1988	08/03/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	NIL	G1: 17.44 Ha	Entire potentially mineralised area of 17.44 Ha covered under G-1.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NIL	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	Entire potentially mineralised area of 17.44 Ha covered under G-1.
1e	Balance reserve as on 01/04/20	-----	2. 17 million tonnes as on 1/4/2019 (Grade: CaO:35 to 46 % and MgO:<6 %)	Based on last approved SOM dated 8/3/2016.
1f	General remarks of inspecting officers on geology, exploration etc	-----	-----	23 nos of core BHs with total meterage of 1579 drilled so far. Additional 3 nos of core BHs proposed during year 2020-21 to ascertain the depth and continuity of eastern side limestone Band-III.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Band-I: N-1521210 to 1521450 & E-654338 to 654523 and Band III: N-1520940 to 1521560 & E-655866 to 656161	Carried out only in Band-I as per the proposals.	Mining operation was temp. discontinued w.e.f. 31/10/2018 due to un-economic and stoppage of plant.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in O/B and mineral.	Separate benches in O/B and mineral as per the proposals	NIL
2c	Stripping ratio or ore to OB ratio	1: 5.10	1: 69	Mining operation was temp. discontinued w.e.f. 31/10/2018 due to un-economic and stoppage of captive plant.
2d	Quantity of topsoil generation in m3	NIL	NIL	NIL
2e	Quantity of overburden generation in m3	326,855	13,839	BD: 2.5
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-----	-----	Mining operation was temp. discontinued w.e.f. 31/10/2018 due to un-economic and stoppage of their captive plant. Further, corner BPs were well maintained at the time of inspection.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two nos (Band-I and Band-III pits)	One pit only (Band-I pit)	Due to stoppage of mining operation.
3b	Quantity of ROM mineral production proposed	154,620	500 tones	Due to stoppage of captive plant.
3c	Recovery of sailable/usable mineral from ROM production	80 %	80 %	NIL
3d	Quantity of mineral reject generation	38,655 tonnes	NIL	Non-working.
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NIL	20 % of generation of mineral rejects was below threshold value i.e. > 6 % MgO

3f	Quantity of sub grade mineral generation.	NIL	NIL	NIL
3g	Grade of sub grade mineral generation	NA	NA	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	Drilling and basting proposed (Blast hole depth 8.8 m: Burden: 2 m and spacing 3.5 m)	Carried out as the proposals.	NIL
3k	Provision of mining machineries in mineral benches	Yes, Excavator and tippers.	As per the proposals.	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height: 8m Bench width: 10 m	Carried out as per the proposals.	NIL
3m	Total area covered under excavation/pits	15.64 Ha	14.30 Ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1: 5.10	1 : 69	Mining operation was temp. discontinued w.e.f. 31/10/2018 .
3o	Total area put in use under different heads at the end of year	Pit: 15.64 Ha Dumps: 30 Ha Road and Infra: 1.6 Ha	Pits: 14.30 Ha Dumps: 25.10 Ha Road and Infra: 1.6 Ha	NIL

3p	Production of ROM mineral during the last five year period as applicable	2014-15: 145,723 2015-16: 148,108 2016-17: 151,352 2017-18: 136,620 2018-19: 154,620	2014-15: 35,400 2015-16: 76,450 2016-17: 49,800 2017-18: 23,423 2018-19: 500	Unit: in tonnes
3q	General remarks of inspecting officers on method of mining etc.	-----	-----	Mining/ method of mining was carried out as per the proposals. Mining operation was temp. discontinued w.e.f. 31/10/2018 due to un-economic and stoppage of their captive plant.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB proposed	Carried out as per the proposals.	No top soil generation.
4b	Location of topsoil, OB and mineral reject dumps	Pit/Band-I waste on western side of Band-I: N-1520850-1520960 & E-653824-654115; Pit/Band-III waste on Band no. II: N-1521137-1521366 & E-655084-655277;	Carried on western side Band-I only as per proposals.	Operation of only one pit (Band-I) during year 2018-19.
4c	Number of dumps within lease area and outside of lease area	6 nos of dumps within ML NIL outside ML.	6 nos of dumps within ML NIL outside ML.	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL.	Outside the UPL.	NIL
4e	Number of active and alive dumps.	2 nos	2 nos	NIL

4f	Number of dead dumps.	4 nos	4 nos	NIL
4g	Number of dumps established.	4 nos	4 nos	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes, proposed.	Carried out as per the proposals.	NIL.
4i	Length of Retaining wall or garland drain all along dumps	50 m retaining wall and garland drain.	60 m retaining wall and garland drain.	NIL
4j	Number of settling ponds	one	one	NIL
4k	Specific comments of inspecting officer on waste dump management	-----	-----	Waste dump management is being carried out as per the approved proposals.

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.	NIL	NIL	Existing pits were not matured for back-filling as ore not exhausted so far.
5b	Area under backfilling of mined out area	NIL	NIL	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NIL	NIL
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-----	-----	Existing pits were not matured for back-filling as ore not exhausted so far.

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	1 st July of every year	submitted	NIL
6b	Area available for rehabilitation (ha) .	NIL	NIL	NIL
6c	afforestation done (ha).	NIL	NIL	Pits were not matured.
6d	No. of saplings planted during the year	NIL	NIL	NIL on dumps and pits.
6e	Cumulative no .of plants	NIL	NIL	NIL
6f	Any other method of rehabilitation	NIL	NIL	NIL
6g	Cost incurred on watch and care during the year	NA	1.36 lakhs	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL	Existing pits were not matured for back-filling as ore not exhausted so far.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NIL	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	NIL

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	750 nos of saplings	1000 nos of saplings	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.28 Ha	0.35 Ha	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation.	Afforestation.	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Season-wise environmental monitoring proposed.	Season-wise environmental monitoring was carried out and all parameter were within the limit.	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-----	-----	PMCP implementation is being carried out as the approved proposals.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM from mine will be transported through tippers to their crusher located at the plant premise.	Carried out as per the proposals.	Presently, 0.3 million tonnes clinker capacity cement plant was stopped due to un-economic.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	NIL

7c	Different grade of mineral sorted out at mines.	NIL	NIL	NIL
7d	Any beneficiation process at mines .	NIL	NIL	Only crushing and screening plant (100 TPH) at plant premises.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-----	-----	There is no mineral conservation issue as ore above threshold value was utilised.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NIL	NIL	No such proposals during year 2018-19.
8b	Concurrent use or storage of topsoil	NIL	NIL	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of OB waste proposed	Carried out as per the proposals.	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NIL	NIL	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	NIL	Pits were not matured for back-filling as ore not exhausted so far.

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	750 nos of saplings during year 2018-19	1000 nos of saplings during year 2018-19	7500 nos cum. saplings on wasteland.
8g	Survival rate	NA	70 %	NIL
8h	Water sprinkling on roads to control airborne dust	Proposed.	Water tanker provided to control airborne dust.	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-----	-----	Aesthetic beauty in and around mines area was good and the lessee had carried out afforestation and environmental protective measures as per the proposals.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	-----	Submission of ARs and MRs are regular.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Shri Nama Nagamalleswara rao Mining Engineer: Shri Thayaraj M.P Geologist: Shri Praveen Kulkarni	Manager: Shri Nama Nagamalleswararao Mining Engineer: Shri Thayaraj M.P Geologist: None	Non-working mine.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pits: 14.3 Ha Dumps: 25.1 Ha Road & Infra: 1.6 Ha Green-belt and environ. protective measures: 3.12 Ha	Actual also same.	NIL

9d	Scrutiny of Annual return on afforestation	750 nos within ML 200 nos outside ML	Actual also same.	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	Actual also same.	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock: NIL Ore stock: 5156 tonnes	Actual also same.	NIL.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex.mine price per tonnes of ore: Rs 518.31 Cost of production per tonne: Rs 733.92	The unit cost of production shall be ex-mine price, in case of captive mine.	Letter issued on 2/1/2020 for correction as non-working mine.
9h	Scrutiny of Annual return on fixed assets	Rs 19,42,385	Actual also appear to be same.	NIL
9k	Scrutiny of Annual return on mining machineries	BACK HOE (1.000 CUM) : 1nos AIR COMPRESSOR: 1 nos TIPPER (10.000 CUM) : 3 nos BLAST HOLE DRILL(115.000 MM) : 1 nos DOZER: 1nos	Actual also same.	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.	Issued on Compliance on

Date :

(Prashant S Hegde)

Indian Bureau of Mines