

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

MCDR inspection REPORT

Goa regional office

Mine file No : KNT/BJP.LST-65/GOA

Mine code : 38KAR26045

- (i) Name of the Inspecting : **K03**) **G. S. KANNAN**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Shri.S.R.Mathad, Lessee
Official with
Designation
- (iv) Date of Inspection : 17-OCT-18
- (v) Prev.inspection date : 25-APR-14

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **LOKAPUR (9 AC 5 GU)ML2405**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : KARNATAKA
District : BAGALKOT
Village : LOKAPUR
Taluka : MUDHOL
Post office : LOKAPUR
Pin Code : 587122
FAX No. : 08350-240563
E-mail : rkt.rkm60@yahoo.com
Phone : 08350-340038
- (f) Police Station : Lokapur
- (g) First opening date : 18-JUN-03
- (h) Weekly day of rest : TUE
2. Address for : Shri S.R.Mathad
correspondance : At and po-Lokapur-587122
Tq-Mudhol, Dist-Bagalkot
3. (a) Lease Number : KAR1360
- (b) Lease area : 3.69
- (c) Period of lease : 20
- (d) Date of Expiry : 01-JUN-23
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : SURESH RUDRAIAH MATHAD
P.O. LOKAPUR TALUKA-MUDHOL
DISTRICT-BAGALKOT BAGALKOT
KARNATAKA
Phone:08350-340038
FAX :

Owner : S.R.MATHAD
At Po-Lokapur Tq-Mudhol
BAGALKOT KARNATAKA
Phone: 08350-340038
FAX :

| | | | |
|-------------------------------|---|--------------------------------|-----------|
| 6. Date of approval of Mining | : | Fresh under rule 22 MCR1960 | 28-APR-03 |
| Plan/Scheme of Mining | | Modif.of approved Mining Plan | 12-APR-06 |
| | | Modif.of approved Mining Plan | 20-NOV-07 |
| | | Mining Scheme rule 12 MCDR1988 | 27-JAN-10 |
| | | Mining Scheme rule 12 MCDR1988 | 24-SEP-13 |
| | | MP review under 17(1) MCR 2016 | 25-JAN-18 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|--|--|--|
| 1a | Backlog of previous year | No Proposal | 6 Core Boreholes has been drilled during previous scheme period | |
| 1b | Exploration over lease area for geological axis 1 or 2 | Geological axis - 1 | Geological axis - 1 | 6 - Core boreholes was carried out in the lease area for Geological axis - 1, during previous scheme period |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | No Proposal | Nil | 3 DTH with 90 meters and 6 DDH with 165 meters has been drilled upto 2017-2018. Total expenditure towards exploration is 2.5 Lakhs |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | No Proposal | Nil | Exploration was carried out at 100m X 100m grid interval. Entire area has been explored and under G-2. |
| 1e | Balance reserve as on 01/04/20 | As on 01.04.2018 Proved Mineral Reserves (111) = 1088575 tons Pre-Feasibility Mineral Resources (221) = 935400 Tons. | As on 01.04.2018 Proved Mineral Reserves (111) = 1088575 tons Pre-Feasibility Mineral Resources (221) = 935400 Tons. | Hence there is no mining activity from April 2018; R & R has not been changed. |
| 1f | General remarks of inspecting officers on geology, exploration etc | It is part of Kaladgi basin which belongs to Upper Cuddapag system | The deposit is litho unit of Lokapur sub group of Bagalkot group which belongs to Kaladgi Super group | Geologically the top most area is more disturbed by Murram with Limestone |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|---|--|
| 2a | Location of development w.r.t.lease area | During 2017-2018, there was proposal to work in between cross section AA'-CC' | Working has been carried out as per the proposal. | Mine is not Working from April 2018, for want of Statuary Clearances. |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Yes, proposed separate benches in OB & Mineral. | Working has been carried out as per the proposal. | Mine is not Working from April 2018, for want of Statuary Clearances. |
| 2c | Stripping ratio or ore to OB ratio | 1 : 0.05 | 1 : 0.23 | |
| 2d | Quantity of topsoil generation in m3 | No Proposal | Nil, there is no topsoil generation | |
| 2e | Quantity of overburden generation in m3 | OB waste is only Intercalated waste. During 2017-2018 it is proposed 3250 tons | 9500 tons of waste has been achieved. | Due to Morrum bands, the intercalated waste has been excess than proposal. |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | Proposed 3250 tons of intercalated waste from 2 benches | Achieved 9500 tons of intercalated waste from 2 benches | Mine is not Working from April 2018, for want of Statuary Clearances. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|---|---------|
| 3a | Number of pit proposed for production | Development and production was proposed in Pit-1. | Development and production are carried out in single pit. | |
| 3b | Quantity of ROM mineral production proposed | The total target of ROM Production was 68253 tons during 2017-2018. | 44140 tons of Limestone | |

| | | | |
|----|---|--|--|
| 3c | Recovery of sailable/usable mineral from ROM production | 95% | 95% |
| 3d | Quantity of mineral reject generation | There is no Mineral Reject generation | There is no Mineral Reject generation |
| 3e | Grade of mineral rejects generation and threshold value declared. | Mineral reject- No Proposal. Threshold Value for Mineral rejects is not Declared | Mineral reject- No Proposal. Threshold Value for Mineral rejects is not Declared |
| 3f | Quantity of sub grade mineral generation. | No Sub Grade Generation | No Sub Grade Generation |
| 3g | Grade of sub grade mineral generation | There is No Generation of Subgrade Mineral | There is No Generation of Subgrade Mineral |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Manual | Manual |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | No Benefication Study is Proposed | Only Manual Picking of Ore from Intercalated Waste |
| 3j | Provision of drilling and blasting in mineral benches | Spacing - 0.80m Burden - 0.70m Depth - 1.50m It is Proposed to drill by Jack Hammer and blasting by using Slurry & ANFO | As per proposal the Drilling & Blasting are done |

| | | | |
|----|--|--|--|
| 3k | Provision of mining machineries in mineral benches | Jack Hammer - 1 Tracker Compressor - 1 Tractors - 4 Tippers - 1 | Jack Hammer - 1 Tracker Compressor - 1 Tractors - 4 Tippers - 1 |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Bench height of 3m was proposed in Mineral. | Bench Height is more than proposal. |
| 3m | Total area covered under excavation/pits | 2.80 hect area is proposed for Pit during 2017-2018 | 2.50 hect areas are under Pit only. |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1 : 0.05 | 1 : 0.23 |
| 3o | Total area put in use under different heads at the end of year | Land use Pattern as on 01.04.2018. Mines = 2.80 hect Infra = 0.010 hect Road = 0.010 hect Green Belt = 0.185 hec | Land use Pattern as on 01.04.2018. Mines = 2.80 hect Infra = 0.010 hect Road = 0.010 hect Green Belt = 0.188 hec |
| 3p | Production of ROM mineral during the last five year period as applicable | 2017-2018 = 65003 tons 2016-2017 = 58913 tons 2015-2016 = 58998 tons 2014-2015 = 60763 tons 2013-2014 = 46828 tons | 2017-2018 = 44140 tons 2016-2017 = 58998 tons 2015-2016 = 58998 tons 2014-2015 = 35800 tons 2013-2014 = 19000 tons |
| 3q | General remarks of inspecting officers on method of mining etc. | Manual Mining | Manual Mining |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|--|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Proposed for Intercalated waste | Dumping has been done as per proposal | |
| 4b | Location of topsoil, OB and mineral reject dumps | Proposed to dump along the lease boundary within 7.5m safety barrier | Safety bund has been formed as per proposal. | |
| 4c | Number of dumps within lease area and outside of lease area | Lease area = 1 Non Lease area = Nil | Lease area = 1 Non Lease area = Nil | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Outside UPL | Outside UPL | |
| 4e | Number of active and alive dumps. | No Proposal | Nil | |
| 4f | Number of dead dumps. | No Proposal | Nil | |
| 4g | Number of dumps established. | No Proposal | Nil | |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Formation of Bund has been proposed along the Lease boundary | Bund has formed as per proposal | |
| 4i | Length of Retaining wall or garland drain all along dumps | 50m Formation of Bund has been proposed during 2018-2019 | Achieved along the lease boundary | |
| 4j | Number of settling ponds | No proposal | Nil | |
| 4k | Specific comments of inspecting officer on waste dump management | Nil | Nil | |

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 for Back filling | No backfilling done |
| 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. | No Backfilling | No Backfilling |

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 should be on or before 1st July every year. | Not Submitted for the year 2017-2018 | Violation has pointed out under Rule 26 (2) |
| 6b | Area available for rehabilitation (ha) . | Nil | Nil | |
| 6c | afforestation done (ha). | Nil | Nil | |
| 6d | No. of saplings planted during the year | Total 50 saplings were proposed during last year 2017-2018. | 50 Saplings has been planted | 280 plants has been planted during 2013-2018 in 0.188 hect |

| | | | | |
|----|--|---|------------------------------|--|
| 6e | Cumulative no .of plants | Total 50 saplings were proposed during last year 2017-2018. | 50 Saplings has been planted | 280 plants has been planted during 2013-2018 in 0.188 hect |
| 6f | Any other method of rehabilitation | Nil | Nil | |
| 6g | Cost incurred on watch and care during the year | 0.60 Lakhs | 0.70 Lakhs | |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | Nil | Nil | |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | Nil | Nil | |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area | Nil | Nil | |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | Nil | Nil | |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | Nil | Nil | |

| | | | | |
|----|---|---|--|--|
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | Total 50 saplings were proposed during last year 2017-2018. | 50 Saplings has been planted | 280 plants has been planted during 2013-2018 in 0.188 hect |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | 0.037 hect | 0.037 hect | |
| 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) | Bi-Annually Survey | Environment monitoring is carried out through own as well as private agency. | |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | Nil | Nil | |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|--|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | 68253 tons ROM/ 65003 tons Saleable Ore | 53640 tons ROM/ 44140 tons Saleable Ore | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | Manual | Manual | |

| | | | |
|----|--|---|--|
| 7c | Different grade of mineral sorted out at mines. | Cao = +40 - 51% Mgo = 3.0 - 5.0% Sio2 = 4.0 - 12.0% | Cao = +40 - 51% Mgo = 3.0 - 5.0% Sio2 = 4.0 - 12.0% |
| 7d | Any beneficiation process at mines . | Manually sorting and sizing proposed | Manually sorting and sizing is being done |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | Nil | Lessee is using all the ore by blending with high grade ore. As per buyers specification |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|---|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | There is No proposal for separately remove and utilised of topsoil | Nil, Topsoil generation is not there for 2017 - 2018. | |
| 8b | Concurrent use or storage of topsoil | Nil | Nil | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Proposed Safety bund for intercalated waste along the 7.5m safety zone along the lease boundary. | Safety Bund has been formed | |

| | | | | |
|----|---|--|--|---|
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | At present there is no proposal for restoring. | 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) | 50 saplings per year | Lessee has planted 50 plants during 2017-2018 | Cumulatively 280 plants has been planted during 2013-2018 in 0.188 hect |
| 8g | Survival rate | 80% | 80% | |
| 8h | Water sprinkling on roads to control airborne dust | Yes, it is proposed for water sprinkling on haul roads. | Daily Water tanker is spraying water on mines roads side to control airborne dust. | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Scanty vegetation, bushes, neem are observed in lease area | Surrounding area beyond lease area is greenery | |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|--|---------|
| 9a | Status of submission of Monthly and Annual returns | MR Submitted up to = August 2018 AR Submitted up to = 2016-2017 | Both Annual & Monthly returns are submitting in online system. | |

| | | | | |
|----|---|---|---|---|
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | No Mining Engineer, Geologist | Only Mines mate is working as Permit Manager | It is advised to appoint mining engineer/ Geologist. |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Area under Mining = 2.500Hect Office = 0.020 Hect Safety Zone = 0.60 Hect | Land use pattern as per approved Review of Mining plan. Area under pit 2.50 hect. | |
| 9d | Scrutiny of Annual return on afforestation | Lessee has planted 50 saplings during 2017-2018 | Lessee has planted 50 saplings during 2017-2018 | Cumulatively 280 plants has been planted during 2013-2018 |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | There is no Mineral Rejects Generation | There is no Mineral Rejects Generation | |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | 29672 tons of Limestone has been stocked | Mine has produced 44140 tons of Production during 2017-2018. | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Cost of Production Rs.292/- per tons | Nil | |
| 9h | Scrutiny of Annual return on fixed assets | Fixed Assets is given | Fixed Assets is filled Properly | |
| 9k | Scrutiny of Annual return on mining machineries | Machineries details given | As available in field | |

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 |
| MCDR17 | Rule 11(1) | 02-NOV-18 | | | |
| MCDR17 | Rule 26(2) | 02-NOV-18 | | | |
| MCDR17 | Rule 28(1) | 02-NOV-18 | | | |
| MCDR17 | Rule 33 | 02-NOV-18 | | | |

Date :

(G. S. KANNAN)

Indian Bureau of Mines