INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bangalore regional office

Mine file No : KNT/SMG/LST/1/BNG Mine code: 38KAR17001

(i) Name of the Inspecting : **s011**) K.SRINIVAS

Officer and ID No.

(ii) Designation : Assistant Mining Geologis

(iii) Accompaning mine : S/shri K. Mahalingam, Agent & D.G.M and Anil Kumar, M

Official with Designation

(iv) Date of Inspection : 29/05/2015 Prev.inspection date : 27/02/2013 (v)

PART-I : GENERAL INFORMATION

(a) Mine Name : BADIGUND

(b) Registration NO. : IBM/5662/2011

(C) Category : A Fully Mechanised

(d) Type of Working Opencast

Postal address (e)

> State : KARNATAKA District SHIMOGA Village BHADRAVATI Taluka BHADRAVATI Post office BHADIGUND

Pin Code

FAX No. 08282-291291,271621(ext.20) E-mail : vislminesdept@gmail.com 08282-273208,271667 Phone

(f) Police Station : Bhadravathi First opening date : 01/04/1983 (g)

Weekly day of rest (h) : SUN

Address for : BHADRAVATI, correspondance

SHIMOGA,

KARNATAKA-577301.

3. : KAR0110 Lease Number (a) : 40.12 (b) Lease area

Period of lease : 20 (C)

Date of Expiry (d) : 31/03/2023

Mineral worked 4. : LIMESTONE Main 5. Name and Address of the

Lessee : VISL

BHADRAVATI, SHIMOGA, SHIMOGA KARNATAKA

Phone: 08282-271621 - 9 (10 LINES)

FAX :

Owner : VISL

BHADRAVATI, SHIMOGA, SHIMOGA KARNATAKA Phone: 08282-66620 FAX : 08282-66432,666

Agent : K.MAHALINGAM

Dy GENERAL MANAGER, MINES & RM SAIL/VISL, BHADRAVATHI CHIKMAGALUR KARNATAKA

Phone: FAX:

Geologist

Name : K. Mahalingam, Full Time

Qualification : M.Sc (Geology)
Appointment/ : 15/04/2008

Termination date

Manager

Name : C. Anil Kumar Reddy

Qualification : Dip. in Mining Engineering, GJE, FCC

Appointment/ : 15/04/2004

Termination date

6. Date of approval of Mining
Plan/Scheme of Mining
Mining Scheme rule 12 MCDR1988
Mining Scheme rule 12 MCDR1988
Modif.of approved Mining Plan
Mining Scheme rule 12 MCDR1988
25/06/2013

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--|-------------|---|
| 1a | Backlog of previous year | 10 exploratory boreholes | Nil | The violation has been pointed out. |
| 1b | Exploration over lease area for geological axis 1 or 2 | 05 exploratory boreholes. | Nil | The violation has been pointed out. |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | 12 lakhs rupees. | Nil | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Not specified for the year 2014-15 | Nil | During the Scheme period i.e., upto 31.03.2018, 12 ha. area is proposed to be covered. |
| 1e | Balance reserve as on 01/04/20 | - | - | 22120834 tonnes as on 01/04/2015(Total resources) |
| 1f | General remarks of inspecting officers on geology, exploration etc | - | - | The lessee has not carried out the exploration as proposed. The violation has been pointed out. |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-----------|-------------|---------|
| 2a | Location of development w.r.t.lease area | Pit-1 | Pit-1 | |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Nil | NIL | |
| 2c | Stripping ratio or ore to OB ratio | 1:0.75 | 1:0 | |
| 2d | Quantity of topsoil generation in m3 | nil | Nil | |

| 2e | Quantity of overburden generation in m3 | 34090 cu.m | nil | |
|----|---|------------|-----|---|
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | - | - | The mining operations are being carried out slowly due to closure of the Steel Plant. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--------------------|--------------|---|
| 3a | Number of pit proposed for production | one | one | |
| 3b | Quantity of ROM mineral production proposed | 1,00,000 tonnes | 26,729tonnes | The production during the year 2014-15. |
| 3с | Recovery of sailable/usable mineral from ROM production | 100% | 100% | |
| 3d | Quantity of mineral reject generation | Nil | Nil | The low grade CaO will be blended with the high grade ore to feed the plant which takes +45 CaO as cut off. |
| 3e | Grade of mineral rejects generation and threshold value declared. | nil | nil | |
| 3f | Quantity of sub grade mineral generation. | 22000 tonnes | nil | |
| 3g | Grade of sub grade mineral generation | 35% to 45% CaO | nil | |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Mechanised | Mechanised | |

| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | nil | nil | |
|----|--|---|--|--|
| 3ј | Provision of drilling and blasting in mineral benches | Yes | Yes | |
| 3k | Provision of mining machineries in mineral benches | Tata Hitachi- 1 Tippers-8 | Tata Hitachi-1 Tippers-8 | |
| 31 | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Yes | Yes | |
| 3m | Total area covered under excavation/pits | 21.3ha | 21.3ha | |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:0.75 | 1:0 | |
| 30 | Total area put in use under different heads at the end of year | Not specified | 32.0ha | |
| 3p | Production of ROM mineral during the last five year period as applicable | 2010-11: 101000t 2011-12: 101000t 2012-13: 101000t 2013-14: 100000t 2014-15: 100000t | 2010-11: 27998t 2011-12: 44801t 2012-13: 30460t 2013-14: 9427t 2014-15: 26729t | Deviation is more than 50% on negative side. |
| 3q | General remarks of inspecting officers on method of mining etc. | - | - | There is no change in method of mining. |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
| | | | | |

| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Yes | Yes | |
|----|--|--------------------------------------|--------------------------------------|---|
| 4b | Location of topsoil, OB and mineral reject dumps | Northwestern side of the lease area. | Northwestern side of the lease area. | |
| 4c | Number of dumps within lease area and outside of lease area | One within the lease area. | One within the lease area. | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Out side | Out side | |
| 4e | Number of active and alive dumps. | One | One | |
| 4f | Number of dead dumps. | Nil | Nil | |
| 4g | Number of dumps established. | Nil | Nil | |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Yes | Yes | |
| 4i | Length of Retaining wall or garland drain all along dumps | Proposed | 50ft | The construction of retaining wall is under progress. |
| 4j | Number of settling ponds | Nil | Nil | |
| 4k | Specific comments of inspecting officer on waste dump management | - | - | The construction of retaining wall is under progress. |

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 proposals | Nil | |

| 5b | Area under backfilling of mined out area | No proposals | Nil | |
|----|---|--------------|-----|--|
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | No proposals | Nil | |
| 5d | Total area fully reclaimed and rehabilitated | No Proposals | Nil | |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | - | - | No proposals since the mineral is not yet exhausted. |

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). | - | Submitted. | |
| 6b | Area available for rehabilitation (ha) . | No specific proposals | Nil | The mined out area is around 21.3 ha. This area is still active. Hence no proposals given. |
| 6c | afforestation done (ha). | Nil | Nil | |
| 6d | No. of saplings planted during the year | Nil | Nil | |
| бе | Cumulative no .of plants | Nil | Nil | |
| 6f | Any other method of rehabilitation | Nil | Nil | |
| 6g | Cost incurred on watch and care during the year | Nil | Nil | |

| 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)Afforestati on on backfilled area | Nil | Nil | |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | To make the pit as water reservoir. | Nil | The deposit is not yet exhausted and the pit is active. |
| 61 | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | no specific proposals | Rehabilated waste land by afforestation. | |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | no specific proposal | The waste land of 5.8ha was rehabilitated by afforestation. | |
| б р | Compliance of environmental monitoring (core zone and buffer zone) | Regular Monitoring | Regularly air, water and noise are monitered. | |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | _ | _ | After complete exploitation of mineral, the pit can be converted into a water reservoir to cater the wild inhabitants |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-------------|-------------|--|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | No proposal | Nil | The subgrade mineral is categorised as low CaO % which is blended proportionately along with high CaO and the same will be fed to the captive steel Plant. |
| 7b | Method of grade- wise mineral sorting i.e. manual or mechanical. | Nil | Nil | |
| 7c | Different grade of mineral sorted out at mines. | Nil | Nil | |
| 7d | Any beneficiation process at mines . | Nil | Nil | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | | | The excavated ROM is transported from the mine site to captive steel plant. |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-----------|-------------|--|
| 8a | Separate removal and utilization of topsoil (Rule 32) | | nil | No top soil generated, since the workings are proposed within the broken area. |
| 8b | Concurrent use or storage of topsoil | nil | nil | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Yes | yes | |

| 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) | Nil | Nil | |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | 2250 saplings | 2000 teak saplings | |
| 8g | Survival rate | 85% | 90% | |
| 8h | Water sprinkling on roads to control airborne dust | sprinkling on | Water sprinkling on road by water tanker. | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | - | _ | There is no change in austhetic beauty in and around the mining lease area. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|-------------|---------|
| 9a | Status of submission of Monthly and Annual returns | MR submitted upto April,2015 AR submitted for the year 2014-15 | - | |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Given | - | |

| 9d Scrutiny of Given Annual return on afforestation 9e Scrutiny of Given Annual return on mineral reject generation (Grade and quantity) 9f Scrutiny of Given Annual return on ROM stock and/or graded ore 9g Scrutiny of given Annual return on sale value, Ex. Mine price and production cost 9h Scrutiny of Given Annual return on fixed assets 9k Scrutiny of Given Annual return on mining machineries | 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Given | |
|--|----|--|-------|---|
| Annual return on mineral reject generation (Grade and quantity) 9f Scrutiny of Given Annual return on ROM stock and/or graded ore 9g Scrutiny of given Annual return on sale value, Ex. Mine price and production cost 9h Scrutiny of Given Annual return on fixed assets 9k Scrutiny of Given Annual return on mining | 9d | Annual return on | Given | _ |
| Annual return on ROM stock and/or graded ore 9g Scrutiny of given Annual return on sale value, Ex. Mine price and production cost 9h Scrutiny of Given Annual return on fixed assets 9k Scrutiny of Given Annual return on mining | 9e | Annual return on mineral reject generation (Grade and | Given | _ |
| Annual return on sale value, Ex. Mine price and production cost 9h Scrutiny of Given - Annual return on fixed assets 9k Scrutiny of Given - Annual return on mining | 9f | Annual return on ROM stock and/or | Given | _ |
| Annual return on fixed assets 9k Scrutiny of Given - Annual return on mining | 9g | Annual return on sale value, Ex. Mine price and | given | _ |
| Annual return on mining | 9h | Annual return on | Given | _ |
| | 9k | Annual return on mining | Given | _ |

Details of violations observed during current inspection and compliance position of violation pointed out

| Viola | tion observed | Show couse position | |
|------------|-------------------------|---------------------|-------------------------|
| Rule NO. | Issued on Compliance on | Rule NO. | Issued on Compliance on |
| Rule 13(1) | 05/06/2015 14/08/2015 | | |
| Rule 29 | 05/06/2015 14/08/2015 | | |

Date: (K.SRINIVAS)

Indian Bureau of Mines