INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Chennai regional office

Mine file No: TN/SLM/LST-117/MDS Mine code: 38TMN11039

(i) Name of the Inspecting : N001) N.SUBRAHAMAANYAM

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : Dhanasekar rep of Owner.

Official with Designation

(iv) Date of Inspection : 01/02/2017
(v) Prev.inspection date : 12/03/2016

PART-I : GENERAL INFORMATION

. (a) Mine Name : PRITHIVI MINERALS

(b) Registration NO. :

(c) Category : B Manual
(d) Type of Working : Opencast

(e) Postal address

State : TAMIL NADU
District : SALEM
Village : ALATHUR
Taluka : SANKARI
Post office : ALATHUR
Pin Code : 637303

FAX No. : E-mail :

Phone : 04283 - 54288

(f) Police Station :

(g) First opening date : 20/10/1997

(h) Weekly day of rest : SUN

2. Address for : M/S PRITHVI MINERALS

correspondance VARANALLAMPALAYAM , ALATHUR (PO)

SANKARI TALUK , SALEM DT-637303

3. (a) Lease Number : TMN0563

(b) Lease area : 1.1
(c) Period of lease : 20

(d) Date of Expiry

4. Mineral worked : LIMESTONE Main

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5. Name and Address of the

Lessee : M/S. PRITHIVI MINERALS

VARANDALAMPALAYAM ALATHUR-PO SANKARI -TALUK SALEM

TAMIL NADU Phone:
FAX:

Owner : SHRI.T.P.THANGAVELU

VARANALLAMPALAYAM ALATHUR - POST SANKARI WEST SALEM

TAMIL NADU Phone:
FAX:

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 27/08/2003 Plan/Scheme of Mining : Mining Scheme rule 12 MCDR1988 05/08/2013

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--|--|---------------------------------|
| 1a | Backlog of previous year | One bore hole up to 30 depths from surface. | Nil. | Existing pit: 185x16x18m depth. |
| 1b | Exploration over lease area for geological axis 1 or 2 | Nil | Nil | Existing pit: 185x16x18m depth. |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | Nil. | Nil. | No comments |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | ML area is very small, 80% of lease area was covered nby existing pit.o be explored. | Nil. | No comments |
| 1e | Balance reserve as on 01/04/20 | 16557 tones (111) & 976600 tones (222) | Reserves and resources have been estimated up to 18m depth from surface. | No comments. |
| 1f | General remarks of inspecting officers on geology, exploration etc | Nil. | Nil. | No comments |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|----------------------------|--|--|
| 2a | Location of development w.r.t.lease area | of lease area, | Mine is not working due to labour and MOFE problems. | Mine will be reopened / worked as soon as they get clrarancev from MOEF. |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | benches for topsoil cum OB | Same as proposed. | Nil. |
| 2c | Stripping ratio or ore to OB ratio | 1:0.04 | Same as proposed. | Nil. |

| 2d | Quantity of topsoil generation in m3 | Top soil cum overburden generation in m3 is about 500. | Same as proposed. | Nil. |
|----|---|--|-------------------|--|
| 2e | Quantity of overburden generation in m3 | Top soil cum overburden generation in m3 is about 500. | Same as proposed. | Nil |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | Nil. | Nil. | Mine is not working due to labour problems, Mining by Cat" B" opencast method. Jackhammer drilling, sorting, loading of limestone has been carried out with help of hydraulic excavators and tippers of 10Ts capacity. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|------------------------|--|---------|
| 3a | Number of pit proposed for production | - | Mine is not working due to labour / MOFE problems | Nil. |
| 3b | Quantity of ROM mineral production proposed | Proposed 1200 tones | Mine is not working due to labour problems. | Nil. |
| 3с | Recovery of sailable/usable mineral from ROM production | | Achieved as proposed. | Nil. |
| 3d | Quantity of mineral reject generation | No rejects | Mineral rejects is 40% of ROM which includes rock fragments, impurities etc. | Nil. |
| 3e | Grade of mineral rejects generation and threshold value declared. | No rejects | Nil. | Nil. |

| 3f | Quantity of sub grade mineral generation. | No sub-grade mineral. | Below 40% of CaCO3 with contaminations of calc gneiss waste are considered as mineral rejects in these particular formations. | Nil. |
|----|--|--|---|------|
| 3g | Grade of sub grade mineral generation | Nil. | Nil. | Nil. |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Cat" B" opencast manual method. | Same as proposed. | Nil. |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | Nil. | Nil. | Nil. |
| 3ј | Provision of drilling and blasting in mineral benches | Drilling & blasting is proposed by contract basis. | Same as proposed. | Nil. |
| 3k | Provision of mining machineries in mineral benches | | Excavators will be deployed for development of benches and loading. Manual labours will be engaged with the help of spades and axes for removing the ROM and hand sorting | Nil. |
| 31 | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Height of bench in overburden is 1m and mineral bench is 2.5m. | Same as proposed. | Nil. |
| 3m | Total area covered under excavation/pits | 0.26 ha | Same as proposed. | Nil. |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:1.67 | Same as proposed. | Nil. |
| 30 | Total area put in use under different heads at the end of year | 1.08 ha | Same as proposed. | Nil. |

| 3p | Production of ROM mineral during the last five year period as applicable | 1.2011-12:700 2.2012-13:700 3.2013-14:900 4.2014-15:900 5.2015-16:900 | 2011-12:310 2012-13:280 2013-14:200 2014-15:270 2015-16:450 | The deviation in production is due to market demand. |
|----|--|---|---|--|
| 3q | General remarks of inspecting officers on method of mining etc. | Nil | Nil | The deviation in production is due to market demand. |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|----------------------------|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Top soil dump & waste dumps are proposed. | Proposed as per proposal. | Nil. |
| 4b | Location of topsoil, OB and mineral reject dumps | Dumps are proposed at north & Eastern side of ML area. | Proposed as per proposal. | Nil. |
| 4c | Number of dumps within lease area and outside of lease area | Within lease area three dumps without. | As proposed is maintained. | Nil. |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Dumps are far away from UPL | Proposed as per proposal. | Nil. |
| 4e | Number of active and alive dumps. | | Proposed as per proposal | Nil. |
| 4f | Number of dead dumps. | Nil | Nil | Nil |
| 4g | Number of dumps established. | Nil | Nil | Nil |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | No retaining wall or garland drain all along dumps proposed. | Not applicable. | Nil. |
| 4i | Length of Retaining wall or garland drain all along dumps | Not applicable. | Nil. | Nil. |
| 4j | Number of settling ponds | Not applicable. | Nil | Nil |

| 4k | Specific | Top soil | Topsoil dump does not | Nil. |
|----|------------------|--------------|--------------------------|------|
| | comments of | dumping is | have any problem of wash | |
| | inspecting | partly | offs. | |
| | officer on waste | utilized for | | |
| | dump management | plantation. | | |

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. | After complete extraction of Limestone, pits shall be backfilled. | Limestone is yet to be exhaust. | Nil. |
| 5b | Area under backfilling of mined out area | Not applicable | Nil. | Nil. |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | For plantation use only. | As proposed is maintained | Nil. |
| 5d | Total area fully reclaimed and rehabilitated | Not applicable at present | Nil. | Nil, |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | As per proposal. | Nil. |

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). | Not submitted | Nil. | Nil. |
| 6b | Area available for rehabilitation (ha) . | Nil | Nil | Nil |
| 6c | afforestation done (ha). | 0.12 | 0.13 | Nil |

| 6d | No. of saplings planted during the year | 20 | 20 | Poor growth due to water problems |
|----|--|------|------|-----------------------------------|
| 6e | Cumulative no .of plants | 120 | 95 | Poor growth due to water problems |
| 6f | Any other method of rehabilitation | Nil. | Nil. | No comments. |
| бд | Cost incurred on watch and care during the year | Nil. | Nil. | No comments. |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | Nil | Nil | No comments. |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | Nil. | Nil. | No comments. |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area | Nil. | Nil. | No comments. |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | Nil. | Nil. | No comments. |
| 61 | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | Nil | Nil | No comments. |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | Nil | Nil | No comments. |

| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | Nil | Nil | No comments. |
|----|---|------|------|---|
| 60 | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | Nil | Nil | No comments. |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Nil. | Nil. | No comments. |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | Nil. | Nil. | Mine is working by as per proposal by Cat" B" opencast manual method. Jackhammer drilling, sorting, loading of limestone has been carried out with help of hydraulic excavators and tippers of 10Ts / 20Ts capacity |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-----------|---------------------------------------|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | | Same as proposed. | Nil. |
| 7b | Method of grade- wise mineral sorting i.e. manual or mechanical. | Manual | Manual | Nil. |
| 7c | Different grade of mineral sorted out at mines. | Nil. | The grades of ore are almost uniform. | Nil. |
| 7d | Any beneficiation process at mines . | Nil. | Nil. | Nil. |

7e General remarks Nil. Nil. Mine is niot of inspecting working, Mining is by Cat" B" officer on Mineral opencast manual conservation and method. beneficiation Jackhammer issues drilling, sorting, loading of limestone has been carried out with help of hydraulic excavators and tippers of 10Ts capacity

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|---|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | is being | Same as proposed. | Nil. |
| 8b | Concurrent use or storage of topsoil | Topsoil/OB is stored separately for plantation purpose only. | Same as proposed. | Nil. |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Separate dumps to be made for topsoil cum overburden, rejects. Same as proposed. | Same as proposed. | Nil. |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Generation of topsoil cum overburden is for plantations. | Same as proposed. | Nil. |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No such proposal | Since the lease area is small, does not arise | Nil. |

| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | The area is dry and barren. | Some plantations have been made along the lease boundary within safety zone. | Nil. |
|----|---|-----------------------------|--|------|
| 8g | Survival rate | 80% | 50% | Nil. |
| 8h | Water sprinkling on roads to control airborne dust | No proposal | Since the lease area is small, does not arise. | Nil. |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Area is dry and barren. | Some greenery has been developed by mine management | Nil. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|--|--------------|
| 9a | Status of submission of Monthly and Annual returns | Monthly and annual returns have not been submitted, referred to Statistical. | Nil. | No comments. |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | All monthly returns and Annual returns have been submitted. | All monthly returns and Annual returns submitted are examined found to be in order. | Nil |
| 9с | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Nil | Nil | Nil |
| 9d | Scrutiny of Annual return on afforestation | Nil | Nil | Nil |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Nil | Nil | Nil |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Nil | Nil | Nil |

| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Nil | Nil | Nil |
|----|---|---|-----|------|
| 9h | Scrutiny of Annual return on fixed assets | Nil | Nil | Nil |
| 9k | Scrutiny of Annual return on mining machineries | JCB for loading & 10 ton tipper fir transporting are being used | | Nil. |

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

| Viola | ation observed | Show c | ouse position |
|------------|-------------------------|----------|-------------------------|
| Rule NO. | Issued on Compliance on | Rule NO. | Issued on Compliance on |
| Rule 12(2) | 07/04/2017 | | |
| Rule 23(2) | 07/04/2017 | | |

Date: (N.SUBRAHAMAANYAM)

Indian Bureau of Mines