

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KRL/ALP/B.LIMESHELL/ 1/BNG

Mine code : 37KRL01007

- (i) Name of the Inspecting : **S011**) **K.SRINIVAS**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : Sri Riji, the president of the Society
Official with
Designation
- (iv) Date of Inspection : 08/12/2017
- (v) Prev.inspection date : 12/12/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MANNANCHERRY 4.9 HA**
- (b) **Registration NO.** : **IBM/274/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : KERALA
District : ALAPUZHA (ALLEPPY)
Village : MANNANCHERRY
Taluka : AMBALAPPUZHA
Post office : PONNAD
Pin Code : 688538
FAX No. : NIL
E-mail : clamsociety@gmail.com
Phone : 0478 - 2868659
- (f) Police Station : Muhamma
- (g) First opening date : 12/07/2006
- (h) Weekly day of rest : SUN
2. Address for : MUHAMMA CLAM MARKETING COOP SOCIETY LTD
correspondance NO A 1078, MUHAMMA POST,
ALLAPUZHA - 688528
3. (a) Lease Number : KRL0250
- (b) Lease area : 4.9
- (c) Period of lease : 20
- (d) Date of Expiry : 05/06/2026
4. Mineral worked : LIMESHELL Main

5. Name and Address of the

Lessee : MUHAMMA CLAM MARKETING COOP SOCIETY LTD
NO A 1078, MUHAMMA POST,
ALLAPUZHA ALAPUZHA
(ALLEPPY) KERALA
Phone:
FAX :

Owner : MUHAMMA CLAM MARKETING COOP SOCIETY LTD
ALAPUZHA (ALLEPPY)
KERALA
Phone:
FAX :

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 28/07/2016
Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|--------------|-------------|--|
| 1a | Backlog of previous year | No proposals | Nil | - |
| 1b | Exploration over lease area for geological axis 1 or 2 | No proposals | Nil | - |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | Nil | Nil | - |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | No proposals | Nil | - |
| 1e | Balance reserve as on 01/04/20 | - | - | The reserves as on 1.4.2017 is 33324 tonnes. |
| 1f | General remarks of inspecting officers on geology, exploration etc | - | - | The are no specific proposals as per the approved mining plan. |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|-----------------------|-------------|--|
| 2a | Location of development w.r.t.lease area | No specific proposals | Nil | - |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | No proposals | Nil | The mineral is under water deposit. |
| 2c | Stripping ratio or ore to OB ratio | - | - | The operation is involved in collection of shells from the lake floor. |
| 2d | Quantity of topsoil generation in m3 | No proposal | Nil | No top soil generation since it is under water deposit. |
| 2e | Quantity of overburden generation in m3 | No proposals | Nil | The operation is involved in collection of shells from the lake floor. |

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| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | - | - | The operation is involved in collection of shells from the lake floor. |
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Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------------------|-------------|--|
| 3a | Number of pit proposed for production | No specific proposals | Nil | Mainly the collection of shells from the lake floor is involved in the operations. |
| 3b | Quantity of ROM mineral production proposed | 3700 tonnes | 3676 tonnes | - |
| 3c | Recovery of sailable/usable mineral from ROM production | 100% | 100% | - |
| 3d | Quantity of mineral reject generation | Nil | Nil | - |
| 3e | Grade of mineral rejects generation and threshold value declared. | Nil | Nil | There is no generation of rejects. |
| 3f | Quantity of sub grade mineral generation. | Nil | Nil | No sub grade generation. |
| 3g | Grade of sub grade mineral generation | Nil | Nil | - |
| 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. | Nil | Nil | - |

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| 3j | Provision of drilling and blasting in mineral benches | Nil | Nil | - |
| 3k | Provision of mining machineries in mineral benches | Nil | Nil | The operations involved are under water. |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Not applicable | Nil | - |
| 3m | Total area covered under excavation/pits | Nil | Nil | As per the Mining lease deed, No excavation of the lake floor is permissible under the grant. The shells are being collected from the lake floor. |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:0 | 1:0 | No waste is generated. |
| 3o | Total area put in use under different heads at the end of year | No specific proposals | Nil | No specific area can be demarcated for the collection of shells under lake water. |
| 3p | Production of ROM mineral during the last five year period as applicable | 2012-13: nil 2013-14: nil 2014-15: nil 2015-16: nil 2016-17: 3700 t | 2012-13: 3321t 2013-14: 14:2988t 2014-15: 3238t 2015-16: 3330t 2016-17: 3676t 2017-18 : 2994t (upto Nov.2017) | - |
| 3q | General remarks of inspecting officers on method of mining etc. | - | - | The mining operations are being as the approved proposals. |

Solid Waste Management - Dumping:

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--------------|-------------|---|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | No proposals | Nil | No top soil, Overburden, mineral rejects and waste are generated. |

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|----|--|---------------|-----|--|
| 4b | Location of topsoil, OB and mineral reject dumps | No proposals | Nil | - |
| 4c | Number of dumps within lease area and outside of lease area | No proposals | nil | - |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | No proposals | nil | - |
| 4e | Number of active and alive dumps. | No proposals | nil | - |
| 4f | Number of dead dumps. | No proposals | nil | - |
| 4g | Number of dumps established. | No proposals | nil | - |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | No proposals. | Nil | - |
| 4i | Length of Retaining wall or garland drain all along dumps | No proposals | Nil | - |
| 4j | Number of settling ponds | No proposals | Nil | - |
| 4k | Specific comments of inspecting officer on waste dump management | - | - | No proposals for solid waste dumping as the mining operations are the collection of the live shells from the lake floor. |

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 | - |

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|----|---|--------------|-----|-------------------------------|
| 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 for 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). | - | submitted | - |
| 6b | Area available for rehabilitation (ha) . | No proposals | nil | - |
| 6c | afforestation done (ha). | No proposals | nil | - |
| 6d | No. of saplings planted during the year | No proposals | nil | - |
| 6e | Cumulative no .of plants | No proposals | nil | The lease area is under water. |
| 6f | Any other method of rehabilitation | No proposals | nil | - |
| 6g | Cost incurred on watch and care during the year | No proposals | nil | - |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | No proposals | nil | - |

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|----|---|--------------|-----|---|
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | No proposals | nil | - |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area | No proposals | nil | - |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | No proposals | nil | - |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v) any other specific means. | No proposals | nil | - |
| 6m | Compliance of rehabilitation of waste land within lease (i) afforestation | No proposals | nil | - |
| 6n | Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha) | No proposals | nil | - |
| 6o | Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation | No proposals | nil | - |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | No proposals | nil | - |

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| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | - | - | There are no specific proposals on PMCP. |
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Mineral Conservation:

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|-----------------------|-------------|---|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | No proposals | Nil | - |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | No specific proposals | nil | The collected black shell is boiled in vessel to remove the flesh outside the lease area, as the entire area is under lake water. |
| 7c | Different grade of mineral sorted out at mines. | No specific proposals | Nil | There is only one grade which is used for Agricultural purposes and chicken feed applications. |

Environment:

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--------------|-------------|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No proposals | nil | - |
| 8b | Concurrent use or storage of topsoil | No proposals | nil | - |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | No proposals | nil | - |

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|----|---|--------------|-----|---------------------------------|
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No proposals | nil | - |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No proposals | nil | - |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | No proposals | nil | - |
| 8g | Survival rate | No proposals | nil | - |
| 8h | Water sprinkling on roads to control airborne dust | No proposals | nil | - |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | - | - | There is no specific proposals. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|-------------|---------|
| 9a | Status of submission of Monthly and Annual returns | Monthly returns are being submitted. Annual Return submitted for the year 2016-17. | - | - |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | nil | - | - |

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| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Nil | The area is under water. | Hence no pattern of land use has been shown. |
| 9d | Scrutiny of Annual return on afforestation | Nil | No afforestation applicable as it is under water deposit. | - |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Nil | No mineral rejects generated. | - |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Not given | - | - |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Not given | - | - |
| 9h | Scrutiny of Annual return on fixed assets | Not given | - | - |
| 9k | Scrutiny of Annual return on mining machineries | Not given | Not applicable as it is manual mine. | The collecting of shells from the lake bed. |

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 35(1) | 26/12/2017 | MCDR17 | Rule 35(1) | 26/12/2017 |
| MCDR17 | Rule 27(2) | 26/12/2017 | MCDR17 | Rule 27(2) | 26/12/2017 |

Date :

(K.SRINIVAS)

Indian Bureau of Mines