

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

MCDR INSPECTION REPORT

Bangalore regional office

Mine file No : KRL/KOTT/LIMESHELL/7/BNG

Mine code : 37KRL05006

- (i) Name of the Inspecting : **S011**) **K.SRINIVAS**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : Sri Sugunan, the Representative
Official with
Designation
- (iv) Date of Inspection : 11/12/2015
- (v) Prev.inspection date : 05/06/2014

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **VEBANADU LAKE(94.5H)**
- (b) **Registration NO.** : **IBM/6531/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : KERALA
- District : KOTTAYAM
- Village : VAIKOM
- Taluka : VAIKOM
- Post office : PALLIPPURATHUSSERY
- Pin Code : 686606
- FAX No. : - -
- E-mail : lscs3145@gmail.com
- Phone : 04829-210465 (0), 9446375:
- (f) Police Station : Vaikom
- (g) First opening date : 04/01/1996
- (h) Weekly day of rest : SUN
2. Address for : M/s The Vaikom Lime Shell Co-Operative Society,
correspondance # 3145, PALLIPURATHUSSERY POST,
VAIKOM -686606 ,KOTTAYAM Distt., KERALA State.
3. (a) Lease Number : KRL0059
- (b) Lease area : 94.5
- (c) Period of lease : 5
- (d) Date of Expiry : 04/01/2001
4. Mineral worked : LIMESHELL Main

5. Name and Address of the

Lessee : VAIKOM LIMESHELL CO-OP SOCIETY
 PALLIPURATHUSSERY [PO],
 VAIKOM, KOTTAYAM, KOTTAYAM
 KERALA
 Phone:04829 210465
 FAX :--

Owner : VAIKOM LIMESHEL COOP.SOCIETY LTD
 #3145, PALLIPURATHUSSERY
 VAIKOM KOTTAYAM KERALA
 Phone: 04829 210465
 FAX : ---

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	12/04/1990
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	16/10/2015

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	nil	nil	
1b	Exploration over lease area for geological axis 1 or 2	Two trial pits for G1 per year.	Nil	Not yet carried out at the time of inspection i.e., 11.12.2015.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	lessee	nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not specified	nil	
1e	Balance reserve as on 01/04/20	-	-	23606 tonnes as on 1.4.2015
1f	General remarks of inspecting officers on geology, exploration etc	-	-	The lessee has proposed two trial pit every year for scheme period.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	C&D blocks in southern part of the lease area.	C&D blocks in southern part of the lease area.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal	nil	
2c	Stripping ratio or ore to OB ratio	1:0.1	1:0	
2d	Quantity of topsoil generation in m3	nil	nil	

2e	Quantity of overburden generation in m3	74 cu.m	nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	No specific remarks.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	southern part of the lease area.	southern part of the lease area.	Mining operations are involved under lake waters.
3b	Quantity of ROM mineral production proposed	4450 tonnes	2490 tonnes	Production of ROM upto Nov.2015.
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	
3f	Quantity of sub grade mineral generation.	nil	nil	
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.	No proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	NA	NA	
3k	Provision of mining machineries in mineral benches	NA	NA	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	NA	NA	
3m	Total area covered under excavation/pits	Not specified	Not specified.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.1	1:0	
3o	Total area put in use under different heads at the end of year	Not specified	Not specified	
3p	Production of ROM mineral during the last five year period as applicable	2010-11: Nil 2011-12:Nil 2012-13:Nil 2013-14:Nil 2014-15: Nil	2010-11: 4672 t 2011-12:3418 t 2012-13:3006 t 2013-14:4120 t 2014-15: 6520 t	There were no valid proposals for last five years.
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
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal	Nil	
4b	Location of topsoil, OB and mineral reject dumps	No proposal	nil	
4c	Number of dumps within lease area and outside of lease area	No proposal	nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal	nil	
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.	No proposal	nil	
4i	Length of Retaining wall or garland drain all along dumps	No proposal	nil	
4j	Number of settling ponds	No proposal	nil	
4k	Specific comments of inspecting officer on waste dump management	-	-	The entire mining operations are under lake waters.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	nil	
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.	-	-	As the working is under the sea back water, only limeshells are scrapped. Backfilling is not applicable.

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 proposal	nil	
6c	afforestation done (ha).	No proposal	nil	
6d	No. of saplings planted during the year	No proposal	nil	

6e	Cumulative no .of plants	No proposal	nil
6f	Any other method of rehabilitation	No proposal	nil
6g	Cost incurred on watch and care during the year	No proposal	nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	nil

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	nil	
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)	No proposal	nil	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	No proposals for PMCP.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal	nil	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	nil	
7c	Different grade of mineral sorted out at mines.	No proposal	nil	
7d	Any beneficiation process at mines .	No proposal	nil	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	The ROM is directly transported to end user.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	nil	
8b	Concurrent use or storage of topsoil	No proposal	nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	nil	
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)	No proposal	nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposal	nil	

8g	Survival rate	No proposal	nil	
8h	Water sprinkling on roads to control airborne dust	No proposal	nil	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	There is no impact of mining on aesthetic beauty in and around the area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR submitted upto Oct. 2015. AR submitted for the year 2014-15.	-	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Not given	Not appointed	Violation has been pointed out.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	-	
9d	Scrutiny of Annual return on afforestation	Given	-	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given	-	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	-	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	-
9h	Scrutiny of Annual return on fixed assets	Given	-
9k	Scrutiny of Annual return on mining machineries	Given	-

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
Rule 42(1)(C)(II)	12/01/2016				

Date :
(K.SRINIVAS)

Indian Bureau of Mines