

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KRL/ERNK/GR/1/BNG

Mine code : 28KRL11001

- (i) Name of the Inspecting : S011) K.SRINIVAS
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : ,
Official with
Designation
- (iv) Date of Inspection : 06/12/2017
- (v) Prev.inspection date : 08/12/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : KALLOORKAD GRAPHITE MINES
- (b) **Registration NO.** : IBM/5550/2011
- (c) **Category** : B Manual
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : KERALA
- District : ERNAKULAM
- Village : KALLOORKAD
- Taluka : MUVATTUPUZHA
- Post office : KALLOORKAD
- Pin Code :
- FAX No. : nil
- E-mail : tgmccmpk@gmail.com,
- Phone : 09995809810
- (f) **Police Station** : KALLOORKAD
- (g) **First opening date** : 20/06/2006
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : Thomson Graphite Mines &Crucible Works,
Rajbhavan, Companymukku, Vellanad P O,
Nedumangad, Thiruvananthapuram - 695543
3. (a) **Lease Number** : KRL0248
- (b) **Lease area** : 1.25
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 06/06/2026
4. **Mineral worked** : GRAPHITE Main

5. Name and Address of the

Lessee : THOMSON GRAPHITE CRUCIBLE WORKS
THIRUVANANTHAPURAM
KERALA
Phone:
FAX :

Owner : THOMSON GRAPHITE CRUCIBLE WORKS
ThomsonGraphitemines
&Crucible Work
Company mukku, Vellanad (p.o)
Thiruvananthapuram
THIRUVANANTHAPURAM KERALA
Phone: 09995809810
FAX : nil

6. Date of approval of Mining : Fresh under rule 22 MCR1960 27/03/1996
Plan/Scheme of Mining : Mining Scheme rule 12 MCDR1988 02/02/2015

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	None	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	-	-	Reserves as on 1.4.2017 is 15793 as per the last approved document.
1f	General remarks of inspecting officers on geology, exploration etc	-	-	There are no approved proposals. The violation has been pointed out. The reserves as on 1.4.2017 is 15793tonnes.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	No approved proposals	within the pit.	The violation has been pointed out.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No approved proposals	yes	-
2c	Stripping ratio or ore to OB ratio	No approved proposals	1:19	-
2d	Quantity of topsoil generation in m3	Nil	NIL	-
2e	Quantity of overburden generation in m3	No approved proposals	2250 cu.m	-

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	The lessee is not having the approved proposals. The violation has been pointed out.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	No approved proposals	one pit	-
3b	Quantity of ROM mineral production proposed	No approved proposals	660 tonnes	-
3c	Recovery of sailable/usable mineral from ROM production	No approved proposals	5%	-
3d	Quantity of mineral reject generation	No approved proposals	nil	No generation of rejects.
3e	Grade of mineral rejects generation and threshold value declared.	No approved proposals	nil	-
3f	Quantity of sub grade mineral generation.	No approved proposals	nil	No generation of subgrade.
3g	Grade of sub grade mineral generation	No approved proposals	nil	-
3h	Manual / Mechanised method adopted for segregating from ROM	No approved proposals	manual	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No approved proposals	nil	-
3j	Provision of drilling and blasting in mineral benches	No approved proposals	nil	-

3k	Provision of mining machineries in mineral benches	No approved proposals	nil	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No approved proposals	yes	-
3m	Total area covered under excavation/pits	No approved proposals	Not specified	-
3n	Ore to OB ratio for the pit/mine during the year.	No approved proposals	1:19	-
3o	Total area put in use under different heads at the end of year	No approved proposals	Not specified.	-
3p	Production of ROM mineral during the last five year period as applicable	2012-13: 1050t 2013-14: 1000t 2014-15:1200t 2015-16: nil 2016-17: nil	2012-13: 1050t 2013-14: 1000t 2014-15:175t 2015-16: 240t 2016-17:660t	-
3q	General remarks of inspecting officers on method of mining etc.	-	-	The lessee is not having the approved proposals. The violation has been pointed out.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No approved proposals	yes	-
4b	Location of topsoil, OB and mineral reject dumps	No approved proposals	south eastern side	-
4c	Number of dumps within lease area and outside of lease area	No approved proposals	one	within the lease.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No approved proposals	outside	-
4e	Number of active and alive dumps.	No approved proposals	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.	No approved proposals	nil	-
4i	Length of Retaining wall or garland drain all along dumps	No approved proposals	nil	-
4j	Number of settling ponds	No approved proposals	nil	-
4k	Specific comments of inspecting officer on waste dump management	-	-	No specific comments on waste dump management.

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 approved proposals	nil	-
5b	Area under backfilling of mined out area	No approved proposals	nil	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No approved proposals	nil	-
5d	Total area fully reclaimed and rehabilitated	No approved proposals	nil	-

5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	There are no specific approved proposals.
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Progressive Mine Clousre Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	-	No submitted	The violation has been pointed out.
6b	Area available for rehabilitation (ha) .	No approved proposals	nil	-
6c	afforestation done (ha).	No approved proposals	nil	-
6d	No. of saplings planted during the year	No approved proposals	nil	-
6e	Cumulative no .of plants	No approved proposals	nil	-
6f	Any other method of rehabilitation	No approved proposals	nil	-
6g	Cost incurred on watch and care during the year	No approved proposals	nil	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No approved proposals	nil	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No approved proposals	nil	-

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No approved proposals	nil	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No approved proposals	nil	-
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No approved proposals	nil	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No approved proposals	nil	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No approved proposals	nil	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No approved proposals	nil	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	No approved proposals	nil	-
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	The lessee is not having the approved PMCP proposals. The violation has been pointed out.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	No approved proposals	Primary washing is being carried within the lease area.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No approved proposals	mechanical.	-
7c	Different grade of mineral sorted out at mines.	No approved proposals	A single grade	-
7d	Any beneficiation process at mines	No approved proposals	Primary washing unit within the lease area.	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	No specific remarks on mineral conservation and beneficiation issues.

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No approved proposals	nil	-
8b	Concurrent use or storage of topsoil	No approved proposals	nil	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No approved proposals	yes	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No approved proposals	nil	-

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No approved proposals	nil	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No approved proposals	nil	-
8g	Survival rate	No approved proposals	nil	-
8h	Water sprinkling on roads to control airborne dust	No approved proposals	nil	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	There is no change in aesthetic beauty in and around mines area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly returns submitted upto November, 2017. Annual returns submitted for the year 2016-17.	-	-
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	Givne	-	-
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
MCDR17	Rule 11(4)	28/12/2017			
MCDR17	Rule 35(1)	28/12/2017			
MCDR17	Rule 26(2)	28/12/2017			
MCDR17	Rule 27(2)	28/12/2017			
MCDR17	Rule 55(1)(3)	28/12/2017			

Date :

(K.SRINIVAS)

Indian Bureau of Mines