

**INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT 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 : Sri T. Suresh Kumar, Managing Partner
Official with
Designation
- (iv) Date of Inspection : 08/12/2015
- (v) Prev.inspection date : 03/10/2013

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KALLOORKAD GRAPHITE MINE**
- (b) **Registration NO.** : **IBM/5550/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : KERALA
- District : ERNAKULAM
- Village : KALLORKAD
- Taluka : THIRUVANATHAPURAM
- Post office :
- Pin Code :
- FAX No. : nil
- E-mail : tgmccmk@gmail.com
- Phone : 09995809810
- (f) Police Station : KALLOORKAD
- (g) First opening date : 20/06/2006
- (h) Weekly day of rest : SUN
2. Address for : Thomson Graphite Mines &Crucible Works,
correspondance Company mukku,
Vellanadu - 695 543,Thiruvananthapuram District.
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
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,Velland (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	Two boreholes	Nil	Violation has been pointed out.
1b	Exploration over lease area for geological axis 1 or 2	For G1	Nil	Violation pointed out.
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	-	-	-
1e	Balance reserve as on 01/04/20	-	-	The reserves as on 1.4.2015 is 31710 tonnes.
1f	General remarks of inspecting officers on geology, exploration etc	-	-	The exploration has not been carried out.The violation has been pointed out.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	within the pit	within the pit	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	yes	yes	
2c	Stripping ratio or ore to OB ratio	1:19	1:19	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	570	83	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	There is no change in development of pit.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	
3b	Quantity of ROM mineral production proposed	1200 tonnes	175 tonnes	Less production.
3c	Recovery of sailable/usable mineral from ROM production	5%	5%	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	
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.	Primary washing.	Primary washing.	
3j	Provision of drilling and blasting in mineral benches	Nil	Nil	

3k	Provision of mining machineries in mineral benches	Nil	nil	
3l	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	Not specified	Not specified.	
3n	Ore to OB ratio for the pit/mine during the year.	1:19	1:19	
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: 454t 2011-12: 450t 2012-13: 1050t 2013-14: 1000t 2014-15: 1200t	2010-11: 454t 2011-12: 450t 2012-13: 1050t 2013-14: 1000t 2014-15: 175t	
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	south eastern side	south eastern side.	
4c	Number of dumps within lease area and outside of lease area	one	one	within the lease.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside.	outside.	
4e	Number of active and alive dumps.	one	one	
4f	Number of dead dumps.	nil	nil	
4g	Number of dumps established.	NA	NA	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	nil	No proposal during the year 2015-16.
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management	-	-	No specific comment.

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 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.	-	-	No specific proposal for backfilling ,reclamation etc. during the year 2015-16.
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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.	Violation pointed out.
6b	Area available for rehabilitation (ha) .	No proposal	Nil	No proposal during the year 2015-16.
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 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 proposal during the year 2015-16.

Mineral Conservation:

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

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	yes	yes	
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	Nil	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	Nil	nil	
8h	Water sprinkling on roads to control airborne dust	Nil	Nil	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	There is no change in aesthetic beauty around the mining area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return - submitted upto June, 2015	-	Violation pointed out.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Not employed.	Violation 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	-	No rejects generated.
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 12(3)	12/01/2016				
Rule 13(1)	12/01/2016				
Rule 23E(2)	12/01/2016				
Rule 42(1)(C)(II)	12/01/2016				

Date :**(K.SRINIVAS)**

Indian Bureau of Mines