

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/RP/GRP-1-MDS

Mine code : 28TMN10001

- (i) Name of the Inspecting : **M017**) **Matiul Islam**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Th.T.V.HEMANTHKUMAR MINES AGENT /MINES MANAGER, Th.
Official with
Designation
- (iv) Date of Inspection : 28/01/2021
- (v) Prev.inspection date : 17/10/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SIVAGANGA (237.39 HA)**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : TAMIL NADU
District : SIVAGANGA
Village : SENTHIUDAYANATHAPURA
Taluka : SIVAGANGAI
Post office : SAKKANTHI
Pin Code : 630562
FAX No. : 04575-41938
E-mail : tamin@taminggranites.com
Phone :
- (f) Police Station :
- (g) First opening date : 25/09/1982
- (h) Weekly day of rest : SUN
2. Address for : SIVAGANGA GR MINE,
correspondance SIVAGANGAI-630561
3. (a) Lease Number : TMN0195
(b) Lease area : 236.85
(c) Period of lease : 20
(d) Date of Expiry : 15/05/2007
4. Mineral worked : GRAPHITE Main

5. Name and Address of the

Lessee : TAMILNADU MINERALS LTD
 31, KAMARAJA SALAI CHEPAUK,
 CHENNAI CHENNAI CITY TAMIL
 NADU
 Phone:
 FAX :

Owner : Chairman and Managing Director
 M/S.TAMIN,31Kamarajar
 Salai,TWAD House, Chepauk
 CHENNAI CITY TAMIL NADU
 Phone:
 FAX :

Agent : K.DEVENDRAN
 SENTHIUDAYANATHAPURAM VILL
 P.O:SAKKANTHI TAMILNADU -
 630562 SIVAGANGA TAMIL NADU
 Phone: 044 - 28525113
 FAX : 04575 - 41938

Mining Engineer
 Name : HEMANT KUMAR,Full Time
 Qualification : DIPLOMA IN MINING
 Appointment/ : 12/02/8201
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	20/07/2000
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	24/12/2004
	:	Renewal under rule 24 MCR1960	20/07/2012
	:	Mining Scheme rule 12 MCDR1988	03/09/2014
	:	MP review under 17(1) MCR 2016	22/03/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	18 boreholes proposed to be drilled during the plan period 2019-20 to 2023-24	Nil	Time available till 2023-24 as per approved proposal
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Nil
1e	Balance reserve as on 01/04/20	-	31,52,283 Tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Satisfactory

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	IIIrd PIT	IIIrd PIT	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top Soil - 1 No Overburden -3 Nos Mineral - 2 Nos	Top Soil - 1 No Overburden -3 Nos Mineral - 2 Nos	As proposed
2c	Stripping ratio or ore to OB ratio	1:6	Nil	Mine temporarily closed
2d	Quantity of topsoil generation in m3	Nil	Nil	Nil

2e	Quantity of overburden generation in m3	2,35,257 M3	Nil	Mine temporarily closed
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Satisfactory

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1	Nil	Mining Operations temporarily discontinued due to want of EC
3b	Quantity of ROM mineral production proposed	1,03,540 te (41,416 M3)	Nil	Mining Operations temporarily discontinued
3c	Recovery of sailable/usable mineral from ROM production	100%	Nil	Mining Operations temporarily discontinued
3d	Quantity of mineral reject generation	Nil	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	Nil	Nil	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	Nil	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Nil	Nil	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	Nil

3j	Provision of drilling and blasting in mineral benches	Yes	Nil	Mining Operations temporarily discontinued
3k	Provision of mining machineries in mineral benches	Yes	Nil	Mining Operations temporarily discontinued
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	5m	5m	As proposed
3m	Total area covered under excavation/pits	33.72 Ha	33.72 Ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:6	Nil	Mining Operations temporarily discontinued
3o	Total area put in use under different heads at the end of year	54.645 Ha	54.645 Ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	Year Qty (Tonnes) 2015-16 1,02,365 2016-17 1,04,791 2017-18 1,04,557 2018-19 1,01,125 2019-20 1,03,540	Year Qty (Tonnes) 2015-16 90,275 2016-17 92,901 2017-18 207 2018-19 Nil 2019-20 Nil	Within limits. Mining operations temporarily discontinued.
3q	General remarks of inspecting officers on method of mining etc.	-	-	Mining Operations temporarily discontinued due to want of EC

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposed	Nil	Mining Operations temporarily discontinued

4b	Location of topsoil, OB and mineral reject dumps	1600W to 2800W 0W to 1600W 0E to 1600E 1600E to 2800E	Nil	Mining Operations temporarily discontinued
4c	Number of dumps within lease area and outside of lease area	Three dumps withing the lease area	Three dumps within the lease area	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	Nil
4e	Number of active and alive dumps.	02	02	Nil
4f	Number of dead dumps.	03	03	Nil
4g	Number of dumps established.	Nil	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Provided	As proposed
4i	Length of Retaining wall or garland drain all along dumps	150 meters (Retaining Wall) 300 meters (Garland Drain)	150 meters (Retaining Wall) 300 meters (Garland Drain)	As proposed
4j	Number of settling ponds	3 Nos	3 Nos	As proposed
4k	Specific comments of inspecting officer on waste dump management	-	-	Satisfactory

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.	Nil	Nil	Mineral not exhausted yet

5b	Area under backfilling of mined out area	Nil	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed	Nil	Mine temporarily discontinued
5d	Total area fully reclaimed and rehabilitated	NA	NA	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	No backfilling/reclamation proposed/carried out at this stage

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	-	Not provided	Draft Violation Letter enclosed alongside
6b	Area available for rehabilitation (ha) .	0.10.5 ha	0.10.5 ha	As proposed
6c	afforestation done (ha).	0.10.5 ha	0.10.5 ha	As proposed
6d	No. of saplings planted during the year	170 nos	170 nos	As proposed
6e	Cumulative no .of plants	170 nos	170 nos	2019-20 is the first year of plan period
6f	Any other method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch and care during the year	Nil	Nil	Nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NA	NA	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	170 saplings	170 saplings	As proposed
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.10.5 ha	0.10.5 ha	As proposed
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation	Afforestation	As proposed

6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical monitoring proposed	Periodical monitoring carried	Complied
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	Satisfactory

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Nil	Mine temporarily discontinued
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Nil
7c	Different grade of mineral sorted out at mines.	Only one grade	Only one grade	0.20 Fixed Carbon
7d	Any beneficiation process at mines	Nil	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Satisfactory

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Separate dumps maintained	Nil

8b	Concurrent use or storage of topsoil	Yes	Nil	Mine temporarily discontinued
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Maintained	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	Mineral not exhausted yet. Backfilling not proposed at this stage.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	Phased restoration/reclamation/rehabilitation not proposed yet
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Yes	Done	Nil
8g	Survival rate	80%	90%	Nil
8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out	As proposed
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Satisfactory

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	Submitted	Nil

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given in Part-I, Sl. 2	Manager T.V.HEMANTH KUMAR,B.E (MINING), FCC(R) , Mining Engineer in charge T.V.HEMANTH KUMAR Geologist in charge S.VENKATACHALAPATHY MSc GEOLOGY	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given in Part I, Sl 12	Under forest Outside forest Total (i) Already exploited & abandoned by opencast (O/C) mining 0.000 0.000 0.000 (ii) Covered under current (O/C) Workings 0.000 39.000 39.000 (iii) Reclaimed/Rehabilitated 0.000 0.500 0.500 (iv) Used for waste disposal 0.000 16.000 16.000 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.000 8.000 8.000 (vi) Other Purpose () 0.000 0.000 0.000 (vii) Work done under progressive mine closure	Nil
9d	Scrutiny of Annual return on afforestation	Given in Part V, Sec 4. Mining operations during the year	4.4 (i) Number of trees planted during the year (a) Within lease area 75 (b) Outside lease area 50 (ii) Species 90 (iii) Survival rate in percentage 90.00	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given in Part V, Sec 4 - Mineral Rejects for Graphite	4.2 Opencast 4.2 (B) (ii) Mineral Rejects generated with grades (tonnes) a. Quantity 0 b. Grade 0	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given in Part VI, Sl 1 & 2	Category Opening stock (in tonne) Production (in tonne) Closing stock (in tonne) (a) Open Cast Workings 162327.470 0.000 162327.470 (b) Underground Workings 0.000 0.000 0.000 (c) Dump Workings 8687626.000 0.000 8687626.000	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given in Part VI, Sl 2 & Part VII	Ex-Mine Price - Rs 0/- Cost of Production - Rs 40/-	Referred back
9h	Scrutiny of Annual return on fixed assets	Given in Part II(A)(Capital Structure)	Net Fixed Assets - Rs 2,37,00,000/-	Nil
9k	Scrutiny of Annual return on mining machineries	Given in Part V, Sec 5/6/8/9	Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) Used in opencast/ underground (specify) AIR COMPRESSOR 17.000 CUM/MN 2 Non Electrical Opencast BACK HOE 0.900 CUM 1 Non Electrical Opencast EXPLOSIVE VAN 3.450 TONNE 1 Non Electrical Opencast TIPPER 5.750 CUM 7 Non Electrical Opencast WATER TANKER 5000.000 LITRE 1 Non Electrical Opencast DOZER 180.000 HP 1 Non Electrical Opencast JEEP/TRACTOR 42.000 HP 3 Non Electrical Opencas	Nil

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

Date :

(Matiul Islam)

Indian Bureau of Mines