

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

Review and updation of Mining Plan 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 : Mr. E. Ganesan, QP & Mr. John Bright, Mines Manager.
Official with
Designation
- (iv) Date of Inspection : 19/10/2023
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SIVAGANGA (237.39 HA)**
- (b) **Registration NO.** : **IBM/5661/2011**
- (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 : 044 28410382
- (f) Police Station : SIVAGANGA
- (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/ : 12/02/2011
 Termination date

Geologist

Name : S.VENKATACHALAPATHY,Full Time
 Qualification : M.Sc GEO
 Appointment/ : 02/02/2015
 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 during the plan period	Nil	Violation pointed out
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	Not specified	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	3,485,825.00	3,485,825.00	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Violation pointed out for not carrying out exploration as proposed.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	PIT no 1. 200N to 300N 200E to 500E	PIT no 1. 200N to 300N 200E to 500E	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	-do-
2c	Stripping ratio or ore to OB ratio	1:2.62	1:1.67	Nil
2d	Quantity of topsoil generation in m3	Nil	Nil	Nil

2e	Quantity of overburden generation in m3	1,09,236 cu.m.	36,267 cu.m.	Violation pointed out
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Violation pointed out for inadequate development w.r.t. proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit	Single pit	As proposed
3b	Quantity of ROM mineral production proposed	1,04,250 tonne	54,216 tonne	Violation pointed out
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	Nil
3d	Quantity of mineral reject generation	Nil	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	NA	NA	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	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	Drill Dia 110 mm Depth 6 m SUN PRIME Detonating Fuse.	Drill Dia 110 mm Depth 6 m SUN PRIME Detonating Fuse.	Nil
3k	Provision of mining machineries in mineral benches	AIR COMPRESSOR 17.000 CUM 2 BACK HOE 0.900 CUM 1 BACK HOE 1.500 CUM 3 EXPLOSIVE VAN 3.250 TONNE 1 GENERATOR (DIESEL) 82.500 KWH 1 GENERATOR (DIESEL) 82.500 KWH 1 JEEP/TRACTOR 42.000 HP 3 TIPPER 5.750 CUM 4 DUMPER 12.000 CUM 5 WATER TANKER 5000.000 LITRE 1 ROCK DRILL 114.00 MM 2 PUMPS 2000.00 L/MN 4	AIR COMPRESSOR 17.000 CUM 2 BACK HOE 0.900 CUM 1 BACK HOE 1.500 CUM 3 EXPLOSIVE VAN 3.250 TONNE 1 GENERATOR (DIESEL) 82.500 KWH 1 JEEP/TRACTOR 42.000 HP 3 TIPPER 5.750 CUM 4 DUMPER 12.000 CUM 5 WATER TANKER 5000.000 LITRE 1 ROCK DRILL 114.00 MM 2 PUMPS 2000.00 L/MN 4	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	5m	5m	Suitable
3m	Total area covered under excavation/pits	34.03.5 Ha	34.03.5 Ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:2.62	1:1.67	Nil
3o	Total area put in use under different heads at the end of year	59.12. Ha	59.12. Ha	Nil

3p	Production of ROM mineral during the last five year period as applicable	2018-19 1,01,125 Tonnes 2019-20 1,03,540 Tonnes 2020-21 1,04,757 Tonnes 2021-22 1,03,957 Tonnes 2022-23 1,04,250 Tonnes	2018-2019 Nil 2019-2020 Nil 2020-2021 10,026 2021-2022 36,214 2022-2023 54,216	Within limits
3q	General remarks of inspecting officers on method of mining etc.	-	-	Violation pointed out for inadequate production w.r.t. proposals

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate Dumps for Top Soil, Overburden & Mineral Reject	Separate Dumps for Top Soil, Overburden & Mineral Reject	As proposed
4b	Location of topsoil, OB and mineral reject dumps	1600W to 2800W 0W to 1600W 0E to 1600E 1600E to 2800E	1600W to 2800W 0W to 1600W 0E to 1600E 1600E to 2800E	-do-
4c	Number of dumps within lease area and outside of lease area	Within lease - 01 nos outside lease -04 nos	Within lease -01 nos outside lease -04 nos	Old dumps lying outside concerned lease area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side UPL	Out side UPL	Nil
4e	Number of active and alive dumps.	01	01	As proposed
4f	Number of dead dumps.	04	04	Outside lease area
4g	Number of dumps established.	Nil	Nil	Nil

4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drains proposed	Garland drains provided	As proposed
4i	Length of Retaining wall or garland drain all along dumps	Not specified	300 mt	Nil
4j	Number of settling ponds	Nil	4 nos	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	04 numbers of Old dumps are lying inactive outside the lease.

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

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Submitted	Submitted	Nil
6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	0.10.5Ha	0.10.5Ha	As proposed
6d	No. of saplings planted during the year	170 nos	170 nos	-do-
6e	Cumulative no .of plants	680 nos	680 nos	-do-
6f	Any other method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch and care during the year	Not specified	Rs 1,00,000/-	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 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 Hect	0.10.5 Hect	-do-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation	Afforestation	-do-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodic Monitoring Proposed	Periodic Monitoring Carried out	As proposed
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	PMCP Compliance & progressive closure operations were found satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No sorting proposed	Nil	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	Nil

7c	Different grade of mineral sorted out at mines.	NA	NA	Nil
7d	Any beneficiation process at mines	Nil	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	No issues were observed with mineral conservation or beneficiation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No topsoil removal proposed for the year	Nil	Nil
8b	Concurrent use or storage of topsoil	NA	NA	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No backfilling proposed for the year	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	Nil

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	-	640 nos saplings planted cumulatively	Nil
8g	Survival rate	Not specified	60%	Nil
8h	Water sprinkling on roads to control airborne dust	Proposed	Water tanker deployed	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	The aesthetic beauty in and around mines area was found 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	7. Manager : S.JOHN BRIGHT 8. Mining Engineer in charge: S.JOHN BRIGHT 9. Geologist in charge : C.JAWAHAR Msc Gology	Given in Part I, Sl 7-9	Nil

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(ii) Covered under current (O-C) Workings 0.000 34.035 34.035 (iii) Reclaimed-rehabilitated 0.000 0.000 0.000 (iv) Used for waste disposal 0.000 5.900 5.900 (v) Occupied by plant, buildings, residential, welfare buildings and roads 0.000 3.335 3.335 (vi) Used for any other purpose (specify) Top Soil Storage, Mineral Storage and green belt 0.000 9.590 9.590 (vii) Work done under progressive mine closure plan during the year 0.000 52.860 52.860	Given in Part V, Sl 12	Nil
9d	Scrutiny of Annual return on afforestation	Number of trees planted during the year 170	Given in Part V, Sl 5	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Given in Part V, Sl 3	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	d) With less than 20% fixed carbon 144624.870 54216.000 53632.405 145208.465 1221.68	Given in Part VI, Sl 3	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price - Rs 1221.68 per tonne	Given in Part VI, Sl 3 & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets Rs 14,57,188/-	Given in Part II A Capital Structure	Nil
9k	Scrutiny of Annual return on mining machineries	AIR COMPRESSOR 17.000 CUM 2 BACK HOE 0.900 CUM 1 BACK HOE 1.500 CUM 3 EXPLOSIVE VAN 3.250 TONNE 1 GENERATOR (DIESEL) 82.500 KWH 1 JEEP/TRACTOR 42.000 HP 3 TIPPER 5.750 CUM 4 DUMPER 12.000 CUM 5 WATER TANKER 5000.000 LITRE 1 ROCK DRILL 114.00 MM 2 PUMPS 2000.00 L/MN 4	Given in Part V, Sl 6	Nil

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(1)	11/12/2023			

Date :

(Matiul Islam)

Indian Bureau of Mines