

**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 : **T003**) **S.THIRUNAVUKKARASU**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri.T.V.HEMANTH KUMAR Mines Agent cum mines manager
Official with
Designation
- (iv) Date of Inspection : 17/10/2018
- (v) Prev.inspection date : 14/02/2018

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** : 237.39
- (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 : K.DEVENDRAN,Full Time
 Qualification : DIP.MIN.ENG, 1 MMC
 Appointment/ :
 Termination date

Geologist

Name : S.VENKATACHALAPATHY,Full Time
 Qualification : M.Sc GEO
 Appointment/ :
 Termination date

Manager

Name : K.DEVENDRAN
 Qualification : D.M.E; F.C.C
 Appointment/ :
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	20/07/2000
		Mining Scheme rule 12 MCDR1988	24/12/2004
		Renewal under rule 24 MCR1960	20/07/2012
		Mining Scheme rule 12 MCDR1988	03/09/2014

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	Nil	Nil	
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	Nil	Nil	
1e	Balance reserve as on 01/04/20	31,52,490 (111)	31,52,490 (111)	
1f	General remarks of inspecting officers on geology, exploration etc	--	geology, exploration mine is satisfactory.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Fierst and 3rd pit	Fierst and 3rd pit	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed	As per the proposal	
2c	Stripping ratio or ore to OB ratio	1 : 7	1 : 8	
2d	Quantity of topsoil generation in m3	1,03,972	2000	Due to issue of Environment Clearance temporarily discontinuance of Mining activities.
2e	Quantity of overburden generation in m3			

2f General remarks of inspecting officers on development of pit w.r.t. type of deposit etc

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	TWO	TWO	
3b	Quantity of ROM mineral production proposed	1,04,557	NIL	Due to issue of Environment Clearance temporarily discontinuance of Mining activities
3c	Recovery of sailable/usable mineral from ROM production	80 %	80 %	
3d	Quantity of mineral reject generation	20 %	20 %	
3e	Grade of mineral rejects generation and threshold value declared.	Below 5% Fixed Carbon	Thresh hold Value <2% Fixed Carbon	
3f	Quantity of sub grade mineral generation.	40 %	NA	
3g	Grade of sub grade mineral generation	8-10 % of Fixed Carbon	NA	
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.	YES	YES, By the IMMT, Bhuvaneshwar	
3j	Provision of drilling and blasting in mineral benches	Provided	As per the proposal	

3k	Provision of mining machineries in mineral benches	Provided	Provided	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	yes	As per the Proposals	
3m	Total area covered under excavation/pits	33.57 Ha	33.57 Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 3	1 : 3	
3o	Total area put in use under different heads at the end of year	Over Burden/ Side Burden 7.4 Ha Storage of Top soil 1.94 Ha Plantation 5.98.5 Ha	Over Burden/ Side Burden 7.4 Ha Storage of Top soil 1.94 Ha Plantation 5.98.5 Ha	
3p	Production of ROM mineral during the last five year period as applicable	213-14 87,353 2014-15 1,03,450 2015-16 1,02,365 2016-17 1,04,791 2017-18 1,04,557	213-14 87,995 2014-15 71,706 2015-16 90,275 2016-17 92,901 213-14 Nil	2013-14 mine not working
3q	General remarks of inspecting officers on method of mining etc.	---	method of mining found to be satisfactory.	

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Provided separately	Provided separately	
4b	Location of topsoil, OB and mineral reject dumps	North western side, South side of Pit 2	North western side, South side of Pit 2	

4c	Number of dumps within lease area and outside of lease area	Three & Two dumps	Three & Two dumps	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	North western side, South side of Pit 2	North western side, South side of Pit 2	
4e	Number of active and alive dumps.	Two	Two	
4f	Number of dead dumps.	Three	Three	
4g	Number of dumps established.	nil	nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes Provided	150 m Retaining wall	
4i	Length of Retaining wall or garland drain all along dumps	500 mtrs	500 mtrs	
4j	Number of settling ponds	Three	Three	
4k	Specific comments of inspecting officer on waste dump management	--	waste dump management is found to be satisfactory	Mine not working during inspection

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	
5b	Area under backfilling of mined out area	NIL	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NIL	

5d	Total area fully reclaimed and rehabilitated	1.0 Ha	1.0 Ha
5e	General remarks of inspecting officers on backfilling and reclamation etc.	--	Backfilling, reclamation found satisfactory

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).	Yes	Submitted	
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	0.52 hect	1.0 hect	
6d	No. of saplings planted during the year	350	350	
6e	Cumulative no .of plants	500	350	
6f	Any other method of rehabilitation	water reservior	water reservior	
6g	Cost incurred on watch and care during the year	Nil	Rs 25,00,000/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NA	NA
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodically done by state pollution control board	Periodically done by state pollution control board
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	--	PMCP compliance & progressive closure is satisfactory

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	yes	yes
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	semi mechanised	semi mechanised
7c	Different grade of mineral sorted out at mines.	Yes	Yes
7d	Any beneficiation process at mines	No	No
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	- -	Mineral conservation & beneficiation issues is satisfactory

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	utilized and maintained	
8b	Concurrent use or storage of topsoil	plantation	plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separately provided	Separately provided	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	yes	overburden are stocked seprtaely	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	NIL	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	yes done	yes done	
8g	Survival rate	80 %	as given	
8h	Water sprinkling on roads to control airborne dust	By Water sprinkling system	By Water sprinkling system	By 5000 ltrs Capacity
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	--	aesthetic beauty in and around mines area is good	

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Proposed	Subitted in time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	given	As Given	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Provided	As Provided	
9d	Scrutiny of Annual return on afforestation	No	NO	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	given	nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Provided	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	as Given
9h	Scrutiny of Annual return on fixed assets	provided	NIL
9k	Scrutiny of Annual return on mining machineries	given	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

Date :

(S. THIRUNAVUKKARASU)

Indian Bureau of Mines