INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION Mining Plan Modification Report Chennai Regional Office

Mine file No: TN/SLM/MG-18.MDS Mine code: 39TMN11009

(i) Name of the Inspecting : (K08) G.SORNADURAI KANNAN

Officer and ID No.

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine : Thiru.A.Jagannathan, Qualified Person

Official with Designation

(iv) Date of Inspection : 20/09/2024
(v) Prev. Inspection date : 25/06/2024

PART-I: GENERAL INFORMATION

1. (a) Mine Name : JAGIRAMMAPALAYAM

(b) Registration No. : IBM/5017/2011

(C) Category : A Mechanised

(d) Type of Working : Opencast

(e) Postal address : JAGIRAMMAPALAYAM

State : TAMIL NADU

District : SALEM

Village : CHETTICHAVADI

Taluka : SALEM

Post office : JAGIRAMMAPALAYAM

Pin Code : 636012

FAX No. : 0427-2345937

E-mail : pongurumagnesite@gmail.com

Phone : 0427-6533520

(f) Police Station : SALEM

(g) First opening date : 02.09.1963

(h) Weekly day of rest : SUN

2. Address for correspondence : Thiru.S.Sundarajan, 5/22-A,

Periyakollpatti Kannankuruchi Post,

Gorimedu, Salem-636008

3. (a) Lease Number : TMN0384

(b) Lease area : 77.50 Hectares

(C) Period of lease : 50 Years
(d) Date of Expiry : 31.03.2030

4. Mineral Worked : Magnesite Main

5. Name and Address of the

Lessee : Thiru.S.Sundarajan,

5/22-A, Periyakollpatti, Kannankuruchi Post, Gorimedu,

Salem-636008

Phone: 0427 - 2345937/ 6533520

FAX :

Owner : Thiru.S.Sundarajan,

5/22-A, Periyakollpatti, Kannankuruchi Post, Gorimedu,

Salem-636008

Phone: 0427 - 2345937/ 6533520

FAX :

Agent : Thiru. C.NARAYANAN

SRI Ponguru Magnesite Mines

Periyakollpatti,

Kannankuruchi Post, Gorimedu,

Salem-636008

Mining Engineer

Name : B.Rajesh, Full Time

Qualification : B.E., (Mining Engineering)

Appointment/ : 01.12.2018

Termination date

Geologist

Name : Abdul Nisar, Full Time

Qualification : M.Sc, (Geology)
Appointment/ : 16.11.2020

Termination date

Manager

Name : K.Prakash,

Qualification : B.E., (Mining Engineering)

Appointment/ : 18.09.2023

Termination date

5. Date of approval of Mining Plan/Scheme of Mining Mining Scheme rule 12 MCR1960 12/11/2004 12/11/2004 Mining Scheme rule 12 MCDR1988 24/04/2009 Mining Scheme rule 12 MCDR1988 07/04/2014 MP review under 17(1) MCR 2016 13/11/2018

PART - II: OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Sl. No	Item	Proposals	Actual Work	Remarks
		A. EXPLOR	RATION:-	
1a	Backlog of Previous Year	10 Boreholes has been proposed during 2023-2024.	13 Boreholes has drilled during 2023-2024.	Form-I has been submitted
1b	Exploration Over Lease area for Geological Axis 1 or 2	10 additional explorations were proposed during 2023-2024 in the lease area for Geological axis - 1.	13 additional explorations were carried out in the lease area for Geological axis - 1 during 2023-2024.	Entire lease area 77.50 hectares are under G-1 category.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	10 Lakhs has proposed for exploration during 2023-2024.	12 Lakhs has spent for Exploration during 2023-2024.	So far 205 boreholes have been drilled with 8344 meterage in the lease upto 2024-25
1d	Balance area to be explored to bring Geological axis 1 or 2	Entire area is under G-1	Entire area is under G-1	Entire area has been explored under G-1 category with 100m X 100m grid interval.
le	Balance reserves as on 01/04/2023	Magnesite as on 01.04.2024 Proved Mineral Reserves (111) = 9460602 tons Pre-Feasibility Mineral Resources (221) = 10945264 tons Pre-Feasibility Mineral Resources (222) = 14752481 tons	Magnesite as on 01.04.2024 Proved Mineral Reserves (111) = 10997607 tons Pre-Feasibility Mineral Resources (221) = 10945264 tons Pre-Feasibility Mineral Resources (222) = 14752481 tons	The available grade of Magnesite in this lease area is Refractory Grade.
1f	General remarks of inspecting officer on geology, exploration etc.	Located at the foothills of Shevaroys. Due to weathering, Magnesite outcrop looks like Chalk hills.	The belt comprises of intrusive Dunite, Peridotite, Pyroxenite & Magnesite ore.	Magnesite deposit has emplaced as veins in the ultrabasic rocks

Sl. No	Item	Proposals	Actual Work	Remarks	
	B. DEVELOPMENT:-				
2a	Location of development w.r.t. lease area	During 2023-2024, there is no proposal in development	Development is not carried out as per proposal.	There is no Topsoil & OB proposal during 2023-2024	

2b	Separate benches in topsoil, overburden and mineral	OB - 3 bench & Minerals – 3 Benches proposed in Lease.	OB & Mineral benches are formed as per proposal.	When the vein deposit has removed from benches, after that it is considered as Overburden benches.
2c	Stripping ratio or ore to OB ratio	1:13.28	1:15.16	Due to less production quantity the Stripping Ratio is increased. Violation has been issued.
2d	Quantity of topsoil generation in m3	There is no proposal of Topsoil generation during 2023-2024	No topsoil has generated during 2023-2024.	There is no Topsoil & OB proposal during 2023-2024
2e	Quantity of overburden generation in m3	There is no proposal of OB generation during 2023-2024	No OB has been generated during 2023-2024.	There is no Topsoil & OB proposal during 2023-2024
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Due to less production quantity the Stripping Ratio is increased.	There is no Topsoil & OB proposal during 2023-2024	When the vein deposit has removed from benches, after that it is considered as Overburden benches.

Sl. No	Item	Proposals	Actual Work	Remarks		
	C. EXPLOITATION:-					
3a	Number of Pit Proposed for Production	During 2023-2024, it is proposed to work in existing Pit-1, 2 & 3	Productions are carried out as per proposal in Lease.	Nil		
3b	Quantity of ROM mineral production proposed	The total target of Magnesite production proposed was 74386 tons during 2023- 2024.	Achieved Magnesite Production is 24958 tons during 2023- 2024.	RMP has submitted for 2024-25 to 2028-29		
3c	Recovery of Sailable/ Usable Mineral from ROM Production	93% Recovery	95% Recovery	Nil		
3d	Quantity of mineral reject generation	There is proposal of Mineral Reject generation during 2023- 2024 is 882002 tons.	756892 tons of Mineral Reject generated during 2023- 2024.	RMP has submitted for 2024-25 to 2028-29		
3e	Grade of mineral reject generation and threshold value declared	Peridotite, dunite is considered as mineral rejects.	Peridotite, dunite is considered as mineral rejects.	Nil		

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3f	Quantity of sub-grade mineral generation	No Sub Grade Generation	No Sub Grade Generation	Nil
3g	Grade of sub-grade mineral generation	There is No Generation of Subgrade Mineral	There is No Generation of Subgrade Mineral	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sorting of Magnetite is proposed.	As per proposal Manual sorting of Magnetite is done.	Nil
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Beneficiation Study is Proposed	Only Manual Picking of Ore from Intercalated Waste	Rock Breaker is used for breaking the strata as medium hard in nature.
3j	Provision of drilling & blasting in mineral benches	Drilling & Blasting are proposal.	Drilling & Blasting are done as per proposal.	Rock breakers are used for production.
3k	Provision of mining machineries in mineral benches	Excavators Tippers Rock Breakers Dozer Air Compressor Dumper Water Tanker	As per proposal the machineries are there during inspection.	Available machinery are shown in Annual Returns
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/ SOM	In 2023-2024, Bench height of 6.5m was proposed in Mineral.	As per proposal benches are formed.	Nil
3m	Total area covered under excavation/pits	38 hect area is proposed for Pit during 2023-2024	38 hect areas are under Pit only.	Nil
3n	Ore to OB ratio for the pit/ mine during the year	1:13.28	1:15.16	Due to less production quantity the Stripping Ratio is increased. Violation has been issued.
30	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2024. Mines = 38 hect Dump = 24 hect	Land use Pattern as on 01.04.2024. Mines = 38 hect Dump = 24 hect	Nil
3p	Production of ROM mineral during last five- year period, as applicable	2023-2024 = 1062653 tons 2022-2023 = 1080053 tons 2021-2022 = 1092915 tons 2020-2021 = 1079108 tons 2019-2020 = 1084040 tons	2023-2024 = 781850 tons 2022-2023 = 479183 tons 2021-2022 = 534441 tons 2020-2021 = 502032 tons 2019-2020 = 426969 tons	Nil

3q	General remarks of inspecting officer on method of mining etc.	During 2023-2024, it is proposed to work in existing Pit-1, 2 & 3	Achieved ROM Production is 781850 tons during 2023-2024 against proposal of 1062653 tons.	
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Sl. No	Item	Proposals	Actual Work	Remarks
		D. SOLID WASTE MANA	GEMENT - DUMPING:-	
4a	Separate Dumping of Topsoil, OB and Mineral Rejects	There is proposal for dumping of Mineral Reject in existing dump 1 to 7 during 2023-2024.	As per proposal the dumping was carried out during 2023-2024 in existing dumps.	RMP has submitted for 2024-25 to 2028-29
4b	Location of Topsoil, OB and Mineral Rejects Dumps	There is proposal for dumping of Mineral Reject in existing dump 1 to 7 during 2023-2024.	As per proposal the dumping was carried out during 2023-2024 in existing dumps.	RMP has submitted for 2024-25 to 2028-29
4c	Number of Dumps within Lease & Outside Lease area	Lease area = 7 Non Lease area = Nil	Lease area = 7 Non Lease area = Nil	Nil
4d	Location of Dumps, within Ultimate Pit Limit (Rule-16)	Outside UPL	Outside UPL	Nil
4e	Number of Active & Alive Dumps	Active Dump= 7 Alive Dump = Nil	Active Dump= 7 Alive Dump = Nil	Nil
4f	No of Dead Dumps	No Proposal	Nil	Nil
4g	No of Dumps Established	No Dumps have been established.	No Dumps have been established.	Nil
4h	Whether Retaining Wall or Garland drain along Dumps are there	No Proposal	Nil	Nil
4i	Length of Retaining Wall or Garland drain along Dumps	No Proposal	Nil	Nil
4j	No of Settling tanks	No proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	There is proposal for dumping of Mineral Reject in existing dump 1 to 7 during 2023-2024.	As per proposal the dumping was carried out during 2023-2024 in existing dumps.	RMP has submitted for 2024-25 to 2028-29

Sl. No	Item	Proposals	Actual Work	Remarks	
	E. SOLID WASTE MANAGEMENT - BACKFILLING:-				
5a	Status of part or full extraction of mineral from mined out area before starting backfilling	No Proposal for backfilling during 2023-2024.	Nil	Nil	
5b	Area under backfilling of mined out area	No Proposal during 2023-2024.	Nil	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposal during 2023-2024.	Nil	Nil	
5d	Total area fully reclaimed and rehabilitated	No Proposal during 2023-2024.	Nil	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	No backfilling has done during 2023-24	The mine was not worked upto the proved depth and no backfilling were proposed during 2023-24.	RMP has submitted for 2024-25 to 2028-29	

Sl. No	Item	Proposals	Actual Work	Remarks
		F. PROGRESSIVE MIN	NE CLOSURE PLAN:-	
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	It should be on or before 1 st July every year.	Submitted for the year 2023-2024.	Nil
	Management of worked/ mined out benches i) Area available for rehabilitation (ha)	i) No Proposal	i) Nil	
	ii) Afforestation done (ha)	ii) No Proposal	ii) Nil	Nil
6b	iii) No. of saplings planted during the year	iii) No Proposal	iii) Nil	MII
	iv) Cumulative no. of plants	iv) No Proposal	iv) Nil	
	v) Any other specific method of rehabilitation	v) No Proposal	v) Nil	
	vi) Cost incurred on watch & care during the year	vi) No Proposal	vi) Nil	
	Compliance on reclamation and rehabilitation by			
6c	backfilling i) Voids available for backfilling (L X B X D)	i) No Proposal	i) Nil	Nil
ьс	ii) Void filled by waste/ tailings	ii) No Proposal	ii) Nil	
	iii) Afforestation on the backfilled area	iii) No Proposal	iii) Nil	
		iii) No Proposal	iii) Nil	

	iv) Rehabilitation by	iv) No Proposal	iv) Nil	
	making water reservoir v) Any other specific means	v) No Proposal	v) Nil	
64	Compliance of Rehabilitation of waste land within lease i) Afforestation	 i) 300 saplings proposed in safety zone 2023-2024. ii) Proposed 1.0 heet in a fattern of 2023-2024. 	i) Total 1000 saplings has achieved during 2023-2024 along safety zone. ii) 1.15 hect achieved in	Cumulatively 40500
6d	iii) Method of rehabilitation	safety zone for 2023-2024. iii) Green Belt development proposed on safety barrier for 2023-2024.	safety zone area during 2023-2024. iii) Plantation has been done as per proposal along the safety barrier for 2023-2024.	saplings have been planted within lease area & 4750 sapling outside lease area.
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Bi-Annually Survey	Environment monitoring is carried out through Government as well as private agency.	Lessee is conducting Environmental monitoring and all are within permissible limit
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	300 saplings proposed in 1.0 hectares along the safety zone for 2023-2024.	Total 1000 saplings has achieved in 1.15 hectares of safety zone during 2023-2024.	Cumulatively 40500 saplings have been planted within lease area & 4750 sapling outside lease area.

Sl. No	Item	Proposals	Actual Work	Remarks
		G. MINERAL CO	NSERVATION:-	
7a	ROM mineral dispatch or grade wise sorting within lease area	1062653/ ROM 74386/ Saleable Ore	781850/ ROM 24958/ Saleable Ore	RMP has submitted for 2024-25 to 2028-29
7ь	Method of Grade-wise mineral sorting i.e. manual or mechanical	Manual sorting of Magnetite is proposed.	As per proposal Manual sorting of Magnetite is done.	The available grade of Magnesite in this lease area is Refractory Grade.
7c	Different grade of mineral sorted out at mines	MgO = 35 - 495% CaO = 0.5 - 2.5%	MgO = 35 - 495% CaO = 0.5 - 2.5%	Magnesite which is more than 35% MgO is Suited for Refractory Industries
7d	Any beneficiation process at mines	Manually sorting and sizing proposed	Manually sorting and sizing is being done	No Beneficiation process is Proposed

7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues		Manually sorting and sizing is being done	The available grade of Magnesite in this lease area is Refractory Grade.
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Sl. No	Item	Proposals	Actual Work	Remarks		
H. ENVIRONMENT:-						
8a	Separate removal and utilization of topsoil	There is no proposal of Topsoil generation during 2023-2024	No topsoil has generated during 2023-2024.	There is no Topsoil & OB proposal during 2023-2024		
8b	Concurrent use or storage of topsoil	No Proposal	Nil	Nil		
8c	Separate dumps for overburden, waste rock, rejects and fines	There is proposal for dumping of Mineral Reject in existing dump 1 to 7 during 2023-2024.	As per proposal the dumping was carried out during 2023-2024 in existing dumps.	RMP has submitted for 2024-25 to 2028-29		
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal for backfilling during 2023-2024.	Nil	Nil		
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal for backfilling during 2023-2024.	Nil	Nil		
8f	Baseline information on existence of plantation & additional plantation done	300 saplings proposed in safety zone for 2023-2024.	Total 1000 saplings has achieved during 2023-2024 along safety zone.	Plantation has been done as per proposal along the safety barrier.		
8g	Survival rate	No Proposal in the document.	50%	Plantation has been done as per proposal along the safety barrier.		
8h	Water sprinkling on roads to control airborne dust	Yes, it is proposed for water sprinkling on haul roads.	Daily Water tanker is spraying water on mines roads side to control airborne dust.	During Inspection, water sprinkling on mines roads has been noticed.		
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Scanty vegetation, bushes, neem are observed in lease area	There is no prominent river or stream running in this area.	Surrounding area beyond lease area is greenery		

Sl. No	Item	Com	Remarks			
I. COMPLIANCE OF RULE-45:-						
9a	Status of Submission of Monthly & Annual Returns	MR Submitted up to = August 2024 AR Submitted up to = 2023-2024.	Returns are submitted within time limit.	Both Annual & Monthly returns are submitted in online.		
Sl. No	Item	Details Given in A.R	Observation of I/Officer	Remarks		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer, Geologist & Manager has shown.	During inspection Mining Engineer, Geologist is present.	Nil		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use Pattern as on 01.04.2024. Mines = 38 hect Reclaimed = 24 hect	Landuse Pattern is filled as per approved Mining Plan	Nil		
9d	Scrutiny of Annual return on afforestation	Lessee has planted 1000 saplings during 2023-24.	Plantation has been done as per proposal along the safety zone.	Cumulatively 40500 saplings have been planted within lease area & 4750 sapling outside lease area.		
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Mineral Reject is included in the waste quantity	Nil	It is advised to show separately the Mineral reject dump & quantity.		
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Achieved ROM Production is 781850 tons during 2023-24.	Out of 781850 tons of ROM, 24958 tons as ore and 756892 tons as intercalate waste	Mine has dispatches 29857 tons of Magnesite during 2023-24 and 23101 tons as closing stock.		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cost of Production & Ex. Mine Price has shown	Some invoice has been checked	Nil		
9h	Scrutiny of Annual return on fixed assets	Fixed Assets is given	Fixed Assets is filled	Nil		
9k	Scrutiny of Annual return on mining machineries	Machineries details given	As available in field	Nil		

Details of violations observed during current inspection and compliance position of violation pointed out:-

There is no Violation pointed out.