

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

**MCDR inspection REPORT
Hyderabad regional office**

Mine file No : AP/VZNR/MN-141/HYD

Mine code : 40APR20094

- (i) Name of the Inspecting : **160**) **kalmata.M.K**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : K.Sivaprasada Rao, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 19-OCT-23
- (v) Prev.inspection date : 26-AUG-21

PART-I : GENERAL INFORMATION

- 1. (a) **Mine Name** : **PUTIKAVALASA MINE (21.77 H**
- (b) **Registration NO.** : **IBM/20167/2015**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :
State : ANDHRA PRADESH
District : VIZIANAGARAM
Village : PUTIKAVALASA
Taluka : SALURU
Post office : SALURU
Pin Code : 535591
FAX No. :
E-mail : svnmines0803@gmail.com
Phone :
- (f) Police Station :
- (g) First opening date : 01-APR-15
- (h) Weekly day of rest : SUN
- 2. Address for : S.VENKATA NARAYANA REDDY
correspondance : D.No.39-3-38/1, Phase-III, Masjid Junction,
Murali Nagar(East), VISAKHAPATNAM-530007, A.P
- 3. (a) Lease Number : **N.A.**
- (b) Lease area : **21.77Ha.**
- (c) Period of lease : **50 years**
- (d) Date of Expiry :
- 4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the Lessee : SGX Minerals Pvt.Ltd.lot No Fourteen,
Flat No One Zero Three, One Zero
Four Sowparnika Castle, Journalists
Colony, VUDA Layout Marripalem

6. Date of approval of Mining Plan/Scheme of Mining : MP review under 17(1) MCR 2016 28-NOV-18
Latest approved document Review of Mining plan AP/VZNR/MP/Mn-101/HYD,
dated:-28-11-2018

Details of Mining Engineer:- K.Shivaprasad Rao, Dip
Mining with IInd class
certificate

Details of Geologist:- D.Sudhakar, Msc Geology.

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There was a proposal to drill 16 boreholes in the year 2022-23. and total boreholes proposed in the block period 2018-19 to 2022-23, was 73.	In the year 2022-23 lessee has drilled 04 boreholes and so far in the block period (2018-19 to 2022-23) drilled total 59 boreholes.	The exploration is not carried out as per the proposal and violation is pointed out for the same under Rule 11(1) of MCDR 2017.
1b	Exploration over lease area for geological axis 1 or 2	Exploration was proposed convert entire mineralized area under G-1 level.	Approximately about 4.97Ha is explored under G-1 level.	Total mineralized area is about 6.00Ha., However as on date only 4.97Ha is explored under G-1 level and about .59 Ha is under G-2. Exploration is not carried out as per the proposal and violation is pointed out for the same under Rule 11(1) of MCDR 2017.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None.	Exploration ins carried out by M/s Earth and Environment .	Information on expendityure is not available.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Proposal was given to explore entire Mineralized area under G-1 level.	Total mineralized area is about 6.00Ha., However as on date only 4.97Ha is explored under G-1 level and about .59 Ha is under G-2 level.	Exploration is not carried out as per the proposal and violation is pointed out for the same under Rule 11(1) of MCDR 2017.

1e	Balance reserve as on 01/04/20	As per the approved document dated 28.11.2018, Proved Mineral reserves (111) - 107658 tonnes Remaining M Resources (221) - 8297 tonnes Total :- 115955 tonnes	Reserves/resources as on 01.04.2023 is as follows Proved Mineral Reserves (111) - 86073 tonnes. Remaining M Resources (221) 8297 tonnes Total:- 94370 tonnes	Reserves/resources were updated by depleting production carried out from 01.12.2018 to 31.03.2023. Lessee has drilled 59 bore holes during the block period 2018-19 to 2022-23 and exploration is still not completed. Once exploration is completed lessee has advised to submit Geological report with updated reserve position to this office.
1f	General remarks of inspecting officers on geology, exploration etc		The mining lease area is occupied by Khondalite of Archean age. The manganese ore is derived from supergene enrichment and alteration of Manganese Silicate. The chief minerals are Psillomelane, Pyralusite and braunite. The Strike of the formation is NE-SW and dip varies from 70 to 80 degree towards east.	Total mineralized area is about 6.00Ha., However as on date only 4.97Ha is explored under G-1 level and about .59 Ha is under G-2. Exploration is not carried out as per the proposal and violation is pointed out for the same under Rule 11(1) of MCDR 2017. Total 59 borholes were drilled so far in the lease area.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	In the year 2022-23 proposed working is as follows, Pit- 1:- N 330 to N 380 and E-630 to 700 and Pit 2:- N 50 to N 120 and E 260 to 400	No working has been carried out in pit No-1 and In pit No-2, working is carried out between the co-ordinates N 30 to N 110 and E 220 to 260.	The co-ordinates given in the approved documents are local co-ordinates and in the present submission co-ordinates are given in National grids. So, the working deviation given are approximately. However, in drone data it is observed that working has been extended beyond 7.5 mtr safety zone in South-western portion of the lease area and violation is pointed out for the same under Rule 11(1) of MCDR 2017.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes proposed separate benches in ore and OB.	Benches were made as per the proposal.	
2c	Stripping ratio or ore to OB ratio	1:0.1 in the year 2022-23.	1:1.4	As per the handling quantity mentioned in the approved document for ore and waste, the proposed striping ration should be almost 1:0.6, however, under ROM/waste column figures are wrongly mentioned.
2d	Quantity of topsoil generation in m3	509.66 in the year 2022-23.	Nil.	Working was carried out in the already broken up area , so no top soil was removed in the year 2022-23.

2e	Quantity of overburden generation in m3	8652 in the year 2022-23.	1244 in the year 2022-23.	The production is achieved less than the proposal due to heavy rain and due to transfer of the lease the mining was not carried out as per the proposal.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	<p>The production is achieved less than the proposal due to heavy rain and due to transfer of the lease the mining was not carried out as per the proposal.</p> <p>However, in drone data it is observed that working has been extended beyond 7.5 mtr safety zone in South-western portion of the lease area and violation is pointed out for the same under Rule 11(1) of MCDR 2017.</p>		

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	In the year 2022-23 working was proposed in two pits.	It appears working was carried out in only one pit in the year 2022-23.	Due to heavy rain and change of lessee, the mine is not working properly in the year 2022-23, further, lessee is submitted draft RMP for approval in the revised proposal is given for the block period 2023-24 to 2027-28, so violation is pointed out.

3b	Quantity of ROM mineral production proposed	24951 tonnes in the year 2022-23	1687 ROM production is achieved in the year 2022-23.	Only 7% production is achieved in the year 2022-23. Due to heavy rain and change in ownership the mine is not worked properly in the year 2022-23.
3c	Recovery of sailable/usable mineral from ROM production	85%	99% recovery is shown in the year 2022-23.	
3d	Quantity of mineral reject generation	978 tonnes in the year 2022-23.	None in the year 2022-23.	Recovery is shown 99% in the year 2022-23 and remaining 1% is pure waste.
3e	Grade of mineral rejects generation and threshold value declared.	Threshold value declared is plus 10% Mn.	Generation of Mineral reject was zero in the year 2022-23. The ore having Mn morethan 10% is shown under below 25% Mn grade.	
3f	Quantity of sub grade mineral generation.	489.246 tonnes in the year 2022-23.	Nil.	
3g	Grade of sub grade mineral generation	None.	Not applicable.	No subgrade mineral was generated in the year 2022-23
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized.	Mechanized.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None.	None.	

3j	Provision of drilling and blasting in mineral benches	Non proposal was given for drilling and blasting.	None.	Since the material was soft and friable which can be easily removed from excavator, no drilling and blasting is proposed and carried out in the year 2022-23.
3k	Provision of mining machineries in mineral benches	Yes proposed	Lessee is using combination of excavator and tipper for production and development	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed 3mtr bench height in OB and mineral benches.	Yes the proposed bench height is suitable for the method of mining adopted. However, lessee has not maintained bench heights as per the proposal.	Violation was issued for the same by ACOM during previous inspection, so no fresh violation is issued. Further, lessee has advised to carry out slope stability and modify the proposals as per the results of the study.
3m	Total area covered under excavation/pits	1.809 ha up to 2022-23.	0.49Ha up to 2022-23.	The production is not carried out as per the proposal, so, area under mining is lessee only.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.1 in the year 2022-23.	1:1.4	As per the handling quantity mentioned in the approved document for ore and waste, the proposed striping ration should be almost 1:0.6, however, under ROM/waste column figures are wrongly mentioned.

3o	Total area put in use under different heads at the end of year	Area under Mining- 1.809Ha, Waste dump-0.713Ha, Roads-0.27Ha.	Area under mining- 0.32Ha, area under dump-0.06Ha, area under roads-0.28Ha, Mineral storage-0.15Ha	
3p	Production of ROM mineral during the last five year period as applicable	2022-23 24951 tonnes 2021-22 21213 tonnes 2020-21 22113 tonnes 2019-20 24617 tonnes 2018-19 12667 tonnes	2022-23 1687 tonnes 2021-22 5400 tonnes 2020-21 5400 tonnes 2019-20 5633 tonnes 2018-19 5851 tonnes	In the five year block period (2018-19 to 2022-23) production achieved is only 22.71%.
3q	General remarks of inspecting officers on method of mining etc.		The method of mining adopted is category A mechanized mines. Lessee has deployed combination of excavator and tippers in working benches to carry out production and development. The benches were not maintained as per the proposal and violation is issued for the same by ACOM during previous inspection so no fresh violation is issued. Further, lessee has submitted draft RMP for approval in that proposal is given to rectify the bench parameters.	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes proposed separate dumps for OB	OB is dumped separately. However during inspection it was observed that one waste dump is existing outside the lease area (In the southern part).	Violation is pointed out for the same under Rule 11(1) of MCDR 2017.

4b	Location of topsoil, OB and mineral reject dumps	There was a to dump waste in the eastern part of the lease area between co-ordinates N415 to N 490 and E 705 to E 795 (Local grids)	Actual dumping was made outside the lease area in the southren part of the lease.	Violation is pointed out for the same under Rule 11(1) of MCDR 2017.
4c	Number of dumps within lease area and outside of lease area	Two dump was proposed in side the lease area (One existing old dump and one new dump).	One old dump is existing within the lease area and one out side the lease area.	Violation is pointed out for dumping outside the lease area. Natural vegetation was observed on the dump existing within the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL.	One old dump is existing within the UPL and same will be shifted onve working commenced in that area.	New dump is made outside the lease area and violation is pointed out for the same under Rule 11(1) of MCDR 2017.
4e	Number of active and alive dumps.	Two	Two	One dump is existing outside the lease area and violation is pointed out for the same under Rule 11(1) of MCDR 2017.
4f	Number of dead dumps.	None.	None.	
4g	Number of dumps established.	None.	None.	

4h	Whether Retaining wall or garland drain all along dumps are there.	None in the year 2022-23.	None	Earlier, there was a proposal to construct retaining wall. garlan drain around the proposed waste dump in the year 2018-19. Since the production carried out is only 22 % in the block period of 2018-19 to 2022-23, the generation of waste was less only, so the dump is not formed as per the proposal, so, no garland drains and retaining walls are constructed as proposed.
4i	Length of Retaining wall or garland drain all along dumps	None in the year 2022-23.	None.	
4j	Number of settling ponds	None in the year 2022-23.	None.	
4k	Specific comments of inspecting officer on waste dump management			There was a proposal to dump waste in the eastern part of the lease area in the block period 2018-19 to 2022-23. However, it is observed that dumping was made out side the lease area in the southren side of the lease boundary and Violation is pointed out for the same under Rule 11(1) of MCDR 2017.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	None.	None.	No back filling is proposed in the block period 1018-19 to 2022-23.
5b	Area under backfilling of mined out area	None.	None.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	None.	None.	
5d	Total area fully reclaimed and rehabilitated	None.	None.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The mineral is not extracted up to the proved depth, so no back filling is proposed and made in the block period 2018-19 to 2022-23.

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).	Before 1st july of every year.	Submitted PCCP report for the year 2022-23 along with the annual returns.	Submitted yearly report on PMCP 30.06.2023.
6b	Area available for rehabilitation (ha) .	None.	None.	
6c	afforestation done (ha).	0.12 Ha in the year 2022-23.	0.12Ha in the year 2022-23.	
6d	No. of saplings planted during the year	200 saplings in the year 2022-23.	200 saplings within the lease area.	Plantation is made as per the proposal.

6e	Cumulative no .of plants	1000 saplings in the block period 2018-19 to 2022-23.	860 saplings were planted in the block period 2018-19 to 2022-23.	
6f	Any other method of rehabilitation	None.	None.	
6g	Cost incurred on watch and care during the year	None.	Approximately 50000/year	For regular watering.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	None.	None.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	None.	None.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	None.	None.	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None.	None.	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	None.	None.	

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	None.	None.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	None.	None.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	None.	None.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed Environmental monitoring in the core and buffer zone.	Due to transfer of the lease and approved mining plan is not available for the block period 2023-24 to 2027-28, the mine is not working so no environmental monitoring is carried out recently.	Lessee has advised to carry out environmental monitoring once mining operation is commenced.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Plantation is made as per the proposal. Since the generation of waste was less the dump height was not reached the height as proposed. and in the most of the waste generated in the block period 2018-19 to 2022-3 was dumped outside the lease area. The proposed garland drains and retaining walls were not made. Further, since the mine is not working in the year 2023-24 due to approval of mining plan is due, so environmental monitoring is not carried out for recent period.	However, lessee has advised to carry out environmental monitoring after the commencement of mining operation.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposed grade wise dispatch from the lease area.	Lessee is dispatching below 25%Mn and 25 to below 35% Mn ore.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	Below 25% Mn ore and 25 to below 355 Mn ore.	Below 25% Mn ore and 25 to below 355 Mn ore.	In last two years lessee has dispatched only below 25% Mn ore. So lessee has advised to shown the dispatch/sale invoices for last two years.
7d	Any beneficiation process at mines	None.	Lessee is doing manual washing of the ore to remove waste.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Lessee is doing manual washing of the ore to remove waste.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposed.	The topsoil removed before the last plan period is utilized for plantation work within the lease area.	In the year 2022-23 no topsoil was removed. Lessee was not maintained proper record for topsoil removal and utilization and advised to maintain the records properly in future. During previous inspection violation was issued by the ACOM for the same , so no fresh violation is pointed out.
8b	Concurrent use or storage of topsoil	Proposed storage in the year 2022-23.	No topsoil was removed in the year 2022-23.	The topsoil removed earlier, was utilized for plantation work within the lease area.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes proposed.	separate dumps are existing for ore and waste.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	None.	None.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	None.	None.	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Given information on existing plantation in the approved document. Additionally lessee has planted 860 saplings in the block period 2018-19 to 2022-23.	
8g	Survival rate	None.	65 to 70 %	
8h	Water sprinkling on roads to control airborne dust	Yes proposed.	On the day of inspection mine is not working due to no valid approved document was available for the block period 2023-24 to 2027-28. So, no water sprinkling was done.	However, during working days lessee is doing water sprinkling on roads through water tankers.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		The benches were not maintained as per the proposals and lessee has advised to rectify the same. Plantation was made as per the proposal. Cleanliness was observed around the mine office.	

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	A monthly returns shall be submitted before 10 th day of every month in respect of preceding month and an annual returns shall be submitted before 1st day of july of each year for the preceding financial year.	Submitted Annual returns for the year 2022-23 and monthly returns up to September 2023.	The monthly and annual returns were submitted within the prescribed time limit.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	As per the annual returns submitted for the year 2022-23, details are as follows, Mining Engineer & Manager:- Shri K. Shivaprasad Rao., Geologist:- D.Sudhakar.	The details of Mining Engineer and geologist furnished in the annual returns submitted for the year 2022-23 are found correct.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Mining:- 0.26Ha, Waste dump-0.06Ha, Infrastructure -0.27Ha.	Area under mining- 0.32Ha, area under dump-0.06Ha, area under roads-0.28Ha, Mineral storage-0.15Ha	Area under mining is morethan the proposal. Lessee has submitted draft Review of Mining plan for approral, in that the landuse details are updated and new proposals are given based on updated data so no violation is pointed out for the same.
9d	Scrutiny of Annual return on afforestation	200 saplings planted in the year 2022-23 with the survival rate of 70%.	The information furnished in the annual returns about plantation is found correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	None.	None.	No mineral reject is generated in the year 2022-23. Total ROM produce in the year 2022-23 is 1687 tonnes and ore recovered is 1675 tonnes of below 25% mn ore and remaining 12 tonnes is pure waste, so not shown in the mineral reject.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM:- opening and closing stock -Nil and production-1687 tonnes. Grade wise production and dispatch:- below 25% Mn ore:- Opening stock-50 tonnes, production-1675 tonnes , dispatch-100 tonnes and closing stock-1625.	The stock positions mentioned in the annual returns is almost matching. Stocks were observed near the mine office.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value is shown as Rs 1450/ tonne for below 255Mn ore, Exmine price:- Rs 1450/ tonne and cost of production;- Rs:- 1255.64/tonne	In the annual returns submitted for the year 2022-23, t part III (6) (i) under other expenses, value for overhead is mentioned as zero, however, under cost of production same is mentioned as Rs-340/tonnes, further, Royalty paid is mentioned as zero in the AR submitted for the year 2022-23, but under cost of production Royalty is mentioned as Rs-42.51/tonne and dead rent Rs-52/tonne.	The details furnished for cost of production appears incorrect and Showcause notice is issued for the same under Rule 45(7) of MCDR 2017.
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset is shown as Rs 60 lakhs for the year 2022-23.	Under type of Machinery, Shovel of 0.9Cum capacity and two tippers of 9.0 cum capacity are shown, however, under value of fixed assets details under plant and machinery including transport equipment is mentioned as Nil.	Showcause notice is issued for the same under Rule 45(7) of MCDR 2017.
9k	Scrutiny of Annual return on mining machineries	Shovel of 0.9cum capacity-01, tippers of 9.0 cum capacity-02.	The mine was not working on the day of inspection and no machineries were observed in the mine.	



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 :

(kalmata.M.K)

Indian Bureau of Mines