

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

**MCDR inspection REPORT**

**Hyderabad regional office**

**Mine file No :** AP/VZNR/MN-121/HYD

**Mine code :** 40APR20063

- (i) Name of the Inspecting : **25** ) **SHRI IBRAHIM SARIF**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sri K Siva Prasada Rao, Mines Manager  
Official with  
Designation
- (iv) Date of Inspection : 29/02/2020
- (v) Prev.inspection date : 19/06/2018

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **SAI KRISHNA**
- (b) **Registration NO.** : **IBM/4237/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ANDHRA PRADESH
- District : VIZIANAGARAM
- Village : G.AGRAHARAM
- Taluka : TARLAM MANDLAM
- Post office : CHEEPURUPALLI
- Pin Code :
- FAX No. :
- E-mail :
- Phone :
- (f) Police Station : THARLAM
- (g) First opening date : 18/05/1981
- (h) Weekly day of rest : SUN
2. Address for : SGX Minerals Pvt.Ltd. D.No: 39-3-19/1, Phase-III  
correspondance Murali Nagar, Masjid Junction,  
VISAKHAPATNAM-530007
3. (a) Lease Number : APR0255
- (b) Lease area : 15.61
- (c) Period of lease : 20
- (d) Date of Expiry : 23/07/2021
4. Mineral worked : MANGANESE ORE Main

## 5. Name and Address of the

Lessee : M/S A.S.V.Prasad Mining Pvt.Ltd.  
 Flat No.304, Eshwar Homes,  
 1st Lane, Dwaraka Nagar,  
 VISAKHAPATNAM VISAKHAPATNAM  
 ANDHRA PRADESH  
 Phone:  
 FAX :

Owner : A.S.V.PRASAD  
 MINE OWNER, JAGANNADHARAJU  
 COLONY CHEEPURUPALLI (PO &  
 M) VIZIANAGARAM DT.  
 VIZIANAGARAM ANDHRA PRADESH  
 Phone:  
 FAX :

## Manager

Name : K.SIVA PRASADA RAO  
 Qualification : DIPLOMA IN MINING ENGINEERING  
 Appointment/ : 01/10/2016  
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	14/06/2013
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	17/04/2015
		Mining Scheme rule 12 MCDR1988	29/07/2016
		MP modif under 17(3) MCR 2016	21/06/2019

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog, 16 core bore holes were proposed to be drilled	Nil. Main Mineralised area has been explored in G1 scale up to UPL	
1b	Exploration over lease area for geological axis 1 or 2	Gi scale of exploration	Main mineralised area has been explored in G1 scale So far 20 core bore holes with 599.91 meterage with maximum depth of 46 meters and 50 DTH bore were drilled in between core bore holes to assess the continuity of ore body. Further four trial pits across strike line of the ore has been done.	Inspection is done for compliance of FMCP
1c	Exploration Agencies and Expenditure in lakh rupees during the year	-	Lessee, cost incurred for exploration so far is Rs. 37,86,100	
1d	Balance area to be explored to bring Geological axis in 1 or 2	-	Main Mineralised area where mining operation carried out has been explored under G1 scale up to 40 meters depth (UPL).	
1e	Balance reserve as on 01/04/20	32165 tonnes (under 111 category reserves) and 37848 tonnes (under 211 category resources).	As on 01.04.2019 111 : 32,165 tonnes, 211-: 37,848 Tonnes and 331-: 1,09,288 tonnes.	

1f	General remarks of inspecting officers on geology, exploration etc	Exploration in main Vein is carried out in G1 scale up to present UPL. So far 20 core bore holes were drilled with 599.91 meterage with maximum depth of 46 meters and 50 DTH bore were drilled in between core bore holes to assess the continuity of ore body. Further four trial pits across strike line of the ore were also done. Exploration as per rule 12(4) of MCDR 2017 is not carried out
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## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Section D-D', F-F', G-G' N18°26'20.06 " to N18°26'23.27 ", E83°32'47.57" to E83°32'57.56"	Development is being carried out within the proposed area	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No, this being vein type deposit and due to pinching and swelling of the ore body it is difficult to maintain seperate benches for OB and Ore.	Single bench is mined for ore and OB.	

2c	Stripping ratio or ore to OB ratio	2018-19 : 1:10.95 2019-20 : 1 :3.3 2020-21 (UP TO 19/05/2020) : 1 :1.93	2018-19 : 1:561 AR for 2019-20 is not submitted	
2d	Quantity of topsoil generation in m3	2018-19 : 3213 Nil CUM 2019-20 : Nil 2020-21 (up to 19.05.2020) : Nil		
2e	Quantity of overburden generation in m3	2018-19 : 249834 CUM 2019-20 : 113154 CUM 2020-21 (up to 19.05.2020) : 20,694 cum	2018-19 : 15635 CUM	AR for the year 209-20 not submitted
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Open cast method of mining with semi- mechanisation without drilling and blasting. Excavation of OB & ore is being done by excavator and brought in to pit top, where segregation of ore is done by manual means development.	Development was observed within approved limit.	

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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	During the year 2018-19- 22,809 MT 2019-20 - 28026 MT 2020-21 (up to 19.05.2020) : 10,712 MT	2018-19 - 2784 MT 2019-20 : 6,000 MT(ROM), Graded Ore was 3414 MT 2020-21 (up to 19.05.2020) : 2780 MT, Graded ore was 1070 MT	2019-20 & 2020-21 (up to 19.05.2020) : Data is as per Monthly returns

3c	Recovery of sailable/usable mineral from ROM production	2018-19 : 67% 2019-20 : 67% 2020-21 (up to 19.05.2020) : 67%	77% 2019-20 : 56.9% 2020-21 (up to 19.05.2020) : 38.4 %	As per Monthly return submitted
3d	Quantity of mineral reject generation	Nil	Nil	No details furnished
3e	Grade of mineral rejects generation and threshold value declared.	No such proposal of generation	Nil	
3f	Quantity of sub grade mineral generation.	No such proposal	Nil	
3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual method to be adopted for segregation of Ore	Segregation of Ore is being done by Manually	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	No drilling Blasting is proposed	No drilling & Blasting is carried out	
3k	Provision of mining machineries in mineral benches	Excavator : 0.9 cum, Tipper : 12 cum	Machineries as proposed is being deployed for development & Production	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height of 3 meters is designed for development & production	enchn height of 3 meters is suitable for this type of vein deposit	
3m	Total area covered under excavation/pits	3.8742 Ha	About 3.8742 Ha area is under excavation	

3n	Ore to OB ratio for the pit/mine during the year.	2018-19 : 1:10.95 2019-20 : 1:3.3 2020-21 (UP TO 19/05/2020) : 1:1.93	2018-19 : 1:561 AR for 2019-20 is not submitted
3o	Total area put in use under different heads at the end of year	Excavation : 3.8742 Ha, Waste Dump : 2.4369 Ha, Mineral Storage : 0.125 Ha Road : 0.1 Ha	Most of the lease area has been degraded, the same could not be ascertain as there is no updated plan maintained by Lessee
3p	Production of ROM mineral during the last five year period as applicable	2015-16=33140 t 2016-17=22956 MT 2017-18=20838 MT 2018-19= 22809 MT 2019-20 : 28026 MT 2020-21 (up to 19/05/2020) : 10712 MT	2015-2016: 6282 tons 2016-2017: 19990 ton 2017-2018: 5406 tons 2018-2019: 3451 tons 2019-2020 : 6000 MT (ROM) 2020-21 (up to 19/05/2020) : 2780 (ROM)
3q	General remarks of inspecting officers on method of mining etc.	Semi-mechanised opencast method of mining is adopted without Drilling and Blasting. OB and Ore is being excavated by excavator and ore bought on to pit top is being segregated manually.	Mining method as approved is being adopted

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB is proposed	OB is dumping seperately	

4b	Location of topsoil, OB and mineral reject dumps	NE side of mining lease-Overburden Western side of mining pit -sub grade	Dumping and mineral stack is being done in the proposed area
4c	Number of dumps within lease area and outside of lease area	Within the lease area - 2no's dumps	2 nos within the lease area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	North Eastern side and outside UPL	North Eastern side and outside UPL
4e	Number of active and alive dumps.	1 alive & active, 1 alive & non active,	1 alive & active, 1 alive & non active,
4f	Number of dead dumps.	-	Nil
4g	Number of dumps established.	Two dumps is to be terraced and Stabalised	Bothe dumps are terraced, but old dumps is partly stabalised by plantation, new dump was not stabalised.
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall and Garland Drain all along bottom periphery of dumps to be maintained	Retaining wall is partly maintained and not fully all along the bottom periphery of waste dump. Garland drain was not found maintained all around dumps
4i	Length of Retaining wall or garland drain all along dumps	All along bottom periphery of Dumps	Nil
4j	Number of settling ponds	1 No	1 No.Settling pond already ladened with wash off from waste dump-1.
4k	Specific comments of inspecting officer on waste dump management		Old dumps is terraced and partly stabalised by plantation. New Dum was terraced but not stabalised. Garland all along bottom periphery of dumps were also not maintained.

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Solid Waste Management - Backfilling:

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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.	This is of Vein type of Deposit and ore is found to exist at Pit bottom, Hence backfilling proposals were not made	Nil	
5b	Area under backfilling of mined out area	No proposal	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal of Top soil generation	Nil	
5d	Total area fully reclaimed and rehabilitated	No area proposed for Fully Reclamation & Rehabilitation	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	Vein type of Deposit and Ore is found to exist at bottom, hence there is no proposal of backfilling	No part of the mining lease area is matured for back filling.

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).	TO be Submitted for the Year 2019-20	Not Submitted for the Year 2019-20	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	1.2006	5500 nos saplings	
6d	No. of saplings planted during the year	2019-20 : 6450 2020-21 : 500	6000 saplings	
6f	Any other method of rehabilitation	No	NA	

6g	Cost incurred on watch and care during the year	2019-20 : Rs. 2,50,000 2020-21 : Rs. 50,000	details not submitted	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No proposal	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)		Environmental monitoring is being carried out.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	The following proposals are approved in FMCP: 1. To fenced all around the working pit. 2. No mineral reject/ sub grade dumps in the lease area 3. Two dumps be terraced with slope of 28°and stabilised during 2019-20. 4. Develop green belt on all the terraces of dump 4. Maintain garland drain and retaining wall all around Dump 5.Sensitive areas to be earthen bunded. 6. Saplings be planted in safety barrier zone and on the slopes of all dumps	Actual done as follows: 1. 200 meters on Eastern side of pit is done balance area of pit is not fenced. 2. Sub grade mineral stack is observed in the lease area. 3. Part of old dump (North side) found terraced and stabilised by plantation new dump not stabilised. 4. Garland drain and Retaining wall is not found maintain all around the dumps. 5.Earthen bund is not fully maintained 5. 348 sapplings planted during 2018-19 and 100 sapplings during 2019-20 so far 6.	Proposals made in the FMCP has not been complied by Lessee fully.

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Entire saleable ore of 29828T to be dispatched	Saleable (graded) ore is being dispatched by the lessee as per the market	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual method is to be adopted	Manual Segregation is being done	
7c	Different grade of mineral sorted out at mines.	15% & above	As per proposal/ Market condition mineral sorting is being done in the lease area	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Blending of low grade with high grade is being done in conservation point of view. No beneficiation is practised in the lease area.	

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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, Separate dumps for OB and Low grade stock/ Dumps were to be maintained	Yes, Separate dumps for OB and Low grade stock/ Dumps were found maintained	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Additional Plantation 6400 sapplings are proposed in the year 2019-20	additional plantation of 380 sapplings are found planted in the year 2019-20 and under progress
8g	Survival rate	60%	60%
8h	Water sprinkling on roads to control airborne dust	Proposed to sprinkle water by water tank in Roads, mine workings	Yes, water sprinkling is being done
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Yes	To improve the aesthetic beauty lessee has planted substantial sapplings in the lease over old dump.

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Annual returns and monthly returns to be submitted.	Monthly returns are being submitted Regularly. So far Annual return(AR) for the year 2018-19 is only submitted, whereas AR for 2019-20 is not yet submitted	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager K.SIVAPRASADA RAO Mining Engineer in charge K.SIVAPRASADA RAO Geologist in charge SUDHAKAR RAO	K.Sivaprasada Rao, Mines Manager is employed	2018-19

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under pits- 3.874 ha, Area under dumps-2.387 ha, plant/building : 0.1 Ha, Mineral Storage : 0.275 Ha	More or less above area is being utilised by lessee for Mining and Allied activities	2018-19
9d	Scrutiny of Annual return on afforestation	348 nos of saplings planted	348 nos of saplings planted	2018-19
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	2018-19
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM-3451 tonnes, Graded Ore-2784 tonnes	ROM-3451 tonnes, Graded Ore-2784 tonnes	2018-19
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine Price-Rs 2474.00, Production cost-Rs 2369.00	Ex mine Price-Rs 2474.00, Production cost-Rs 2369.00	2018-19
9h	Scrutiny of Annual return on fixed assets	(in Rs.) 7672500	As reported by Lessee	2018-19
9k	Scrutiny of Annual return on mining machineries	1. GENERATOR (DIESEL)- 75.000 KWH - 1No., 2. AIR COMPRESSOR- 1No., 3. SHOVEL -0.9 CUM - No. 4. DUMPER 18 TONNE- 3 No.s 5. WHEEL LOADER-1.0 CUM, 1 no., 6. WATER TANKER- 1 No., 7. PUMPS -3 Nos.	The machineries mentioned is found deployed in the lease	2018-19

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**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 :**

**(SHRI IBRAHIM SARIF)**

Indian Bureau of Mines