

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

**MCDR inspection REPORT
Hyderabad regional office**

Mine file No : AP/VZNR/MN-04/HYD

Mine code : 40APR20029

- (i) Name of the Inspecting : 25) SHRI IBRAHIM SARIF
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sri ASHOK KONDA, Nominated Owner
Official with
Designation
- (iv) Date of Inspection : 09-OCT-21
- (v) Prev.inspection date : 21-OCT-16

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : SAIBABA MN MINE-1
- (b) **Registration NO.** : IBM/732/2011
- (c) **Category** : B Manual
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : ANDHRA PRADESH
- District : VIZIANAGARAM
- Village : KOTHAKARRA
- Taluka : MERAKAMUDIDAM
- Post office : GARBHAM
- Pin Code : 535102
- FAX No. : NIL
- E-mail : NIL
- Phone : 08952- 83225, 83374
- (f) **Police Station** :
- (g) **First opening date** : 21-MAR-87
- (h) **Weekly day of rest** : SUN
2. **Address for** : M/S S.K. SARAVAGI & CO (P) LTD
correspondance PO:CHIPURAPALLI,
DIST: VIZIANAGARAM.
3. (a) **Lease Number** : APR0254
- (b) **Lease area** : 8.05
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 01-JUN-19
4. **Mineral worked** : MANGANESE ORE Main

5. Name and Address of the

Lessee : S.K.SARWAGI &CO (P)LTD
 S.K. SARWAGI &CO (p)LTD PO
 CHIPURA PALLI VIZIANAGARAM.
 VIZIANAGARAM ANDHRA PRADESH
 Phone:3225 3240
 FAX :91 089522 3374.

Owner : SK SARAWAGI & CO.
 SK SARAWAGI & CO.
 CHIPURPALLI VILL&PO
 VIZIANAGARAM DISTRICT
 VIZIANAGARAM ANDHRA PRADESH
 Phone:
 FAX :

Agent : ASOK KONDA
 S.K.SARAWAGI & CO(P) Ltd.
 CHEEPURUPALLI VIZIANAGARAM
 DT. VIZIANAGARAM ANDHRA
 PRADESH
 Phone:
 FAX :

Mining Engineer

Name : S.K. MISHRA., Full Time
 Qualification : AMIE SECTION A&B
 Appointment/ :
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	20-OCT-93
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	03-NOV-03
	:	Mining Scheme rule 12 MCDR1988	07-OCT-16
	:	MP review under 17(1) MCR 2016	10-AUG-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	F.Y 2020-21 4 nos core BHs to be drilled	3 Core bore holes were drilled in the year 2018-19	Violation pointed out for 1 bore hole
1b	Exploration over lease area for geological axis 1 or 2	No additional proposal for lateral extent	about 1.6293 Ha explored in G1 and G2 scale	Mineralised area has been explored laterally and exploration proposals were given for depth wise persistence of ore body. G1: 0.8254 Ha, G2: 0.8039 Ha, G3 : 0.6028 Ha.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not mentioned in MP	Nil during the year	Lessee carried out the exploration and about Rs 24.55 Lakhs spent towards exploration so far.
1d	Balance area to be explored to bring Geological axis in 1 or 2	0.8039 Ha on South western side of lease area to be explored	Exploration carried out during the year 2018-19.	G1: 0.8254 Ha, G2: 0.8039 Ha, G3 : 0.6028 Ha. South-Western Manganese Ore body is to be proved for lateral and depth wise extension. NE ore body needs to be proved for Depth wise after the exhaustation of proved ore.

1e	Balance reserve as on 01/04/20	155562 tonnes Reserves proposed for depletion : 62,732 Tonnes 2018-19 : 30005 Tonnes 2019-20 : 30245 Tonnes 2020-21 : 30205 Tonnes Balance Reserves :	158841 tonnes-Reserves (111) category Reserves proposed for depletion : 62,732 Tonnes 2018-19 : 13719 out of total production 19373 Tonnes 2019-20 : 19270 Tonnes 2020-21 : 18884 Tonnes Balance Reserves : 1,06,968	
1f	General remarks of inspecting officers on geology, exploration etc		South-Western Manganese Ore body is to be proved for lateral and depth wise extension. NE ore body needs to be proved for Depth wise after the exahustation of proved ore.	Exploration carried out in the lease area: G1 level- 0.8254 Ha, G2-0.8039 Ha, G3- 0.6028 Ha. Manganese Ore occurs as Lenses and Bands in association with Garnetferrous Quartzite and Calc Granules. The strike direction of ore deposit is NW-SE with Steep dipping 70 degree towards South. The reff orebody occur as tabular lenses confirming to the trend of the enclosing highly weathered Zone.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	F.Y. 2020-21: In between Sec 2-2' to 10-10' MRL from 44 to 80 mtrs	Could not verified in the field as pit was found waterlogged	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	This being vein type deposit and due to pinching and swelling of the ore body it is difficult to maintain separate benches for OB and Ore. For side burden development separate benches	Single bench is mined for ore and also for generation of OB/IW.	
2c	Stripping ratio or ore to OB ratio	1:2.34	1: 0.5	Violation was pointed out for deviation
2d	Quantity of topsoil generation in m ³	F.Y. 2020-21: No proposal	No top soil generated	
2e	Quantity of overburden generation in m ³	28294 m ³	9442 Tonnes	Violation was pointed out for less development
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		As the ore body is narrow and mining has reached to a depth of 59 mRL, there is no scope for extension of pit in north eastern side of the mining pit and as on date the benches are steep and more than six metre at many places. There is a scope of extending the pit in SW direction of the mining pit. Further exploration of the Southern ore body may enhance the life of the mine.	Mining operations are being carried out by maintaining bench height of 10 to 12 meters against 6 meters and some portion of the pit was found collapsed on South eastern side and South Western side of the Pit. Benches were to be developed properly for scientific mining.

Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
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3a	Number of pit proposed for production	One	One	275 mtrs (L) 270 mtrs (W)	X
3b	Quantity of ROM mineral production proposed	FY-2020-21: 30,245 Tonnes of usable Ore	FY-2020-21: 18,884 Tonnes of usable Ore		Production was less due to Covid Pandemic
3c	Recovery of sailable/usable mineral from ROM production	69% of ROM	About 69%		
3d	Quantity of mineral reject generation	FY-2020-21: No proposal	750 Tonnes of Mineral Reject is generated		violation pointed out
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Below 15% Mn content		
3f	Quantity of sub grade mineral generation.	No sub-grade minera will be generated during plan period.	No mineral sub-grade has been generated during F.Y. 2020-21.		
3g	Grade of sub grade mineral generation	Not applicable.	Nil		
3h	Manual / Mechanised method adopted for segregating from ROM	Manual method to be adopted	Yes Manual method adopted for segregation		
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation study has been proposed during plan period.	Not applicable.		

- 3j Provision of drilling and blasting in mineral benches
- Deep Hole Drilling and Blasting is proposed to be adopted by using Drilling machine Dia.: 115 mm, by maintaining Spacing: 3.0 m, Burden: 2.0 m Depth of Hole: 6.6m Blasting is to be carried out by using ANFO based explosives
- Drilling and Blasting is being carried out as per approved proposals.
- 3k Provision of mining machineries in mineral benches
- | | |
|---|---|
| 1. Backhoe Excavator: 3.0 CuM bucket capacity- 01 nos. | 1. Backhoe Excavator: 3.0 CuM bucket capacity- 01 nos. |
| 2. Tippers 16 cum Capacity- 4 nos. | 2. Tippers 16 cum Capacity- 4 nos. |
| 3. Crawler mounted Drilling Machine 115 mm dia- 01 no. | 3. Crawler mounted Drilling Machine 115 mm dia- 01 no. |
| 4. Water Tanker 10 KL capacity- 01 no. with 5. Pumps: 40 HP & 20 HP | 4. Water Tanker 10 KL capacity- 01 no. with 5. Pumps: 40 HP & 20 HP |
| 6. Front end loader: 3.0 cum | 6. Front end loader: 3.0 cum |

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes 6.0 meters bench height in ore/mineral and overburden/waste are compatible with the digging height of the deployed excavator (PC 450) 3.0 cum capacity	Yes Digging height of excavator of 3.0 cum capacity is compatible for bench height of 6.0 meters	
3m	Total area covered under excavation/pits	6.851 Ha. up to end of F.Y. 2022-23	6.851 Ha. up to end of F.Y. 2022-23	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 2.34	1 : 0.5	Violation was pointed out for low development activity.
3o	Total area put in use under different heads at the end of year	Pit- 6.851 Ha. Ore/ Mineral Stack yard t- 0.842 Ha. Infrastructure : 0.013 Ha, Roads : 0.12 Ha Others- 0.2 Ha. Up to end of F.Y. 2022-23	Pit- 6.851 Ha. Ore/ Mineral Stack yard t- 0.842 Ha. Infrastructure : 0.013 Ha, Roads : 0.12 Ha. Others- 0.2 Ha.	
3p	Production of ROM mineral during the last five year period as applicable	Yr. 2016-17: 30015.00 Metric Tonnes Yr. 2017-18: 30015.00 Metric Tonnes Yr. 2018-19: 30005.00 Metric Tonnes Yr. 2019-20: 30245.00 Metric Tonnes Yr. 2020-21: 30205.00 Metric Tonnes	Yr. 2016-17: 20825.00 Metric Tonnes Yr. 2017-18: 15785.00 Metric Tonnes Yr. 2018-19: 19373.00 Metric Tonnes Yr. 2019-20: 26930.00 Metric Tonnes Yr. 2020-21: 27368.00 Metric Tonnes	

3q General remarks
of inspecting
officers on
method of mining
etc.

Mining is being
carried out by
Mechanised open
cast method by
deploying HEMM
with conventional
deep hole drilling
and Blasting.
Bench were not
maintained
properly as per
approved proposals
at place benches
were found
collapsed on
Southern side and
South- Western
side of the lease
area.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal	OB generated is being used for backfilling Mineral reject generated is stacked in the lease area.	No seperate dumps of Top soil/ Ob is observed
4b	Location of topsoil, OB and mineral reject dumps	No toposil and mineral reject dump proposed. Waste to be used for backfilled in extended working within 7.5 m of the safety barrier.	mineral reject generated is being stacked on Southern side of lease area Ob generated is being used for backfilling on Northern side of lease area	

4c	Number of dumps within lease area and outside of lease area	Back filling of extended working within 7.5m of the safety zone and balance waste dumping in SW of the ML after diverting electrical line.	back filling is being carried out within lease area.Two external dump out side lease area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump outside ultimate pit	Waste is being utilised for backfilling	Southern side of lease are was proposed to be dumped which is beyond UPL
4e	Number of active and alive dumps.	1 back filling area and one dumping area.	Backfilling is being carried out on Northern side of lease area	
4g	Number of dumps established.	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil	
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			The overburden and waste material excavated during mining operations is being backfilled on Northern side of lease area.

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.			
5b	Area under backfilling of mined out area	No Proposal		Backfilling is being carried out on Safety Zone area within 7.5 meters on Northern side of lease boundary.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No topsoil will be generated during plan period.		Not applicable.
5d	Total area fully reclaimed and rehabilitated	No Proposal during F.Y. 2020-21.		Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Backfilling is being carried out on Northern side of lease area where workings are extended within Safety Zone area of 7.5 meters. Apart from that no part of lease area is matured for backfilling.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted before due date.	Yes submitted in time	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	

6c	afforestation done (ha).	Not mentioned in the document	About 0.2 Ha
6d	No. of saplings planted during the year	150 no.s saplings to be planted	500 saplings planted
6f	Any other method of rehabilitation	No proposal	Nil
6g	Cost incurred on watch and care during the year	Not mentioned in the document	About Rs. 10,000
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	F.Y 2020-21 : 0.132 Ha	About 0.165 Ha so far
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No proposal	nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Green belt to be development along safety zone of 7.5 metrs area	Green Belt is being developed

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposal has been given in the approved document for regular monitoring of the environmental parameters in the core and buffer zone.	Being done as per proposal.	All the parameters are within the prescribed limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Backfilling is being carried out on Northern side of the lease are. Plantation and Environment monitoring is being carried out as per approved proposals

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	69% of ROM ore is to be dispatched after segregation by manual mean within the working pit before dispatch	About 69% of ROM ore is being dispatched	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting & Sizing is proposed to be carried out	Manual sorting and sizing is being done as per proposal.
7c	Different grade of mineral sorted out at mines.	Below 25% Mn content and above threshold value and 25% to 35% Mn Content	Below 25% Mn content and above threshold value and 25% to 35% Mn Content
7d	Any beneficiation process at mines .	No beneficiation study has been proposed in the approved document.	Not Applicable.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Mineral reject generated is being stacked separately for future use

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No topsoil will be generated during Review period.	Not applicable.	
8b	Concurrent use or storage of topsoil	No proposal.	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Southern side of the lease are is proposed for dumping	No external dumping is observed in the lease are.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposal has been given in the approved document for backfilling of the northern side of lease area where workings are extended within safety zone of lease area.	Backfilling is being carried out on Northern side of lease area where workings are extended within Safety Zone area of 7.5 meters
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling is being carried out on Northern side of lease area where workings are extended within Safety Zone area of 7.5 meters	Backfilling is being carried out on Northern side of lease area
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	150 nos. of saplings will be planted over 0.30 Ha. area at 7.5 m barrier zone.	500 nos. of saplings have been planted over 0.1 Ha. area at 7.5 m barrier zone.
8g	Survival rate	Not mentioned in the approved document.	Approx 80 %
8h	Water sprinkling on roads to control airborne dust	Proposal has been given in the approved document for water sprinkling on roads to control airborne dust through the water tanker.	Being done as per proposal.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Plantation is being carried out to improve aesthetic beauty

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to September 2021 A.R. to be submitted up to F.Y. 2020-21	M.R. Submitted up to September 2021 A.R. Submitted up to F.Y. 2020-21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager & Mining Engineer:: Shri J K Mohanty Geologist: Shri D. K dassu	Manager & Mining Engineer:: Shri Arun Jyoty Geologist: Shri Koteswar Rao	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Under Current working Pit- 6.15 Ha. Reclaimed & Rehabilitated : 0.165 Ha Occupied by Plant Others- 0.42 Ha. Up to end of F.Y. 2020-21	Under Current working Pit- 6.85 Ha. Reclaimed & Rehabilitated : 0.165 Ha Occupied by Plant Others- 0.42 Ha. Mineral Storage : 0.842 Ha Green belt : 0.1 Ha Up to end of F.Y. 2020-21	Deviation area put to use has been pointed out.
9d	Scrutiny of Annual return on afforestation	Within lease area: 500 nos. with 80% survival rate.	Within lease area: 500 nos. with approx 80% survival rate.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject: 750 Tonnes Grade: <15%Mn	Mineral Reject: 750 Tonnes Grade: <15%Mn	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock: ROM: NIL Grade Manganese Ore: 1923 Tonnes	Closing Stock: ROM: NIL Grade Manganese Ore: 1923 Tonnes	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value: Rs. 3438 & Rs.2631 Ex-Mine Price: Rs. 1768 Per Metric Tonne Cost of Production: Rs. 1559 Per Metric Tonne	Sale Value: Rs. 3438 & Rs.2631 Ex-Mine Price: Rs. 1768 Per Metric Tonne Cost of Production: Rs. 1559 Per Metric Tonne	Discrepancies observed are pointed out in violation
9h	Scrutiny of Annual return on fixed assets	Rs. 80016946	As submitted by Lessee	
9k	Scrutiny of Annual return on mining machineries	1. Backhoe Excavator: 01 nos. with 3.0 CuM bucket capacity 2. Tippers 4 nos. with 16 cum Capacity 3. Crawler mounted Drilling Machine 01 no. 115 mm dia. 4. Water Tanker 01 no. with 5 KL capacity 5. Pumps: 40 HP & 20 HP 6. Front end loader: 3.0 cum	1. Backhoe Excavator: 01 nos. with 3.0 CuM bucket capacity 2. Tippers 4 nos. with 16 cum Capacity 3. Crawler mounted Drilling Machine 01 no. 115 mm dia. 4. Water Tanker 01 no. with 5 KL capacity 5. Pumps: 40 HP & 20 HP 6. Front end loader: 3.0 cum	

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-NOV-21				
MCDR17 Rule 31(3)	11-NOV-21				
Rule 45(7)	11-NOV-21				
Rule 46	11-NOV-21				
MCDR17 Rule 54(a)	11-NOV-21				

Date :

(**SHRI IBRAHIM SARIF**)

Indian Bureau of Mines