

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

**MCDR inspection REPORT
Hyderabad regional office**

Mine file No : AP/VZNR/MN-102/HYD

Mine code : 40APR20039

- (i) Name of the Inspecting : **PG01**) **P.GURUVAIAH**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Sri.Asok Konda, Nominated owner and Sri.M.Koteswar Ra
Official with
Designation
- (iv) Date of Inspection : 27-OCT-21
- (v) Prev.inspection date : 23-OCT-16

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MAHESWARI MN MINE**
- (b) **Registration NO.** : **IBM/732/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :
State : ANDHRA PRADESH
District : VIZIANAGARAM
Village : BANKURUVALASA
Taluka : BOBBILI
Post office : SOMPURAM
Pin Code : 535579
FAX No. :
E-mail : asokkonda sarawagi.com
Phone :
- (f) Police Station : RAMABHADRAPURAM
- (g) First opening date : 23-FEB-91
- (h) Weekly day of rest : SUN
2. Address for : M/S S.K. SARAWAGI &CO (P0) ltd,
correspondance PO: CHIPURAPALLI,
DIST:VIZIYANAGARAM.
3. (a) Lease Number : APR0181
- (b) Lease area : 15.64
- (c) Period of lease : 10
- (d) Date of Expiry : 22-JAN-01
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : SK SARAWAGI AND (P)CO LTD
 VIZIANAGARAM ANDHRA
 PRADESH
 Phone:08952 83225 &83374
 FAX :

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 :

Manager
 Name : M.APPALA RAJU
 Qualification : AMIE
 Appointment/ : 01-DEC-04
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	31-MAR-05
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	10-AUG-07
	:	Mining Scheme rule 12 MCDR1988	27-OCT-14
	:	Mining Scheme rule 12 MCDR1988	05-MAY-17
	:	MP review under 17(1) MCR 2016	09-APR-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal.	Nil	
1b	Exploration over lease area for geological axis 1 or 2	No proposal.	Nil	G1 : 1.85 Ha , G2 : 0.6913 Ha
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal.	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	0.6913 ha	0.6913 ha	
1e	Balance reserve as on 01/04/20	As on 1/04/2021 under 111 : 152407.7 M.Tonnes. 122 : 11878.32 Metric .Tonnes.	As on 1/04/2021 under 111 : 152407.7 M.Tonnes. 122 : 11878.32 Metric .Tonnes.	Updated reserves and resources obtained from Average grade of Manganese ore Mn - 18 .00 to 27..00 % , Fe -7. 84 to 12. 32 % . the latest approved document dated 09/04/2020.

1f	General remarks of inspecting officers on geology, exploration etc	The topography is more or less a flat terrain altitudes ranges from 92 to 114 m above MSL.and interspersed with isolated hummocks at a distance in the weast of srikakulam twon,these few rugged hills ridges mark the beginning of the Eastern ghat hiilly teraaain.	The manganese ore deposits are of alteration of original rocks like kodurites /khodalites .The orezone is admixed with clay,iron oxide ,altred rocks patches and are aften cut across by quartz veins. The area is associated with meta sedimentary rocks of Khondalite series of precambrian Eastern ghat Group of rocks.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	F.Y 2020-21 in between UTM co- ordinates N 743949 to N 744037 and E 2047118 To E 2047289 South west of the lease area.	F.Y 2020-21 in between UTM co- ordinates N 744037 and E 2047118 To E 2047289 South west of the lease area.	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	It was proposed to have seperate benches in the ore and overburden. Overburden/waste : 6nos Mineral/ore :7 nos.	It was proposed to have seperate benches in the ore and overburden. Overburden/waste : 6 nos Mineral/ore :7 nos.	-
2c	Stripping ratio or ore to OB ratio	1 : 5.00	1: 0.66	-

2d	Quantity of topsoil generation in m3	No proposal.	Nil, as the entire production and development have been done within working pit.	
2e	Quantity of overburden generation in m3	F.Y 2020-21 37682.54 cum.	F.Y 2020-21 12130.43 cum.	Due to lack of demand less production and its effects on waste generation.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development production is being done through other than fully mechanised means.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01 no.	01 no.	
3b	Quantity of ROM mineral production proposed	F.Y .2020-21 : 21099 Metric Tonnes.	F.Y .2020-21 : 18502 Metric Tonnes.	
3c	Recovery of sailable/usable mineral from ROM production	61%	61 %	-
3d	Quantity of mineral reject generation	No mineral reject will be generated during plan period.	No mineral reject will be generated during plan period.	-
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	Nil	-
3f	Quantity of sub grade mineral generation.	No proposal.	Nil	
3g	Grade of sub grade mineral generation	Not applicable.	Nil	

3h	Manual / Mechanised method adopted for segregating from ROM	No proposal.	Nil	The ROM is screened manually and sorted for removal of waste material.
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	Drilling and blasting was proposed. Dai-110 mm Spacing-3m burden- 2.5 m Explosive- 5.7 Kg/hole.	Drilling and blasting was proposed. Dai-110 mm Spacing-3m burden- 2.5 m Explosive- 5.7 Kg/hole.	Drilling and blasting techniques are being used as muffled blasting.
3k	Provision of mining machineries in mineral benches	1. DrillingCrawle r Mounted 1 no, 2. Excavation P C 450 and P C300 2 nos. 3. Wheel Loader 01 no 4.Water tanker 01 no., 5.Tippers 05 nos with 6 cum capacity. 6. Dewatering pumps 02 nos 20 and 40 HP.	1. Front end Loader 01 no 2. Tippers 05 nos with 16 cum capacity. 3. Electrical Motor 20 and 40 HP. 4. Water tanker 01 no with 5000 L capacity. 5. Generator Diesel 01 no.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	It was proposed to maintain a bench height O.B/waste - 3. 0 m , Mineral/Ore- 6. 0 m .	It has maintained a bench height a bench height O.B/waste - 3. 0 m , Mineral/Ore- 6. 0	Height of the benches in ore/mineral and overburden/waste are compatible with the digging height of the deployed excavator.
3m	Total area covered under excavation/pits	7. 1301 Ha. up to22/01/ 2021.	7.340 Ha.up to 31/03/ 2021.	-

3n	Ore to OB ratio for the pit/mine during the year.	1 : 5.00	1: 2.5	
3o	Total area put in use under different heads at the end of year	pit- 7.1301 Ha OB/waste - 4.728 Ha others- 2.7436 Ha. up to 22/01/2021.	pit- 7.340 Ha OB/waste - 2. 478 Ha others- 0.254 Ha. up to end of F.Y 2020-21.	-
3p	Production of ROM mineral during the last five year period as applicable	Yr. 2016-17 - 41434 Metric Tonnes, Yr. 2017-18 - 41538 Metric Tonnes, Yr. 2018-19 - 41071 Metric Tonnes, Yr. 2019-20 - 36395 Metric Tonnes. Yr. 2020-21- 21099 Metric tonnes.	Yr. 2016-17 - 15330 Metric Tonnes. Yr. 2017-18 - 19430 Metric Tonnes. Yr. 2018-19 - 12744 Metric Tonnes. Yr. 2019-20 - 24575 Metric Tonnes. Yr. 2020-21 - 37682 Metric Tonnes.	
3q	General remarks of inspecting officers on method of mining etc.			Mining is being done through the opencast method with other than fully mechanized means.

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/Waste has been proposed in the earmarked locations.	Separate dumping of OB/Waste has been proposed in the earmarked locations.	

4b	Location of topsoil, OB and mineral reject dumps	Overburden/Waste: In between UTM co-ordinate N743949 to N 744037 and E 2047118 to E 2047289due NW of the mine.	Overburden/Waste: In between UTM co-ordinate N743949 to N 744037 and E 2047118 to E 2047289due NW of the mine.	-
4c	Number of dumps within lease area and outside of lease area	Within lease area: Waste/Overburden: 01 no. Outside lease area: NIL	Within lease area: Waste/Overburden: 01 no. Outside lease area: NIL	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Overburden/Waste dump will be dumped in the existing pit and within UPL.	Overburden/Waste dump will be dumped in the existing pit and within UPL.	-
4e	Number of active and alive dumps.	01 no.	01 no.	
4f	Number of dead dumps.	No proposal.	Nil	
4g	Number of dumps established.	01 no. of Temporary dump	01 no. of Temporary dump	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal.	Nil	Already constructed retaining wall and garland drain along the waste and Overburden.
4i	Length of Retaining wall or garland drain all along dumps	No proposal.	60 mts.	
4j	Number of settling ponds	No proposal.	Nil	
4k	Specific comments of inspecting officer on waste dump management	One dump within the lease area.	One dump within the lease area.	

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.	No Proposal during F.Y. 2020-21.	NIL, Area not matured for the reclamation and the rehabilitation.	-
5b	Area under backfilling of mined out area	No proposal.	Nil	-
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 -Area is not matured for reclamation and rehabilitation.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Nil

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).	Submitted before due date.	Information has been cross verified during inspection.	No major deviation has been found.
6b	Area available for rehabilitation (ha) .	No proposal.	Nil	-
6c	afforestation done (ha).	No proposal.	Nil	-
6d	No. of saplings planted during the year	No proposal	Nil	-
6e	Cumulative no .of plants	No proposal.	Nil	-

6f	Any other method of rehabilitation	No proposal.	Nil	-
6g	Cost incurred on watch and care during the year	No proposal.	Nil	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	No proposal.	Nil	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal.	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal.	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	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	Within the lease area. 150 nos Out side lease area 150 nos.	Within the lease area. 150 nos Out side lease area 150 nos.	

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1. 0 ha	2. 47 ha	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	By plantation	By plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	It 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 permissible limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Nil

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	It was proposed to produce 21,099 tonnes during the year 2020-21.	The actual production reported during the year 2020-21, 18,502 tonnes.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	It was proposed to carry out manual sorting and screening.	Being done as per proposal.	

7c	Different grade of mineral sorted out at mines.	No proposal.	Nil	-
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			In view of the Mineral conservation, below 25% Mn and 25% to below 35% Mn is being produce and despatch.

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)	Separate dumping of OB/Waste has been proposed in the earmarked locations. Within lease area in between UTM co-ordinates N 2019900 to N 2020100 and E769400 to E769500	Separate dumping of OB/Waste has been proposed in the earmarked locations. Within lease area in between UTM co-ordinates N 2019900 to N 2020100 and E769400 to E769500	

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)	150 nos. of saplings will be planted over 0.31 Ha. area within the lease area.	150 nos. of saplings will be planted over 0.31 Ha. area within the lease area.
8g	Survival rate	80%	55%
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		Nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to September 2021 A.R. 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	Mining Engineer & Manager - Sri A . Venkatesh yadav. Geologist - Sri.P.Ravikumar.	Mining Engineer & Manager - Sri A . Venkatesh yadav. Geologist - Sri.P.Ravikumar.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 7.34Ha. Waste/reject- 2.478Ha. Others- 1.748 Ha. Up to end of F.Y. 2020-21	Pit- 7.34Ha. Waste/reject- 2.478Ha. Others- 1.748 Ha. Up to end of F.Y. 2020-21
9d	Scrutiny of Annual return on afforestation	Within the lease 150 nos and out side lease. 150 nos survival rate 55%	Within the lease 150 nos and out side lease. 150 nos survival rate 55%
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject: NIL Grade: NIL	Mineral Reject: NIL Grade: NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock: ROM: 0 Tonnes Below 25% Grade Mn : 1547.495 Tonnes	Closing Stock: ROM: 0 Tonnes Below 25% Grade Mn : 1547.495 Tonnes

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value: Rs. Not given Ex-Mine Price: Rs. 2035 Per Metric Tonne Cost of Production: Rs. 1751.33 Per Metric Tonne	Sale Value: Rs. Not given Ex-Mine Price: Rs. 2035 Per Metric Tonne Cost of Production: Rs. 1751.33 Per Metric Tonne
9h	Scrutiny of Annual return on fixed assets	Rs-3983446.00	Rs-3983446.00
9k	Scrutiny of Annual return on mining machineries	Given in the annual returns.	Cross verified from the field logbooks.

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 :

(P.GURUVAIAH)

Indian Bureau of Mines