

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

Review and updation of Mining Plan REPORT

Hyderabad regional office

Mine file No : AP/KSN/FE-11/HYD

Mine code : 30APR10003

- (i) Name of the Inspecting : **K007**) **SHAIVAL KARTIKEYA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri J. Jagathpal Rao, Managing Partner
Official with
Designation
- (iv) Date of Inspection : 30-JAN-23
- (v) Prev.inspection date : 11-OCT-18

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GANDRAI(9.261 HA)**
- (b) **Registration NO.** : **IBM/5634/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ANDHRA PRADESH
- District : KRISHNA
- Village :
- Taluka :
- Post office :
- Pin Code :
- FAX No. :
- E-mail : surapaneniprasad54@gmail.co
- Phone : 9394411990
- (f) Police Station : CHILLAKALLU
- (g) First opening date : 20-JUL-08
- (h) Weekly day of rest : SUN
2. Address for : SRI SIVAPRASADA RAO, Mg.Partner,
correspondance M/S LAKSHMI ENTERPRISES, Ratna Laboratory,40-1-1
I Floor, Sai Tower, NCB Colony,Benz Circle, Vij
3. (a) Lease Number : APR2661
- (b) Lease area : 9.27
- (c) Period of lease : 50
- (d) Date of Expiry : 25-JUN-58
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : M/SLAKSHMI ENTERPRISES
 KRISHNA ANDHRA PRADESH
 Phone:
 FAX :

Owner : M/SLAKSHMI ENTERPRISIS
 SRI SIVAPRASAD RAO, MG
 PARTNER H.NO. 40-1-101/A,
 SAI TOWERS, NCB COLONY,
 BENJ CIRCLE, VIJAYAWADA
 KRISHNA ANDHRA PRADESH
 Phone:
 FAX :

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	20-APR-07
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	04-FEB-15
		MP review under 17(1) MCR 2016	28-NOV-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal.	F.Y. 2022-23: 12 nos. of Pits with cumulative depth 8.0 meters have been made.	The entire mineralized zone have been explored under G1 Level of exploration. G1 Level: 7.58 Ha. Non-mineralised: 1.688 Ha.
1b	Exploration over lease area for geological axis 1 or 2	No proposal.	-do-	-do-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal.	M/s Sri Lakshmi Enterprises	-do-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal.	Nil.	-do-
1e	Balance reserve as on 01/04/20	As on 01/04/2022 Under (111): 0.0185 Million Tonnes Under (122): 0.0187 Million Tonnes	As on 01/04/2022 Under (111): 0.01902 Million Tonnes Under (122): 0.0187 Million Tonnes	Average Grade Fe: 51.50% (45% to 58% Fe) SiO2: 9.61%

1f	General remarks of inspecting officers on geology, exploration etc	The geological formation of the region belongs to Vempalle stage of Papaghni series of lower Cuddapah. The Stratigraphic sequence of the rocks of Cuddapah basin, as, enunciated by W. King is, as, given below:	Khrishna series Un-conformity Srisailam stage Kolamnela stage Iralkonda stage Un-conformity Upper Cuddapah Nallamalai series Cumbum stage Bairenkonda stage Un-conformity Cheyair series Tadipatri stage Pulivendla stage Un-conformity Lower Cuddapah Papaghni Series Vempalle stage Gulcheru stage Un-conformity Archean gneisses and schist.	The lease area forms a part of the Iron belt, with outcrops of Iron in the entire leasehold. The litho-units exposed in the area are described below: Iron is the main rock in the ML area which occupies the entire extent.
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Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	F.Y. 2021-22: In between UTM Co-ordinates N404120 to N404223 and E1875460 to E1875480	F.Y. 2021-22: In between UTM Co-ordinates N404120 to N404223 and E1875460 to E1875480	No major deviation has been found.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil: Nil OB/Waste: Nil Mineral: 01 no.	Topsoil: Nil OB/Waste: Nil Mineral: 01 no.	As the mineral recovery is 32% from the matrix, hence, the concurrent backfilling is being done.
2c	Stripping ratio or ore to OB ratio	1 : 2.125	1 : 1.562	-
2d	Quantity of topsoil generation in m3	No proposal.	Nil.	-
2e	Quantity of overburden generation in m3	1465.4 CuM	62.50 CuM	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development and production is being done through manual means.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01 no.	01 no.	As the mineral recovery is 32% from the ROM, hence, the concurrent backfilling is being done.
3b	Quantity of ROM mineral production proposed	F.Y. 2021-22: 2000.00 Metric Tonnes	F.Y. 2021-22: 40.00 Metric Tonnes	Less production due to lack of market demand.
3c	Recovery of sailable/usable mineral from ROM production	32%	32%	-
3d	Quantity of mineral reject generation	No proposal.	Nil.	-
3e	Grade of mineral rejects generation and threshold value declared.	No proposal.	Nil.	-
3f	Quantity of sub grade mineral generation.	No proposal.	Nil.	-
3g	Grade of sub grade mineral generation	No proposal.	Nil.	-
3h	Manual / Mechanised method adopted for segregating from ROM	Manual segregation has been proposed.	Manual segregation is being done.	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal.	Nil.	-
3j	Provision of drilling and blasting in mineral benches	No proposal.	Nil.	-
3k	Provision of mining machineries in mineral benches	No proposal.	Nil.	Manual mining is being done.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Topsoil: Nil. OB/Waste: Nil. Mineral: 0.60 Meters	Topsoil: Nil. OB/Waste: Nil. Mineral: 0.60 Meters	-
3m	Total area covered under excavation/pits	2.0356 Ha. Up to end of F.Y. 2022-23	0.1277 Ha. Up to end of F.Y. 2021-22	-
3n	Ore to OB ratio for the pit/mine during the year.	1 : 2.125	1 : 1.562	-
3o	Total area put in use under different heads at the end of year	Pit: 2.0356 Ha. Waste/reject- Nil. Others- 1.471 Ha. Up to end of F.Y. 2022-23	Pit: 0.128 Ha. Waste/reject- Nil. Others- 1.40 Ha. Up to end of F.Y. 2021-22	-
3p	Production of ROM mineral during the last five year period as applicable	Yr. 2017-18: 2000.00 Metric Tonnes Yr. 2018-19: 2000.00 Metric Tonnes Yr. 2019-20: 2000.00 Metric Tonnes Yr. 2020-21: 2000.00 Metric Tonnes Yr. 2021-22: 2000.00 Metric Tonnes	Yr. 2017-18: 430.00 Metric Tonnes Yr. 2018-19: 55.00 Metric Tonnes Yr. 2019-20: 90.00 Metric Tonnes Yr. 2020-21: 60.00 Metric Tonnes Yr. 2021-22: 40.00 Metric Tonnes	-
3q	General remarks of inspecting officers on method of mining etc.			Mining has been carried out through the opencast method with manual means without using drilling and blasting.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposal has been given in the approved document for separate stacking of mineral in between Latitude 16° 57' 30.57" to 16° 57' 31" and Longitude 80° 05' 59.01" to 80° 05' 59.21"	Ore/Mineral has been stacked separately in between Latitude 16° 57' 30.57" to 16° 57' 31" and Longitude 80° 05' 59.01" to 80° 05' 59.21"	-
4b	Location of topsoil, OB and mineral reject dumps	ROM/Mineral will be stocked in between Latitude 16° 57' 30.57" to 16° 57' 31" and Longitude 80° 05' 59.01" to 80° 05' 59.21" in 0.030 Ha.	ROM/Mineral has been stocked in between Latitude 16° 57' 30.57" to 16° 57' 31" and Longitude 80° 05' 59.01" to 80° 05' 59.21" in 0.030 Ha.	-
4c	Number of dumps within lease area and outside of lease area	No proposal, as the mined out pit will be backfilled with the waste rock concurrently after recovery of the mineral from the working pit.	Being done as per proposal.	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal.	Nil.	-
4e	Number of active and alive dumps.	No proposal.	Nil.	-
4f	Number of dead dumps.	No proposal.	Nil.	-
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			Nil.

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.	Concurrent backfilling has been proposed in the approved document after recovery of the ore/mineral from the pit.	Concurrent backfilling is being done in the mined out pit, after recovery of the ore/mineral from the working pit.	-
5b	Area under backfilling of mined out area	F.Y. 2021-22: In between UTM co-ordinates N404120 to N404223 and E1875465 to E1875482 in 0.36 Ha. with 1465.4 CuM waste.	F.Y. 2021-22: 0.013 Ha. mined out pit has been backfilled with 62.50 CuM of waste in between UTM Co-ordinates N404120 to N404223 and E1875460 to E1875480.	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal.	Nil.	Negligible quantity of topsoil has been generated and same has been utilized for plantation.
5d	Total area fully reclaimed and rehabilitated	F.Y. 2018-19 to 2021-22: 1.31 Ha. area will be backfilled with 5861.6 CuM of waste and restored for cultivation.	2018-19 to 2021-22: 0.06 Ha. area has been backfilled with 680.0 CuM of waste and the backfilled area has been restored for cultivation.	-

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Concurrent backfilling is being done in the mined out pit, after recovery of the ore/mineral from the working pit.
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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).	As per rule 26(2), lessee has to submit the annual report before 1st day of July of every year.	Submitted before due date. Information has been cross verified during inspection.	Violation has been pointed out for NIL Plantation.
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 (Lx B x D	1465.40 CuM	680.0 CuM	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	1465.40 CuM	680.0 CuM	-

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.	Not any.	Nil.	-
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	45 nos.	Not done.	Violation has been pointed out for Nil plantation.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.09 Ha.	Not done.	-do-
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	By plantation.	Not done.	-do-
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 permissible limits.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal.	Nil.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual segregation of float ore/mineral from the matrix has been proposed in the approved document.	Manual segregation of ore/mineral from the matrix is being done.	-
7c	Different grade of mineral sorted out at mines.	No proposal.	Nil.	-
7d	Any beneficiation process at mines	No proposal.	Nil.	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Nil.

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)	ROM/Mineral will be stocked in between Latitude 16° 57' 30.57" to 16° 57' 31" and Longitude 80° 05' 59.01" to 80° 05' 59.21" in 0.030 Ha.	ROM/Mineral has been stocked in between Latitude 16° 57' 30.57" to 16° 57' 31" and Longitude 80° 05' 59.01" to 80° 05' 59.21" in 0.030 Ha.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent backfilling has been proposed in the approved document in the mined out pit.	Concurrent backfilling is being done in the mined out quarry.	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Concurrent backfilling has been proposed in 0.36 Ha. during F.Y. 2021-22.	Concurrent backfilling has been done in 0.06 Ha.	Less production has been done due to less market demand.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	45 nos. of saplings will be planted over 0.09 Ha. area along 7.5 m barrier zone.	Nil plantation has been done.	Deviation has been pointed out.
8g	Survival rate	No proposal.	Nil.	-do-
8h	Water sprinkling on roads to control airborne dust	No proposal.	Nil.	-
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
9a	Status of submission of Monthly and Annual returns	M. R. Submitted up to Jan 2023. A. R. Submitted up to F.Y. 2021-22.	M. R. Submitted up to Jan 2023. A. R. Submitted up to F.Y. 2021-22.	Nil.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Nil. Mining Engineer: Nil. Geologist: Nil.	Manager: Nil. Mining Engineer: Shri B. Thirumala Vinodh. Geologist: K. Tirupati Rao	Nil.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 3.0 Ha. Waste/reject- Nil. Others- 1.40 Ha.	Pit: 0.128 Ha. Waste/reject- Nil. Others- 1.40 Ha.	Nil.
9d	Scrutiny of Annual return on afforestation	Within lease area: 25 nos. with survival rate 90%	Nil plantation has been done.	Violation has been pointed out.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral-reject: NIL Grade: NIL	Mineral-reject: NIL Grade: NIL	Nil.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock ROM: NIL Graded Ore: Below 55% Fe: 452.0 Metric Tonne	Closing Stock ROM: NIL Graded Ore: Below 55% Fe: 452.0 Metric Tonne	Nil.

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value: Rs. 174000.00 Ex-mine Price: Rs. 2000.00 Per Metric Tonne Cost of Production: Rs. 2000.00 Per Metric Tonne	Sale value: Rs. 174000.00 Ex-mine Price: Rs. 2000.00 Per Metric Tonne Cost of Production: Rs. 2000.00 Per Metric Tonne	(i) Ex-mine price has been reported similar to the Cost of Production as computed in Part VII. Which is unjustified for non-captive leases. (ii) For computation of Cost of Production Per Metric Tonne, values of Depreciation, Interest, Royalty, Taxes and Dead Rent have been considered as zero. Which is incorrect.
9h	Scrutiny of Annual return on fixed assets	Nil.	Nil.	Nil.
9k	Scrutiny of Annual return on mining machineries	Nil.	Nil.	Nil.

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
MCDR17	Rule 11(1)	16-FEB-23	02-MAY-23				
MCDR17	Rule 27(2)	16-FEB-23	02-MAY-23				
MCDR17	Rule 33	16-FEB-23	02-MAY-23				

Date :

(SHAIVAL KARTIKEYA)

Indian Bureau of Mines