

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

**Review and updation of Mining Plan REPORT**

**Hyderabad regional office**

**Mine file No :** AP/KNL/FE-72/HYD

**Mine code :** 30APR11039

- (i) Name of the Inspecting : 25 ) SHRI IBRAHIM SARIF  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sri Prabhakar reddy, QP, Sri Ramamurthy, Mines Manage  
Official with  
Designation
- (iv) Date of Inspection : 08-DEC-20
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : RANGAPURAM(12.481 HA)
- (b) **Registration NO.** :
- (c) **Category** : B Manual
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : ANDHRA PRADESH
- District : KURNOOL
- Village : BETHAMCHERLA
- Taluka : GANDHINAGAR
- Post office : BANGALORE
- Pin Code : 560009
- FAX No. :
- E-mail :
- Phone : 08516273988
- (f) **Police Station** : BETHAMCHERAL
- (g) **First opening date** : 03-OCT-06
- (h) **Weekly day of rest** : SUN
2. **Address for** : FLAT NO: 13, PAMIDI TOWERS,  
**correspondance** FIRST MAIN, GANDHI NAGAR  
BANGALORE.
3. (a) **Lease Number** : APR2752
- (b) **Lease area** : 12.48
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 07-SEP-26
4. **Mineral worked** : IRON ORE Main

## 5. Name and Address of the

Lessee : M/S LEO MINIG CO  
FLAT NO:13, PAMIDI TOWERS,  
FIRST MAIN, GSNDHI NAGAR,  
BANGALORE. BANGALORE  
KARNATAKA  
Phone:  
FAX :

Owner : M/S LEO MINING CO  
FLAT NO:13, PAMIDI TOWERS,  
FIRST MAIN, GANDHI NAGAR,  
BANGALORE. KURNOOL ANDHRA  
PRADESH  
Phone:  
FAX :

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	27-JAN-12
Plan/Scheme of Mining	:	MP modif under 17(3) MCR 2016	13-JAN-17

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	6 boreholes of previous years are pending.	Not done	Mine was suspended for non compliance of violation on.20.10.2020
1b	Exploration over lease area for geological axis 1 or 2	As per current level of exploration 4.71 hectare is under G2 level of exploration and 9.771 hectare is under G3 level of exploration. Proposal was there to upgrade the exploration in 2016-17 and 2017-18.	No exploration is undertaken as per proposal.	
1d	Balance area to be explored to bring Geological axis in 1 or 2		7.771 Hectare of area under G3 is to be upgraded. As per rule 12(4) entire lease is to be brought under G1 level of exploration	

1e	Balance reserve as on 01/04/20	Total Mineral Reserves (ROM) as on 4/2/2016 122- 0.4157 mT Depletion of reserves 4/12/2016- 31/03/2017=52 0T 2017-18- 0.038mT (6040 T I Ore, 32500 T waste) 2018-19- 0.072mT (25210 T I.Ore ,40348T waste) 2019-20- 0.02630mT	Total Mineral Reserves (ROM) as on 1/04/2019 122- 0.28627 mT
1f	General remarks of inspecting officers on geology, exploration etc		The iron ore deposition is of Vempalli formation. The iron ore enrichment is largely concentrated in the ferruginous pockets along with shale, sandstone. Violations pointed out earlier are pending.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Working was proposed in the Northeast part of the lease between E 186300 186500 & N1710650- N1710450	Work has been found to be undertaken to the west of mine office and in front of it in the year 2019-20 and up to suspension of mining operation.	Mine was suspended by IBM on 22.10.2020

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal	The pit is in the mineralized zone, largely devoid of top soil of OB	
2c	Stripping ratio or ore to OB ratio	In 2019-20, Ore : waste ratio of 1:1.022 was anticipated (cum:cu m)	In 2019-20, Ore : waste ratio of 1:6.15 was produced (cum:cu m)	12076 T of material backfilled and 4100 T of material reported to be disposed in the external dump i.e, about 16176 T of waste has been generated in 2019-20. Against which 2630 T of Iron Ore was produced.
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	No OB generation anticipated	No OB generated	However, about 16,176 T of intercalated waste is reportedly generated. which has been partly backfilled and partly put in the new dump.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Presently the mine is under suspension since 22.10.2020 and no fresh development was observed during inspection.	

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	In 2019-20, the pit was proposed in the north eastern part of lease	One new pit of about 1100m and width 50m is seen in the field.	Mine was suspended under rule 11(2) of MCDR 2017 for deviation in excavation.

3b	Quantity of ROM mineral production proposed	66,667(2019-20): (30,000 T of Ore & 36667 T of Intercalated waste)	In 2019-20 2632 T of Iron Ore has been produced. No Production reported during the year 2020-21 as per the monthly returns submitted.	
3c	Recovery of sailable/usable mineral from ROM production	50% recovery assessed for the year 2019-20 .	About 14% reported in the year 2019-20.	Mining is being carried out in mineralised area and total excavation is ROM only. 2630 T of salable Iron Ore was produced and 16706 T of intercalated waste removed.
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	Not Applicable	Not Applicable	
3f	Quantity of sub grade mineral generation.	No proposal	Nil	
3g	Grade of sub grade mineral generation	Not Applicable	Not Applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised Screening is proposed to be carried out	No segregation was observed in the lease area.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	No such study undertaken.	
3j	Provision of drilling and blasting in mineral benches	No drilling and blasting proposed	Nil	

3k	Provision of mining machineries in mineral benches	Excavator-tipper combination is proposed.	No mining activity observed on the date of inspection.	
3m	Total area covered under excavation/pits	4.54 hectare proposed under pit till 2020-21.	Plans and sections were not updated and same could not be ascertained, However as per lessee's submission in Star rating, area under mining is less than the proposed areaa of 4.54 Ha.	
3n	Ore to OB ratio for the pit/mine during the year.	In 2019-20, Ore : waste ratio of 1:1.022 was anticipated (cum:cu m)	In 2019-20, Ore : waste ratio of 1: 6.15 was produced (cum:cu m)	12076T of waste was backfilled and 4100 T of waste reported to be disposed in the external dump i.e, about 16176 T of waste has been generated in 2019-20 against which 2630 T of Iron Ore produced.
3o	Total area put in use under different heads at the end of year	Proposed till 2020-21 Under pit 4.54 ha. Under dump- 0.81 ha Mineral storage -0.35 ha. Road/Infra - 0.46 ha.	Broadly as per submission.	
3p	Production of ROM mineral during the last five year period as applicable		2017-18- ROM=38540T (6040 T Iron Ore, 32500 T waste)	
			2018-19(upto feb20) - ROM- 65558T (25210 T Iron Ore ,40348T waste)	
			2019-20 : ROM 18,806, Ore : 2630 T, Intercalated waste : 16176 T	

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

No mining activity were observed during inspection, however mining ioperations were reported to be carried out earlier using Excavator in combination with tipper.

#### 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 proposed	Separate dumps of waste are there	
4b	Location of topsoil, OB and mineral reject dumps	Backfilling proposed	No mining operations were observed in the field. However, backfilling was done at a different site. Existing waste dump is located at E-185808 to 185910, N- 1710041 to 1710150	
4c	Number of dumps within lease area and outside of lease area	one dump within lease area	Two major waste dumps and few small dumps/ stack are there.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Backfilling of waste was proposed in the year 2019-20.	Dump was created on the excavation site and some portion of pit was backfilled.	
4e	Number of active and alive dumps.		No active dumps are there as mine was suspended , however two major waste dumps and few small dumps/ stack are there.	
4f	Number of dead dumps.		None of the dump is dead dump	
4g	Number of dumps established.	No proposal	No dump has been estabilized.	



4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil
4j	Number of settling ponds	No proposal	Nil
4k	Specific comments of inspecting officer on waste dump management		Intercalated waste generated is being used partially for backfilling and external dump. Maximum dump height is about 4.5 meters height. SO far no dump is stabilised in the lease area.

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#### 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.	Area to be backfilled to be devoid of mineral.	The status of full extraction could not be ascertained as plans were not maintained updated and has to be established by the lessee.	No mining activity observed in the lease area.
5b	Area under backfilling of mined out area	Backfilling proposed at the proposed excavation site in the north east part of lease	Not undertaken accordingly	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Not undertaken	
5d	Total area fully reclaimed and rehabilitated	No proposal	No area has been fully reclaimed and rehabilitated. In the past about 1.0 hectare area was backfilled.	

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5e	General remarks of inspecting officers on backfilling and reclamation etc.	No mining activity observed in the lease area on the date of inspection, however backfilling is not being done as per proposal made in the approved document.
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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 yearly	Not Submitted	Mine was suspended by IBM on 22.10.2020
6b	Area available for rehabilitation (ha) .	No proposal for rehab. of worked out benches	Nil	
6c	afforestation done (ha).	No proposal for rehab. of worked out benches	Nil	
6d	No. of saplings planted during the year	No proposal for rehab. of worked out benches	Nil	
6e	Cumulative no .of plants	No proposal for rehab. of worked out benches	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Rehabilitation by back filling is not proposed	Nil	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Rehabilitation by back filling proposed	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	no proposal of afforestation for Rehabilitation over back filled area	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No proposal	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposal	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)		Being done.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Environment monitoring is being carried out

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area		1333 T of graded ore of less than 55% Fe dispatched.	

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7b	Method of grade-wise mineral sorting i.e. manual or mechanical.		Mechanized screening (mobile) is reportedly done when required
7c	Different grade of mineral sorted out at mines.	Lumps and fines generation proposed	Only lumps and fines are segregated.
7d	Any beneficiation process at mines		Only screening is done.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Only Screening is being carried out to segregate Lumps and Fines

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Area is largely devoid of top soil	
8b	Concurrent use or storage of topsoil	No proposal	Area is largely devoid of top soil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Intercalated waste was proposed for backfilling.	Separate dump of intercalated waste has been observed	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed	Not undertaken	

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8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		100 saplings planted in 2019-20
8g	Survival rate	--	35%
8h	Water sprinkling on roads to control airborne dust		Water tanker provided
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Plantation is being carried out by the lessee to improve the aesthetic beauty.

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR and MR to be submitted regularly.	Submitted regularly.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager SUDHAKAR M Mining Engineer in charge K PRABHAKARA REDDY Geologist in charge S MOHAN KUMAR	Manager SUDHAKAR M Mining Engineer in charge K PRABHAKARA REDDY Geologist in charge S MOHAN KUMAR	

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) : 0, Reclaimed/Rehabilitated : 0.22 Ha, Used for waste disposal : 0.37 Ha, Occupied by plant, buildings, residential, welfare buildings & roads : 0.10 Ha, Work done under progressive mine closure plan during the year : 0.48 Ha WorkingsArea under pit, has not been reported correctly.	Land use details are reported incorrectly.	Mine was suspended by IBM on 22.10.2020
9d	Scrutiny of Annual return on afforestation	100 saplings reportedly planted in 2018-19	As per submission	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	8805 MT of Iron ore lumps of less than 55% Fe reported 8868 MT of Iron ore Fines of less than 55% Fe reported	As submitted in the returns	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		Ex Mine price of Iron Ore lumps is reported as 600 Rs PMT (<55% Fe)and fines is reported as 400 Rs PMT(<55% Fe). COP : Rs. 480/ MT
9h	Scrutiny of Annual return on fixed assets	data not submitted	--
9k	Scrutiny of Annual return on mining machineries	Incorrectly reported	No excavator has been reported in the returns for the year 2019-20.

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**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 :**

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines