

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

MCDR inspection REPORT

Hyderabad regional office

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

Mine code : 30APR11039

- (i) Name of the Inspecting : **M017**) **MANISH K MAINDIRATTA**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Sri Maddura Sudhakar, Mines Manager & others
Official with
Designation
- (iv) Date of Inspection : 07/03/2020
- (v) Prev.inspection date : 13/02/2018

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 : **03/10/2006**
- (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 : **07/09/2026**
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	27/01/2012
Plan/Scheme of Mining	:	MP modif under 17(3) MCR 2016	13/01/2017

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	
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.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	---	NIL	
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 Resource (ROM) as on 4/2/2016 122- 0.4157 mT 221- 0.0157mT 333- 0.2646 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)	Total Mineral Resource (ROM) as on 1/04/2019 122- 0.31257 mT 221- 0.0157mT 333- 0.2646 mT
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1f	General remarks of inspecting officers on geology, exploration etc	The iron ore deposition is of Vempalli formation. The iron ore enrichment s largely concentrated in the ferruginious pockets along with shale, sandstone.
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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.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	---	The pit is in the mineralized zone, largely devoid of top soil of OB	

2c	Stripping ratio or ore to OB ratio	In 2018-19, Ore : waste ratio of 1:1.22 was anticipated (cum:cu m)	In 2018-19, Ore : waste ratio of 1:1.6 was produced (cum:cu m)	22348T of backfilled quantity and 18000 T of material reported to be disposed in the external dump i.e, about 40348 T of waste has been generated in 2019-20. Against which 25210 T of Iron Ore was produced.
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	No OB generation anticipated	No OB generated	Only 40348 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		The mining has not been undertaken at the approved site. The mined area has been filled for stacking the waste and is not approved. The depth upto which mining has been done is also not very clear.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	In 2018-19, 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.	
3b	Quantity of ROM mineral production proposed	66667(2018-19)	65558 (2018-19) In 2019-20 2632 T of Iron Ore has been produced.	In 2019-20, 2632 T of Iron Ore has been produced.
3c	Recovery of sailable/usable mineral from ROM production	70% recovery assessed.	38.45%	
3d	Quantity of mineral reject generation	Nil	Nil	

3e	Grade of mineral rejects generation and threshold value declared.	Not Applicable	Not Applicable	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Not Applicable	Not Applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Screening proposed	Mechanized screening reportedly undertaken	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	not done accordingly.	
3j	Provision of drilling and blasting in mineral benches	No drilling and blasting proposed	No drilling and blasting undertaken	
3k	Provision of mining machineries in mineral benches	Proposed	Excavator- tipper combination along with mechanised screen is reportedly used.	
3m	Total area covered under excavation/pits	4.54 hectare proposed under pit till 2020-21.	As per proposal total area under pit is less than envisaged.	
3n	Ore to OB ratio for the pit/mine during the year.	In 2018-19, Ore : waste ratio of 1:1.22 was anticipated (cum:cu m)	In 2018-19, Ore : waste ratio of 1:1.6 was produced (cum:cu m)	22348T of backfilled quantity and 18000 T of material reported to be disposed in the external dump i.e, about 40348 T of waste has been generated in 2019-20. Against which 25210 T of Iron Ore was 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)

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	Not as per proposal. Backfilling done at a different site.	
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 2018-19.	Dump was created on the excavation site.	
4e	Number of active and alive dumps.		None of the dump is dead dump	
4f	Number of dead dumps.		None of the dump is dead dump	
4g	Number of dumps established.		No dump has been stabilized.	
4h	Whether Retaining wall or garland drain all along dumps are there.		Suitable measures need to be taken	

4i	Length of Retaining wall or garland drain all along dumps		----
4j	Number of settling ponds	No proposal	Nil/ not done.

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.		The status of full extraction has to be established by the lessee.	
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 area has been fully reclaimed and rehabilitated. In the past 0.9 hectare area was backfilled.	

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).		Not Submitted	
6b	Area available for rehabilitation (ha) .	No proposal for rehab. of worked out benches	Not done	

6c	afforestation done (ha).	No proposal for rehab. of worked out benches	Not done
6d	No. of saplings planted during the year	No proposal for rehab. of worked out benches	Not done
6e	Cumulative no .of plants	No proposal for rehab. of worked out benches	Not done
6f	Any other method of rehabilitation	---	-----
6g	Cost incurred on watch and care during the year	----	-----
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	rehabilitation by back filling proposed	Not done
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	rehabilitation by back filling proposed	Not done
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	rehabilitation by back filling proposed	Not done
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Not done
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	-----	-----

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	Not done
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Not done
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Not done
6p	Compliance of environmental monitoring (core zone and buffer zone)		Being done.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	---	20421 T of graded ore of less than 55% Fe dispatched.	
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.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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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
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	---	---
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		100 saplings planted in 2018-19
8g	Survival rate		35%
8h	Water sprinkling on roads to control airborne dust	---	Water tanker provided

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		MR submitted upto Jan 2020 AR submitted upto 2018-19	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri K Prabhakar Reddy has been reported as Mining Engineer and Shri Mohan Rao as Geologist	Shri K Prabhakar Reddy has been reported as Mining Engineer and Shri Mohan Rao as Geologist
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under pit, has not been reported correctly.	Area under pit, has not been reported correctly.
9d	Scrutiny of Annual return on afforestation	100 saplings reportedly planted in 2018-19	As per submission
9f	Scrutiny of Annual return on ROM stock and/or graded ore	9043T of Iron ore lumps of less than 55% Fe reported 11378 T of Iron ore Fines of less than 55% Fe reported	As submitted in the register
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).
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 2018-19.

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)	21/05/2020				
Rule 45(7)	21/05/2020				
Rule 26(2)	21/05/2020				
MCDR17 Rule 35(2)	21/05/2020				

Date :

(**MANISH K MAINDIRATTA**)

Indian Bureau of Mines