

MCDR Insp. Report

1) Name of Inspecting officer:	Mr. Prem Prakash
2) Designation	Dy. Controller of Mines
3) Accompanying mine official with designation	Mr. Narayan Prasad, Agent & Vijaykumar D Kelkar, Mines Manager
4) Date of Inspection	18/05/2017
5) Date of Previous Inspection	20/08/2016

PART –I GENERAL INFORMATION

1. Name of mine	Calsanichomato De Oilomol Iron Ore Mine
a. Category of mine (A-Fully mechanized, A-Other than fully mechanized, B-Manual)	“A”Fully Mechanized
b. Mode of working (OC/UG/Both o/c & u/g)	Opencast
c. Postal address	Khalap Chambers, Market Road, Mapusa District: North Goa, State: Goa, Pin code: 403 507
d. State	Goa
e. District	North Goa
f. Tehsil/ Taluka	Bicholim and Bardez
g. Police station	Bicholim
h. Village	Advalpal and tivim
i. Post	Assonara
j. Pin Code	403504
k. FAX	-
l. E-mail	lithoferro@gmail.com
m. Phone	9420689596
n. Weekly day of rest	Sunday

2. a) Lease No.	:	T.C. 89 of 1952
b) Lease area in hect.	:	36.2202 Ha
c) Period of lease	:	22/11/2007 to 21/11/2027
f) Date of expiry.	:	21/11/2027

3.a) Mineral(s) included in the lease deed	:	Iron ore
b) Mineral(s) worked	:	Iron ore

4. Name and address of (including FAX/ E-mail, if any)

- a) Lessee/ owner : M/s Lithoferro
Khalap Chamber Market Road
Mapusa Goa
Pin code: 403 507
Mobile No: +91 9420689596
- b) Nominated owner : ---
- c) Agent with date of appointment : Mr. Narayan Prasad - 01/11/2016
- d) Mining Engineer and geologists appointed under rule 42 of MCDR, 1988 with date of appointment and whether full/ part time with qualification. : i)Mining Engineer -Mr.Srish Pal
08/10/2012
Btech in Mining Engineering
ii)Geologist-Mr.Abhijit Pednekar
14/12/2015
Post Graduate Degree in Geology
- e) Mine Manager with qualification and date of appointment : Mr.Vijaykumar D. Kelkar, Diploma in Mining and Mining Surveying , appointed 26.07.2010

5. Details about Mining Plan/ Mining Scheme

- a) Letter No. and date of approval of mining plan. : Approval of Modification of Mining Plan No: MMP/MECH-19/GOA/2015-16 Vol-II
Dated:- 08/02/2017.
- b) Period of mining plan/ mining scheme in force : : From 2013-14 to 2017-18
(financial year)

PART II-TECHNICAL DETAILS

I. Details about employment.

Maximum number of persons employed on any day during the year (i) below ground (ii) above ground and (iii) in all in the mines.-Maximum number- 98, on 25/03/2017.

Classification	Average daily employment			Average No. of days worked in a year	Remarks
	Direct	Contract	Total		
OPENCAST				303	Average employment During year 2016-17
a) Managerial person	03	0	03		
b) Supervisory persons	08	0	08		
c) Workers	-	53	53		
d) Ministerial persons	-	-	-		
e) Employment in plant	-	-	-		
f) Others	03	03	06		
UNDERGROUND	NA	NA	NA		

II. Community Development Plan (in and around the mines)

S. N	Proposed action towards socio-economic development during the current year	Expenditure proposed in Rs. Lakhs (Previous financial year) (2016-17)	Expenditure proposed in Rs. Lakhs for current year (2017-18)	Expenditure incurred in Rs. Lakhs (Previous financial year) (2016-17)	Expenditure incurred so far in Rs. Lakhs, in current year (2017-18), Till the date of inspection	Remarks
1	General development in the area	-	-			Expenditures given here are as reported by the Agent/ mines manager. Not verified by the undersigned
	a) Housing				-	
	b) Water supply				-	
	c) Sanitation				-	
	d) Health, safety and medical facilities.				-	
2	Training	-	-			
3	Employment to local inhabitants	-	-	20.65	1.84	
4	Infrastructure-public transport, roads, communication and electricity	-	-			

5	Recreation and other sports activities	-		1.98	-	
6	Expenditure for environment management	-	-	75.21	2.50	
7	Others(School transport)	-	-	5.68	0.58	
	Total	-	-	103.52	4.92	

III. Status of compliance of MCDR, 88 including therewith the rectification of outstanding violation of the rules.

Date of last inspection	Violation pointed out	Compliance reported
20/08/2016	Nil	NA

*** Annual Return for the year 2016-17 has not been submitted by the lessee till the date of inspection, as due date of submission is 1st July of every year for preceding year. Hence, information given below is based on the Data provided by the Agent/ mines manager of the mine and information/proposal given in the Modification of Mining Plan (MMP) approved vide letter no.- MMP/MECH-19/GOA/2015-16 Vol-II, Dated:- 08/02/2017.

IV. Scientific Mining (As per latest approved mining Plan/Scheme): (for year 206-17)

1. Exploration:

1A.Backlog of previous year:-02 BHs—140m

1B.Exploration over lease area for geological axis 1 or 2: G1 6.6773 Ha and G2 0.4444 Ha

1C.Exploration agencies and expenditure in lakh during the year: No exploration carried out 1D.Balance area to be explored to bring geological axis 1 or 2: 33.6283 Ha

1E.Balance reserve as on 26.12.2016: Reserves (111 cat.) 2.042 Million tonnes and Total mineral Resource 4.097 Million tonnes.

1F. General remarks of inspecting officer on geology, exploration etc. : Violation being issued for not carrying out exploration during the year 2016-17.

2.Development:

A.Location of development lease area: As per MMP

B. Separate benches in topsoil, overburden and minerals(Rule 15)-Yes

C. Stripping ratio (ore to OB ratio) :- 1:3.80

D. Quantity of topsoil generation in m³ - Nil

E. Quantity of overburden generation in M³ - 4,75,770m³ (951540Tonnes)

3.Exploitation:

A.Number of pit proposed for production - 01

B. Quantity of ROM mineral production proposed.- 2,99,300 tonnes

C. Recovery of sailable/usable mineral from ROM production- Entire quantity is being dispatched after dry screening

D. Quantity of mineral rejects generation - Nil

E. Grade of Mineral rejects generation and threshold value declared -NA

F. Quantity of Subgrade mineral generation- Nil

G. Grade of Subgrade mineral generation- Nil

H. Manual/Mechanical method adopted for segregating from ROM. - Mechanized

I. Any analysis for benefaction study proposed and carried out for sub grade mineral-No

J. Provision of drilling and blasting in mineral benches.- No, (Soft Strata)

K. Provision of mining machineries in mineral benches- Mechanized (HEMM)

L. Whether height of benches in overburden and mineral suitable for method of mining proposed- Yes M. Total area covered under excavation/pits.- about 21.240 Ha. as on 01.04.2017

N. Ore to OB ratio for the pit/mine during the year: 1:3.80

O. Total area put in use under different heads at the end of the year: about 27 Ha

P. Production of ROM mineral during the last five years period as applicable:

Year	Production(Tonnes)
2012-13	Nil
2013-14	Nil
2014-15	Nil
2015-16	19,575
2016-17	2,49,994

Q. General remarks of inspecting officers on method of mining etc.:

Mining operations have not been carried out in accordance with the Modification of Mining Plan (MMP) approved vide letter no.- MMP/MECH-19/GOA/2015-16 Vol-I, Dated:- 08/02/2017 to the extent indicated below:-

(i) The exploration proposed for the year 2016-17 i.e. 02 BHs (140m) were not carried out.

(ii) As per approved MMP, excavation/development of pit was approved to be carried out by formation of regular benches of height 6 m and width more than its height (width of benches to be 10 to 12m).

However, It was observed during inspection that, benches were merged in irregular manner and width of benches were not maintained as approved at the places; and thus resulted in collapse of lower benches in southern side of pit (near ML boundary pillar no.- BP-5 to BP-7). This is against the systematic and scientific mining.

Hence, In this regard, Violations of rule 11(1) of MCDR,2017 being communicated to the party.

4.Waste:

A. Separate dumping of topsoil,OB and mineral rejects (Rule32,33)-Yes

B. Location of topsoil, OB and mineral rejects dumps: Within lease as per MMP

C. Number of dumps with in lease area and outside of the lease area: 2 nos.

D. Location of dumps w.r.t ultimate pit limit (Rule 16)- one temporary dump falls within UPL

E. Number of active and alive dumps- one.

F. Number of dead dumps-one

G. Numbers of dumps established: one for 2016-17

H. Whether retaining wall or garland drain all along dumps are there- Chech dams/bund are made in the trenches /drains.

I.Length of retaining wall or garland drain all along dumps: Garland Drain/trench of about 750m.

J. Number of settling ponds – around 06 Nos.

5.Backfilling:

A. Status of part or full extraction of mineral from mined out area before starting backfilling – No permanent backfilling has been carried out, pit is partly excavated and temporarily backfilled.

B. Area under backfilling of mined out area –nil

C. Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)- Nil

D. Total area fully reclaimed and rehabilitated–Nil

6.PMCP:

A. Whether annual report on PMCP submitted on time and correctly, Rule 23E(2)- Not submitted for 2016-17 till the date of inspection. Due date 1st July.

B. Area available for rehabilitation (Ha)– Nil

C. Afforestation done (Ha)– Gap filling only.

D. No. of sapling planted during the year -.2000(2016-17)

E. Cumulative no. of plants.- 60885(WML + OML)

- F. Any other method of rehabilitation - none
- G. Cost incurred on watch and care during the year.- about 2 lakhs
- H. Compliance on reclamation and rehabilitation by backfilling (i) voids available for backfilling
L*B*W. – None
- I. Compliance on reclamation and rehabilitation by backfilling (ii) voids filled by waste/tailings.
NA
- J. Compliance on reclamation and rehabilitation by backfilling (iii) afforestation on backfilling area: Nil
- K. Compliance on reclamation and rehabilitation by backfilling (iv) rehabilitation by making water
Reservoir : Nil
- L. Compliance on reclamation and rehabilitation by backfilling (V) any other specific means: Nil
- M. Compliance on rehabilitation of waste land within lease (i) afforestation: Nil
- N. Compliance on rehabilitation of waste land within lease (ii) area rehabilitation(Ha): Nil
- O. Compliance on rehabilitation of waste land within lease (iii) method of rehabilitation: Nil
- P. Compliance of environmental monitoring (core zone & buffer zone): Yes, being carried out on quarterly basis.
- V. Conservation:
- A. ROM mineral dispatch or grade wise sorting within lease area - ROM produced is dry screened within the lease by deploying mobile dry screening plant and processed ore in the form of Fines and Lumps is transported to Jetty.
- B. Method of grade wise mineral sorting i.e. manual or mechanical.- Mechanical
- C. Different grade of mineral sorted out of mines: Normal Ore of Average Grade +45% Fe
- D. Any beneficiation process at mines – Dry Screening
- VI. Environment:
- A. Separate removal and utilization of topsoil (Rule 32)- Not applicable
- B. Concurrent use or storage of topsoil- No Top Soil Generated
- C. Separate dumps for overburden, waste rock, rejects and fines (Rule 32)- Yes
- D. Use of overburden, waste rock, rejects and fines dumps for restoring the lands to its original use. Backfilling not yet started
- E. Phased restoration, reclamation and rehabilitation of lands affected by mining operation (pits, dumps etc.- Full reclamation and rehabilitation of lands affected by mining operation – Nil, However, PMCP being implemented.
- F. Baseline information on existence of plantation and additional plantation done(Rule-41)-Yes
- G. Survival rate- about 70%
- H. Water sprinkling on roads to control airborne dust : Mobile water tankers being engaged for water sprinkling.
- VII. Compliance on Rule 45:
- A. Status of submission of monthly annual return- Monthly returns for the year 2016-17 Submitted.
However, Annual Return for the year 2016-17 has not been submitted till the date of inspection; since due date of submission is 1st July of every year for preceding year.
- B. Scrutiny of annual return for information on Mining Engineer, Geologist and Manager:
- C. Scrutiny of annual return on land use pattern for area under pits, reclaimed area, dumps etc.:
- D. Scrutiny of annual return on afforestation:
- E. Scrutiny of annual return on mineral rejects generation (grade and quantity):
- F. Scrutiny of annual return on ROM stock and /graded ore:
- G. Scrutiny of annual return on sale value, Ex. Mines price and production cost:
- H. Scrutiny of annual return on fixed assets:
- I. Scrutiny of annual return on mining machineries:
- *Annual Return for the year 2016-17 has not been submitted till date; since due date of submission is 1st July of every year for preceding year. Hence, Sample scrutiny of Monthly Returns of April 2016 to April 2017 were carried out and discrepancies observed being communicated to the party in terms of violation of Rule 45 of Mineral Conservation and Development Rules'2017 as below:

45	<p>(i) In Monthly Returns submitted for your mine from April 2016 to April 2017; details reported under Part-II, w.r.to the Ex-mines price is given as below: Iron Ore (Lumps)- 55% to below 58% Fe (fe content) grade: Rs. 623.60 (Rs. per te) Iron Ore (Lumps)- 58% to below 60% Fe (fe content) grade: Rs. 623.60 (Rs. per te) Iron Ore (fines) - 55% to below 58% Fe (fe content) grade: Rs. 623.60 (Rs. per te) <i>Whereas, Average Sale Price of minerals by Grades, Published by IBM for March 2017 in respect of Goa State was as follows:</i> <i>Iron Ore (Lumps)- 55% to below 58% Fe (fe content) grade: Rs.1430 (Rs. per te)</i> <i>Iron Ore (Lumps)- 58% to below 60% Fe (fe content) grade: Rs. 2027 (Rs. per te)</i> <i>Iron Ore (fines) - 55% to below 58% Fe (fe content) grade: Rs.1310 (Rs. per te)</i> <i>and, Average Sale Price of minerals by Grades, Published by IBM for April 2016 in respect of Goa State was as follows:</i> <i>Iron Ore (Lumps)- 55% to below 58% Fe (fe content) grade: Rs. 926 (Rs. per te)</i> <i>Iron Ore (Lumps)- 58% to below 60% Fe (fe content) grade: Rs. 1824 (Rs. per te)</i> <i>Iron Ore (fines) - 55% to below 58% Fe (fe content) grade: Rs. 933 (Rs. per te)</i> From above, it is evident that Ex-mines price of ore reported by you is incorrect and un-realistic.</p>
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(P. PRAKASH)
DCOM