

MCDR Insp. Reoprt

1) Name of Inspecting officer:	Shri. P. Prakash
2) Designation	Dy. Controller of Mines
3) Accompanying mine official with designation	Shri. C. G. S. Bhaskara Varma, Agent
4) Date of Inspection	22.12.2016
5) Date of Previous Inspection	18.05.2015

PART –I GENERAL INFORMATION

1. Name of mine	Cazreachem Culna (Cudnem) 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 (OC)
c. Postal address	Smt. Kunda Raghuvir Gharse Cazreachem Culna (Cudnem) Iron Ore Mine Cudnem, Sanquelim, Goa
d. State	Goa
e. District	North Goa
f. Tehsil/ Taluka	Bicholim
g. Police station	Bicholim
h. Village	Cudnem
i. Post	Sanquelim
j. Pin Code	403 505
k. FAX	0832 2370312
l. E-mail	shankarvarma63@gmail.com
m. Phone	0832-2370312
n. Date of first opening	
o. Weekly day of rest	Sunday

2. a) Lease No. (T. C. No.)	:	51/52
b) Lease area in hectare with forest area, if any	:	79.5075
c) Period of lease	:	20 years (22.11.2007 - 21.11.2027)
d) 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 : Smt. Kunda Raghuvir Gharse
 PB No. 204, Near Municipal Building, Margao,
 Salcete, Goa
 Fax: 0832 2731036
 Email: rsgharse@yahoo.in

b) Nominated owner : Smt. Kunda Raghuvir Gharse

c) Agent with date of appointment : C. G. S. Bhaskara Varma
 Cazrechem Culna (Cudnem) Iron Ore Mine
 Cudnem, Sanquelim, Goa
 Email: shankarvarma63@gmail.com
 Date of appointment: 16.11.2015

d) Mining Engineer and geologists appointed under rule 42 of MCDR, 1988 with date of appointment and whether full/ part time with qualification.

1) Shekharanand Bhat
 Date of appointment: 24.03.2012, Full time
 Qualification: B.E. Mining

2) M. M. Sardar
 Date of appointment: 01.11.2015, Full time
 Qualification: M.Sc. Geology

e) Mine Manager with qualification and date of appointment : Shekharanand Bhat
 Date of appointment: 16.11.2015
 Qualification: B.E. Mining / First class mines manager certificate metal (R)

5. Details about Mining Plan/ Mining Scheme

a) Letter No. and date of approval of mining plan : No. MP/OTF.MECH-40/GOA/2006-07,
 dated 09.05.2007

b) Letter No. and date of approval of Mining Scheme : No. MMP/MECH-20/GOA/2015-16, dated:
 12.08.2015 (Modified Mining Plan)

c) Period of mining plan/ Mining scheme in force : From 01.04.2013 to 31.03.2018 (Modified Mining Plan)

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.

Classification	Average daily employment			Average No. of days worked in a year	Remarks
	Direct	Contract	Total		

OPENCAST					
a) Managerial person	06	-	06	306	
b) Supervisory persons	08	-	08		
c) Workers	38	-	38		
d) Ministerial persons	02	-	02		
e) Employment in plant	-	-	-		
f) Others		09	09		
UNDERGROUND	Not Applicable				

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) (2015-16)	Expenditure proposed in Rs. Lakhs for current year (2016-17)	Expenditure incurred in Rs. Lakhs (Previous financial year) (2015-16)	Expenditure incurred so far in Rs. Lakhs, in current year (2016-17), Till the date of inspection* upto November 2016	Remarks
1	General development in the area	-	-	-		Expenditures given here is 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	-	-	-	0.25 (Summer camp for school children)	
3	Employment to local inhabitants	-	-	122.15		
4	Infrastructure-public transport, roads, communication and electricity	-	-	2.67	1.77 (Transport facility to school & college children & electrical fixtures to village panchayat)	
5	Recreation and other sports activities	-	-	0.45	0.23 (Donations to religious & cultural organizations)	
6	Expenditure for environment management	-	-	4.43	3.63	

7	Others	-	-	1.19	1.29 Distribution of notebooks, uniforms & dictionaries to school children	
	Total	-	-	130.89	7.17	

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
18.05.2015	Nil	NA

IV. Scientific Mining (As per latest approved mining Plan/Scheme): (2015-16)

1. Exploration:

1A. Backlog of previous year: - Nil

1B. Exploration over lease area for geological axis 1 or 2: -Nil

1C. Exploration agencies and expenditure in lakh during the year: Nil

1D. Balance area to be explored to bring geological axis 1 or 2: as per MP

1E. Balance reserve on 01.04.2016: 12.01 Million Tonnes

1F. General remarks of inspecting officer on geology, exploration etc. : MP being followed.

2. Development:

A. Location of development lease area: E -1320 – E-1630 & N-50 – N-380

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

C. Stripping ratio (ore to OB ratio): 1:0.95

D. Quantity of topsoil generation in m³: -Nil-

E. Quantity of overburden generation in m³: 85,662 m³ (214,156 tonnes)

F. General remarks of inspecting officer on development of pit w.r.t type of deposit etc. : satisfactory

3. Exploitation:

A. Number of pit proposed for production: One

B. Quantity of ROM mineral production proposed: 326,000 tonnes

C. Recovery of sailable/usable mineral from ROM production: 100%

D. Quantity of mineral rejects generation: Nil

E. Grade of Mineral rejects generation and threshold value declared: Not applicable

F. Quantity of Subgrade mineral generation: Nil

G. Grade of Subgrade mineral generation: Nil

H. Manual/Mechanical method adopted for segregating from ROM.: Mechanical

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

J. Provision of drilling and blasting in mineral benches: Non

K. Provision of mining machineries in mineral benches: Yes (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 66 Ha

N. Ore to OB ratio for the pit/mine during the year (2015-16): 1: 0.95

O. Total area put in use under different heads at the end of the year : as per MP

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

Unit: in Tonnes

Year	Production Approved in mining plan/ scheme	Production achieved
2011-12	720,000	635,164

2012-13	723,000	131,598
2013-14	-	-
2014-15	-	-
2015-16	326,000	225,125

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

Mining operations were not observed carried out in accordance with the Modification of Mining Plan approved dated 12.08.2015 to the extent indicated below:-

- (i) Height and width of the pit benches has not been maintained as approved, in the South-western side of the pit. It was observed during inspection that, benches were merged in irregular manner with height of benches up to about 10 m & width of about 3 m only at places; against the approved bench height of 6 m & width of 10m to 12m.
- (ii) Substantial quantity of ROM/low grade ore observed stacked in unsystematic manner at non-approved area in northern side of lease area near to workshop. Moreover, this stack has been made over the sloping ground near to north side Nalla, without taking/ erecting environmental protection measures.

In this regard, Violations of rule 13(1) of MCDR,88 communicated to the party.

4. Waste:

- A. Separate dumping of top soil, OB and mineral rejects (Rule 32, 33): Yes
- B. Location of top soil, OB and mineral rejects dumps.: As per MP.
- C. Number of dumps within lease area and outside of the lease area : 03 nos. within lease area and 01 no. outside of the lease area (old).
- D. Location of dumps w.r.t ultimate pit limit (Rule 16): 2 temporary dumps (1 – active, 1 - dead) within ultimate pit limit.
- E. Number of active and alive dumps: 01 (temporary dump within pit)
- F. Number of dead dumps: 02 nos. within lease area
- G. Numbers of dumps stabilized: 01 no. within lease area
- H. Whether retaining wall or garland drain all along dumps are there.: Yes
- I. Length of retaining wall or garland drain all along dumps: Retaining wall - 342 meters (along temporary backfilling)
- J. Number of settling ponds: 01 (within lease area)
- K. Specific comments of inspecting officer on waste dump management : Satisfactory

5. Backfilling: (Temporary)

- A. Status of part or full extraction of mineral from mined out area before starting backfilling: Partly extracted.
- B. Area under backfilling of mined out area: about 1.3 Ha. (temporary backfilling)
- C. Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32): NA
- D. Total area fully reclaimed and rehabilitated: Nil
- E. General remarks of inspecting officer on backfilling and reclamation : Satisfactory.

6. PMCP:

- A. Whether annual report on PMCP submitted on time and correctly, Rule 23E (2): Yes
- B. Area available for rehabilitation (Ha): 0.5 Ha.
- C. Afforestation done (Ha): 9.4980 Ha. Within lease area
- D. No. of sapling planted during the year (2015-16): 4,011
- E. Cumulative no. of plants (Upto 2015-16): about 7,000 Within lease area
- F. Any other method of rehabilitation: No
- G. Cost incurred on watch and care during the year: about Rs. 10,000.00
- H. Compliance on reclamation and rehabilitation by backfilling : temporary back-filling
- J. Compliance on rehabilitation of waste land within lease (i) afforestation: Nil
- K. Compliance on rehabilitation of waste land within lease (ii) area rehabilitation (Ha): Nil

- L. Compliance on rehabilitation of waste land within lease (iii) method of rehabilitation: NA
M. Compliance of environmental monitoring (core zone & buffer zone): environmental monitoring is being carried out in core & buffer zone
N. General remarks of inspecting officer on PMCP compliance and progressive closure operation etc. : Satisfactory

V. Conservation:

- A. ROM mineral dispatch or grade wise sorting within lease area: No dispatch in 2015-16
B. Method of grade wise mineral sorting i.e. manual or mechanical: None
C. Different grade of mineral sorted out of mines: NA
D. Any beneficiation process at mines: No
E. General remarks of inspecting officer on Mineral conservation and beneficiation issues:NA

VI. Environment:

- A. Separate removal and utilization of topsoil (Rule 32): The major portion of mining lease is broken up and is more or less covered with hard laterite. Hence, no topsoil is expected to be generated.
B. Concurrent use or storage of topsoil: NA
C. Separate dumps for overburden, waste rock, rejects and fines (Rule 32): Yes
D. Use overburden, waste rock, rejects and fines dumps for restoring the lands to its original use: --
E. Phased restoration, reclamation and rehabilitation of lands affected by mining operation (pits, dumps etc.): For the year 2015-16, about 4,000 saplings were planted on mined out benches.
F. Baseline information on existence of plantation and additional plantation done (Rule-41) : In the year 2015-16, about 4,000 saplings were planted.
G. Survival rate: Survival rate of the saplings is approximately 50%.
H. Water sprinkling on roads to control airborne dust : Total two numbers of tankers are reported engaged for dust suppression. On an average 15-16 trips are done in a day for dust suppression.
I. General remarks of inspecting officer on Env.: Satisfactory

VII. Compliance on Rule 45:

- A. Status of submission of monthly annual return: Submitted regularly
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.
(A-I) : Above, observed to be in order, except followings points for which Violations of following rules of MCDR,88 communicated to the party.

42 & 13(1)	A whole-time mining engineer has not been employed as required under rule 42 for category 'A' mines and also as proposed in Modification of Mining Plan approved dated 12.08.2015.
45	Details reported under Part-II of Monthly Returns of year 2016-17 i.e. Nov. 2016; regarding the Ex-mines price (Rs. per tone) of Rs. 780 for below 55 % fe content and Rs. 1070 for (all type of grades) above 55 % to 65% & above fe content for lumps & fines seems to be very low and unrealistic.

(P. Prakash)
DCOM