

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

MCDR INSPECTION REPORT

Hyderabad regional office

Mine file No : AP/VZNR/MN-105/HYD

Mine code : 40APR20050

- (i) Name of the Inspecting : **C\$10**) **Ch.Suseela**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : Shri. G.V.Subba Rao, Agent and Shri P.Ramakrishna, Ge
Official with
Designation
- (iv) Date of Inspection : 25/01/2017
- (v) Prev.inspection date : 27/01/2007

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GARBHAM**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : ANDHRA PRADESH
District : VIZIANAGARAM
Village : GARBHAM
Taluka : MEREKAMUDIDAM
Post office : GARBHAM
Pin Code :
FAX No. :
E-mail :
Phone :
- (f) Police Station :
- (g) First opening date : 20/09/1995
- (h) Weekly day of rest : SUN
2. Address for :
correspondance
3. (a) Lease Number : APR0247
- (b) Lease area : 264.64
- (c) Period of lease : 20
- (d) Date of Expiry : 07/10/2022
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : RASHTRIYA ISPAT NIGAM LTD.
VISAKHAPATNAM STEEL PLANT
VISAKHAPATNAM
VISAKHAPATNAM ANDHRA
PRADESH
Phone:0891-
FAX :0891-

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	21/10/2003
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	15/07/2008
		Mining Scheme rule 12 MCDR1988	02/12/2013
		Mining Scheme rule 12 MCDR1988	02/12/2013

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	None	None	
1b	Exploration over lease area for geological axis 1 or 2	10 Bore holes	NIL	Violation of rule 13(1) was pointed out to the lessee.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NIL	The lessee has contacted M/s MAPP Drilling and exploration Pvt. Ltd. for exploration work. The work order value for this mine is Rs.37,95,432/-
1d	Balance area to be explored to bring Geological axis in 1 or 2	264.54 ha	264.54 ha	
1e	Balance reserve as on 01/04/20	526982 tonnes	526982 tonnes	
1f	General remarks of inspecting officers on geology, exploration etc	_____	_____	The Mining operations are being restricted to Dump Pit only. No core mining is being carried out as proposed in the approved scheme of mining.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	North East part of Central Garbham, C-C'	North East part of Central Garbham, C-C'	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Dump Pit, only mineral benches	Dump Pit, only mineral benches	
2c	Stripping ratio or ore to OB ratio	Not Applicable	Not Applicable	

2d	Quantity of topsoil generation in m3	Not Applicable	Not Applicable	
2e	Quantity of overburden generation in m3	Not Applicable	Not Applicable	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	_____	_____	The Mining operations are being restricted to Dump Pit only. No core mining is being carried out as proposed in the approved scheme of mining.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One dump pit	One dump pit	
3b	Quantity of ROM mineral production proposed	15,000 tonnes	12,245 tonnes	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	NIL	NIL	Due to dump mining, there is 100% recovery
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	Mechanised	Mechanised	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not applicable	Not applicable	
3j	Provision of drilling and blasting in mineral benches	Not applicable	Not applicable	
3k	Provision of mining machineries in mineral benches	Yes, Excavator	Yes, Excavator	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, 4 m ht	Yes, 3 to 4m ht	
3m	Total area covered under excavation/pits	11.84 ha	11.84 ha	
3n	Ore to OB ratio for the pit/mine during the year.	Not applicable	Not applicable	
3o	Total area put in use under different heads at the end of year	46.22 ha	46.22 ha	
3p	Production of ROM mineral during the last five year period as applicable	2011-12-- 15,000 t, 2012-13-- 15,000 t, 2013-14-- 15,000 t , 2014-15-- 15,000 t, 2015-16-- 15,000 t	2011-12--12,494 t, 2012- 13--12,521 t, 2013-14-- 13,550 t , 2014-15-- 16,223 t, 2015-16-- 12,245 t	
3q	General remarks of inspecting officers on method of mining etc.	_____	_____	The Mining operations are being restricted to Dump Pit only. No core mining is being carried out as proposed in the approved scheme of mining.

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Not applicable	Not applicable	
4b	Location of topsoil, OB and mineral reject dumps	Not applicable	Not applicable	
4c	Number of dumps within lease area and outside of lease area	One dump within the lease area	One dump within the lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not Applicable	Not Applicable	Since the dump mining is being practiced in the mine.
4e	Number of active and alive dumps.	NIL	NIL	
4f	Number of dead dumps.	01	01	
4g	Number of dumps established.	01	01	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes, Garland drain	Yes, Garland drain	
4i	Length of Retaining wall or garland drain all along dumps	100 m	100 m	
4j	Number of settling ponds	NIL	NIL	
4k	Specific comments of inspecting officer on waste dump management	_____	_____	_____

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.	NIL	NIL	

5b	Area under backfilling of mined out area	NIL	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NIL	
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	_____	_____	The Mining operations are being restricted to Dump Pit only. No core mining is being carried out as proposed in the approved scheme of mining. Hence backfilling does not arise.

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).	NIL	NIL	
6b	Area available for rehabilitation (ha) .	Not applicable	Not applicable	
6c	afforestation done (ha).	NIL	NIL	
6d	No. of saplings planted during the year	NIL	NIL	
6e	Cumulative no .of plants	NIL	NIL	
6f	Any other method of rehabilitation	NIL	NIL	
6g	Cost incurred on watch and care during the year	NIL	NIL	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not Applicable	Not Applicable
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Applicable	Not Applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not Applicable	Not Applicable
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Applicable	Not Applicable
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not Applicable	Not Applicable
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	50	100
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	6.08 ha	6.08 ha
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	_____	_____

6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed monitoring of environmental parameters	Monitoring of environmental parameters is being practiced	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	_____	_____	_____

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting	Grade wise sorting by screening lumps and fines	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	Yes	Lumps-29% Mn Fines-26% Mn	
7d	Any beneficiation process at mines	No	No	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	_____	_____	_____

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not Applicable	Not Applicable	

8b	Concurrent use or storage of topsoil	Not Applicable	Not Applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Maintained, One OB dead dump	Maintained, One dump	OB dead
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Applicable	Not Applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Applicable	Not Applicable	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	50	100	cumulative plants-4100
8g	Survival rate	95%	90%	
8h	Water sprinkling on roads to control airborne dust	Yes, Provided	Provided	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	_____	_____	The surrounding areas of ML are agricultural lands looks greenary

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual Returns submitted up to date	Monthly and Annual Returns submitted up to date	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager-1, Mining Engineer-1, Geologist-1	Manager-1, Mining Engineer-1, Geologist-1	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under pits- 19.84 ha, Area covered under dump-5.0 ha	Area covered under pits- 19.84 ha, Area covered under dump-5.0 ha	
9d	Scrutiny of Annual return on afforestation	100	100	
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	12245 tonnes	12245 tonnes	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value-0, Ex. Mine Price- Rs.2320/-, CoP-Rs.1597/-	Sale Value-0, Ex. Mine Price-Rs.2320/-, CoP-Rs.1597/-	Mineral is used for captive purpose.
9h	Scrutiny of Annual return on fixed assets	Rs.118,50,320/-	Rs.118,50,320/-	
9k	Scrutiny of Annual return on mining machineries	Back hoe, Dozer, Tipper, water tanker, Front end Loader and tractor	Back hoe, Dozer, Tipper, water tanker, Front end Loader and tractor	

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
Rule 13(1)	02/03/2017		

Date :

(Ch.Suseela)

Indian Bureau of Mines