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

#### MCDR inspection REPORT

#### Hyderabad regional office

Mine file No : AP/KSN/LST-17/HYD Mine code: 38APR10010

(i)Name of the Inspecting: M015 ) MANISH K. MAINDIRATTA

Officer and ID No.

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine :

> Official with Designation

(iv) Date of Inspection : 06/03/2018 Prev.inspection date : 20/04/2017 (v)

PART-I : GENERAL INFORMATION

(a) Mine Name : JAGGAYYAPETA

(b) Registration NO.

(C) Category : A Mechanised

(d) Type of Working Opencast

Postal address (e)

> State : ANDHRA PRADESH

District KRISHNA Village BUDDAWADA Taluka JAGGAYYAPETA

Post office : LIMESTONE TOWNSHIP

Pin Code : 521175

FAX No. : 08652- 222358

vspjlm@yahoo.co.in E-mail : 08652-222358, 222373 Phone

(f) Police Station : jaggayyapet First opening date : 23/03/1989 (g)

Weekly day of rest (h) : SUN

Address for : RINL LIMESTONE MINE

correspondance

**JAGGAYYAPET** 

KRISHNA DIST.

3. : APR0199 (a) Lease Number (b) Lease area : 1295 Period of lease : 20 (C)

> : 08/08/2020 (d) Date of Expiry

4. Mineral worked : LIMESTONE Main 5. Name and Address of the

Lessee : RASHTRIYA ISPAT NIGAM LTD.

VISAKHAPATNAM STEEL PLANT

VISAKHAPATNAM

VISAKHAPATNAM ANDHRA

PRADESH Phone:0891-FAX:0891-

Owner : UMESH CHANDRA

ADMN BUILDING, RINL/VSP. VISAKHAPATNAM ANDHRA

PRADESH Phone:

FAX : dir.opr@vizagst

Agent : SRI C N S SASTRY

JAGGAYYAPETA LIMESTONE MINE RINL, VSP, BUDAWADA VILL. JAGGAYYAPET TQ KRISHNA

ANDHRA PRADESH

Phone:

FAX : 0854 222358

Mining Engineer

Name : SRI C N S SASTRY, Full Time

Qualification : B.E.(Mines)
Appointment/ : 12/04/2007

Termination date

Manager

Name : VIJAY KUMAR
Qualification : B.SC ENGG & FCC

Appointment/ : 31/03/2009

Termination date

6. Date of approval of Mining Plan/Scheme of Mining Mining Scheme rule 22 MCR1960 30/11/2001
Mining Scheme rule 12 MCDR1988 16/05/2005
Modif.approved Mining Scheme 06/07/2006
Mining Scheme rule 12 MCDR1988 19/10/2010
Mining Scheme rule 12 MCDR1988 21/10/2015

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2016-17- 15 boreholes 2017-18- 15 boreholes Total exploration proposed in scheme period including backlog of pre scehme period (2015- 16 to 2019- 20) till 2016-17 is 26 +30= 56	Exploration by means 83 holes have been undertaken along with DTH	
1b	Exploration over lease area for geological axis or 2	L	As a result of exploration area unded different level of exploration G1 = about 147 hectar G2 = About 1148 hectar	ce
1c	Exploration Agencies and Expenditure in lakh rupees during the year		M/s MAPP drilling and Exploration pvt ltd. Rs 72,52,200/- as per work order.	
1e	Balance reserve as on 01/04/20		As on 1.3.2018 111- 31.78 million tonnes 221 - 3.60 million tonnes 331 - 40.02 million tonnes 332 - 86.50 million tonnes 334- 181 million tonnes	nes.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area		In pit-2 only at the proposed location	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)		No top soil , waste generation anticipated in 2016-17 and 2017-18. NIl generated during the period as well.
2c	Stripping ratio or ore to OB ratio	1:0	1:0
2d	Quantity of topsoil generation in m3	NIL	NIL
2e	Quantity of overburden generation in m3	NIL	NIL

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2	production taken from pit 2 only	
3b	Quantity of ROM mineral production proposed		2016-17 = 348102 T 2017-18 = 317108 T (till Feb 2018)	
3с	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	nil	nil	
3e	Grade of mineral rejects generation and threshold value declared.	nil	nil	
3f	Quantity of sub grade mineral generation.	nil	nil	
3g	Grade of sub grade mineral generation	nil	nil	
3h	Manual / Mechanised method adopted for segregating from ROM		Not applicable as entire ROM is being used.	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.		NIL	
3j	Provision of drilling and blasting in mineral benches	proposed	ammonium nitrate base slurry explosive in cartridge form of 83 mm dia are used for blasting of deep holes of 115 mm diameter.	
3k	Provision of mining machineries in mineral benches	Proposed	Shovel dumper combination is being used.	Shovel - 4.6 cu m- 1 no. dumper 35 T - 5 nos. Drill machine- 115mm - 1 no. (1 standby)
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM		Yes	
3m	Total area covered under excavation/pits	under pit 50.40 hectare till the end of scheme period.	Area under pit as on 1/1/2018= 38.946 hectare.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	
30	Total area put in use under different heads at the end of year	Additional are to be brought under pit in the scheme period 2015-16 to 2019-20 under excavation 16.40 hectare, cumulative 50.40 hectare	hectare.	
3p	Production of ROM mineral during the last five year period as applicable	2013-14 = 780000 T 2014-15 = 780000 T 2015-16 = 780000 T 2016-17 = 780000 T 2017-18= 780000T	2013-14 = 401807 T 2014-15 = 344402 T 2015-16 = 354764 T 2016-17 = 348102 T 2017-18= 317108 T (as on 1.03. 2018)	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)		Not Applicable.	
4b	Location of topsoil, OB and mineral reject dumps		Not Applicable for 2016- 17 and 2017-18. However an old waste dump is there.	
4c	Number of dumps within lease area and outside of lease area		one old waste dump is there.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)		Outside UPL as per the exploration data at the time of mining plan preparation	
4e	Number of active and alive dumps.	1	1 dead dump (siliceous fines)	
4h	Whether Retaining wall or garland drain all along dumps are there.		No	
4i	Length of Retaining wall or garland drain all along dumps		Not applicable	
4j	Number of settling ponds		nil	

## 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 is not mature for backfilling at present.	
5b	Area under backfilling of mined out area	NIL	NII	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NIl as there is no top soil	

5d Total area NII Nil fully reclaimed and rehabilitated

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).		submitted for 2016-17	
6b	Area available for rehabilitation (ha) .	No proposal	NII	
6c	afforestation done (ha).	No proposal	Not applicable for rehabilitation purpose	
6d	No. of saplings planted during the year	No proposal	Not applicable for rehabilitation purpose	
бе	Cumulative no .of plants	No proposal	NIL as area is not mature for rehabilitation purpose.	
5f	Any other method of rehabilitation			
5g	Cost incurred on watch and care during the year			As for green belt developed Rs 804999 has been reported to be spent towards watering and meaintenance during last 2 years.
бh	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D		Not applicable as area is not mature for rehabilitation by backfilling purpose	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings		Not applicable	

area.

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Not applicable as area is not mature for rehabilitation by backfilling purpose	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable at present as area is not mature for the purpose.	
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.		
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	There is no waste land in the lease	However as part of Green belt development, lessee had proposed to undertale plantation at the rate of 1000 saplings per hectare in 2016-17 and 2017-18.  Against the same 5500 sapling shave been planted over about 5.5 hectare area.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No waste land	However as part of Green belt development, lessee had proposed to undertale plantation at the rate of 1000 saplings per hectare in 2016-17 and 2017-18.  Against the same 5500 sapling shave been planted over about 5.5 hectare

6p Compliance of environmental monitoring (core zone and buffer zone)

Monitoring was not made available.

### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area		Entire mineral is despatched without sorting after size reduction 2016-17 = 347135 T 2017-18 =299023 T (as on 1.03.2018)	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.		Not applicable as the entire ROM is consumed.	
7c	Different grade of mineral sorted out at mines.			
7d	Any beneficiation process at mines		No benefeciation process. Only size reduction is done.	

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)		Not applicable as there is no top soil or over burden.	
8b	Concurrent use or storage of topsoil		Not applicable as there is no top soil or over burden.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)		Not applicable as there is no top soil or over burden. However an old fine dump is there in the lease.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	mine is not mature for the purpose of restoring the land to it's orignal iuse. however it is not possible either due to inadequate material for backfilling
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable as the mine is not mature for the purpose.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1,48,370 saplings over 93.40 hectare till 2016-17 and additional 5500 saplings over 5.5 hectare in 2017-18.
8g	Survival rate	70%
8h	Water sprinkling proposed on roads to control airborne dust	Permanent water sprinkling system has been provided on haul road and water tanker is there for the mine.

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Appointed as furnished.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Engineer in	As reported	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	reported (i) Covered under current (O/C) Workings 37.970 ha. (ii) Used for waste disposal  9.310	
		ha. (iii) Infrastructure	
		127.470 ha.	
9d	Scrutiny of Annual return on afforestation	100 saplings within mining lease during 2016-17	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIl reported	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore		ROM prod - 348102 T C/.B of ROM - NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		Cost of production Rs 834.59 hectare for the graded mineral.
9h	Scrutiny of Annual return on fixed assets		
9k	Scrutiny of Annual return on mining machineries	data furnished	

# Details of violations observed during current inspection and compliance position of violation pointed out

Violation	n observed	Show couse position	
Rule NO.	Issued on Compliance on	Rule NO. Issued on Compliance on	
MCDR17 Rule 40	05/04/2018 23/05/2018		
MCDR17 Rule 41(1)	05/04/2018 23/05/2018		
MCDR17 Rule 56	05/04/2018		

Date :

(MANISH K. MAINDIRATTA)

Indian Bureau of Mines