

**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 : **M029**) **MADHU SUDHAN YADAV M**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sri Vijay Kumar-DGM(Mines), Shri K. Srinivasa Rao, Dy.
Official with
Designation
- (iv) Date of Inspection : 17-DEC-20
- (v) Prev. inspection date : 12-DEC-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JAGGAYYAPETA**
- (b) **Registration NO.** : **IBM/1071/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **ANDHRA PRADESH**
- District : **KRISHNA**
- Village : **BUDDAWADA**
- Taluka : **JAGGAYYAPETA**
- Post office : **LIMESTONE TOWNSHIP**
- Pin Code : **521175**
- FAX No. : **08652- 222358**
- E-mail : **vspjlm@yahoo.co.in**
- Phone : **08652-222358, 222373**
- (f) **Police Station** : **jaggayyapet**
- (g) **First opening date** : **23-MAR-89**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **RINL LIMESTONE MINE**
correspondance **JAGGAYYAPET**
KRISHNA DIST.
3. (a) **Lease Number** : **APR0199**
- (b) **Lease area** : **1295**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **08-AUG-20**
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 : Ajit Kumar Saxena
 RINL/VSP VISAKHAPATNAM
 VISAKHAPATNAM ANDHRA
 PRADESH
 Phone:
 FAX :

Agent : B U V N Raju
 BUDAWADA VILLAGE
 JAGGAYYAPETA MANDAL KRISHNA
 DIST KRISHNA ANDHRA PRADESH
 Phone:
 FAX :

Mining Engineer

Name : Krishna Kumar Dhruw, Full Time
 Qualification : B TECH MINING
 Appointment/ : 14-SEP-19
 Termination date

Manager

Name : VIJAY KUMAR
 Qualification : B.SC ENGG & FCC
 Appointment/ : 31-MAR-09
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	30-NOV-01
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	16-MAY-05
		Modif.approved Mining Scheme	06-JUL-06
		Mining Scheme rule 12 MCDR1988	19-OCT-10
		Mining Scheme rule 12 MCDR1988	21-OCT-15
		MP review under 17(1) MCR 2016	31-MAR-20
		MP review under 17(1) MCR 2016	28-MAY-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2019-20- 14 Nos. of boreholes proposed.	2019-20 - Nil	The entire Exploration prosed in the five year block has already been completed in the year 2017-18 for 84 No's of Boreholes with 4010.12 meters of core drilling.
1b	Exploration over lease area for geological axis 1 or 2	----	G1 - 232 Ha G2 - 633 Ha G3 - 351 Ha	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	2019-20 - Nil	MAPP drilling and exploration pvt. ltd., Hyderabad drilled the holes in the year 2017-18. Exploration cost - Rs.72,52,200/- .	
1d	Balance area to be explored to bring Geological axis in 1 or 2	----	G1 - 232 Ha G2 - 633 Ha G3 - 351 Ha	
1e	Balance reserve as on 01/04/20	---	Proved Reserves as on 01/12/2020 - 60.36 million Tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			Balance area to convert into G1 level is proposed in the year 2020-21 and 2021-22.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Pit 1 : E2748502 - 2749091 N679270 - 679950 Pit 2 : E2749099 - 2749934 N679710 - 680258	Work done within the proposed co-ordinates.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No topsoil and OB bench proposed. Mineral bench proposed.	Only mineral benches are developed.	
2c	Stripping ratio or ore to OB ratio	No proposal	Nil	
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	No proposal	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			No OB is generated in the proposed mining area.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two pits - Pit-1 & Pit-2	Though there are two pits, but due to less requirement of limestone to plant, excavation has been done from one pit(Pit-2) only.	
3b	Quantity of ROM mineral production proposed	2019-20 - 1040000 Te 2020-21 - 780000 Te	2019-20 - 287634 Te 2020-21 - 98245 Te (till Nov'20)	Lessee has reported that less production in the year 2019-20 due to less plant requirement.

3c	Recovery of sailable/usable mineral from ROM production	100%	100%
3d	Quantity of mineral reject generation	No proposal	Nil
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable	Nil
3f	Quantity of sub grade mineral generation.	No proposal	Nil
3g	Grade of sub grade mineral generation	Not applicable	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting proposed in mineral benches.	Duirng inspection it was observed that Wagon drill being used for drilling with a blast hole dia of 115 mm & depth of 9 m, spacing of 4-5 meters and burden of 3- 4 meters. Blasting with SME and emulsion explosives with NONELS as initiating system.

3k	Provision of mining machineries in mineral benches	a) Shovel: 4.5 m3 - 2 (supported by 3.2 m3 standby) b) Dumpers 35 T - 4 no's c) Drill machine - Revathi C-60H, 115mm dia - 1	a) Shovel: 4.5 m3 - 2 (supported by 3.2 m3 standby) b) Dumpers 35 T - 4 no's c) Drill machine (C-60H) , 115mm dia - 1
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	It was proposed to work with a bench height of 8m.	Digging height of the excavator is compatible for proposed bench height fo 8m.
3m	Total area covered under excavation/pits	50.40 Ha	40.83 Ha
3n	Ore to OB ratio for the pit/mine during the year.	No proposal	Nil
3o	Total area put in use under different heads at the end of year	43.99 Ha	40.83 Ha
3p	Production of ROM mineral during the last five year period as applicable	2015-16 7,80,000 T 2016-17 7,80,000 T 2017-18 7,80,000 T 2018-19 7,80,000 T 2019-20 10,40,000 T 2020-21 - 7,80,000 T	2015-16 - 3,54,764 T 2016-17 - 3,48,102 T 2017-18 - 3,42,108 T 2018-19 - 3,15,005 T 2019-20 - 2,87,634 T 2020-21 - 98,245 T (till Nov'20)
3q	General remarks of inspecting officers on method of mining etc.		Mining is done through mechanised open cast mining method by deploying HEMM and using deep hole drilling and blasting.

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal for the year 2019-20.	Nil	
4b	Location of topsoil, OB and mineral reject dumps	Not applicable	Nil	
4c	Number of dumps within lease area and outside of lease area	One old mineral reject dump is maintained withing the lease area.	Old mineral reject dump is being maintained. No fresh dump is being developed.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No dump proposed	Old dump is outside UPL. No fresh dump developed.	
4e	Number of active and alive dumps.	One old dead mineral reject dump is maintained.	Old mineral reject dump is maintained.	
4f	Number of dead dumps.	One old dead mineral dump maintained.	Old dead dump is maintained.	
4g	Number of dumps established.	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal for the year 2019-20.	Retaining wall and Garland drain maintained along the dump.	
4i	Length of Retaining wall or garland drain all along dumps	No proposal for the year 2019-20.	Retaining wall and Garland drain maintained along the dump.	
4j	Number of settling ponds	No proposal for the year 2019-20.	Nil	
4k	Specific comments of inspecting officer on waste dump management			One old mineral reject dump is maintained in the lease area.

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.	No proposal	Nil	
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The pit is not mined out upto its ultimate pit limit to start backfilling.

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).	To be submitted	Submitted	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	2019 -20 - 1.0 Ha	2019-20 - Nil.	5.0 Ha of area proposed for plantation for the plan period from 2015-16 to 2019-20. However 5.5 Ha area of plantation done in the year 2017-18.

6d	No. of saplings planted during the year	2019 -20 - 1000 Nos.	2019-20 - Nil.	5000 Nos. of saplings proposed to plant for the plan period from 2015-16 to 2019-20. However 5500 Nos. of saplings planted in the year 2017-18.
6e	Cumulative no .of plants	No proposal	5500 Nos.	
6f	Any other method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch and care during the year	No proposal	Lessee has reported that cost incurred for Plantation - Rs.514745/- and Watch and care - Rs.219945/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly environmental monitoring of core and buffer zone proposed.	Quarterly environmental monitoring carried out during 2020-21.
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	No proposal	Entire mineral being used in steel plant at Viskhapatnam after crushing to -70mm size	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Nil	
7c	Different grade of mineral sorted out at mines.	No proposal	Nil	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The plant requirement has reduced due to import of sms grade limestone as a result exploitation and the corresponding requirement has also reduced.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	Old mineral reject dump is existing in the lease area. No fresh dumps are created.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposal	5500 Nos. of saplings planted in the year 2017-18 covering 5.5 Ha area.	
8g	Survival rate	---	70%	
8h	Water sprinkling on roads to control airborne dust	Water Tankers to be provided for dust suppression	Water tanker is provided for dust suppression.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			New method of plantation done by creating trenches in the adjacent side of the plantation for water accumulation during rain and also providing water cans adjacent to the plants for drip irrigation.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	To be submitted in time	Submitted in time
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager - Shri. Vijay Kumar. Mining Engineer - Shri. K.K.Dhruw Geologist - Shri. K.Srinivas Rao	Manager - Shri. Vijay Kumar. Mining Engineer - Shri. K.K.Dhruw Geologist - Shri. K.Srinivas Rao
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	a) Covered under current (O/C) Workings - 39.88 Ha. b) Used for waste disposal (Fines Dump) - 7.20 Ha. c) Occupied by plant, buildings, residential, welfare buildings & roads - 143.39 Ha.	Broadly as submission.
9d	Scrutiny of Annual return on afforestation	Nil	Nil
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	Opening stock - 25306.91 Tons Production - 287634 Tons Dispatch - 287634 Tons Closing stock @ 2806.1 Tons	As per submission.

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost per tonne - Rs.1071.05/-	Lessee is undertaking mining, crushing and wagon loading by mechanized means and an employment of 136 persons appx are there as per AR
9h	Scrutiny of Annual return on fixed assets	The value of fixed assets reported by the lessee in annual returns is Rs.331560427/-	----
9k	Scrutiny of Annual return on mining machineries	Submitted	Machineries have been deployed as submitted.

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

Date :

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines