

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

MCDR INSPECTION REPORT

Hyderabad regional office

Mine file No : AP/KNL/FE-61/HYD

Mine code : 30APR11027

- (i) Name of the Inspecting : **PR09**) **M.Pratap.Reddy**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : PEER CHAN BASHA MINES MANAGER
Official with
Designation
- (iv) Date of Inspection : 19/11/2016
- (v) Prev.inspection date : 11/02/2016

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **THAVASIKONDA**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : ANDHRA PRADESH
District : KURNOOL
Village :
Taluka :
Post office :
Pin Code :
FAX No. : 08516-276111
E-mail :
Phone :
- (f) Police Station : BETHAMCHERLA
- (g) First opening date : 23/01/2008
- (h) Weekly day of rest : SUN
2. Address for : B.SANJEEV REDDY,
correspondance H.NO 6-200, RLY STATION ROAD, BETHAMCHERLA
DIST- KURNOOL , A.P-518599
3. (a) Lease Number : APR2769
- (b) Lease area : 32
- (c) Period of lease : 20
- (d) Date of Expiry : 07/01/2028
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : B.SANJEEVA REDDY
6-100 RLY STATION ROAD
BETHHAMCHERLA POST KURNOOL
ANDHRA PRADESH
Phone:
FAX :

Owner : B.SANJEEVA REDDY
25/512,SRINIVASA NAGAR
NANDYAL KURNOOL ANDHRA
PRADESH
Phone: 08514 - 242356
FAX :

6. Date of approval of Mining : Fresh under rule 22 MCR1960 02/08/2006
Plan/Scheme of Mining Mining Scheme rule 12 MCDR1988 19/11/2014

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During the year 2015-16, 5 boreholes were proposed.	As proposed, the drilling has been completed along with the backlog of 2014-15.	
1b	Exploration over lease area for geological axis 1 or 2	G2 level of exploration	G2 level of exploration has been completed.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Lessee himself	Lessee under the supervision of Mines Manager has been done.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Six additional Boreholes have been proposed in the year 2016-17 to convert the exploration into G1 level of exploration.	As on the day of Inspection , the proposed exploration has not been takenup.	
1e	Balance reserve as on 01/04/20	1,42,867 T	2,52,766 T	The balance reserve is more than the proposed as the anticipated production is not achieved due to market conditions..
1f	General remarks of inspecting officers on geology, exploration etc	The formations of the area belongs to Vempally stage of Cuddapah system. G2 level of exploration is proposed.	The Vempally formation in which the Iron Ore is in between Dolomite and Quarzite. The G2 level of exploration has been carried out.	During 2016-17, some more additional exploration is proposed to convert G2 level of exploration to G1 level of exploration.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	The development is proposed between section A-A' to D-D'	The development is proposed between section A-A' to D-D'	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB has been proposed.	As proposed the ON benches have been formed.	
2c	Stripping ratio or ore to OB ratio	1:1.24	1:1	The ratio is less due to the fact that less production on account of poor market conditions.
2d	Quantity of topsoil generation in m3	There is no proposals of Soil generation	-	
2e	Quantity of overburden generation in m3	58,794 T	35,200 T	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	It has been proposed to develop the pit between section A-A' to D-D'. It is a pocket type deposit	As proposed the pit could not be developed to the full extent as the targeted production could not be achieved.	The targeted production cum development is less due to less market demand.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	A pit is proposed in between section A-A' to D-D'	The proposed single pit is not be developed to the full extent on account of less production.	The targeted production could not be done due to poor marketing conditions.
3b	Quantity of ROM mineral production proposed	70,964 T	1530 T	
3c	Recovery of sailable/usable mineral from ROM production	40% float ore, 29% from Ferruginous Shale.	35% float ore, 30% from Ferruginous Shale.	
3d	Quantity of mineral reject generation	29,507 T	450 T	

3e	Grade of mineral rejects generation and threshold value declared.	Theshold vale declated is 45% Fe content. No mineral reject grade is furnished.	The grade of Mineral reject is 35%Fe content and the thresh hold value declared is 45% fe content.
3f	Quantity of sub grade mineral generation.	No generation subgrade mineral is proposed.	-
3g	Grade of sub grade mineral generation	No details have been proposed.	-
3h	Manual / Mechanised method adopted for segregating from ROM	Manual method	manual method
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals have been made.	-
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting provision has been made.	As proposed drilling and blasting is practiced.
3k	Provision of mining machineris in mineral benches	Provision has been made.	As proposed, it has been done.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Done.
3m	Total area covered under excavation/pits	8.5 ha	3.25 ha
3n	Ore to OB ratio for the pit/mine during the year.	1:1.24	1:12
3o	Total area put in use under different heads at the end of year	10.51 ha	8.15 ha

3p	Production of ROM mineral during the last five year period as applicable	2011-12=1,19,550 T, 2012-13=89,450 T, 2013-14=No proposals(document under processing), 2014-15=70,896 T, 2015-16=70,964 T	2011-12=69,163 T, 2012-13=66,654 T, 2013-14=37,345 T, 2014-15=30,522 T, 2015-16=1,530 T	Production is less than the targetted production for want of market demand.
3q	General remarks of inspecting officers on method of mining etc.	Opencast semimechanised method of mining	As proposed semi mechanised opencast method of mining is practiced. Excavation is done mechanically by deploying Excavator/JCB and where as ore sorting is done manually.	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No top soil and mineral reject dumps have been proposed. The waste dump is proposed on the North eastern part of the ML area.	As proposed the waste dump is dumped on the North Eastern part of the ML area.	
4b	Location of topsoil, OB and mineral reject dumps	As said the waste dump is proposed on the North eastern part of the ML area.	As proposed, the waste is dumped on the North eastern part of the ML area.	
4c	Number of dumps within lease area and outside of lease area	Waste dumps have been proposed at locations with in the ML area.(NE and S)	There are two waste dumps with in the ML area. One is on the North Eastern side and the other is on the Southern side with in ML area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	The proposed dumps are beyond UPL	The two dumps lie beyond UPL	
4e	Number of active and alive dumps.	The proposed dumps are active in nature.	These two dumps are active dumps.	

4f	Number of dead dumps.	Nil	-
4g	Number of dumps established.	None	-
4h	Whether Retaining wall or garland drain all along dumps are there.	There are no proposals Retaining wall and garland drains during 2015-16.	-
4i	Length of Retaining wall or garland drain all along dumps	Nil	-
4j	Number of settling ponds	Nil	-
4k	Specific comments of inspecting officer on waste dump management	Two dumps have been proposed beyond UPL	The two dumps are in a single terrace. The height of the dumps does not exceed beyond 4m.

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 such proposals have been made as the mineral is yet to exhaust.	-	
5b	Area under backfilling of mined out area	None	-	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposals are made.	-	
5d	Total area fully reclaimed and rehabilitated	Nil	-	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No backfilling and reclamation proposals have been made.	-	

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Not submitted.	Violation of Rule 23(E)(2) of MCDR 1988 has been pointed out .	
6b	Area available for rehabilitation (ha) .	No such proposals have been made,	-	
6c	afforestation done (ha).	Abou 520 saplings over an extent of 0.52 ha has been proposed.	Afforestation is done as proposed.	
6d	No. of saplings planted during the year	520	550	The survival rate is less(40%) due to lack of watch and ward.
6e	Cumulative no .of plants	1560 saplings	500 saplings	The survival rate is poor due to lack of watch and ward.
6f	Any other method of rehabilitation	None	-	
6g	Cost incurred on watch and care during the year	No cost details have been furnished.	-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No such proposals have been made.	-	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposals have been made.	-	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No such proposals have been made.	-	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposals have been made.	-	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No such proposals have been made.	-	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No such proposals have been made.	-	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Afforestation over an extent of 0.52 ha is proposed	Afforestation is done but the survival rate is very poor.	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	The method proposed is by afforestation	Afforestation is done.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	It is proposed to periodical monitoring of Environmental parameters both in Core and Buffer zone.	As proposed, the monitoring is done.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No reclamation and rehabilitation proposals have been proposed as the mineral is persisting at depth	Except afforestation programme in the buffer zone (7.5m) no other means of rehabilitation is done.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM sorting with in ML area is proposed.	The sorting of ROM is done with in the ML area.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting is proposed.	Manual sorting of ROM is done.
7c	Different grade of mineral sorted out at mines.	Except size sorting, no grade wise sorting is proposed.	As proposed sorting is done.
7d	Any beneficiation process at mines .	Except sizing no beneficiation is proposed.	Sizing of ROM is done.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The Screening, Sizing & Sorting of the ROM is proposed.	The ROM is subjected to Screening, Sizing & Manual sorting where the Mineral is effectively/metculously sorted out.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There are no propsals of removal topsoil and utilisation of the same.	-	
8b	Concurrent use or storage of topsoil	No such proposals have been made.	-	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate waste rock dump is proposed.	As proposed the waste rock is dumped seperately.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals have been made.	-	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposals have been made.	-	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	In addition to existing thorny bushes, complimentary afforestation in 7.7 is proposed.	As proposed, the additional/complimentary afforestation is done.	
8g	Survival rate	80%	40%	survival rate is less due to lack of watch and ward.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul roads is proposed.	Periodical water sprinkling is done on haul roads to arrest airborne dust.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Proposed complimentary afforestation adds aesthetic beauty to mine area.	As proposed complimentary afforestation is done. However, the survival rate is around 40% and the aesthetic beauty is not on expected lines.	

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly return shall be submitted before the 10th of every month in respect of preceding month and An annual return which shall be submitted before the 1st July each year for the preceding Financial year	Submitted with in stipulated time.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on ME and Geologist to be furnished.	Furnished.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	To be furnished.	Furnished.
9d	Scrutiny of Annual return on afforestation	To be furnished.	Afforestation is done.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	To be furnished	No mineral rejection is reported.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	To be furnished.	The Closing stock(lumps): 9381 T and fines 6149 T is furnished.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	To be furnished	Ex mine price for lumps is Rs. 500/ and FOR fines Rs.350/-
9k	Scrutiny of Annual return on mining machineries	To be furnished.	The machinery details furnished are as below: One JCB of 0.3 cum, Two Tippers (10 MT), One L&T(Excavator) of 0.9 cum and one water tanker 4000 L capacity

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 23E(2)	06/02/2017	10/04/2017			
Rule 23E(2)	06/02/2017				

Date :

(M.Pratap.Reddy)

Indian Bureau of Mines