

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

**Review and updation of Mining Plan REPORT**

**Hyderabad regional office**

**Mine file No :** AP/CDP/Fe-3/HYD

**Mine code :** 30APR04003

- (i) Name of the Inspecting : **RK13** ) **A.V.Ramesh Kumar**  
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : Sri Mahesh, Manager(Mines)  
Official with  
Designation
- (iv) Date of Inspection : 23/02/2019
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **CHABALI IRON ORE MINE**
- (b) **Registration NO.** : **IBM/4580/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ANDHRA PRADESH
- District : CUDDAPAH
- Village : CHABALI
- Taluka : PENDLIMARRI
- Post office : PENDLIMARRI
- Pin Code : 516361
- FAX No. : (040)40275348,p.no.(040)234
- E-mail : bentiya industries limimte
- Phone : 08564-252652/9440280315
- (f) Police Station : Pendlimarri
- (g) First opening date : 10/11/2004
- (h) Weekly day of rest : SUN
2. Address for : Chabali Village,Pendlimarri Mandal  
correspondance Kadapa District-516216  
Andhra Pradesh State
3. (a) Lease Number : APR2278
- (b) Lease area : 163.48
- (c) Period of lease : 20
- (d) Date of Expiry : 09/11/2024
4. Mineral worked : LATERITE Associated  
IRON ORE Main

## 5. Name and Address of the

Lessee : M/S BENITA INDUSTRIES LTD  
D-203, ADITYA ELITE  
B.S.Maktha, Somajiguda  
HYDERABAD HYDERABAD  
TELANGANA  
Phone:  
FAX :

Owner : M/S.BENTIYA INDUSTRIES LTD,D.VENUGOPAL DIRECTOR  
D.VENUGOPAL  
DIRECTORM/S.BENTIYA IND D-  
203 ADITYA ELITE,B.S.MAKTHA  
SOMAJI GHDA HYDERABAD  
HYDERABAD TELANGANA  
Phone: (040)23418543  
FAX : (040)40275348

## Mining Engineer

Name : M.MALLIKARJUNA,Full Time  
Qualification : Diploma in Mining Engineering ,S.M.M.C.  
Appointment/ : 04/05/2012  
Termination date

## Geologist

Name : N.GOPINATH,Full Time  
Qualification : M.Sc.GEOLOGY  
Appointment/ :  
Termination date

## Manager

Name : Mahesh  
Qualification : B Tech Mining  
Appointment/ :  
Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	16/03/2004
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	02/08/2006
	:	Mining Scheme rule 12 MCDR1988	20/07/2009
	:	Modif.approved Mining Scheme	15/02/2013
	:	Mining Scheme rule 12 MCDR1988	28/10/2014

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog of exploration. During the year 2017-18, 11 DTH were proposed	During the year 2017-18 11 DTH were carried out during the year 2018-19 13 core bore holes were made.	Exploration carried out as per proposal.
1b	Exploration over lease area for geological axis 1 or 2	--	The area under G1 scale of exploration is about 100.864 ha. Under G3 it is 58.575 ha and 4.0248 ha under G4 scale.	it was proposed in the approved document on 9.4.2019 that remaining area under G3 scale will be upgraded to G1 scale by 2020.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	---	The expenditure incurred towards exploration as reported by lessee was Rs.25,00,000/-	None
1d	Balance area to be explored to bring Geological axis in 1 or 2	--	The balance area to be upgraded to G1 scale is about 58.575 ha.	None
1e	Balance reserve as on 01/04/20	--	The balance of reserves as on 1.4.2019 are 30 Million tonnes. Taking into account the augmented reserves as per the latest approved document	None
1f	General remarks of inspecting officers on geology, exploration etc	--	The exploration for about 100 ha is under G1 scale and rest it was proposed to be upgraded to G1 by end of 31.3.2020.	None

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	It was proposed to actively work in pit no.4 & 9.	The same was observed during the inspection.	None

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	It was proposed to make benches in OB & ore.	During the inspection it was noticed that these separate benches in Over Burden and ore. separately.	No comments
2c	Stripping ratio or ore to OB ratio	0:1	0:0.90	No comments
2d	Quantity of topsoil generation in m3	No topsoil in the mining lease.	No topsoil generated.	No comments
2e	Quantity of overburden generation in m3	It was proposed to generate about 3,86,726 tonnes of waste during the year 2017-18.	The actual waste generated was 7,08,446 tonnes during the year 2017-18	The generation of waste is on higher side as the overburden and side burden were found to on higher side after the development of benches.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	---	The development of the mine is as per the proposals made in the approved document.	The boundary pillars are as per the norms and found to be in order as on date of inspection.

### Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	It was proposed to carry out production from Pit no. 4 & 9 only.	The production was observed to be taken from proposed pits only.	None
3b	Quantity of ROM mineral production proposed	It was proposed to produce about 0.71 million tonnes during 2018-19	The actual production reported during year 2018-19 was 0.28 Million tonnes	None
3c	Recovery of saleable/usable mineral from ROM production	The proposed recovery % is 90.	The recovery % reported was about 90. The recovered ore is being sent to different sponge iron plants in the vicinity of the lease.	None
3d	Quantity of mineral reject generation	--	There was no mineral reject generated during 2018-19.	None

3e	Grade of mineral rejects generation and threshold value declared.	---	Not applicable as not mineral rejects were generated.	None
3f	Quantity of sub grade mineral generation.	None	None	None
3g	Grade of sub grade mineral generation	None	None	None
3h	Manual / Mechanised method adopted for segregating from ROM	It was proposed to seggregate the ore exploited from lease by feeding it into the washing and jigging plant and deriving outputs as per the industry specifications	The ore is fed into crushing plant and two types of outputs are recovered thay are 0-5MM and 5-188mm sizes..These material is fed into washing plant for washing and jigging.	None
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None	None	None
3j	Provision of drilling and blasting in mineral benches	It is proposed in the approved document that provision has been made for drilling and blasting in the benches	During the field inspection it was observed that drilling machines with 115 MM Dia were used for drilling and Slurry cartridge of 83 mm as prime charge and 75% Ammonium Nitrate fuel oil as mixture are used.The blast hole pattern is as follows: 3mx3mx6.5m.The charge per hole is 28.36 Kg.	None
3k	Provision of mining machineries in mineral benches	It was proposed to provide Machinaries in mineral benches.	During the inspection it was observed that Front end loaders and ripper dozer for levelling and trucks for transport of material are being used.	None

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	It was proposed to work with 7-8 meter benches.	Duirng the inspection it was noticed that the benches are being maintained at an height of about 7-8 meters.	None
3m	Total area covered under excavation/pits	--	16.8 HA	None
3n	Ore to OB ratio for the pit/mine during the year.	1:09	1:1	nONE
3o	Total area put in use under different heads at the end of year	--	The area put in use under different heads is as follows: Area covered under current mining: 16 ha Area reclaimed: 2.265 Area under infrastructure: 4.120 ha Area under mineral stock:6.5 ha	None
3p	Production of ROM mineral during the last five year period as applicable	The production proposed for five years is as follows: 2014-15-647971 tonnes 2015-16-677697 tonnes 2016-17-739404 tonnes 2017-18-719583 tonnes 2018-19-715466 tonnes	2014-15-652849 tonnes 2015-16-266504 tonnes 2016-17-267468 tonnes 2017-18-308202 tonnes 2018-19-286360 tonnes	None
3q	General remarks of inspecting officers on method of mining etc.	--	The mining operations are being carried out as per the proposals made in the approved document	None

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	It was proposed to dump the waste generated on the South East side of the mining lease.	The dump was observed at per the proposed place.	No comments

4b	Location of topsoil, OB and mineral reject dumps	It is proposed to dump OB on South East side	The same was noticed during the inspection.	No comments
4c	Number of dumps within lease area and outside of lease area	It was proposed to have two active dumps.	There are two active dumps on south eastern part of the lease. Other than these two dumps there are seven non active dumps in the lease.	No comments
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	South Eastern part of the mining lease.	South Eastern part of the lease.	No comments
4e	Number of active and alive dumps.	Two active dumps and seven non active dumps	Same was observed during the inspection.	No comments
4f	Number of dead dumps.	None	None	No comments
4g	Number of dumps established.	Two dumpsp were proposed for eastablisheemt	It was noticed that two dumps have been proposed for establishment.	None
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	No comments
4i	Length of Retaining wall or garland drain all along dumps	45 meters	43 meters	No comments
4j	Number of settling ponds	It was proposed to have one tailing pond for receiving the slimes from washing plant	One tailing pond was noticed during the inspection being used for stirng slimes from beneficiation plant.	No comments
4k	Specific comments of inspecting officer on waste dump management	--	None	The waste dump management is being carried out as per the proposal. One tailing pond being maintained for receiving slimes from washing plant.

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Solid Waste Management - Backfilling:

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Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Duirng the year 2018-19 it was proposed to reclaim about 3.354 ha.	During the year 2018-19 it was reported that 3.30 ha was reclaimed.	None
5b	Area under backfilling of mined out area	3.354 ha	3.30 ha	None
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No topsoil was proposed for generation	No topsoil was generated duirng the year 2018-19.	None
5d	Total area fully reclaimed and rehabilitated	3.354 ha duirng 2018-19	3.30 ha during 2018-19	None
5e	General remarks of inspecting officers on backfilling and reclamation etc.	--	The proposed reclamation has been carried out as per the approved proposals. only 0.05 ha could not achieved duirng the year 2018-19	None

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).	--	The Annual report duirng the year 2017-18 has not been submitted. A violation letter was issued.	None
6b	Area available for rehabilitation (ha) .	3.30 ha duirng the year 2018-19	3.30 ha during the year 2018-19	None
6c	afforestation done (ha).	It was proposed to plant 3226 saplings duirng 2018-19.	Duirng the inspection it was noticed that 2000 saplings were planted in the lease.	None
6d	No. of saplings planted during the year	3226	2000	None
6e	Cumulative no .of plants	16130 duirng the proposed five year block period	7500 saplings duirng the proposed block period	None



6f	Any other method of rehabilitation	None	None	None
6g	Cost incurred on watch and care during the year	--	The cost incurred on watch and ward duirng the year 2018-19 was reported to be about about Rs.75,000/-	None
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	None	None	None
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	It was proposed to backfill the mined out area by waste generated.	it was noticed duirng the inspection that the mined out area of about 3.30 ha has been reclaimed duirng 2018-19.	None
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	None	None	None
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None	None	None
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	None	None	None
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	None	None	None
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	None	None	None

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	None	None	None
6p	Compliance of environmental monitoring (core zone and buffer zone)	It was proposed to carry out environmental monitoring in both buffer and core zones.	Quarterly monitoring in both core and buffer zones being carried out by the lessee.	None
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	---	The reclamation proposals were carried out as proposed for 2018-19. The Annual report on protective measures for the year 2017-18 has not been submitted.	None

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	It was proposed to produce 6,53,855 tonnes of Iron ore during the year 2017-18.	The actual production reported during the year 2017-18 was 3,08,020 tonnes	There was no reporting of excess production in reference to proposed figures.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	It was proposed to sort the mineral both manually and mechanically.	During the inspection it was observed that the mineral is being sorted both by manually and also mechanically	No comments
7c	Different grade of mineral sorted out at mines.	It was proposed sort out below 55% Fe content only	The same was noticed during the inspection.	No comments

7d	Any beneficiation process at mines .	It was proposed to crush the ROM in Jaw crusher to 20 mm size and screend to remove the dust and fines.The crushed ore is then fed into rotary tanks for washing process.The output is Ore,Midlings & Slime.The Midlings are further subjected to secondary washing process for generation of Ore,Midlings & Slime.	The same process was observed duirng the inspection.The final ore from this washing plant is used for Sponge Iron industry,fines in Cement industry ad slime goes to a worked out pit called Amoda pit.	No comments
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-----	The Iron ore produced is manually and Mechanically sorted out and later on washed in the plant for getting better grade and the same being consumed by spong Iron industry.	No comments

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There is no topsoil in the lease.	No toposil in the mining lease.As such there is no generation.	No comments
8b	Concurrent use or storage of topsoil	Not applicable as there is no generation of topsoil	No toposil in the lease as such the concurrent usage does not arise.	No comments
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate Dumps were proposed in the mining lease for waste disposal.	Duirng the inspection waste dumps were noticed on the Central part of lease and on the North East part of the lease.	No comments

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	It was proposed to use the waste generated for reclamation of the mined out area.	Duirng the inspection it was noticed that part of the old pit no.6 & were backfilled using the waste generated.	No comments
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	It was proposed to reclaim the old pits in a phased manner by the waste generated.	The same was noticed duirng the inspection.The lessee company is engaged in the reclamation of the old mined out pits.	No comments
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Except for the pplantation made by lessee and for few shrubs and bushes no ther vegetation was observed.	Duirng the inspection also except for the few shrubs and bushes and plantation made by lessee, no othervegetation was noticed.	No comments
8g	Survival rate	It was proposed that a survival rate of 60%.	Duirng the inspection actual survival rate reported was 30%.	As there was scanty rainfall during the Monsoon reason.drought like conditions are prevailing as such survival rate was lesse.
8h	Water sprinkling on roads to control airborne dust	It was proposed to carry out water sprinkling for dust suppression in themining lease.	Duirng the inspection it was noticed that water sprinklers are being used for dust psuppression.	No comments.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	---	In general it was observec that the waste dump is as per proposal and dust suppression measures are being carried out as proposed.	No comments

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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	-----	The Monthly and Annual Returns are being submitted by Lessee company regularly.	No Comments.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	As per the Annual Returns Sri Mahesh is the Mining Engineer and Manager(Mines) and Sri Nagasubbaiah is the Geologist.	The same was noticed during the inspection.	No comments
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	As per the Annual Returns 2017-18, the area under mining is 37.90 ha.under waste dump management is 8.5 ha,infrastrutur e is 4.120 ha reclaimed is 2.265 ha	The land use pattern was observed to be as per the proposals made in the approved document.	No comments
9d	Scrutiny of Annual return on afforestation	It was reported in the annual return 2017-18 that about 3000 trees were planted during the year.	The same was noticed during the inspection.	No Comments
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	It was reported that no mineral reject was generated during the year 2017-18	The same was observed during the inspection.	No comments
9f	Scrutiny of Annual return on ROM stock and/or graded ore	It was reported in the Annual return 2017-18 that 308020 tonnes was produced.	The same was noticed from the registers during the inspection.	No comments

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	It was reported in the Annual return 2017-18 that Rs.279/- per tonne as Ex-mine price.Further the cost of production was reported as Rs.1087.98.	The same was noticed duirng the inspection.	No comments
9h	Scrutiny of Annual return on fixed assets	It was reported in the Annual Return 2017-18 that 650000 as the value of fixed assets.	No scrutitny of value of fixed assets was carried out.	No comments
9k	Scrutiny of Annual return on mining machineries	The following Mining Machineries were reported in the Annual Return 2017-18: 1. Back Hoe - 1.5 Cum- 4 No. 2. Front End Loader - 2.200 Cum - 1 no. 3. Dumper - 32 tonne - 3 no.s 4. Dozer - 80 HP - 1 no. 5. Air Compressor - 7.00 CUM/Minutes - 1 no. 6. Crusher - 150 T/H - 2 no.s 7. Tipper - 8 Cum - 20 8. Water Tanker - 9000 Litre Capacity - 2 no.s 9. Water Tanker - 3000 litre - 1 no.	The above mentioned mining machinery were noticed duirng te ispection.	No comments

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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 26(2)	05/03/2019			

**Date :**

**(A.V.Ramesh Kumar)**

Indian Bureau of Mines