

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

**MCDR INSPECTION REPORT
Hyderabad regional office**

Mine file No : AP/VZNR/MN-123/HYD

Mine code : 40APR20069

- (i) Name of the Inspecting : **PR09**) **M.Pratap.Reddy**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : SATYA RAO MINES MANAGER
Official with
Designation
- (iv) Date of Inspection : 25/05/2017
- (v) Prev.inspection date : 30/07/2016

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SHIVA SHANKAR**
- (b) **Registration NO.** :
- (c) **Category** : B Manual
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : ANDHRA PRADESH
- District : VIZIANAGARAM
- Village :
- Taluka :
- Post office :
- Pin Code :
- FAX No. :
- E-mail : info.bjr@goelgroup.co.in
- Phone : 0771-4288019
- (f) **Police Station** :
- (g) **First opening date** : 01/04/2008
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : S.K.GOYAL, DIRECTOR, SRI BAJARANG POWER & ISPATH
LTD, BORJHARA VILLAGE,URLA,GUMMA ROAD,
RAPUR, CHATTISGARH.
3. (a) **Lease Number** : APR3111
- (b) **Lease area** : 3.95
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 26/09/2020
4. **Mineral worked** : MANGANESE ORE Main

5. Name and Address of the

Lessee : S.NARAYANA RAJU
VANGAPALLIPETA
CHEEPURUPALLI(M)
VIZAINAGARAM DIST
VIZIANAGARAM ANDHRA PRADESH
Phone:9589522-3112
FAX :

Owner : S.K.GOYAL
M/S SRI BAJARANG POWER &
ISPATLTD, BORJHARA VILLAGE,
URLA. GUMMA ROAD, RAIPUR,
CHATTISGARH. RAIGARH MADHYA
PRADESH
Phone:
FAX :

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 03/06/2015
Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There are no proposals in the year 2016-17	There is no no backlog of previous year exploration	
1b	Exploration over lease area for geological axis 1 or 2	G1 scale of exploration.	G1 scale of exploration has already been done.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposals has been made in the year 2016-17.	-	The cumulative expense towards carrying out the exploration is Rs.3,00,000/-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal has been made during the year 2016-17	-	Exploration has been already carried out to the sclae of G1 scale.
1e	Balance reserve as on 01/04/20	43,818 T	46,710 T	The balance reserve is on heigher side as production done is less than the proposed production.
1f	General remarks of inspecting officers on geology, exploration etc	Archean terraaain with Khondalite host rock for Manganese mineralisatio n with proposed e G1 scale of exploration.	It is Metamorphic terrain of Arechean era consisting of Khondalite which is hosting Manganese mineralisation. The exploration activity is under progress to covert it into G1 scale of exploration.	

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	During the year, the development cum production is proposed around section B-B'	As proposed, the development cum production is done around section B-B'	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, proposed.	Seperate benches in Overburden and Ore have been formed. There are no top soil benches.
2c	Stripping ratio or ore to OB ratio	1:0.75	1:0.70
2d	Quantity of topsoil generation in m3	No such proposal has been made.	Nil
2e	Quantity of overburden generation in m3	5700 cum	5192 cum
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	The development cum production is proposed around section B-B' between RLs 81.56 to 71.06	As proposed, the development cum production is carried around section B-B' between RLs 81.56 to 71.06.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit	Single Pit	
3b	Quantity of ROM mineral production proposed	8,892 T	6000 T	
3c	Recovery of sailable/usable mineral from ROM production	Recovery is 65%	65%	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No mineral rejection proposals. Threshold limit id 10% Mn.	-	
3f	Quantity of sub grade mineral generation.	570 T	384 T	
3g	Grade of sub grade mineral generation	12-17% Mn content	15-17% Mn content.	

3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal has been made.	-	
3j	Provision of drilling and blasting in mineral benches	No such proposals have been made.	-	No drilling and blasting is required since the OB and Ore are soft in nature.
3k	Provision of mining machineries in mineral benches	Yes,	Provision is being made moveent of machinary.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes,	The benches in OB and mineral have been made asper the proposals made in the approved document.	
3m	Total area covered under excavation/pits	1.08 ha	1.06 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.75	1:0.70	
3o	Total area put in use under different heads at the end of year	3.69 ha	3..67 ha	
3p	Production of ROM mineral during the last five year period as applicable	2012-13= 5,062 T, 2013-14= 3861 T, 2014- 15=5,197 T, 2015-16=7,488 T & 2016- 17=8,892 T	2012-13= 6010 T, 2013- 14= 3,860 T, 2014- 15=5,193 T, 2015- 16=4,980 T & 2016- 17=6,000 T	
3q	General remarks of inspecting officers on method of mining etc.	Semi mechanised opencast method of mining is proposed.	As proposed Semi mechanised opencast method of mining is practiced without resorting to drilling and blasting.	

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes,	Separate dumping of OB as proposed is done.	
4b	Location of topsoil, OB and mineral reject dumps	No top soil and rejection proposals have been made. The OB dump is proposed on the Northern part of the ML area.	The OB dump is located on the Northern part of the ML area.	
4c	Number of dumps within lease area and outside of lease area	Two dumps with in the ML area	There exists two dumps located on the northern past of the ML area which are wiith in the ML area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Beyond the UPL on the Northern part.	These two dumps are located beyond UPL on the northern part of the ML area.	
4e	Number of active and alive dumps.	Two dumps	Two dumps	
4f	Number of dead dumps.	No such proposals have made.	Nil	
4g	Number of dumps established.	No such proposals have made.	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	No,for the Year 2016-17	-	
4i	Length of Retaining wall or garland drain all along dumps	No such proposals have made.	-	-
4j	Number of settling ponds	Nil	-	
4k	Specific comments of inspecting officer on waste dump management	The waste material is in the form weather Khondalite and which is proposed to be dumped beyond UPL.	As proposed the waste material is dumped beyond UPL on Northwestern part of the ML 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 such proposal has been made.	-	The mineral is continuing at depth and the backfilling proposals at this stage does not arise at this stage.
5b	Area under backfilling of mined out area	No such proposal has been made.	-	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal has been made.	-	
5d	Total area fully reclaimed and rehabilitated	No such proposal has been made.	Nil	The mineral is continuing at depth and therefore no such proposals of backfilling and reclamation proposals have been made.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No backfilling and reclamation proposals have been made.	-	

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).	Yes,	Submitted.	
6b	Area available for rehabilitation (ha) .	No such proposal has been made.	Nil.	
6c	afforestation done (ha).	yes,	yes, done	
6d	No. of saplings planted during the year	550 saplings	300 saplings have been done.	
6e	Cumulative no .of plants	900 saplings.	Around 760 saplings	

6f	Any other method of rehabilitation	None	-
6g	Cost incurred on watch and care during the year	No such proposals have been made.	About Rs.50,000/-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x 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.	However complimentary afforestation is done along the 7.5m buffer zone.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No such proposals have been made.	-

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposals have been made.	However, rehabilitation is done by means of afforestation in the 7.5m buffer zone.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring Environmental parameters is proposed.	Periodical monitoring of Environmental parameters is done.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Environmental protective measures and Monitoring of environmental parameters is proposed.	As proposed Environmental protective measures and Monitoring of environmental is done.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No such proposals have been made.	However grade wise sorting is done with in the ML area.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	No such proposals have made.	However, grade wise mineral is sorted out in mines.	
7d	Any beneficiation process at mines .	No such proposals have been made.	No beneficiation is done at mines.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The entire ROM is meant for captive use.	The entire ROM is used in company's Plant at Raipur, Chattishgarh State after suitable blending.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No such proposal is made.	There is no generation of top soil.
8b	Concurrent use or storage of topsoil	No such proposal is made.	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate proposals have been made.	OB waste rock has been dumped in separately
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals have been made in the year 2016-17	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposals have been made in the year 2016-17	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Besides existing vegetation in the form bushes, additional afforestation of 550 saplings have been proposed.	Besides existing vegetation , additional afforestation of 300 saplings have been done.
8g	Survival rate	Survival % has not been proposed.	80% Survival
8h	Water sprinkling on roads to control airborne dust	Proposed.	Periodical water sprinkling is done on haul roads to arrest air born dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Complimentary afforestation is proposed to improve aesthetic beauty.	As proposed complimentary afforestation is done to improve aesthithic beauty in and around the ML area.

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.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	To be furnished.	Details of appointment of Mining Geologist and Mining Engineer have been furnished.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	To be furnished.	Details of land use pattern have been furnished.	
9d	Scrutiny of Annual return on afforestation	To be furnished.	300 saplings have been done.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	To be furnished.	generation of mineral rejection is nil.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	To be furnished.	ROM stock is nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	To be furnished.	Ex-mine furnished to be Rs.1,607/-	
9h	Scrutiny of Annual return on fixed assets	To be furnished.	The value of fixed assets furnished to be Rs.1,63,805/-	

9k	Scrutiny of Annual return on mining machineries	To be furnished	Furnished in Mining machinary statement.
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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 :
(M.Pratap.Reddy)

Indian Bureau of Mines