

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

MCDR INSPECTION REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/347/BNG

Mine code : 30KAR03023

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 09/12/2017
- (v) Prev.inspection date : 16/05/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JAINSINGPUR (90 AC)**
- (b) **Registration NO.** : **IBM/8050/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **JAISINGPUR**
- Taluka : **SANDUR**
- Post office : **JASINGPUR**
- Pin Code : **583103**
- FAX No. : **08392 - 268033**
- E-mail : **"ansmines@gmail.com,ansmines@gmail.com"**
- Phone : **08392-266939, 0839226693**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **19/06/1966**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **M/S.ASWATHNARAYAN SINGH & CO,**
NO.54, 3rd MAIN ROAD,
PARAVATHI NAGAR, BELLARY - 583103
3. (a) **Lease Number** : **KAR0166**
- (b) **Lease area** : **56.5**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **23/03/2016**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : ASWATHARAYAN SINGH AND CO
 BELLARY KARNATAKA
 Phone:
 FAX :

Owner : ASWATHNARAYAN SINGH & CO.
 NO.54, 3rd MAIN ROAD,
 PARAVATHI NAGAR, BELLARY -
 583103 BELLARY KARNATAKA
 Phone:
 FAX :

6. Date of approval of Mining	:	Modif.of approved Mining Plan	03/10/2007
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	06/05/2014
		Modif.of approved Mining Plan	01/06/2016
		MP modif under 17(3) MCR 2016	05/07/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	06 Core bore holes proposed in 15-16	06 Core bores holes drilled to a maximum depth of 21 mts	No backlog
1b	Exploration over lease area for geological axis 1 or 2	No proposal	G:1 8.12 Ha., G:2 1.46 G:3 42.42	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	NA	Rs.9,37,000 were spent on exploration in the previous year
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	-	06 trail pits done with maximum depth of 4 mts.
1e	Balance reserve as on 01/04/20	-	1005550 Tons as on 01/04/2017	-
1f	General remarks of inspecting officers on geology, exploration etc			The potential mineralized area has been explored.06 trail pits were done in the reporting year. Area covered under G:1 8.12 Ha.G:2 1.46 Ha & G:3 42.42 Ha

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	E657927 to 657870 N1679706 to 1679782	Development carried out as per proposal	Section Line A-A1
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in overburden and mineral benches proposed	Separate benches in overburden and mineral benches maintained	Over burden - 02 Mineral - 03
2c	Stripping ratio or ore to OB ratio	1:0.11	1:0.11	No change

2d	Quantity of topsoil generation in m3	No proposal	NA	The entire area is broken up and there is no top soil in the area proposed for mining.
2e	Quantity of overburden generation in m3	4444	4300	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development of the mine is carried out as per the proposal. There were 3 ore benches and 2 OB benches with no generation of top soil.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	Working as per proposal	-
3b	Quantity of ROM mineral production proposed	1,20,000 MT	105729 MT	-
3c	Recovery of sailable/usable mineral from ROM production	90%	90%	No change
3d	Quantity of mineral reject generation	No proposal	NA	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	NA	There is no mineral rejects generated
3f	Quantity of sub grade mineral generation.	No proposal	35000MT	Blending with High grade Ore
3g	Grade of sub grade mineral generation	No proposal	40-42% Fe.	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanized method is adopted for segregating of ROM by CS plant	-

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	NA	Nil
3j	Provision of drilling and blasting in mineral benches	Yes, Provision is made for drilling & blasting in mineral benches	Accordingly deep hole drilling & blasting is being practiced With Burden 3.00 m & Spacing of 2.5 m.	80% of the total material handling requires drilling & Blasting
3k	Provision of mining machineries in mineral benches	Provision is made for usage of mining machineries in mineral benches	Mining Machineries deployed: Excavator - 2No Drilling Machine - 1No Tippers = 4 No's Loader - 2 No. Water tanker - 1No	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, proposed in document.	Yes, height of the benches in OB & mineral bench is as per the proposal.	Width of the benches is not maintained. Violation pointed out
3m	Total area covered under excavation/pits	18.45Ha.	18.45Ha.	Working in the broken up area
3n	Ore to OB ratio for the pit/mine during the year.	1:0.11	1:0.11	Stripping ratio as per plan
3o	Total area put in use under different heads at the end of year	Area under Excavation- 5.93 Ha OB dumps-15.14 Ha Mineral storage-1.87 Ha Roads-2.46 Ha Green Belt- 8.71 Ha For Future Use-18.45 Ha	Already exploited & abandoned by opencast (O/C) mining - 5.930 Ha Covered under current (O/C) Workings -18.450 Ha Reclaimed/Rehabilitated- 1.870 Ha Used for waste disposal- 14.580 Ha Infrastructure- 2.460 Ha Other Purpose (Green belt)- 8.710Ha Work done under PMCP during the year- 4.000 Ha	-

3p	Production of ROM mineral during the last five year period as applicable	2012-13-Nil 2013-14-Nil 2014-15-120000 MT 2015-16-120000 MT 2016-17-120000 MT	2012-13-Nil 2013-14-Nil 2014-15- Nil 2015-16-59932 MT 2016-17-105729 MT	No Production in the 2012 to 2015 due to stoppage of mines by SC. Production within the proposals limits.
3q	General remarks of inspecting officers on method of mining etc.			Exploitation of the ore is done as per the proposal using heavy machineries and drilling & blasting .There is no mineral rejects and the sub grade ore is blended with high grade ores. Reporting year production within the proposed limits.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB Proposed	Separate dumping of OB is done.	As per Proposal
4b	Location of topsoil, OB and mineral reject dumps	OB active dump E659706 to 657978 N1679277 to 1679248	O.B being dumped in the earmarked area as proposed.	Near Boundary Pillar K
4c	Number of dumps within lease area and outside of lease area	No of Dumps within the Lease area:03 No of Dumps outside the Lease area:03	ID-1, ID-3, & ID-5 are partially outside & Partially inside due to encroachment. ID-2, ID-6 & ID-7 within the lease area	Approx. 14.5 Ha have been occupied by OB dumps
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Location of the dumps proposed outside the UPL	Location of the dumps is outside UPL	-
4e	Number of active and alive dumps.	01	01	-

4f	Number of dead dumps.	04	04	Major part of one dump ID-5 is encroached.
4g	Number of dumps established.	03	03	Reef Band is passing along the ID-2 and requisition is given for re handling.
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall & garland drain proposed all along dump.	Retaining wall & garland drain proposed were constructed	-
4i	Length of Retaining wall or garland drain all along dumps	Length -300 Mtrs Width-01 Mt Height- 01 Mts	Length -550 Mtrs Width-01 Mt Height- 01 Mts	-
4j	Number of settling ponds	No proposal	NA	04 settling tanks constructed in the previous years
4k	Specific comments of inspecting officer on waste dump management			Waste dump is carried out as per the proposal. Retaining wall with garland drain in place all along the toe of the waste dump.

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	NA	Since ore body is not completely delineated, hence backfilling not yet started.
5b	Area under backfilling of mined out area	No proposal	NA	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NA	-

5d	Total area fully reclaimed and rehabilitated	No proposal	NA	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			There was no proposal for backfilling in the plan period. None of the areas of mined out pits were matured for backfilling due to occurrence of mineral at depth.

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).	-	Not submitted for the reporting year	Violation letter issued
6b	Area available for rehabilitation (ha) .	No proposal	NA	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	NA	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	15 saplings proposed on dumps	6000 saplings planted within lease area	Survival rate of 85%
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.05 Ha	0.05 Ha	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation & avenue plantation	Afforestation done on the dumps and Avenue plantation done on the road sides outside the lease area	-

6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed in core zone & buffer zone	AAQ Stn:Core Zone-3,Buffer Zone-4 Noise monitoring stn:Core Zone-3,Buffer Zone-4 Water monitoring Stn:Surface Water-3,Ground water-3	Environmental monitoring done regularly & parameters within the limits specified
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities were carried out as per the approved plan and plantation done, construction of retaining wall and garland drains were in place.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting proposed within the lease area	Grade wise sorting done within the lease area	Sorting Grade wise 55% to 58% Fe 58% to 60% Fe 65% Fe and above
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical Method with dry crushing & screening arrangement	Crushing & Screening Plant for sizing of ore.
7c	Different grade of mineral sorted out at mines.	55% Fe. To 62% Fe.	55% to 58% Fe 58% to 60% Fe 65% Fe and above	-
7d	Any beneficiation process at mines	No proposal	NA	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation is taken care off. 35000 Tons of below 40 to 42% Fe subgrade mineral & is blended with high grade. Grade wise sorting & sizing is done within the lease area as planned using crusher and screening arrangement.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	NA	There is no top soil to be handled
8b	Concurrent use or storage of topsoil	No Proposal	NA	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for OB proposed	Separate dump for OB maintained	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	NA	BHQ in the area is used for construction of Toe-walls
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Afforestation proposed	Plantation done on dump covering an area of 3.40 Ha	Dump Stabilized by Coir Matting & Afforestation
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Available	Within lease area-6000 saplings Outside lease Area-1500 saplings	22.50 Ha. of Plantation done as recommended in R&R Plan
8g	Survival rate	Not available	85%	-
8h	Water sprinkling on roads to control airborne dust	Proposed	One water tank of capacity 8000 Ltrs provided for water sprinkling on roads to suppress the dust.	-

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Plantations have been done in the lease area. Water tanker of 8000 Lts deployed for suppression of dust. Greenery is maintained in & around the lease area.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Monthly Returns Submitted up to date and annual returns for the year 2016-17 were submitted	AR submitted on 18-07-2017
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager- P.Basavaraj Mining Engineer- Nil Geologist- Ananthbabu	Mining Engineer & Geologist were not appointed	Violation pointed out
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited & abandoned by opencast (O/C) mining -5.930 Ha Covered under current (O/C) Workings - 18.450 Ha Reclaimed/Rehabilitated- 1.870 Ha Used for waste disposal- 14.580 Ha Infrastructure - 2.460 Ha Other Purpose (Green belt)- 8.710Ha Work done under PMCP during the year- 4.000 Ha	Appeared to be correct	

9d	Scrutiny of Annual return on afforestation	Plantation done: With in Lease area:6000 Outside Lease area :1500,With 85% survival rate	Appeared to be correct
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	35000 Tons, Below 40% Fe	Appeared to be correct
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Opening Stock: 59436 Tons Production: 105729 Tons Closing Stock: 113763	Appeared to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value: 2500 Rs/Ton Ex-Mine price- 1664.84 Rs/Ton Cost of production:282 Rs/Ton	Appeared to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 17831371	Appeared to be correct
9k	Scrutiny of Annual return on mining machineries	Excavators-2 Wheel Loaders- 2 Water Tanker-1 Trucks-4	Appeared to be correct

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
MCDR17	Rule 11(1)	19/12/2017			
MCDR17	Rule 26(2)	19/12/2017			
MCDR17	Rule 55(1)(3)	19/12/2017			

Date :

(ARUN KUMAR)

Indian Bureau of Mines