

**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 : **278**) **KRISHNENDU CHATTERJEE**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Shri P. Basavaraju. Mine Manager.
Official with
Designation
- (iv) Date of Inspection : 19/07/2019
- (v) Prev.inspection date : 09/12/2017

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 :

Mining Engineer

Name : K.PRABHAKAR REDDY,Full Time
 Qualification : B.E.MINING ENGINEER
 Appointment/ : 24/05/2018
 Termination date

Geologist

Name : N. Shiva Prasad.,Full Time
 Qualification : M.sc Geology
 Appointment/ :
 Termination date

Manager

Name : BASAVARAJ
 Qualification : FCC
 Appointment/ :
 Termination date

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
		FMCP under 23C(1)	15/11/2018
		MP modif under 17(3) MCR 2016	15/11/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil	
1b	Exploration over lease area for geological axis 1 or 2	G1 & G2	G1	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	G1 achieved for the mineralized area.	
1e	Balance reserve as on 01/04/20	Not specified	2.4 million tones	As on 01.04.2019
1f	General remarks of inspecting officers on geology, exploration etc		No exploration proposed during 2018-19. So far, lessee has drilled 15 nos. of core boreholes, 6 nos. of DTH holes and 31 nos. of Trial pits in the ML area (from 2013-14 to 2017-18). Mineralized area has been explored under G1 stage of exploration.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	N1679400 to N1679800, E658400 to 657850	No change	2018-19 working was restricted from Section nos. D-D' to F-F' in Pit-1
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB and mineral proposed.	In OB : 2 Benches In Ore: 3 benches.	
2c	Stripping ratio or ore to OB ratio	1:0.092	1:0.15	Tonnage basis.
2d	Quantity of topsoil generation in m3	No proposal	Nil	

2e	Quantity of overburden generation in m3	4,444 m3	5360 m3
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Bench height of 7m was proposed for the working pit but during the course of inspection between section nos. D-D' to F-F', bench height was found more than 10m. Violation of rule 11(1) was issued to the lessee dated 02.08.2019.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Pit 1, Single pit proposed.	Pit no. 1, Single pit working.	Dimension of existing pits: Pit no. 1: 450m x 70m x 40m.(working pit) Pit no. 2: 40m x 10m x 7m Pit no. 3: 160m x 40m x 15m Pit no. 4: 100m x 10m x 6m Pit no. 5: 280m x 60m x 3m (in float ore) Pit no. 6: 50m x 8m x 3m (in float ore) Pit no. 7: 50m x 5m x 3m (in float ore)
3b	Quantity of ROM mineral production proposed	120,000 tonnes	87,000 tonnes	
3c	Recovery of sailable/usable mineral from ROM production	100%	100% as entire ROM was salable.	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not applicable.	

3f	Quantity of sub grade mineral generation.	No proposal	Not applicable.	
3g	Grade of sub grade mineral generation	No proposal	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals.	Nil	
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting proposed.	Carried out as per the approved proposals.	
3k	Provision of mining machineries in mineral benches	Proposed.	Excavators: 4 nos. Tippers: 6 nos. Water tanker: 1 no.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	7m Bench height proposed.	10 to 12m between section nos. D-D' to F-F in Pit no.1	Violation of rule 11(1) was issued to the lessee dated 02.08.2019.
3m	Total area covered under excavation/pits	5.93 Ha.	5.68 Ha.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.092	1:0.15	Tonnage basis.
3o	Total area put in use under different heads at the end of year	26.50 Ha.	26.10 Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2014-15:Nil 2015-16: 120,000 2016-17: 120,000 2017-18: 120,000 2018-19: 120,000 (in tonnes)	2014-15:Nil 2015-16: 59,436 2016-17: 105,729 2017-18: 67,530 2018-19: 87,000 (in tonnes)	2014-15 no production was reported due to lack of statutory clearances.

3q General remarks of inspecting officers on method of mining etc. Mining operation was carried out as per the approved modified mining plan except for the height of the working benches in working pit no.1, between section nos. D-D' to F-F.

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of waste proposed.	Separate dumping of waste at south-western side of the ML.	No top soil generation.
4b	Location of topsoil, OB and mineral reject dumps	Waste dumping proposed at south-western side of the ML.	No change, Active dumping location N1679200 to 1679400 and E687800 to E658050	
4c	Number of dumps within lease area and outside of lease area	Inactive dumps ID-1, ID-3 & ID-5 located partially inside and partially outside the ML area. Inactive dumping proposed within the ML.	Inactive dumps ID-1, ID-3 & ID-5 located partially inside and partially outside the ML area. Inactive dump ID - 2 located inside the ML area. Active dumping carried out within the ML area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Active dumping proposed outside the UPL.	Active dumping located outside the UPL.	
4e	Number of active and alive dumps.	Active dump: 1 no. Inactive dumps: 4 nos.	Active dump: 1 no. Inactive dumps: 4 nos.	
4f	Number of dead dumps.	4 nos.	4 nos.	
4g	Number of dumps established.	3 nos.	3 nos.	By afforestation.
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed along the dumps.	Carried out as per the approved proposals except for the active dumping areas.	

4i	Length of Retaining wall or garland drain all along dumps	250m of retaining wall along the active dump.	Not constructed by the lessee.	So far, 552m of retaining wall has been constructed by the lessee along the inactive dumps.
4j	Number of settling ponds	No proposal	Nil	So far, 4 nos. of retaining wall constructed.
4k	Specific comments of inspecting officer on waste dump management		Retaining wall along the active dump was not constructed by the lessee as per the approved proposals, Violation of rule 11(1) was issued to the lessee dated 02.08.2019.	

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.	Proposed for the mined out float ore areas.	Mined out float ore areas were backfilled by the lessee.	South eastern side of the ML area.
5b	Area under backfilling of mined out area	Not specified.	1.9 Ha.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	No top soil generation.
5d	Total area fully reclaimed and rehabilitated	Not specified.	1.9 Ha.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Mined out float ore areas located at south-eastern side of the ML were backfilled and reclaimed by the lessee; however the main working pit was not matured for backfilling as mineral still persists beneath.	

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 on PMCP to be submitted within the stipulated time for FY 2018-19 within 1st July 2019	Yearly report 2018-19 not submitted by the lessee.	Violation of rule 26(2) issued to the lessee dated 02.08.2019.
6b	Area available for rehabilitation (ha) .	Not specified.	1.9 Ha.	Mined out float ore areas and inactive dump slopes were rehabilitated.
6c	afforestation done (ha).	0.5 Ha.	8.54 Ha. within ML area so far.	Along the inactive dump slopes and safety barrier zone.
6d	No. of saplings planted during the year	1000 nos.	6000 nos. within ML area.	
6e	Cumulative no .of plants	Not specified.	Approx. 80,000 within ML area.	
6f	Any other method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch and care during the year	Not specified.	Rs.7.00 lakhs.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not specified.	1.9 Ha.	
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 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	No waste land involves within ML area
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)	Season-wise Environmental monitoring proposed.	Season-wise environmental monitoring were carried out and parameters are within the permissible limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Lessee has implemented PMCP proposals in accordance with the approved modified mining plan except for the submission of the annual report for the year 2018-19.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM proposed to be crushed and dry Screening	ROM Mineral dispatched after dry screening.	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical using mobile crushers and screening plant.	Mechanical sorting done using mobile crushers and screening plant.
7c	Different grade of mineral sorted out at mines.	Proposed for all +45% Fe ROM	Yes. Grade wise sorting carried out as per buyer's requirement.
7d	Any beneficiation process at mines .	No proposal except crushing and dry screening.	Crushing and dry screening
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Grade wise sorting & sizing 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	Mining area devoid of any top soil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of waste proposed.	No change.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	8.54 Ha. of dumping areas afforested so far.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed for float ore areas.	1.9 Ha. of mined out float ore areas were backfilled and reclaimed by the lessee.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Entire ML falls under the forest. 1000 nos. of plantation proposed within ML area during 2018-19.	6000 nos. within ML and 2000 nos. outside ML were planted
8g	Survival rate	80%	70 to 80%
8h	Water sprinkling on roads to control airborne dust	Proposed.	Water tankers were arranged for water sprinkling on roads for control the dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		The aesthetic beauty in and around mine was good as lessee had carried out afforestation and other environmental protective measures as per approved Modified MP.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R. Submitted up to June 2019 A.R. Submitted up to 2018-2019	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri K. Prabhakar Reddy. Geologist: Shri Shivaprasad. Mines Manager: Shri P.Basavaraj	Mining Engineer: Shri Prabhakar Reddy. Geologist: Shri Shivaprasad. Mines Manager: Shri P.Basavaraj	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit/Mining: 18.45 Ha; Dumps: 14.84 Ha. Infrastructure / /Roads: 2.52 Ha. Reclaimed: 1.91 Ha.	Area under mining mentioned incorrectly in AR. No changes for other item heads.	Violation of rule 45(5) issued to the lessee dated 02.08.2019.
9d	Scrutiny of Annual return on afforestation	6000 nos. within ML area	6000 nos. saplings planted within ML area along the reclaimed areas, safety zone and dump slopes.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	10,000 tonnes	No mineral reject generation during 2018-19	Mentioned incorrectly in Annual Return, violation of rule 45(5) issued to the lessee dated 02.08.2019.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock Nil as on 31.03.2019.	Actual also same at that time.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex. mine price/ tones: Lumps: Below 55% Fe: Rs. 1700/- 55-58%Fe: Rs. 2510/- 58-60%Fe: Rs. 2918/- 60-62%Fe: Rs. 3066/- 62-65%Fe: Rs. 3188/- Fines: Below 55% Fe: Rs. 880/- 55-58%Fe: Rs. 1262/- 58-60%Fe: Rs. 1765/- 60-62%Fe: Rs. 2025/- 62-65%Fe: Rs. 3188/- 65%Fe and above: Rs. 3230/- Cost of production: Rs. 175/ tonne	Appears to be correct.	Graded/ sorted ore sales and dispatches through e-auction only.

9h	Scrutiny of Annual return on fixed assets	Rs. 1,33,02,977/-	Appears to be correct.
9k	Scrutiny of Annual return on mining machineries	Excavators: 4 nos. Tippers: 6 nos. Water tanker: 1 no. Diesel generator: 1 no.	Appears 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)	02/08/2019			
MCDR17	Rule 26(2)	02/08/2019			
	Rule 45(1)(c)	02/08/2019			

Date :

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines