

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/491/BNG

Mine code : 30KAR03182

- (i) Name of the Inspecting : **P005**) **C.PARAMESHWARAN**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : S/Shri. S.K. Singh, GM(Mines)/
Official with
Designation
- (iv) Date of Inspection : 11/10/2018
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **NANDI IRON ORE MINE**
- (b) **Registration NO.** : **IBM/432/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : KARNATAKA
- District : BELLARY
- Village : MALAGOLLA
- Taluka :
- Post office :
- Pin Code :
- FAX No. : 08395250132
- E-mail :
- Phone : 08395250120
- (f) Police Station : SANDUR
- (g) First opening date : 23/04/2018
- (h) Weekly day of rest : SUN
2. Address for : Malagola Village,
correspondance Sandur Post & Taluk
Bellary
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : JSW STEEL LIMITED
JSW Mining office, Near
Talur Cross Vidyanagar
Post, Toranagallu Sandur,
Bellary BELLARY KARNATAKA
Phone:9448286155
FAX :

6. Date of approval of Mining :
Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	nil	nil	nil, no proposals. this is new mine after the e-auction.
1b	Exploration over lease area for geological axis 1 or 2	5 Nos of BH's (As per MP) Geological axis 1	3 BH's completed	3 BH's completed 1. Additional BH's may be considered based on data. 2. Chemical analysis pending at JSW Lab.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	own company	Rs. 19 Lacs.	Includes drilling and sampling.
1d	Balance area to be explored to bring Geological axis in 1 or 2	21.03 Hectare	8.70 Hectare	Balance area covered in 1 km radius area.
1e	Balance reserve as on 01/04/20	8.16 million Tonnes	8.16 million Tonnes	Mining operations started on 01.06.2018
1f	General remarks of inspecting officers on geology, exploration etc	No proposals.	The mine is just started in 1/6/2018.	The work is in the initial stage, with the existing development, work are in progress.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	No proposals.	nil	nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposals.	Nil	Nil, nothing new development started.
2c	Stripping ratio or ore to OB ratio	1:0.23	1:0.083	slight difference.
2d	Quantity of topsoil generation in m3	No proposals.	Nil	No fresh generation of top soil.

2e	Quantity of overburden generation in m3	46,804 m3.	12,019 m3.	the mine is under progress.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	proposals drawn in the approved document.	progressing as per the approvals.	yes it is under progress.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01	01	same one.
3b	Quantity of ROM mineral production proposed	4,08,000 MT	2,88,168 MT	under progres as on date.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	no change.
3d	Quantity of mineral reject generation	No proposals.	nil	nil
3e	Grade of mineral rejects generation and threshold value declared.	No proposals in the last year,	nilo	nil
3f	Quantity of sub grade mineral generation.	Reported nil	same is found in the leaase.NIL	NIL
3g	Grade of sub grade mineral generation	nO PROPOSALS.	NIL	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Given for mechanical.	Crushing & Screening	yes as above.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposals.	Nil	Nil

3j	Provision of drilling and blasting in mineral benches	Given for drilling & blasting.	106 (2)(b) Permission obtained from DGMS	Wherever required.
3k	Provision of mining machineries in mineral benches	yes proposed.	It is being carried out in the mine with the prevailing old benches.	yes still no major changes made.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Given.	yes suitable as on date.	yes it is suitable.
3m	Total area covered under excavation/pits	Given	8.8 ha.	same.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.23	1: 0.083	slight variation.
3o	Total area put in use under different heads at the end of year	given.	It is reported in the approved document.	It is given in the approved MP.
3p	Production of ROM mineral during the last five year period as applicable	2011-12: NA 2012-13: NA 2013-14:NA 2015-16:NA 2017-18: NA	2011-12: NA 2012-13: NA 2013-14:NA 2015-16:NA 2017-18: NA	The mine started in 1/6/2018.
3q	General remarks of inspecting officers on method of mining etc.	given for systematic mining operation.	yes it is being undertaken in the mine.	Yes systematic.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dump for O/B is Proposed	Dumping carried out as per proposal	ASABOVE.
4b	Location of topsoil, OB and mineral reject dumps	OB: PTD (Between S1-S1' to S2-S2') within the Existing mine pit.	OB: Dumping is carried as per plan	Given in approved MP.

4c	Number of dumps within lease area and outside of lease area	Within Lease area : 01 (Proposed Temporary Dump) Outside - Nil	Within Lease area : 01 (Proposed Temporary Dump) Outside - Nil	No changes.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposals.	Nil	Nil
4e	Number of active and alive dumps.	01	01	same.
4f	Number of dead dumps.	02	02	same.
4g	Number of dumps established.	02	02	same no change.
4h	Whether Retaining wall or garland drain all along dumps are there.	Given	yes it is in progress	same.
4i	Length of Retaining wall or garland drain all along dumps	345m proposed	completed 345m retaining wall.	yes completed as per the proposals.
4j	Number of settling ponds	01	01	no change.
4k	Specific comments of inspecting officer on waste dump management	given	yes it is under progress, time will take to complete. YES	it is under progress, it take some time.

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 proposals.	Nil	Nil
5b	Area under backfilling of mined out area	No proposals.	Nil	nil

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposals.	Nil	nil
5d	Total area fully reclaimed and rehabilitated	No proposals.	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No proposals.	No proposals.	No area matured for back filling.

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).	No proposals.	Nil	Nil
6b	Area available for rehabilitation (ha) .	No proosals.	Nil	Nil
6c	afforestation done (ha).	0.46 Ha	WML: 0.30 Ha	same.
6d	No. of saplings planted during the year	WML: 0.30 Ha	nil	nil due to on cut
6e	Cumulative no .of plants	Given	WML: 191 Nos.,WML: 1	as above,
6f	Any other method of rehabilitation	Constructing R&R structures proposed by ICFRE and Approved by CEC	Construction has been carried out as per the Plan and as per year proposals.	No changr.
6g	Cost incurred on watch and care during the year	Nt given	Consumed the salary for thr whole year.	same.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposals.	Nil	Nil

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal in the PMCP	No such work	nilo\
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposals.	nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposals.	Nil	nil.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposals.	nil	nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No proposals.	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposals.	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposals.	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring on regular interval (Month Wise)	Environment and Ground water monitoring has been done through regular interval by consultant and the reports are submitted to Environment officer, KSPCB	as same.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No proposals in majority.	Nil	nil, the mine started afresh, hence there is no proposals at present.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposed.	Yes done.	same.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Face sampling, Blast holed drill cut sampling Manually.	no chnage.
7c	Different grade of mineral sorted out at mines.	proposed	yes sorted different minerals.	same as above.
7d	Any beneficiation process at mines	proposed for dry.	By adopting dry beneficiation process (Crushing & Screening)	No change.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	proposed for systematic mining.	yes adopted systematic method.	yes done.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There is no likelihood of generation of topsoil.	No generation of Top soil. If some quantity is generated, the same will be stacked and used for afforestation purpose	no top soil.
8b	Concurrent use or storage of topsoil	No proposals.	Nil	Nil

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate Dump for Waste /Over Burden	Separate Dump for Waste /Over Burden as per the location proposed in mining plan	same as above.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposals.	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposals.	Nil	The mine is just started, nothing can be predicted.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Green Belt development across safety Zone No of Plantation :	Plantation across the safety Zone has been created to develop Green Belt No of Plantation :191(Safety Zone)	as above.
8g	Survival rate	given	WML:99%	only within the ML.
8h	Water sprinkling on roads to control airborne dust	Given for water tankers	Through water tankers Water sprinkling being done.	yes it is being done regularly.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Given in the proposals.	The work is started after the e-auctioning of the ML area. The work will continue to go further.	There is no change.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted of annual return for the year 2017-18 not arise, except monthly returns.	No AR, monthly returns of october, 2018 submitted. infromation as per the formats.	yes satisfactory.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	NO AR, only MR submitted.	No information on mining engineer, geologist & manager.	as above.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	No information on AR, not applicable mine started in 1st June, 2018.	Nil	Nil
9d	Scrutiny of Annual return on afforestation	Not applicabe.	Nil	Nil annual return, no infromations.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No infromation on AR.	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given in monthly returns for ex-mine price= Rs. 179/-	Only ex-mine price given.	nil
9h	Scrutiny of Annual return on fixed assets	No infromation on assests.	Nil	Ni
9k	Scrutiny of Annual return on mining machineries	No infromation on machineries.	Nil	Nil

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 11(1)	30/10/2018			

Date :

(C.PARAMESHWARAN)

Indian Bureau of Mines