

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

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/BHD/MN-131/NGP

Mine code : 40MSH05004

- (i) Name of the Inspecting : **K02**) **Kalmata.M.K.**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Shri.Hemant Hinge, Geologist
Official with
Designation
- (iv) Date of Inspection : 28/02/2020
- (v) Prev.inspection date : 21/08/2011

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **NAVEGAON (15.90 HECT)**
- (b) **Registration NO.** : **IBM/560/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :
State : MAHARASHTRA
District : BHANDARA
Village : NAWEGAON
Taluka : MOHADI
Post office : KANDRI
Pin Code :
FAX No. : 0712-2520360
E-mail : admin@sunflagsteel.com
Phone : 0712-2532901
- (f) Police Station : Mohadi
- (g) First opening date : 17/01/2011
- (h) Weekly day of rest :
2. Address for : 33, Mount Road, Sadar
correspondance Nagpur-440001
3. (a) Lease Number : MSH0373
(b) Lease area : 15.9
(c) Period of lease : 50
(d) Date of Expiry : 21/03/2060
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S SUNFLAG IRON & STEEL CO. LTD.
33, MOUNT ROAD, SADAR,
NAGPUR- 440001 BHANDARA
MAHARASHTRA
Phone:
FAX :

6. Date of approval of Mining : Fresh under rule 22 MCR1960 30/09/2009
Plan/Scheme of Mining : MP modif under MCR 1960 09/09/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There was a proposal to drill two boreholes in the year 2017-18, and three boreholes in the year 2018-19.	The exploration has been not carried out by the lessee.	Violation is pointed out for the same, under Rule 11(1) of MCDR-2017.
1b	Exploration over lease area for geological axis 1 or 2	Proposal was given to explore entire mineralized area under G-2 level.	Exploration was not carried out as per the proposal.	Violation is pointed out for the same, under Rule 11(1) of MCDR-2017.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed.	Nil	No exploration has been carried out, in the present plan period.
1d	Balance area to be explored to bring Geological axis in 1 or 2	3.00 Ha	Nil	Exploration is not carried out as per the proposal, and Violation is pointed out for the same under Rule 11(1) of MCDR-2017.
1e	Balance reserve as on 01/04/20	Reserves as on 01.04.2015 (as per approved document) Probable Mineral Reserves (122) - 31185 tonnes Pre-feasibility M resources (222)- 16335 tonnes.	Reserves as on 01.04.2019. Probable Mineral Reserves (122) - 31185 tonnes Pre-feasibility M resources (222)- 16335 tonnes.	No insitu mining was done in the present plan period, so insitu reserves/resources remains unchanged.

1f	General remarks of inspecting officers on geology, exploration etc	GSI has carried out exploration, in the Navegaon area, covering all the mines in the area over strike length of 1.05km from eastern end of R.B.Lanjewar mines to D costa mines in west. As per the GSI report three boreholes are drilled near the lease area, out of three, location of two boreholes falls within the lease area. Reserves are estimated by taking the influence of GSI drilled boreholes.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Development is proposed in the existing old pit only. The proposed co-ordinates are N-2367600 to N-232367660 & E-343850 to E-343975	The mine is not worked in the year 2018-19.	The mine is not working, due to lack of space for extension of the pit. The lease area is surrounded by P.L. area's of the same company, which are under saved case (Section 10 (a) 2(c) of MMDR, Amendment Act, 2015) and proposal is pending with Government.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, proposed.	Nil	The mine is not working due to area restrictions.
2c	Stripping ratio or ore to OB ratio	1:11.30, in the year 2018-19.	Nil	The mine is not working.
2d	Quantity of topsoil generation in m3	120 CUM	Nil	
2e	Quantity of overburden generation in m3	50954 CUM.	Nil	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	The mine is not working, due to lack of space for extension of the pit. The lease area is surrounded by P.L. area's of the same company, which are yet to be decided by the Government.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	working has been not carried out in the year 2018-19.	
3b	Quantity of ROM mineral production proposed	5686 tonnes, in the year 2018-19.	Nil	Mine is not working.
3c	Recovery of sailable/usable mineral from ROM production	80%	Nil	The mine is not working.
3d	Quantity of mineral reject generation	1139 tonnes in the year 2018-19.	Nil	Mine is not working.
3e	Grade of mineral rejects generation and threshold value declared.	Below 20% Mn.	Not applicable.	The company has kept the cut-off grade, above 20% Mn. and manganese ore contained below 20% Mn was proposed to stock separately. The mine is not working and no mineral rejecet is generated in the year 2018-19.
3f	Quantity of sub grade mineral generation.	Not proposed	Nil	
3g	Grade of sub grade mineral generation	Not applicable.	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Nil	Mine is not working, and no production was done in the year 2018-19.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed.	Nil	Lessee has not proposed, any beneficiation study, and only manual sorting of different grades is proposed.
3j	Provision of drilling and blasting in mineral benches	Jack-hammer and wagon drilling was proposed. For blasting contract given to Government recognized agency.	Nil	The mine is not working. No drilling and blasting is carried out in the year 2018-19.
3k	Provision of mining machineries in mineral benches	Yes, combination of Excavator and Trucks is proposed.	Nil.	Mine is not working.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height is proposed 5 mtrs for both ore and OB.	Yes, the proposed bench height is suitable for proposed method of mining.	The mine is not working and no new benches were developed in the year 2018-19.
3m	Total area covered under excavation/pits	0.073Ha, in the year 2018-19.	Nil	One old pit is exist within the lease area and total area covered under old excavation is 1.210Ha.
3n	Ore to OB ratio for the pit/mine during the year.	1:11.30, in the year 2018-19.	Nil	Mine is not working.
3o	Total area put in use under different heads at the end of year	The proposed under different heads, up to the present plan period is as follows. Area under excavation- 2.32Ha, Waste dump-4.55Ha, Mineral stock- 0.099, Infrastructure -0.04	The total area put in use under different heads at the end of 218-19 is as follows. Area under excavation- 1.210Ha, Waste dump- 1.6080Ha, Mineral stock- 0.027Ha, Infrastructure- 0.02Ha.	The mine is not working, so area put under different heads is less than the proposal.

3p	Production of ROM mineral during the last five year period as applicable	2018-19 5686 tonnes 2017-18 5686 Tonnes 2016-17 5686 Tonnes. 2015-16 Nil. 2014-15 12692(Dump re-handling)	2018-19 Nil. 2017-18 14 tonnes 2016-17 Nil 2015-16 Nil 2014-15 NIL
3q	General remarks of inspecting officers on method of mining etc.	Only dump mining is carried out in the present plan period. Presently the mine is not working, due to lack of space for extension of the pit. The lease area is surrounded by P.L. area's of the same company, which are yet to be decided by the Government.	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes, separate duming was proposed for OB and Mineral Reject.	Nil	The mine is not working.
4b	Location of topsoil, OB and mineral reject dumps	Proposed location of OB dump in the plan period is N-2367320 to N-2367390 and E-344210 to E-344370. Mineral reject-N-2367390 to N-2367440 & E-343930 to E-343970.	The mine is not working and no dumping was made in the year 2018-19.	No insitu mining was caried out in the present plan period, so no fresh dump is formed. However the waste generated during dump mining was levelled there only.
4c	Number of dumps within lease area and outside of lease area	Two, one for overburden and other for mineral reject.	Nil, No fresh dump was made in the present plan period up to 2018-19.	Two old dumps are existing within the lease area. (Adjacent to existing old pit)

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL.	No new dump was made in the present plan period.	Two old dumps are existing within the UPL.
4e	Number of active and alive dumps.	Two, proposed in the year 2018-19.	No new dump was made in the year 2018-19.	Two old dumps are existing within the lease area and lessee is recovering ore from the dumps.
4f	Number of dead dumps.	Not proposed.	Nil	
4g	Number of dumps established.	Two	No new dump for formed in the year 2018-19.	Two old dumps are existing within the lease area.
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed in the year 2018-19.	No new dump was made in the year 2018-19 and no retaining wall is constructed in the year 2018-19. Lessee is maintaining existing garland drain.	Earlier, one retaining wall is constructed along the toe of Dump No-2.
4i	Length of Retaining wall or garland drain all along dumps	Not proposed in the year 2018-19.	Nil	Length of old retaining wall and garland drains, constructed along the toe of Dump no-2, are as follows. Retaining wall:- 202m (l) x 3m (w) x 2m (h) Garland drain:- 238m(l) x 1m (w) x 0.5 m(h)
4j	Number of settling ponds	Not proposed.	Nil.	
4k	Specific comments of inspecting officer on waste dump management		The insitu mining was not started in the present plan period, due to area restriction for extension of pit, and no new dump was formed. Two old dumps are present within the lease area. Lessee is maintaing the existing garland drain.	

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not proposed.	Nil.	No backfilling is proposed in the present plan period.
5b	Area under backfilling of mined out area	Not proposed.	Nil.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed for restoration of mineral out area. topsoil was proposed to spread on the waste dump, for plantation purpose.	Nil.	No insitu mining, was carried out in the present plan period, and topsoil was not removed.
5d	Total area fully reclaimed and rehabilitated	Not proposed.	Nil.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Present working is not reached upto the proved depth, and no proposals were made for reclamation and rehabilitation in the present plan period.

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).	Before 1st july of every year.	Lessee has not submitted a yearly report on protective and rehabilitative works carried out as envisaged in the approved mine closure plan, for the year 2016-17, 2017-18 & 2018-19.	Violation is pointed out for the same under Rule 26(2) of MCDR-2017.
6b	Area available for rehabilitation (ha) .	Not proposed.	Nil.	

6c	afforestation done (ha).	0.14Ha, in the year 2018-19.	Nil	Plantation was not made as per the proposal, and violation is pointed out for the same under Rule 11(1) of MCDR-2017.
6d	No. of saplings planted during the year	20, in the year 2018-19.	No plantaion was made in the year 2018-19.	Violation is pointed out for the same under Rule 11(1) of MCDR-2017.
6e	Cumulative no .of plants	Total 60 saplings ,were proposed in the present plan period from 2016-17 to 2018-19.	Nil	Violation is pointed out for the same under Rule 11(1) of MCDR-2017.
6f	Any other method of rehabilitation	Not proposed.	Nil.	
6g	Cost incurred on watch and care during the year	Rs-2000.	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Nil	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	yes, Air,Water and Noise monitoring is proposed in core and buffre zone.	The mine is not working at presnt so lessee has not carried environmental monitoring as per the proposal.	Lessee has advised to carry out, environmental monitoring , once operation re-starts.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Lessee, has not carried out plantation as per the proposal, and also not submitted, yearly report on implimentation of PMCP, so violation is pointed out under Rule 11(1) & 26(2) of MCDR-2017. Lessee has advised to carry out environmental monitoring , once mining operation is re-start.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting within lease area.	Mine is not working in the year 2018-19 and no sorting is done.	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	Below 25% Mn ore, and 25% to below 35% Mn ore.	Mine was not working in the year 2018-19 and no grading wise sorting was done.	Lessee has kept two small (old) ore stocks in the lease area, one is below 25%Mn grade ore stock and other 25 to below 35% Mn ore stock.
7d	Any beneficiation process at mines	Not proposed.	Nil.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Lessee has proposed manual sorting of different grade of ore within the lease area. The mine was not working in the year 2018-19 and no sorting was done in the year 2018-19.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	It is proposed to remove 120CUM of top soil in the year 2018-19, and utilize for spreading over waste dump for plantation purpose.	The mine is not working and no topsoil was removed in the year 2018-19.	No insitu working, has been carried out in the present plan period, and no topsoil is removed.
8b	Concurrent use or storage of topsoil	Proposed for spreading over waste dump.	No topsoil was removed in the yea 2018-19.	The mine was not working in the year 2018-19.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, proposed.	The mine was not working in the year 2018-19 and no dumping was made.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed.	Nil.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information was furnished in the mining plan. Additional plantation proposals are being given in the Mining Plan documents.	Trees such as Neem, Gulmohar, Tamarind Teak, etc are grown in the lease area. The lease area is mainly dominated by shrubs. Additionally 20 plantation/year is proposed in the present plan period. However lessee has not made plantation as per the proposal.	Violation is pointed out under Rule 11(1) of MCDR-17 for not doing plantation as per the proposal.
8g	Survival rate	Not proposed.	Nil	Lessee has not done any plantation in the year 2018-19.
8h	Water sprinkling on roads to control airborne dust	yes proposed.	During working days, lessee is using water tankers for wetting haul roads.	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Most of the lease area is unbroken and covered by vegetation. Lessee has not done the plantation as per the proposal in the present plan period and also not submitted yearly report on implimentation of PMCP for the year 2016-17 to 2018-19. Since the mine is not working lessee has not conducted enviromental monitoring for the year 2018-19. Lessee has advised to do the environmental monitoring once operation re-starts.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	A monthly return shall be submitted before the tenth day of every month in respect of the preceding month and an annual return shall be submitted before the 1st day of July each year for the preceding financial year.	Lessee is regularly submitting monthly and annual returns.	Submitted monthly returns up to January 2020 and annual returns for the year 2018-19.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Name of the geologist is shown as Shri Hemant Hinge, & Manager-Shri Deepak Rahangdale. Mining engineer-Nil.	The information given in the annual returns, submitted for the year-2018-19, is found correct.	Lessee has directed to appoint the mining engineers, once the mining operation re-starts.

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 - 15.90Ha, Area under current working- 2.323Ha, Used for waste disposal-4.556 and Infrastructure -0.040Ha.	The total area put in use under different heads at the end of 218-19 is as follows. Area under excavation- 1.210Ha, Waste dump- 1.6080Ha, Mineral stock- 0.027Ha, Infrastructure- 0.02Ha.	Land use details are not properly shown. Lease area utilized under different heads, are not matching with the land use details, as given in approved document, and area utilized for mining activities in the present plan period. Violation is pointed out for the same under Rule 45(7) of MCDR-2017.
9d	Scrutiny of Annual return on afforestation	Nil	Nil	Plantation was not done in the year 2018-19, violation is pointed out for the same under Rule 11(1) of MCDR-2017.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	The mine is not working.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM-stock and production is shown as nil. No production and dispatch is shown under grade wise production and dispatch. Closing stock of below 25%Mn ore is shown as -64.83 tonnes and 25 to below35% Mn ore-14.36 tonnes.	The details given in the annual returns are found correct.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value is shown as nil and cost of production is shown as Rs-1683.00/tonne.	The mine is not working in the year 2018-19 and no production was done. However in the annual returns submitted for the year-2018-19, lessee has mentioned cost of production Rs-1683/Tonnee.	Production and dispatch is mentioned as Nil in the annual returns. However at part VII cost of production is shown as, Rs-1683/tonnee. Violation is pointed out for the same under Rule 45(7) of MCDR-2017.
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset is shown as zero. Whereas net closing balance is shown as Rs-8650. Land value is shown only Rs. 1850. Value of Plant and machinery is mentioned as Rs-3600, Capitalized expenditure is given as Rs-2500 and value under industry as Rs-700.	The values given are appear very low compare to present market value.	Violation is pointed out for the same under Rule 45(7) of MCDR-2017.
9k	Scrutiny of Annual return on mining machineries	Nil	Nil	Mine is not working.

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)	20/04/2020			
MCDR17	Rule 11(4)	20/04/2020			
MCDR17	Rule 26(2)	20/04/2020			
MCDR17	Rule 28(1)	20/04/2020			
MCDR17	Rule 31(1)	20/04/2020			
MCDR17	Rule 35(2)	20/04/2020			
MCDR17	Rule 45(7)(a)	20/04/2020			

Date :

(Kalmata.M.K.)

Indian Bureau of Mines