

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/MN/KJR/MCDR-13/BBS

Mine code : 40ORI08026

- (i) Name of the Inspecting : SRM) SHRI SUDIP RANJAN MAZUMDAR
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Dipanjan Pal, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 22/10/2019
- (v) Prev.inspection date : 23/10/2018

PART-I : GENERAL INFORMATION

1. (a) Mine Name : MANMORA
- (b) Registration NO. : 4376/40ORI08026
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :
State : ORISSA
District : KEONJHAR
Village : BICHAKUNDI
Taluka : CHAMPURA
Post office : BICHAKUNDI
Pin Code : 758034
FAX No. : 06767-211789
E-mail : chiefofficejoda@tatasteel.
Phone : 06767-211789
- (f) Police Station : ~~Champur~~ Joda
- (g) First opening date : 01/04/1967
- (h) Weekly day of rest : SUN
2. Address for : MONMORA MANGANESE MINES, M/S TISCO LTD
correspondance P.O.JODA, DIST:KEONJHAR
ORISSA-758034
3. (a) Lease Number : ORI0176
- (b) Lease area : 16.35 Ha
- (c) Period of lease : ~~20~~ lease will expire on 31.03.2030
- (d) Date of Expiry : 31.03.2030
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S TATA STEEL LTD
 NUAMUNDI SINGBHUM WEST
 JHARKHAND SINGHBHUM (WEST)
 JHARKHAND
 Phone:06596-233740
 FAX :06596-233706

Owner : M/S TATA STEEL LTD
 NUAMUNDI SINGBHUM WEST
 JHARKHAND SINGHBHUM (WEST)
 JHARKHAND
 Phone: 06596-233740
 FAX : 06596-233706

Agent : SHRI RAJESH KUMAR
 JODA EAST IRON MINE
 KEONJHAR ODISHA KEONJHAR
 ORISSA
 Phone: 9234612797
 FAX :

Mining Engineer

Name : SHRI DIPANJAN PAL, Full Time
 Qualification : B E MINING
 Appointment/ : 15/06/2016
 Termination date

Geologist

Name : SHRI SUDIPTA DAS, Full Time
 Qualification : MSC APPLIED GEOLOGY
 Appointment/ : 15/05/2019
 Termination date

Manager

Name : Dipanjan pal
 Qualification : B tech. (Mining)
 Appointment/ : 09/05/2016
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	20/07/2000
		Renewal under rule 24 MCR1960	21/11/2005
		Modif.of approved Mining Plan	26/03/2009
		Mining Scheme rule 12 MCDR1988	31/03/2010
		Mining Scheme rule 12 MCDR1988	07/04/2015

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration proposal has been furnished in the approved scheme of mining for the period 2015-16 to 2019-20	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	The entire leasehold area has been explored in detail. hence no future exploration program has been proposed.	Nil.	In the approved scheme of mining lease area explored under G1 is 11 ha, G2: 0.82 ha and barren area of 4.53 ha
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Proposed	No exploration carried out in 2018-19	No exploration carried out in 2018-19
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not Proposed	Nil	In the approved scheme of mining lease area explored under G1 is 11 ha, G2: 0.82 ha and barren area of 4.53 ha
1e	Balance reserve as on 01/04/20	As per the scheme of mining approved dated 07.04.2015, there is no mineral reserve reported. However, remaining resources is 0.5 lakh tones	There was no production during the year. As on 01.04.2019, there is no mineral reserve reported whereas remaining resources is 0.5 lakh tones	There was no production during the year. As on 01.04.2019, there is no mineral reserve reported whereas remaining resources is 0.5 lakh tones

1f	General remarks of inspecting officers on geology, exploration etc	No exploration proposal has been furnished in the approved scheme of mining for the period 2015-16 to 2019-20	There was no exploration done during the year 2018-19. In the approved scheme of mining, lease area explored under G1 is 11 ha, G2: 0.82 ha and barren area of 4.53 ha	There was no exploration done during the year 2018-19. In the approved scheme of mining, lease area explored under G1 is 11 ha, G2: 0.82 ha and barren area of 4.53 ha
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Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	No development has been proposed during the year 2018-19	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
2c	Stripping ratio or ore to OB ratio	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
2d	Quantity of topsoil generation in m3	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
2e	Quantity of overburden generation in m3	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	There is no proposal for excavation during the scheme period 2015-16 to 2019-20	There is no mineral reserve as reported in the scheme of mining approved dated 07.04.2015. No development has been carried out during the year 2018-19	There is no mineral reserve as reported in the scheme of mining approved dated 07.04.2015. No development has been carried out during the year 2018-19
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3b	Quantity of ROM mineral production proposed	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3c	Recovery of sailable/usable mineral from ROM production	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3d	Quantity of mineral reject generation	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3e	Grade of mineral rejects generation and threshold value declared.	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3f	Quantity of sub grade mineral generation.	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3g	Grade of sub grade mineral generation	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20

3h	Manual / Mechanised method adopted for segregating from ROM	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3k	Provision of mining machineries in mineral benches	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3m	Total area covered under excavation/pits	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3n	Ore to OB ratio for the pit/mine during the year.	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
3o	Total area put in use under different heads at the end of year	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20

3p	Production of ROM mineral during the last five year period as applicable	2015-16: Nil 2016-17: Nil 2017-18: Nil 2018-19: Nil	2015-16: Nil 2016-17: Nil 2017-18: Nil 2018-19: Nil	The development and production of ROM has not been proposed during the year 2018-19. Only rehandling of subgrade / mineral reject stocks by manual screening and sorting have been proposed till 2017-18.
3q	General remarks of inspecting officers on method of mining etc.	There is no proposal for excavation during the scheme period 2015-16 to 2019-20	No development or production of ROM carried out during the year 2018-19	No development or production of ROM carried out during the year 2018-19

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	The area is devoid of top soil and there will be no waste generation during the scheme period. There is no proposal for excavation during the scheme period 2015-16 to 2019-20	Nil	Nil
4b	Location of topsoil, OB and mineral reject dumps	There is no proposal for excavation during the scheme period 2015-16 to 2019-20	Nil	Nil

4c	Number of dumps within lease area and outside of lease area	There is no proposal for excavation during the scheme period 2015-16 to 2019-20	There already exists one waste dump in the lease area. No new waste dump created in 2018-19	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not proposed	The existing waste dump is outside the UPL. No new waste dump created during 2018-19	The existing waste dump is outside the UPL. No new waste dump created during 2018-19
4e	Number of active and alive dumps.	Not Proposed	Nil	Nil
4f	Number of dead dumps.	Not proposed	There already exists one waste dump in the lease area.	There already exists one waste dump in the lease area.
4g	Number of dumps established.	Not proposed	There already exists one waste dump in the lease area.	There already exists one waste dump in the lease area.
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposal not furnished in the approved scheme of mining	Nil	Nil
4i	Length of Retaining wall or garland drain all along dumps	Proposal not furnished in the approved scheme of mining	Nil	Nil
4j	Number of settling ponds	Proposal not furnished in the approved scheme of mining	Nil	Nil

4k	Specific comments of inspecting officer on waste dump management	The area is devoid of top soil and there will be no waste generation during the scheme period. There is no proposal for excavation during the scheme period 2015-16 to 2019-20	There exists one dead waste dump in the lease area.	There exists one dead waste dump in the lease area.
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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.	Not proposed during the year 2018-19	Nil	Nil
5b	Area under backfilling of mined out area	Not proposed during the year 2018-19	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed during the year 2018-19	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	Not proposed	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	There is no proposal for backfilling of the mined out area	No backfilling of mined out pit has been done in 2018-19	No backfilling of mined out pit has been done in 2018-19

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Annual report on PMCP to be submitted as per Rule 26 (2) of MCDR, 2017	Annual report on PMCP for the year 2018-19 have been submitted	Annual report on PMCP for the year 2018-19 have been submitted
6b	Area available for rehabilitation (ha) .	0.26 ha for managment of worked out benches	0.26 Ha	Nil
6c	afforestation done (ha).	1.08 ha for dump management, 2.36 ha backfilled area and 2.749 ha in waste land	0.14 ha area for dump management. Plantation done in backfilled area and in waste land	Nil
6d	No. of saplings planted during the year	3000 nos of saplings proposed for plantation	600 nos of saplings planted	600 nos of saplings planted
6e	Cumulative no .of plants	Not Specified	So far 45941 nos of saplings planted by lessee	Nil
6f	Any other method of rehabilitation	Not Proposed	Nil	Nil
6g	Cost incurred on watch and care during the year	Rs 210000/-	Rs 167712/-	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Proposed	Nil	Nil

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	1000 nos of saplings proposed for plantation	400 nos of saplings planted	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	1000 nos of saplings proposed	200 nos of saplings planted	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	2.749 ha	0.05 Ha	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Plantation	Plantation	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly monitoring of environmental parameters	carried out	Nil

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No comments to offer	So far 45941 nos of saplings planted by lessee and environmental monitoring in core an buffer zone is being carried out.	So far 45941 nos of saplings planted by lessee and environmental monitoring in core an buffer zone is being carried out.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Not Proposed	Nil	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Not Proposed	Nil	Nil
7c	Different grade of mineral sorted out at mines.	Not Proposed	Nil	Nil
7d	Any beneficiation process at mines	Not Proposed	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	There is no proposal for excavation during the scheme period 2015-16 to 2019-20	No development or production of ROM carried out during the year 2018-19	No development or production of ROM carried out during the year 2018-19

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20

8b	Concurrent use or storage of topsoil	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	There is no proposal for excavation during the scheme period 2015-16 to 2019-20
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	1.08 ha	0.14 ha	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	3000 nos of saplings proposed for plantation	600 nos of saplings planted	Nil
8g	Survival rate	Not Specified	Survival rate: 80% within lease area as reported in annual return 2018-19	Survival rate: 80% within lease area as reported in annual return 2018-19
8h	Water sprinkling on roads to control airborne dust	Not Proposed	Nil	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No comments to offer	Aesthetic beauty in and around mines is maintained	Aesthetic beauty in and around mines is maintained

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual returns to be submitted as per rule 45 of MCDR 2017	Monthly returns and annual return for 2018-19 have been submitted.	Monthly returns and annual return for 2018-19 have been submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on Manager, Mining Engineer and Geologist furnished in annual return for 2018-19	Manager, Mining Engineer and Geologist have been appointed in mines.	Manager, Mining Engineer and Geologist have been appointed in mines.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 2.219 ha, Used for waste disposal: 1.005 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 0.233 Ha, other purposes: 12.893 Ha	Found to be in order	Nil
9d	Scrutiny of Annual return on afforestation	600 nos of saplings planted	600 nos of saplings planted	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock of dump workings: 2985 tones, Closing stock of processed ore at mine head 25% to below 35% Mn : 1131.494 tones 35% to below 46% Mn : 17.528 tones Dioxide Ore : 2.357 tones	Found to be in order	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Nil	Nil	Nil
9h	Scrutiny of Annual return on fixed assets	Nil	Nil	Nil
9k	Scrutiny of Annual return on mining machineries	Nil	Nil	Nil

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 :

Semagudas
02/03/2020
(SHRI SUBIP RANJAN MAZUMDAR)

Indian Bureau of Mines