

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON/KJR/MCDR39/BBS

**Mine code :** 30ORI08035

- (i) Name of the Inspecting : **RAM** ) **RAMKISHAN R**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri R.P.Mali, Agent  
Official with  
Designation
- (iv) Date of Inspection : 23/12/2019
- (v) Prev.inspection date : 02/10/2018

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **KATAMATI**
- (b) **Registration NO.** : **IBM/4376/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : KATAMATI
- Taluka : BARBIL
- Post office : DEOJHAR
- Pin Code :
- FAX No. : 06596233706
- E-mail : rsgarbi@noa.tatasteel.com,l
- Phone : 06596233706
- (f) Police Station : Barbil
- (g) First opening date : 01/05/1934
- (h) Weekly day of rest : SUN
2. Address for : VILL. KATAMATI  
correspondance P.S JODA  
DIST.KEONJHAR.PIN: 758034
3. (a) Lease Number : ORI0107
- (b) Lease area : 403.32
- (c) Period of lease :
- (d) Date of Expiry : 31/03/2030
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : TISCO  
Bombay House 24, Homy Mody  
Street Mumbai MUMBAI  
(SUBURBAN) MAHARASHTRA  
Phone:  
FAX :

Owner : T V NARENDRAN  
TATA STEEL LIMITED  
JAMSHEDPUR, POST-BISTUPUR  
SINGBHUM EAST, JHARKHAND  
SINGHBHUM (EAST) JHARKHAND  
Phone: 06572431818  
FAX : 0657-2431818

Agent : R P MALI  
M/S TATA STEEL LIMITED  
JHARKHAND, WEST SINGHBHUM  
NOAMUNDI SINGHBHUM (WEST)  
JHARKHAND  
Phone: 9238003485  
FAX : 06596233706

## Mining Engineer

Name : RAHUL KISHORE, Full Time  
Qualification : B.E MINING  
Appointment/ : 07/01/2017  
Termination date

## Geologist

Name : ASIM CHATTERJEE, Full Time  
Qualification : MSC APPLIED GEOLOGY), M TECH EARTH SCIEN  
Appointment/ : 01/05/2017  
Termination date

## Manager

Name : RAHUL KISHORE  
Qualification : B.E MINING  
Appointment/ : 07/01/2017  
Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	06/07/2001
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	19/07/2007
	:	Mining Scheme rule 12 MCDR1988	29/09/2009
	:	Mining Scheme rule 12 MCDR1988	15/04/2013
	:	Modif.approved Mining Scheme	30/08/2016
	:	MS modif under MCR 1960	09/06/2017
	:	MP review under 17(1) MCR 2016	09/11/2017

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No such specific proposal.	However 40 nos of boreholes were proposed as a part of exploration during the year 2018-19.	Nil
1b	Exploration over lease area for geological axis 1 or 2	40 nos of boreholes were proposed as a part of exploration during the year 2018-19.	Nil	violation observed and communicated to lessee letter dated 07.01.2020.
1c	Exploration Agencies and Expenditure in lakh rupees during the year		Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	98 nos of boreholes were proposed to brought area under G1/G2 level during the plan period i.e. till 2019-20.	Nil	violation observed and communicated to lessee letter dated 07.01.2020.
1e	Balance reserve as on 01/04/20	As per the approved document dated 09.11.2017, the iron ore reserves are 78.12 mil.t and resources are 45.28 mil.t.	due to depletion/addition over the period of time the updated iron or reserves as on dated 01.04.2019 are 68.76 mil.t and resources are 45.28 mil.t.	Nil
1f	General remarks of inspecting officers on geology, exploration etc		exploration has not been carried during the year 2018-19 as proposed, so violation observed and communicated to lessee letter dated 07.01.2020.	Nil

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	pit-I is proposed for development during the year 2018-19.	development is carried out in pit-I.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	no top soil generation is envisaged, seperate benches in Ob and mineral are proposed.	seperate benches in OB and mineral are maintained.	Nil
2c	Stripping ratio or ore to OB ratio	0.041 t/cu.m.	0.047 t/cu.m.	Nil
2d	Quantity of topsoil generation in m3	Not applicable	Nil	Nil
2e	Quantity of overburden generation in m3	0.28 mil.cu.m.	0.23 mil.cu.m.	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		development is carried out by opencast mining method as propsoed.	Nil

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 no during the year 2018-19.	1 no	
3b	Quantity of ROM mineral production proposed	6.8 mil.t.	5.02 mil.t.	deviation is due to less demand at captive plant.
3c	Recovery of sailable/usable mineral from ROM production	6.3 mil.t.	4.38 mil.t.	deviation is due to less ROM production and due to irregular nature of ore deposit.
3d	Quantity of mineral reject generation	0.5 mil.t.	0.63 mil.t.	

3e	Grade of mineral rejects generation and threshold value declared.	+45-58% Fe	+45-58% Fe	
3f	Quantity of sub grade mineral generation.	addressed in mineral rejects.	Not applicable	
3g	Grade of sub grade mineral generation	Not applicable	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	mechanised.	mechanised.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	Nil	
3j	Provision of drilling and blasting in mineral benches	drilling and blasting is proposed.	carried out.	
3k	Provision of mining machineries in mineral benches	shovel and dumper combination is proposed for excavation and hauling.	shovel and dumper combination is deployed for excavation and hauling.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	12 m	maintained	Nil
3m	Total area covered under excavation/pits	154.5910 ha at the ned of plan period i.e. 2022-23.	79.602 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	0.041 t/cu.m.	0.047 t/cu.m.	

3o	Total area put in use under different heads at the end of year	total area put to use under different heads at the end of plan period i.e. 2022-23 is 241.1946 ha.	144.936 ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 7.5 mil.t. 2015-16: 8 mil.t. 2016-17: 7.55 mil.t 2017-18: 8 mil.t 2018-19: 6.8 mil.t.	2014-15: 3.3 mil.t. 2015-16: 3.8 mil.t. 2016-17: 5.74 mil.t 2017-18: 7.3 mil.t 2018-19: 5.02 mil.t.	
3q	General remarks of inspecting officers on method of mining etc.		production is carried out from pit-I by opencast mining method as proposed.	Nil

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	no topsoil generation is envisaged. seperate dumping of waste and mineral rejects are proposed.	seperate dumping of waste and mineral rejects are carried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	waste dump no.2	waste dump no.2	Nil
4c	Number of dumps within lease area and outside of lease area	1 no of waste dump with in lease area during the year 2018-19.	1 no of waste dump within lease area.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside UPL	outside UPL	Nil

4e	Number of active and alive dumps.	1 no.	1 no.
4f	Number of dead dumps.	Not proposed.	Nil
4g	Number of dumps established.	Not proposed.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	provided.
4i	Length of Retaining wall or garland drain all along dumps	1644 m of retaining wall and garland drain.	1670 m of retaining wall and garland drain
4j	Number of settling ponds	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management		waste dump management is carried out as proposed.

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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.	Area not matured for backfilling.	Not applicable	
5b	Area under backfilling of mined out area	Not applicable	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Nil	
5d	Total area fully reclaimed and rehabilitated	Not applicable	Nil	

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5e	General remarks of inspecting officers on backfilling and reclamation etc.	Area not matured for backfilling.	Nil
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Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	PMCP report to submitted before 1 st July.		
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	1 ha during the year 2018-19 on dump.	1.1 ha	
6d	No. of saplings planted during the year	2000 nos	2727 nos	
6e	Cumulative no .of plants		11121 nos	
6f	Any other method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch and care during the year		Rs 2.83 lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Not applicable	Nil	



6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not applicable Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not applicable Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not applicable Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not applicable Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not applicable Nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	periodical environmental monitoring of core zone and buffer zone are proposed.	carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		PMCP measures were carried out as propped.	Nil

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade-wise sorting of mineral is proposed.	grade-wise sorting of mineral is carried out.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical	mechanical	
7c	Different grade of mineral sorted out at mines.	+45-58% Fe and +58% Fe	+45-58% Fe and +58% Fe	
7d	Any beneficiation process at mines	Not proposed.	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		grade-wise sorting of mineral is carried out.	

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#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Not applicable	Nil	
8b	Concurrent use or storage of topsoil	Not applicable	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps for waste and mineral rejects are proposed.	seperate dumps for waste and mineral rejects are maintained.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not applicable	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	dump plantation is proposed.	carried out.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2000 nos	2727 nos	
8g	Survival rate		84.69%	
8h	Water sprinkling on roads to control airborne dust	water sprinkling on haul raods for dust supression is proposed.	carried out.	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	aesthetic beauty in and around the mines area is maintained.	Nil
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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 and annual returns are to be submitted as per rule 45 of MCDR, 2017	submitted.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining Engineer 11, Diploma Mining Engineer 6, Geologist 1	Graduate Mining Engineer 11, Diploma Mining Engineer 6, Geologist 1	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings: 79.602 ha, Used for waste disposal: 5.050 ha, Occupied by plant, buildings, residential, welfare buildings & roads 19.939 ha, Other Purpose: 40.345 ha.	found to be in order.	Nil
9d	Scrutiny of Annual return on afforestation	2727 nos	2727 nos	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	637545 t	637545 t	Nil

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9f	Scrutiny of Annual return on ROM stock and/or graded ore	65% and above (Lumps) 20.097 t closing stock, 65% and above 9fines) 100819.205 t closing stock	65% and above (Lumps) 20.097 t closing stock, 65% and above 9fines) 100819.205 t closing stock	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost Rs. 1248.49	Production cost Rs. 1248.49	
9h	Scrutiny of Annual return on fixed assets	Rs. 628137064	Rs.628137064	
9k	Scrutiny of Annual return on mining machineries	SHOVEL (HYDRAULIC) 5.700 CUM 3, DUMPER 100.000 TONNE 9, BLAST HOLE DRILL (ELEC.) 650.000 MM 3 DOZER 13.500 HP 2, MOTOR GRADER 280.000 HP 1, FRONT END LOADER 9.000 CUM 1	found to be in order.	Nil

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**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

**Date :**

(RAMKISHAN R)

Indian Bureau of Mines