

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

MCDR inspection REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/SNG/MCDR-28/BBS

Mine code : 30ORI13071

- (i) Name of the Inspecting : **RKR5**) **RAJANI KANTA RAUTARAY**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Sh. Satish Mohanty, AVP (Mines)
Official with
Designation
- (iv) Date of Inspection : 21-NOV-21
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GHORABURAHANI SAGSAHI**
- (b) **Registration NO.** : **IBM/571/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **ORISSA**
- District : **SUNDARGARH**
- Village : **Ghorabhurhani**
- Taluka : **Koira**
- Post office : **Koira**
- Pin Code : **770048**
- FAX No. :
- E-mail :
- Phone :
- (f) **Police Station** :
- (g) **First opening date** : **09-SEP-21**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** :
3. (a) **Lease Number** :
- (b) **Lease area** :
- (c) **Period of lease** :
- (d) **Date of Expiry** :
4. **Mineral worked** : **IRON ORE** **Associated**

5. Name and Address of the

Lessee : ArcelorMittal Nippon Steel India Limited
AHMEDABAD ARAVALI
GUJARAT
Phone:
FAX :

Owner : Dilip Oommen
AHMEDABAD GUJARAT
Phone:
FAX :

Agent : Ramakrishna Chinnamsetty
KEONJHAR ORISSA
Phone:
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	54 NOS. of bore holes were proposed in 2020-21	Nil	Mining operation has started on dt. 09.09.2021.
1b	Exploration over lease area for geological axis 1 or 2	Exploration from G2 to G1 was proposed	Nil	Mining operation has started on dt. 09.09.2021
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	To convert the Potential Mineralised Area from G2 to G1 level	Nil	
1e	Balance reserve as on 01/04/20	As per approved Mining Plan the total reserve and reserve of the mine is 78.24 MT as per GR Report	78.24 Millon tonnes as on 01/04/21& 77.996 Million tonnes as on 1/11/2021	Mining operation has started on dt. 09.09.2021.
1f	General remarks of inspecting officers on geology, exploration etc			Mining operation has started on dt. 09.09.2021.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	2020-21: Pit-1: E-322810 to 323250 & N-2428080 to 2428400 Pit-2: E-322880 to 323340 & N-2427550 to 2427750	Nil	Mining operation has started on dt. 09.09.2021

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Nil	Nil	
2c	Stripping ratio or ore to OB ratio	1:0.021	1:0.333	
2d	Quantity of topsoil generation in m3	12500 for the year 2020-21	1316.70m3	
2e	Quantity of overburden generation in m3	Nil	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mining operation has started on dt. 09.09.2021.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2020-21:-2nos	Nil	
3b	Quantity of ROM mineral production proposed	2020-21:- 3907656 MT	Nil	
3c	Recovery of sailable/usable mineral from ROM production	2020-21:- 2607120 MT	Nil	
3d	Quantity of mineral reject generation	2020-21:- 1300536 MT	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	45 to 58% Fe	Nil	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Nil	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.	No proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	Drilling by using 150mm/115mm dia DTH and Blasting by detonator, Nonel & Safety fuse.	Nil	
3k	Provision of mining machineries in mineral benches	Height:- 10m Width:- Maximum 20m	Nil	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height:- 10m Width:- Maximum 20m	Nil	
3m	Total area covered under excavation/pits	2020-21:- 16.140Ha.	Nil	
3n	Ore to OB ratio for the pit/mine during the year.	2020-21:- 1:0.253	Nil	
3o	Total area put in use under different heads at the end of year	2020-21:- 25.59Ha.	Nil	
3p	Production of ROM mineral during the last five year period as applicable	2020-21:- 3907656MT 2021-22:- 4777703MT	2020-21:- NIL 2021-22:- 320376MT as on 31/10/2021	
3q	General remarks of inspecting officers on method of mining etc.			The mining operations could not be commenced in the FY 2020-21, executed on dt.09.09.2021.

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of topsoil, OB & mineral reject has been proposed	As per the proposal, separate dumping of topsoil, OB & mineral reject has been carried out	
4b	Location of topsoil, OB and mineral reject dumps	2020-21: Topsoil: Near village road OB: Waste dump-1 & Waste dump-2 Mineral reject: Sub-grade dump-1 & Sub-grade dump-2	Nil	
4c	Number of dumps within lease area and outside of lease area	2020-21: OB Dump: 2nos Subgrade dump: 2nos	Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	2020-21 Waste dump -1 Proposed with in the UPL is temporary in nature. Waste dump-2 Proposed outside the UPL.	Nil	
4e	Number of active and alive dumps.	2020-21: 2nos of active dump	Nil	
4f	Number of dead dumps.	Not proposed	Nil	
4g	Number of dumps established.	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed all along the OB and Mineral reject dumps	Nil	Mining operation started in 09.09.2021
4i	Length of Retaining wall or garland drain all along dumps	2020-21: Retaining wall: 1550m Garland drain: 1130m	Nil	As mining operation started on 09.09.2021 the proposal for the year 2020-21 has not been implemented.
4j	Number of settling ponds	2020-21: 2nos	Nil	

4k	Specific comments of inspecting officer on waste dump management	The Mining operation started on 09.09.2021 the proposal for the year 2020-21 has not been implemented.
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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.	No proposal	Nil	
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed for plantation	555cu.mt has been utilized for plantation	Plantation in safety zone only.
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Pits are not matured for backfilling as the mining operation started on 09.09.2021

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).	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2) of MCDR, 2017	Not submitted as the mining operation has been started on dt.09.09.2021	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	

6c	afforestation done (ha).	No proposal	Nil	
6d	No. of saplings planted during the year	No proposal	Nil	
6e	Cumulative no .of plants	No proposal	Nil	
6f	Any other method of rehabilitation	No proposal	Nil	Pits are not matured as mining operation started on 09.09.2021
6g	Cost incurred on watch and care during the year	No proposal	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	
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	

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	2020-21: Area to be rehabilitated (ha): 0.55 Ha.	Nil	As the mining operation started on 09.09.2021
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)	Ambient Air Quality, Water Quality, Soil Quality, Water Level Monitoring has been proposed both in core zone & buffer zone. Noise Level Study, Ground vibration, Fugitive dust Monitoring has been proposed in core zone	As per proposal, Environmental monitoring (core zone & buffer zone) have been carried out.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No work has been carried out in 2020-21 as the mining operation started on 09.09.2021

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting for +58% Fe and 45 to 58% Fe has been proposed for the plan period	No work has been carried out in 2020-21	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	

7c	Different grade of mineral sorted out at mines.	Grade-wise sorting for +58% Fe and 45 to 58% Fe has been proposed.	no work has been carried out in 2020-21.	
7d	Any beneficiation process at mines .	Dry beneficiation by using crusher and screen plant	Nil	3 nos of Screen plant are running at the time of inspection.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No work has been carried out in the year 2020-21 as the minig operation started in 09.09.2021.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal of topsoil has been proposed and will be utilized for plantation	Separate removal of topsoil has been proposed and will be utilized for plantation	
8b	Concurrent use or storage of topsoil	Concurrent use or storage of topsoil has been proposed	Concurrent use or storage of topsoil has been carried out for plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden, waste rock, rejects and fines has been proposed for the plan period.	No work has been carried out in 2020-21.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed	Carried out as per the proposal	
8g	Survival rate	80%	78%	in safety zone plantation
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads to control airborne dust has been proposed	Water sprinkling on roads to control airborne dust has been carried out.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			No core mining activity has been carried out in 2020-21 as the mine was started in 09.09.2021

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 October, 2021	No annual return for 2020-21 has been submitted	The mining operation has been started on 09.09.2021.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Not submitted	Not applicable	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Not submitted	Not applicable	Annual Return for 2020-21 has not been submitted as the mining operation was started on 09.09.2021

9d	Scrutiny of Annual return on afforestation	Not submitted	Not applicable	Annual Return for 2020-21 has not been submitted as the mining operation was started on 09.09.2021
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not submitted	Not applicable	Annual Return for 2020-21 has not been submitted as the mining operation was started on 09.09.2021
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Not submitted	Not Applicable	Annual Return for 2020-21 has not been submitted as the mining operation was started on 09.09.2021
9h	Scrutiny of Annual return on fixed assets	Not submitted	Not Applicable	Annual Return for 2020-21 has not been submitted as the mining operation was started on 09.09.2021
9k	Scrutiny of Annual return on mining machineries	Annual return not submitted	Not Applicable	Annual Return for 2020-21 has not been submitted as the mining operation was started on 09.09.2021

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 :

(RAJANI KANTA RAUTARAY)

Indian Bureau of Mines