

MCDR-MiFLOFE/18/2023-BBS-IBM_RO_BBS
INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION

I/4588/2023

MCDR INSPECTION REPORT
Bhubaneshwar regional office

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

Mine code : 30ORI13071

- (i) Name of the Inspecting : KQ13) KEWAL KRISHAN
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Lingamagunta Babu (Mines Manger)
Official with
Designation
- (iv) Date of Inspection : 17-JAN-23
- (v) Prev.inspection date : 21-NOV-21

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 : KOIRA
- (g) First opening date : 09-SEP-21
- (h) Weekly day of rest : SUN
2. Address for : 2nd floor, Birde Centurian, Century Hill Compound,
correspondance Pandurang Budkar Marg, worli, Mumbai 400030
3. (a) Lease Number :
(b) Lease area : 139.165 HA
(c) Period of lease : 50 yrs.
(d) Date of Expiry : 25.3.2071
4. Mineral worked : IRON ORE Associated



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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 : MP modif under 17(3) MCR 2016 15-FEB-22
Plan/Scheme of Mining

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	no such proposal	not applicable	mining started on 09.09.2021 after auction
1b	Exploration over lease area for geological axis 1 or 2	56 nos of boreholes for G 1 axis	as per the proposal	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	no such proposal	Gemcokati for Core Drilling & APC Drilling for RC Drilling & Total Expenditure done 98.6 Lakh	
1d	Balance area to be explored to bring Geological axis in 1 or 2	53.12 ha	46.8 ha	
1e	Balance reserve as on 01/04/20		as on 1/4/2023 under 122 75495000 T under 222 20370000 T	

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1f General remarks of inspecting officers on geology, exploration etc

Ghoraburhani - Sagasahi iron Ore block lies within the Upper Shale Formation of the Koira Group. Litho units like Iron ores of HLO, SLO, lateralized HLO types, Fe-Shale, laterites of both aluminous and Ferruginous nature, float ores concealed under soil and alluvial cover at places are mapped in the Ghoraburhani - Sagasahi block. Strike / Trend of the Ore Body: ENE to WSW and the of dip of Ore body 20-40 degree towards NW. The potential mineralized area is yet to be explored under G1 level.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t. lease area	North Pit: N-2428048 to 2428408 E-322818 to 323206 South Pit: N-2427480 to 2427718 S-322916 to 323343	broadly as per the proposal	

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2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in topsoil, overburden and minerals are proposed	Separate benches in topsoil, overburden and minerals.	
2c	Stripping ratio or ore to OB ratio	1:0.13	1:0.11	
2d	Quantity of topsoil generation in m3	2176	1316.7	
2e	Quantity of overburden generation in m3	507752	304820	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Development is carried out in the pt as per the approved document	Development is carried out in the pt as per the approved document

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 nos of puts	2 nos of puts	North pit and South pit
3b	Quantity of ROM mineral production proposed	3350613 T	2745042 T	
3c	Recovery of sailable/usable mineral from ROM production	2631182 T	2260387 T	
3d	Quantity of mineral reject generation	719431 T	484655 T	
3e	Grade of mineral rejects generation and threshold value declared.	45 to 58% Fe & threshold value 45 % Fe	45 to 58% Fe	

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3f	Quantity of sub grade mineral generation.	719431 T	484655 T	
3g	Grade of sub grade mineral generation	45 to 58% Fe	45 to 58% Fe	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	no such proposal	no such proposal	
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting proposed	as per the proposal	
3k	Provision of mining machineries in mineral benches	Excavator with dumper	Excavator with dumper	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height: - 10m Width: - 10-20m	broadly as per the proposal	
3m	Total area covered under excavation/pits	as per approved document dt 15/2/2022, total area covered under excavation/pits 18.52 ha	11.489 ha	less area because of less development
3n	Ore to OB ratio for the pit/mine during the year.	1:0.15	1:0.11	

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3o	Total area put in use under different heads at the end of year	Mining-18.52 Topsoil-0.346 Over Burden-2.670 Mineral storage-23.467 Roads-8.995 Infrastructure s - 7.573 Tailing Pond-4.0 Mineral Separation Plant-18.696 Others-3.321	Mining-11.489 Mineral storage-8.475 Roads-5.89 Infrastructures - 3.208 OB/Waste Dump-2.009
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3p	Production of ROM mineral during the last five year period as applicable	2020-21:- 3907656MT 2021-22:- 3350613MT	2020-21:- NIL 2021-22:- 2745042MT
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3q	General remarks of inspecting officers on method of mining etc.	The method of mining is A category and is fully mechanised. The ROM production is carried out by open cast mining method.	The method of mining is A category and is fully mechanised. The ROM production is carried out by open cast mining method.
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Solid Waste Management - Dumping:

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	Separate dumping of topsoil, OB & mineral reject .	

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4b	Location of topsoil, OB and mineral reject dumps	Topsoil: Near village road OB: N 2428365 to 2428560 E 322850 to 323040 Mineral reject: Proposed temporary mineral Reject Stock no1,2,3,4	broadly as per the proposal	
4c	Number of dumps within lease area and outside of lease area	Within lease: OB Dump: 1nos Outside lease: NIL	Within lease: OB Dump: 1nos Outside lease: NIL	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste dump -1,	Waste dump -1,	Waste dump -1 Proposed within the UPL & is temporary in nature.
4e	Number of active and alive dumps.	01	01	
4f	Number of dead dumps.	no such proposal	no such proposal	
4g	Number of dumps established.	no such proposal	no such proposal	
4h	Whether Retaining wall or garland drain all along dumps are there.	proposed	broadly as per the proposal	
4i	Length of Retaining wall or garland drain all along dumps	1008m	broadly as per the proposal	
4j	Number of settling ponds	01 no	01 no	
4k	Specific comments of inspecting officer on waste dump management		waste dump management is carried out as proposed.	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.	no such proposal	no such proposal	
5b	Area under backfilling of mined out area	no such proposal	no such proposal	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed for plantation	as per proposal	
5d	Total area fully reclaimed and rehabilitated	no such proposal	no such proposal	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		There is no proposal of backfilling / reclamation.	There is no proposal of backfilling / reclamation.

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).		submitted	Submitted on 29th June 2022
6b	Area available for rehabilitation (ha) .	no such proposal	no such proposal	
6c	afforestation done (ha) .	1 ha	broadly as per proposal	
6d	No. of saplings planted during the year	1600 no	broadly as per the proposal	
6e	Cumulative no .of plants		approx 7000 .	approx 7000

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6f	Any other method of rehabilitation	no such proposal	no such proposal
6g	Cost incurred on watch and care during the year	24000/-	broadly as proposed
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	no such proposal	no such proposal
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	no such proposal	no such proposal
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	no such proposal	no such proposal
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	no such proposal	no such proposal
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	no such proposal	no such proposal
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	no such proposal	no such proposal

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6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	no such proposal	no such proposal	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	no such proposal	no such proposal	
6p	Compliance of environmental monitoring (core zone and buffer zone)	periodical monitoring of environmental parameters are proposed in core and buffer zone	implemented as per the proposal	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		No specific PMCP measues are proposed by party except the environmental monitoring in the core and buffer zone.	No specific PMCP measues are proposed by party except the environmental monitoring in the core and buffer zone.

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	grade wise sorting within lease	
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 +58% Fe and 45 to 58% Fe .	45 to 55% Fe, 55 to 58% Fe & +58% Fe	

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7d	Any beneficiation process at mines .	no such proposal	no such proposal	Ore processing by screening & crushing.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		no beneficiation is carried out , how ever grade wise sorting is being carriedout out.	no beneficiation is carried out , how ever grade wise sorting is being carriedout out.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal of topsoil has been proposed	Separate removal of topsoil has been done and being used for plantation	
8b	Concurrent use or storage of topsoil	Concurrent use or storage of topsoil has been proposed	as per proposal broadly	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden, waste rock, rejects and fines has been proposed	as per the proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	no such proposal	no such proposal	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	no such proposal	no such proposal	

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8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1600 no sof plantation	broadly as per the proposal	
8g	Survival rate	80%	76%	
8h	Water sprinkling on roads to control airborne dust	water sprinkling to control dust	water sprinkling to control dust	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aesthetic beauty in and around the mine is good because of plantation & regular sprinkling of water on mine road to control the dust.	aesthetic beauty in and around the mine is good because of plantation & regular sprinkling of water on mine road to control the dust.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	as per MCDR 2017, the monthly return are to be submitted before 10th day of every month in respect of the proceding month and AR shall be submitted before the 1st day of July each year for the proceding finicial year	submitted, wrong information furnished in monthly return Dec 2022 and Annual return 2021-22	violation under rule 45(7) of MCDR 2017

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9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Employment status of Mining Engineer ,Geologist, Surveyor have been furnished in AR	Mining Engineer ,Geologist, Surveyor and Mines manager	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	covered under OC working 11.489 ha used for waste disposal 2.009 ha occupied by plant building ,road 9.098 ha Other purposes 8.475ha	broadly in order	
9d	Scrutiny of Annual return on afforestation	proposal 1600 nos	broadly in order	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	484655T 53 % Fe , reported	484655T 53 % Fe , reported	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	closing stock as reported is 495578.60 T	closing stock as reported is 495578.60 T	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price Iron ore reported Rs 406.00	wrong in formation furnished	violation under rule 45(7) of MCDR 2017
9h	Scrutiny of Annual return on fixed assets	as reported by party Fixed Value of Assets- Rs. 929662138/-	as reported by party Fixed Value of Assets- Rs. 929662138/-	
9k	Scrutiny of Annual return on mining machineries	Crusher 01 Dozer 01 Dumper 30 wheel loader 03 Shovel 15 nos	Crusher 01 Dozer 01 Dumper 30 wheel loader 03 Shovel 15 nos	

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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
MCDR17	Rule 45(7) (a)	09-JAN-23			

Date :**(KEWAL KRISHAN)**

Indian Bureau of Mines