

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/MB/MCDR-10/BBS

Mine code : 30ORI10008

- (i) Name of the Inspecting : **U11**) **DAYANAND UPADHYAY**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri P. Das, Mines manager
Official with
Designation
- (iv) Date of Inspection : 06/07/2021
- (v) Prev.inspection date : 22/12/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SULAIPAT**
- (b) **Registration NO.** :
- (c) Category : A Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : MAYURBHANJ
- Village : SULAIPAT
- Taluka : BAMANGHATY
- Post office : SULAIPAT
- Pin Code : 757043
- FAX No. : 06794-222434
- E-mail :
- Phone : 06794-222628
- (f) Police Station :
- (g) First opening date : 10/10/1984
- (h) Weekly day of rest : SAT
2. Address for : SULAIPAT IRON MINE, M/S B.C.DAGARA
correspondance P.O.SULAIPAT, DIST:MAYURBHANJ
ORISSA-757043
3. (a) Lease Number : ORI0111
- (b) Lease area : 618
- (c) Period of lease : 50
- (d) Date of Expiry : 24/10/2025
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : B.C.DAGARA
 B.C.DAGARA, MINE OWNER
 RAIRANGPUR, ORISSA
 MAYURBHANJ ORISSA
 Phone: 06794-22068
 FAX : 06794-22628

Owner : B.C.DAGARA
 MINE OWNER
 RAIRANGPUR, ORISSA
 SUNDARGARH ORISSA
 Phone:
 FAX :

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	19/02/2004
Plan/Scheme of Mining		Modif.of approved Mining Plan	14/09/2007
		Mining Scheme rule 12 MCDR1988	20/11/2009
		Modif.approved Mining Scheme	27/12/2011
		Mining Scheme rule 12 MCDR1988	14/06/2013
		MP review under 17(1) MCR 2016	07/05/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	45 nos. of bore holes in 2020-21	30 nos. of bore holes in 2020-21.	Deviation is pintoed out through vilation letter.
1b	Exploration over lease area for geological axis 1 or 2	G1/G2 level during plan period.	30 nos. of bore holes in 2020-21 under G1 level.	30 nos. of bore holes in 2020-21 under G1 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified.	Exploration agency involved in drilling was M/s Thriveni earth movers, cost incurred in drilling was Rs 9612200/-.	Exploration agency involved in drilling was M/s Thriveni earth movers, cost incurred in drilling was Rs 9612200/-.
1d	Balance area to be explored to bring Geological axis in 1 or 2	486.54 ha under G1/G2 level during plan period.	30 nos. of bore holes in 2020-21 covering about 16 ha area under G1 level.	Deviation is pintoed out through vilation letter.
1f	General remarks of inspecting officers on geology, exploration etc	45 nos. of bore holes in 2020-21	30 nos. of bore holes in 2020-21 under G1 level.	Deviation is pintoed out through vilation letter.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Quarry 1: SW side of lease Quarry 2: Near Lease Boundary pillar 16. Quarry 3: Near Broken Boundary pillar 41.	Development is carried out in development in Quarry 1 and Quarry 2.	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore proposed quarry-3 not developed.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB and ore, top soil bench-nil.	Separate benches in OB and ore maintained.	Separate benches in OB and ore maintained.

2c	Stripping ratio or ore to OB ratio	Qaurry-1: 1:0.94T/cu.m and quarry-2: 1:1.14	Average stripping ratio 1:0.217.	OB generated less as ROM production was less due to earlieir suspension of mining operation.
2d	Quantity of topsoil generation in m3	Not proposed.	There is no top soil generation.	There is no top soil generation.
2e	Quantity of overburden generation in m3	1142330 cu.m	10458 cu.m	OB generated less as ROM production was less due to earlieir suspension of mining operation.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Proposed Quarry 1, Quarry 2 and Quarry 3	Development is carried out in development in Quarry 1 and Quarry 2.	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore proposed quarry-3 not developed.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	03 no. of quarry	02 no. of quarry.	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore proposed quarry-3 not developed.
3b	Quantity of ROM mineral production proposed	1163845T	48210T	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore ROM production in 2020-21 is less.

3c	Recovery of sailable/usable mineral from ROM production	1047461T	48210T	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore ROM production in 2020-21 is less.
3d	Quantity of mineral reject generation	116385T	Nil.	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore ROM production in 2020-21 is less and no mineral reject generation is reported.
3e	Grade of mineral rejects generation and threshold value declared.	45%-55% Fe	Nil.	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore ROM production in 2020-21 is less and no mineral reject generation is reported.
3f	Quantity of sub grade mineral generation.	116385T	Nil.	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore ROM production in 2020-21 is less and no mineral reject generation is reported.

3g	Grade of sub grade mineral generation	116385T	Nil.	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore ROM production in 2020-21 is less and no mineral reject generation is reported.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	Mechanised
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	Controlled blasting .	Drilling and blasting is carried out with DTH drilling of 110mm dia. Blast hole with emulsion/slurry explosive as coloumn charge and booster alongwith delay detonator.	Drilling and blasting is carried out with DTH drilling of 110mm dia. Blast hole with emulsion/slurry explosive as coloumn charge and booster alongwith delay detonator.
3k	Provision of mining machineris in mineral benches	Shovel and dumper combination.	Shovel and dumper combination.	Shovel and dumper combination.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height- 9m	Bench height is suitably matched with the excavator.	Bench height is suitably matched with the excavator.
3m	Total area covered under excavation/pits	73.20 ha during plan period.	55.6 ha	Area covered under excavation pits 55.6 ha.

3n	Ore to OB ratio for the pit/mine during the year.	Quarry-1: 1:0.94T/cu.m and quarry-2: 1:1.14	Average stripping ratio 1:0.217.	OB generated less as ROM production was less due to earlier suspension of mining operation.
3o	Total area put in use under different heads at the end of year	177.548ha. during plan period.	Area covered under different heads at the end of year is 85.14 ha.	Area covered under different heads at the end of year is 85.14 ha.
3p	Production of ROM mineral during the last five year period as applicable	2016-17: 3195500 MT 2017-18: 1867040MT 2018-19: 956120MT 2019-20: 1114450MT 2020-21: 1163845MT	2016-17: Nil 2017-18: Nil 2018-19: Nil 2019-20: Nil 2020-21: 48210MT	Mining Operation was under suspension since 26/10/2015.
3q	General remarks of inspecting officers on method of mining etc.	Proposed Quarry 1, Quarry 2 and Quarry 3	Development is carried out in development in Quarry 1 and Quarry 2.	Earlier mining Mining Operation was under suspension since 26/10/2015 therefore proposed quarry-3 not developed.

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 for overburden and mineral reject.	Separate dumping for overburden. No mineral reject generated in 2020-21.	Separate dumping for overburden. No mineral reject generated in 2020-21.
4b	Location of topsoil, OB and mineral reject dumps	Proposed Dump 1: E-419667-419500 & N2449417-2449738 Proposed Dump 2: E419963-42018 & N2448372-2448338	Waste Dump 1: E-419667-419500 & N2449417-2449738	Waste dump-2 not created due to less ROM production.

4c	Number of dumps within lease area and outside of lease area	2 no. of dumps proposed	1 no. of dumps	Waste dump-2 not created due to less ROM production.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side UPL	Out side UPL	Out side UPL
4e	Number of active and alive dumps.	2 no. of dumps proposed	1 no. of dumps proposed	Waste dump-2 not created due to less ROM production.
4f	Number of dead dumps.	No proposal.	NIL.	NIL.
4g	Number of dumps established.	No proposal.	NIL.	NIL.
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed.	Found to be along waste dumps.	Found to be along waste dumps.
4i	Length of Retaining wall or garland drain all along dumps	Maintainance of Retaining wall and garland drain in 2020-21.	Maintainance of Retaining wall and garland drain done.	Maintainance of Retaining wall and garland drain done.
4j	Number of settling ponds	Not proposed in 2020-21	Nil.	Nil.
4k	Specific comments of inspecting officer on waste dump management	Proposed Dump 1: E-419667-419500 & N2449417-2449738 Proposed Dump 2: E419963-42018 & N2448372-2448338	Waste Dump 1: E-419667-419500 & N2449417-2449738	Waste dump-2 not created due to less ROM production.

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 as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
5b	Area under backfilling of mined out area	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
5d	Total area fully reclaimed and rehabilitated	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.

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).	As per provision of MCDR 2017.	Annual return on PMCP has been submitted.	Annual return on PMCP has been submitted.
6b	Area available for rehabilitation (ha) .	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
6c	afforestation done (ha).	0.5 ha dump area	0.5 ha dump area	0.5 ha dump area
6d	No. of saplings planted during the year	800 nos.	800 nos. of saplings	800 nos. of saplings
6e	Cumulative no .of plants	Not specified.	800 nos. of saplings.	800 nos. of saplings

6f	Any other method of rehabilitation	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
6g	Cost incurred on watch and care during the year	Not specified.	Around Rs 1.5 lakh cost incurred on watch and care.	Around Rs 1.5 lakh cost incurred on watch and care.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and rehabilitation.	Pit is not matured for reclamation and rehabilitation.
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not proposed.	Nil	Nil

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not proposed.	Nil	nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not proposed.	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly monitoring	Quarterly monitoring	Quarterly monitoring
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Backfilling Not proposed as pit is not exhausted.	Pit is not matured for reclamation and re-habilitation.	Pit is not matured for reclamation and re-habilitation.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting.	Gradewise sorting.	Gradewise sorting.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised	Mechanised	Mechanised
7c	Different grade of mineral sorted out at mines.	45% to 55% Fe and +55% Fe.	+55% Fe.	Mineral reject not generated.
7d	Any beneficiation process at mines .	Not proposed.	Only crushing and screening Of ROM is being practiced.	Only crushing and screening Of ROM is being practiced.

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Gradewise sorting.	Gradewise sorting.	Dry crushing and screening Of ROM is being practiced.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed.	Nil	Nil
8b	Concurrent use or storage of topsoil	Not proposed.	Nil.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping for overburden and mineral reject.	Separate dumping for overburden and no mineral reject generated..	Separate dumping for overburden and no mineral reject generated..
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and re-habilitation.	Pit is not matured for reclamation and re-habilitation.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed as pit is not exhausted.	Pit is not matured for reclamation and re-habilitation.	Pit is not matured for reclamation and re-habilitation.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	800 no. of sapling.	800 no. of sapling.	800 no. of sapling.

8g	Survival rate	Not specified.	As reported survival rate is 80%.	As reported survival rate is 80%.
8h	Water sprinkling on roads to control airborne dust	water sprinkler.	water sprinkler are used to control air borne dust.	water sprinkler are used to control air borne dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	800 no. of sapling. in 2020-21	800 no. of sapling. in 2020-21	Aesthetic beauty in and around mines area is maintained.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	On line Monthly & Annual returns are not submitted by lessee.	Recommended for suspension under rule 45(7) of MCDR 2017 to State Govt. vide letter no. T-MISC/SHOWCAUSE/1/BBS-2015. for non submission of On line Monthly & Annual returns are not submitted by lessee.	Recommended for suspension under rule 45(7) of MCDR 2017 to State Govt. vide letter no. T-MISC/SHOWCAUSE/1/BBS-2015. for non submission of On line Monthly & Annual returns are not submitted by lessee.

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)	14/07/2021			
MCDR17	Rule 45(5)(c)	14/07/2021			

Date :

(DAYANAND UPADHYAY)

Indian Bureau of Mines