

MCDR INSPECTION REPORT 2023-24**General:**

Sl.No.	Particulars	Details
1	Name of the Mine	Bailadila Iron ore Mine, Deposit-14 Mining Lease.
2	Date of Inspection	28.10.2024
	Name of inspecting officer	Shri S. K Mahapatra, Assistant Controller of Mines, IBM, Raipur
3	Name of the Mine	Bailadila Iron ore Mine, Deposit-14 Mining Lease.(14 MZ)
4	Name of official accompanying inspection	Shri. S.K Kochar, GM/Mines Manager Dr. CH Sravan Kumar (GM Geology) Shri Vivek Kumar (DGM Mining) Shri Ritayan Goswami, DGM (Geology)
5	Last date of Inspection & Officer	25.11.2023, Shri Deepak Chinchkhede Assistant Controller of Mines, IBM, Raipur
6	Total Lease Area (Ha) with breakup of non-forest and forest land	322.368 Ha., Complete Forest Land
7	Mine code	30CHG03001
8	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/270/2011
9	Name of the Lessee, Address, Phone, email, and fax number	M/s NMDC Ltd,10-3-311/A, Castle Hills Masab Tank, Hyderabad-500028,T.S Email: dirprod@nmdc.co.in Fax no: 040-27172569, Phone 040-23538713-21,23538723 & 23538767
10	Village	Kirandul
11	Taluka/Mandal	Bade Bachel,
12	District	Dantewada
13	Pin code	494556
14	State	Chhattisgarh
15	Post Office	Kirandul
16	Nearest Police Station	Kirandul
17	Nearest Railway Station	Kirandul
18	Date of Grant of Mining Lease	11.02.1965
19	Date of Execution	11.09.1965
20	Weekly day of rest	Wednesday
21	Date of opening of Mine	April' 1968
22	Date of First Renewal, if applicable and its period & expiry	F:3-103/94/12/2, dated 29.06.2002, Period-20 years, Expiry-11.09.2015
23	Date of Second Renewal, if applicable and its period & expiry	As per section 8(A)8 of MMDR 1957, the period of mining leases, including existing mining leases, of Government companies or corporations shall be such as may be prescribed by the Central Government. Accordingly, the lease period of Deposit-14 ML is extended till 11.09.2035 vide Govt of Chhattisgarh order No.: F:4-15/2014/12 dated 17.12.2019

24	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Vinay Kumar Director (Technical), Dir. Production (Addl. Charge) & Director Personal(Addl. Charge) NMDC Ltd., Hyderabad - 500 028. dirprod@nmdc.co.in 040-23538708 DOA: 01.07.2024
25	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Sanjeev Sahi, Chief General Manager, NMDC Ltd, Kirandul, B.I.O.M. Kirandul Complex, Dantewada PIN-494556, Chhattisgarh, padmanabhnaik@nmdc.co.in Fax no: 07857-255227, Phone 07857-255222, Mobile No.: 9425266312 DOA:09.07.2024
26	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri S.K Kochar, General Manager, NMDC Ltd, Kirandul, B.I.O.M. Kirandul Complex, Dantewada PIN-494556, Chhattisgarh, skkochar@nmdc.co.in Fax no: 07857-255226, Phone 07857-255232 Mobile No.: 9449871025 DOA:31/07/2022,
27	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri Rupesh kumar, Dy. General Manager, B.E (Mining) FCC (R), Metal Experience: 22Years Approximately NMDC Ltd, Kirandul, B.I.O.M. Kirandul Complex, Dantewada Email: rupesh@nmdc.co.in Phone No.: 9425266453 PIN-494556, Chhattisgarh, DOA:04.08.2022
28	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57 of MCDR 2017.	Yes
29	Date of Approval of Mine Plan/Modified Mine Plan with five-year period and specific condition in approval letter, if any.	Dantewada/Fe/MP-1214/2019/Raipur/549, Dt: 12.12.2019 FY:2020-21 to 2024-25
30	Mineral(s) granted in lease and approved for Mining	Iron Ore
31	Method of Mining (Opencast, Underground)	Opencast
32	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
33	Captive/Non-Captive	Non-Captive
34	Present EC Status	J-11015/483/2007-IA. II(M),01.12.2021, Co-terminus with mining Lease. 5 Million tonne
35	Status of Financial Assurance	Rs 15,92,50,000/- Valid Till 31.03.2025

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1.0 Exploration:

S.N.	Item	Proposals (2023-24)	Actual Work (2023-24)	Remarks
1a	Backlog of previous year Proposals (as per Form-I)	16	20	Achieved more than 100%
1b	Exploration over lease area for Geological axis 1 or 2.	G1/ G2 Level	G1 Level	
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	NMDC Ltd-In house	In house drilling expenditure Rs. 20100797/-	Exploration cost per/t of RoM for FY is Rs 6.57/-
1d	Balance area to be explored to bring Geological axis in 1 or 2.	50.00 Ha.	68.00 Ha	Completed as verified on the day of inspection.
1e	Balance reserves as on 01.04.2024	As per approved Mining Plan as on 01.04.2019 406.593 Mil. Tons		As on 01.04.2024 393.97 Mil. Tons
1f	General remarks of Inspecting officer on geology, exploration etc.	Entire area is Fully explored . 189.473 Ha under G1 level of exploration. 132.895 Ha is Non-mineralised area.		

2.0 Development:

S.N	Item	Proposals (2023-24)	Actual Work (2023-24)	Remarks
2a	Location of Development w.r.t. lease area	E- 524030 - 524700 N- 2057210-2058455	Within the proposed area.	Development is carried out within approved proposal
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Separate benches in OB and Ore	Separate benches in OB and Ore are maintained as per proposal	
2c	Stripping ratio or ore to OB ratio	1:0.29	1:0.17	In term of tons
2d	Quantity of topsoil generation in m ³	NA	NA	No top soil
2e	Quantity of overburden generation in m ³	8,59,259 m ³ (2,320,000 tonnes)	1,92,547 m ³	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development is carried out within approved proposal.		

3.0 Exploitation:

S.N	Item	Proposals (2023-24)	Actual Work (2023-24)	Remarks
3a	Number of pits proposed for production	01	01	
3b	Quantity of ROM mineral production proposed	8000000	3059482	
3c	Recovery of Salable/usable mineral from ROM production	100 %	100 %	

3d	Quantity of mineral reject generation	NA	NA	
3e	Grade of mineral reject generation and threshold value declared	NA, & Threshold Value = 45 % Fe	NA, & Threshold Value = 45 % Fe	
3f	Quantity of sub-grade mineral generation	None	305425	Sub-grade blended with High Grade RoM
3g	Grade of sub-grade mineral generation	Fe = 45 - 55 %	Fe =51.53 %	
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanized method	Mechanized method	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	None	None	
3j	Provision of drilling & blasting in mineral benches	Yes	Yes (Rock Breaker is also used in addition to drilling)	
3k	Provision of mining machineries in mineral benches	Excavator, Pay loader, Tipper, Rock Breaker, Drill Machine, water Tanker	Excavator, Pay loader, Tipper, Rock Breaker, Drill Machine, water Tanker	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	
3m	Total area covered under excavation /pits	206.00 Ha, up to 31.03.2025 as per approved mine plan	86.550 Ha, as on 01.04.2024	
3n	Ore to OB ratio for the pit/mine during the year	1:0.29	1:0.17	
3o	Total area put in use under different heads at the end of year	322.368, as per approved mining plan	178.4570, as on 01.04.2024	
3p	Production of ROM mineral during last five-years period, as Applicable (tonne)	2019-20: 5000000 2020-21: 5000000 2021-22: 5000000 2022-23: 5000000 2023-24: 8000000	2152276 2136735 2546290 2732037 3059482	
3q	General remarks of inspecting officer on method of mining etc	The ROM production has been carried out from single pit as per proposal.		

4.0 Solid Waste Management-Dumping:

S.N.	Item	Proposals (2023-24)	Actual Work (2023-24)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Separate dumping of topsoil, OB is proposed.	Separate dumping of topsoil, OB is maintained. No top soil.	Separate dumping of topsoil, OB is maintained top soil not proposed.
4b	Location of topsoil, OB & mineral reject dumps	E :523535 - 524491 N: 2058407-2058896	Within the proposed area.	As per proposal
4c	Number of Dumps within lease area and outside lease area	01 dump	01 dump	01 dump
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	Outside UPL
4e	Number of Active & Alive dumps	01 dump	01 dump	01 dump
4f	Number of dead/in-active dumps	01	01	In-active
4g	Number of dumps established	01	01	By plantation
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes	Retaining wall & garland drain are maintained
4i	Length of Retaining wall or garland drain all along dump	200m retaining wall	400 m retaining wall constructed	400 m retaining wall constructed all along the waste dumps.
4j	Number of settling ponds	01	01	01 settling pond
4k	Specific commends of inspecting officer on waste dump management			Separate dumping of OB is maintained. Retaining wall and garland drain maintained along the dump.

5.0 Solid Waste Management-Backfilling:

S.N.	Item	Proposals (2023-24)	Actual Work (2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not proposed	Nil	Nil
5b	Area under backfilling of mined out area	Not proposed	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not proposed	Nil	Nil
5d	Total area fully reclaimed & rehabilitated	Not proposed	Nil	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc			Area is not matured for reclamation and rehabilitation. Thus no proposal /achievement.

6.0 Progressive Mine Closer Plan:

S. N.	Item	Proposals (2023-24)	Actual Work (2023-24)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly-Rule 26 (2)	Yes	PMCP compliance report submitted on 27.06.2024	PMCP report submitted in desired format within stipulated time period
6b	Management of worked/mined out benches Area available for rehabilitation (Ha)	Not proposed	Nil	Nil
	Afforestation done (ha)	Not proposed	Nil	Nil
	No. of saplings planted during the year	Not proposed	Nil	Nil
	Cumulative no. of plants	Not proposed	Nil	Nil
	Any other specific method of rehabilitation	Not proposed	Nil	Nil
	Cost incurred on watch & care during the year	Not specified	Nil	Nil
6c	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L*B*D). (ii) Void filled by waste/tailings (iii) Afforestation on the backfilling (iv) Rehabilitation by making water reservoir (v) Any other specific means	Not proposed	Nil	Nil
6d	Compliance of Rehabilitation of waste land within lease i. Afforestation ii. Area rehabilitation (ha) iii. Method of rehabilitation	2000 No's of plantation in 1.0 Ha area	4000 No's of plantation in 1.5 Ha area	This includes Gap plantation also.
6e	Compliance of Environment monitoring (core zone & buffer zone)	Environmental monitoring proposed	Environmental monitoring carried out. Air quality, Surface Water, Ground water & Noise level monitoring carried out. All parameters are within limits	Environmental monitoring Report from April-2023 to March-2024 available. The results are found within limit
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Area is not matured for reclamation and rehabilitation. Plantation is carried out as per proposal.		

7.0 Mineral Conservation:

S.N.	Item	Proposals (2023-24)	Actual Work (2023-24)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	No proposal for sorting. Total ROM is Being utilized	No grade wise sorting is practiced as total ROM is being utilized	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	Mechanical
7c	Different grade of mineral sort out at mine	NA	NA	NA
7d	Any beneficiation process at mines	Not proposed	Dry crushing and screening is practiced	No beneficiation process adopted.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	There is no proposal for mineral beneficiation was proposed during the reporting year . +45% Fe RoM is fed to crushing plant.		

8.0 Environment:

S.N.	Item	Proposals (2023-24)	Actual Work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	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 of OB	Separate dumping of OB is maintained	Separate dumping of OB is maintained
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Area is not matured for reclamation and rehabilitation	Area is not matured for reclamation and rehabilitation
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	Area is not matured for reclamation and rehabilitation	Area is not matured for reclamation and rehabilitation
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	2000 no of plantation in 1.0 ha area	4000 no of plantation in 1.5 ha area	This includes Gap plantation also.
8g	Survival rate	85%	85%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkling by water tanker over haul roads has been carried out.	water sprinkling over haul roads to minimize the fugitive dust emission

- 8i General remarks of inspecting officer on aesthetic beauty in and around mine area Aesthetic beauty in & around the mine area was good.

9.0 Compliance of Rule 45:

SN	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	MR submitted up to Regularly AR submitted up to Regularly	AR submitted up to Regularly
SN	Item	Details Given in A.R.	Observation of I/Officer
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer, Geologist and Manager furnished in AR Mine Manger – Shri SK Kochar, Mining Engineer – shri Rupesh Kumar, Geologist Shri Sudhir Ganpat Gaikwad	Observation of I/Officer Mining Engineer and Geologist appointed were present during inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Cover under O/C-86.550 Ha Waste Disposal-44.200 Ha Infrastructure-43.840 Green Belt-3.867	As reported in AR 2023-24
9d	Scrutiny of Annual return on afforestation	Planted within lease 4000 saplings	As reported in AR 2023-24 Found in order
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	305425 Tonnes (51.53% Fe)	As reported in AR 2023-24
9f	Scrutiny of Annual return on ROM stock and/or grade ore	RoM - 83316 tons Lump Ore: 62 - 65= 1261 +65 = 181845 Fine Ore: 58-60 = 1854 60-62 = 6319 62-65 = 108695 +65 = 60165 CLO: +65 = 18971	As reported in AR 2023-24
9g	Scrutiny of Annual return on sale value, Ex. Mine price &	Ex- mine price (INR) -	As reported in AR 2023-24

	production costs	Lump: +65 %= 5131.11	
		Fines: 58-60= 3276.57	
		60-62= 4012.23	
		62-65= 4545.28	
		+65= 5042.37	
		CLO: +65% Fe - 5452.94	
		Production Cost- 3467.56	
9i	Scrutiny of Annual return on Fixed assets	Fixed assets Rs. 2928180317/-	As reported in AR 2023-24
9k	Scrutiny of Annual return on mining Machineries	DOZER 416.000 HP 2 Non DOZER 801.000 HP 1 Non DOZER 485.000 HP 1 AIR COMPRESSOR 180.000 CUM/MN 1 BLAST HOLE DRILL (ELEC.) 254.000 MM 2 BLAST HOST DRILL 102.000 MM 2 DUMPER 100.000 TONNE 4 Opencast DUMPER 60.000 TONNE 5 MOTOR GRADER 280.000 HP 2 SHOVEL (HYDRAULIC) 8.870 CUM 2 LOADER 2.100 CUM 1 Opencast CRANE 15.000 TONNE 2 Opencast CRANE 30.000 TONNE 2 Opencast CRANE 75.000 TONNE 1 TONNE 1 Opencast WATER TANKER 28000.000	As reported in AR 2023-24

LITRE 3
Opencast

10. Drone Survey Information and data thereof.

Drone Survey data uploaded (Drone survey management data) in the IBM portal for the reporting year 2023-24 and as per norms.

11. Status of compliance of MCDR, 2017 including therewith the rectification of outstanding violation of the rules.

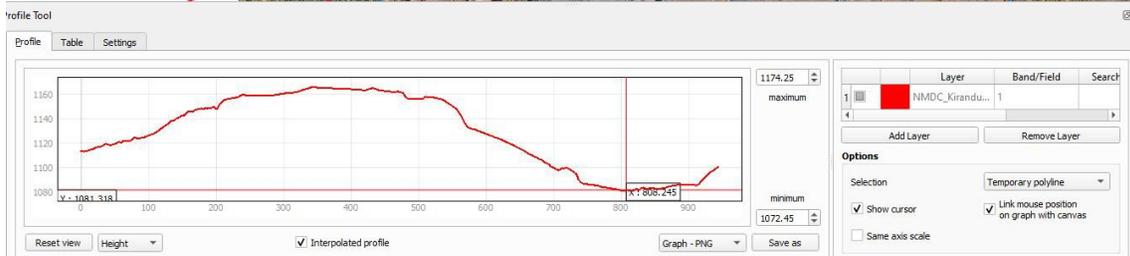
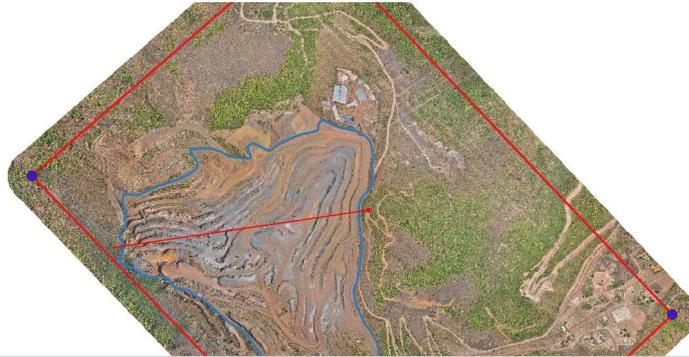
- (i) No violation was pointed during earlier inspection.
- (ii) No violation was pointed out during current inspection.

MIDPASS INFORMATIN AS UP-LOADED.

**Data Analysis Report of Bailadila Iron ore Mine, Deposit-14 MZ OF M/s
NMDC Ltd.**

Name/Designation of the Inspecting officer	Shri Sanjay Kumar Mahapatra, Assistant Controller of Mines
Mine Code	30CHG03001
Zone Name:	Central Zone, Nagpur
Region Name	Raipur
Reported Lease Boundary Area (in Ha)	322.665
Actual Lease Boundary Area (in Ha)	322.368
Area Deviation (%)	0
Reported Volume Extraction as per Annual Return (in m3)	1698812
Actual Volume Extraction (in m3)	Not calculated
Volume Deviation (%)	Not applicable
Deviation Observed in Lateral/Vertical extent of mine	Nil
Attach profile (.pdf)	attached

Deviation Observed in Lateral/Vertical extent of dumps	Nil
Violation issued during the last financial year (Mention rules)	Nil
Compliance Status of above violations:	Not applicable



Date: 21.02.2025

(संजय कुमार महापात्र)
 सहायक खान नियंत्रक
 भारतीय खान ब्यूरो