

MCDR INSPECTION REPORT

1	Name of Inspecting officer:	Mr. Ibrahim Sharief,
2	Designation	Deputy Controller of Mines
3	Accompanying mine official with Designation	Mr. Mridul Dixit, Mines Manager &QP, Shri Santhosh Pathak, Geologist, Shri Sourabh Bamourya, QP
4	Date of Inspection	19.12.2023
5	Previous Inspection date	

Part-I: General

S. No	Particulars	Details
1	Name of the Mine	Majhgawan Diamond Mine
2	Total Lease Area (Ha) with breakup of non-forest and forest land	Total Lease area- 113.332 Ha Forest land- Nil Revenue Land- 11.561 Ha
3	Mine code	17MPR26001
4	IBM Registration Number under rule 45 of MCDR,1988	IBM/270/2011
5	Name of the lessee, Address, Phone, email and fax number	M/s, NMDC Limited. P.O. & Village- Majhgawan Panna e-mail: dirprod@nmdc.co.in Phone No.: 04023538706 Fax No.: 04023538711
6	Village	Majhgawan
7	Taluka/Mandal	Panna
8	District	Panna
9	Pin code	488001
10	State	Madhya Pradesh
11	Post Office	Majhgawan
12	Nearest Police Station	Hinota Police station
13	Nearest Railway Station	Khajuraho Railway Station
14	Date of opening of Mine	1968
15	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. D.K. Mohanty Date of appointment – 08.10.2021 Phone - 7415148119 FAX - 04023538711 e-mail – hodrp@nmdc.co.in
16	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Shreedhar Kodali Date of appointment – 16.07.2022 P.O. & Village- P.O. 488001, Majhgawan Panna Phone - 9346835778 e-mail- kshreedhar@nmdc.co.in
17	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Mridul Dixit Date of appointment – 17.07.2023 P.O. & Village- P.O. 488001, Majhgawan Panna Phone - 9839351173 e-mail- mdixit@nmdc.co.in
18	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Mr. Sourabh Bamourya Date of appointment – 16.07.2022 P.O. & Village- P.O. 488001, Majhgawan Panna Phone - 7587098597 e-mail- sourabh@nmdc.co.in
19	Whether Geologist (with details of	Mr. Santosh Pathak

	appointment) and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Date of appointment – 13.07.2022 P.O. & Village- P.O. 488001, Majhgawan Panna Phone - 9131998184 e-mail- skpathak@nmdc.co.in
20	Date of Approval of Mine Plan/Modified Mine Plan with five-year period and specific condition in approval letter, if any.	Mine plan was approved on 28 th Feb 2020 for the period of 2020-25. Later it was modified on 26.03.2024 for the period of 2023-25 with no specific conditions.
21	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	Mining plan was approved on 28 th Feb 2020 for the period of 2020-25. Later it was modified on 26.03.2024 for the period of 2023-25 with no specific conditions.
22	Mineral(s) granted in lease and approved for Mining	Diamond
23	Method of Mining (Opencast, Underground)	Open Cast
24	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
25	Captive/non-captive	Captive

PART II-Details about Mining Plan/ Review of Mining Plan etc.

a) Letter No. and date of approval of mining plan	:	MP/Panna/Diamond/RMP-32/2019-20
b) Letter No. and date of approval of review of mining plan	:	E9052 MCDR-MPCODia/1/2023-JBP-IBM-RO-JBP
c) Condition while approving the MP/ RMP/ modification	:	NIL
d) Period of mining plan/ mining scheme in force:	:	2020-2025, modification for 2023-2025

PART III-MCDR Report details.

1. **Scientific Mining:** Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

1. Exploration

S.N.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year (before 2023-24)	No Proposal	N/A	The exploration work was completed in 1993-94.
1b	Exploration over lease area for Geological axis 1 or 2 (for 2023-24)	No Proposal	N/A	Mine operations were suspended from 1 st of January 2021 till 10.03.2024 for want for various statutory clearances.
1c	Exploration Agency & Expenditure in Lakh Rupees during the year (for 2023-24)	N/A	N/A	
1d	Balance area to be explored to bring the Geological axis in 1 or 2. (for 2023-24)	Nil	Nil	No proposal for further exploration.
1e	Balance reserves as on 01.03.2024 (in Million Tonne)	Reserves as per approved MP – 8.923 Reserves depleted till the inspection- 0.063 Balance Reserves – 8.86		
1f	General remarks of Inspecting officer on geology, exploration etc.	The ore body is spherical shape in nature and resemble shapes of the inverted frustum of cone. The ore body is having overburden of 40 to 50 meter of sandstone with some patches of shale. Exploration ➤ Potential mineralised area under this lease has been explored in G1 scale in 1993-94.		

2. Development (FY 2023-24) Up to date of inspection

S.N.	Item	Proposals as per approved mining plan	Actual Work	Remarks
2a	Location of Development w.r.t. lease area	Planned at the southeast direction of the pit	No work	Mine operations were suspended from 1 st of January 2021 for want for various statutory clearances.
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Yes separate bench for topsoil, OB and Mineral, to be maintained	Separate benches are maintained, no work during the year 2022-23 .	
2c	Stripping ratio or ore to OB ratio		Nil	
2d	Quantity of topsoil generation in m3 (As on 01.03.2024)	8750 m3	Nil	
2e	Quantity of overburden generation in m3 (As on 01.03.2024)	44000 m3	Nil	Mining activities were started on 11.03.2024.
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	The ore body has the shape of an inverted frustum of a cone, tapering with depth. It is surrounded by sandstone waste, and the development of benches is required outward to extract the ore from the bottom benches. Currently the mine management is developing the OB benches.		

3. Exploitation FY 2023-24 Up to date of inspection

S. N.	Item	Proposals as per approved mining plan	Actual Work	Remarks
3a	Number of pits proposed for production	One	One	Single pit is there for mining.
3b	Quantity of ROM mineral production proposed	400000	0	No ore production was proposed during (FY- 2023-24).
3c	Recovery of Salable/usable minerals from ROM production	0	0	
3d	Quantity of mineral reject generation	0	0	
3e	Grade of mineral reject generation and threshold value declared	0	0	
3f	Quantity of sub-grade mineral generation	0	0	
3g	Grade of sub-grade mineral generation	0	0	
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No	No	
3j	Provision of drilling & blasting in mineral benches	Yes adopted in mineral benches	No	
3k	Provision of mining machineries in mineral	Yes	Yes	

	benches			proposal.		
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10-meter bench width is suitable for present method of mining	Yes suitable			
3m	Total area covered under excavation /pits (Ha.)	13.3 Ha	13.76			
3n	Ore to OB ratio for the pit/mine during the year	Only waste exaction was proposed	Waste mining performed	No ROM was recorded		
3o	Total area put in use under different heads at the end of year	63.32 Ha	61.07 Ha			
3p	Production of ROM mineral during last five-years period, as Applicable	FY	ROM (MT)	FY	ROM (MT)	Mine operation was suspended from 1 st of Jan 2021 to 10.03.2024 for want of statutory clearance.
		2018-19	350000	2018-19	282313	
		2019-20	350000	2019-20	155672	
		2020-21	300000	2020-21	63010	
		2021-22	350000	2021-22	0	
		2022-23	400000	2022-23	0	
		2023-24	450000	2023-24	0	
3q	General remarks of inspecting officer on method of mining etc.	<p>The conventional opencast fully mechanized mining with Hydraulic Excavator in conjunction with dumpers is being followed at the mine. After removing topsoil, (bench height) m thickness), the overburden / reject bench is removed by drilling and blasting.</p> <p>The sequence of operation involves dozing, drilling, blasting, loading, crushing/screening and transportation. Drilling and blasting is carried out for hard overburden and underlying sandstone. After removal of the sandstone and shale the mining of the kimberlite ore is performed by utilizing the above-mentioned machinery and method.</p>				

4. Solid Waste Management-Dumping (FY2023-24) Up to date of inspection

S.N.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Proposed: Topsoil: 8700 M3 OB: 22000 M3	Achieved Topsoil: Nil OB: Nil	Separate dumping sites are maintained.
4b	Location of topsoil, OB & mineral reject dumps	Within the lease	Within the lease	NO mineral reject dump is required.
4c	Number of Dumps within lease area and outside lease area	One O/B dump 2 Coarse tailing dumps One fine tailing dump	One O/B dump 2 Coarse tailing dumps One fine tailing dump	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	West side of lease area	west side of lease area,	
4e	Number of Active & Alive dumps	4	4	All the four dumps are active
4f	Number of dead dumps	0	0	All the dumps are active
4g	Number of dumps established	0	0	No new dump was proposed
4h	Whether Retaining wall or garland drain all along dumps are there	No proposal	Nil	
4i	Length of Retaining wall or garland drain all along dump	No proposal	Nil	Mine operation started on 11.03.2024.

4j	Number of settling ponds	1	1	
4k	Specific comments of inspecting officer on waste dump management	Mining management advised to enclose all the dumps with retaining wall as soon as possible.		

5. Solid Waste Management-Backfilling (FY 2023-24) Up to date of inspection

S.N.	Item	Proposals	Actual Work	Remarks
5a	Status on 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 mined out area (Rule 32)	Stored and further use in preparation of garden	Topsoil stored on designated site.	-
5d	Total area fully reclaimed & rehabilitated (Ha)	No Proposal	Nil	No area is proposed for rehabilitation
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Since the pit is small (500m x 550m) and circular in shape, gradually contracting towards greater depths with the mineral present at the core, backfilling cannot be performed.		

6. Progressive Mine Closure Plan (FY 2023-24) Up to date of inspection

S.N.	Item	Proposals	Actual Work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly- Rule 23E (2). Details should be given in the format as given in Annexure-20	Annual report on PMCP to be submitted on time	Yes submitted on time	
6b	Area available for rehabilitation (Ha)	-	-	
6c	Afforestation done (ha)	0.5	0.5	
6d	No. of saplings planted during the year	500	500	-
6e	Cumulative no. of plants			
6f	Any other specific method of rehabilitation	No	No	
6g	Cost incurred on watch & care during the year	No proposal	About 30 Lakhs	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L X B X D).	No Proposal	N/A	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings.	No Proposal	N/A	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area.	No Proposal	N/A	-
6k	Compliance on reclamation and	No Proposal	N/A	-

	rehabilitation by backfilling (iv) Rehabilitation by making water reservoir.			
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	No Proposal	N/A	-
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	No Proposal	N/A	-
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha) Method of rehabilitation	No Proposal	N/A	-
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	No Proposal	N/A	-
6p	Compliance of Environment monitoring (core zone & buffer zone)	Environment Monitoring is to be.	Monitoring is being performed.	-
6q	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Plantation of 500 sapling within the lease area is being done to improve aesthetic beauty.		

7. Mineral Conservation (FY 2023-24) Up to date of inspection

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	ROM produced is to be dispatch	Nil during the year	Mine operation was suspended from 1 st of Jan 2021 to 10.03.2024 for want of statutory clearance.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	
7c	Different grade of mineral sort out at mine	Extraction of Diamonds	Extraction of Diamonds	
7d	Any beneficiation process at mines	Nil	N/A	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The kimberlite ore is mined from is being processed for the extraction of diamonds. Final extraction of diamonds is carried out manually.		

8. Environment (FY 2023-24) Up to date of inspection

S.N.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	8700 M3	Nil	Excavated topsoil is stored in separate dump.
8b	Concurrent use or storage of topsoil	Storage	Nil	-
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	One dump for O/B One for Fine tailing Two for Coarse Tailing	One dump for O/B One for Fine tailing Two for Coarse Tailing	Maintained
8d	Use of overburden, waste rock, rejects and fines dump for restoring the land to its original use	No Proposal	N/A	
8e	Phased restoration, reclamation and	No Proposal	N/A	Mine is

	rehabilitation of lands affected by mining operations (Pits, dumps etc.)			active and all dumps are also active.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	N/A	500 saplings are planted.	-
8g	Survival rate	80%	80%	-
8h	Water sprinkling on roads to control airborne dust	12 KL and 9 KL water tanker are deployed for water sprinkling on road.	Water Sprinkler are deployed as proposed.	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	The viewpoint area of the mine has been well developed with the placement of a map of the lease area, along with detailed information about the project and its history. The project has also developed a garden for children residing in the township.		

9. Compliance of Rule 45 (As per Annual return 2022-23)

S.N.	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	Annual return & Monthly returns are being submitted in Time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Shri Sourabh Boumourya, Geologist- Mr. Santosh Pathak Manager- Shri Sanjay Kumar	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit Area- 13.300 Reclaimed/ rehabilitated – 9.9 Ha Waste Disposal- 24.360 Ha Infrastructure & Other - 5.05 Ha Plantation and Other : 60.222 ha, Work done under PMCP : 0.50 ha	
9d	Scrutiny of Annual return on afforestation	500 saplings planted during the year	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	No Mining operation for want of statutory clearances
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Nil	-do-
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Nil	-do-
9i	Scrutiny of Annual return on Fixed assets	Rs. 36429193/-	
9k	Scrutiny of Annual return on mining Machineries	Shovel (Hydraulic)- 2.5 cum-1 No., Front End Loader- 3.4 cum- 1 No., Rock Drill (105mm & 115mm)- 2 No., Dumper (35 T- 50T)- 3 No. Dozer- 318 Hpo-410 HP)- 2 No., Motor Grader- 1 No.	As reported in returns

Details of Validations observed during current inspection and compliance position of earlier violation pointed out:
- No violations are pending.

Date:

IBRAHIM SHARIEF

Deputy Controller of Mines