# INDIAN BUREAU OF MINES MINERALS DEVELOPMEMT AND REGULATION DIVISION MCDR Inspection REPORT Jabalpur Regional office

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### Mine code: 38MPR35309

1	Name of Inspecting officer:	Shri Kathroju Naveen	
2	Designation	Sr. Asstt. Controller of Mines	
2	Accompanying mine official with	Shri. Kumar Rajan Mine Manager,	
3	Designation	Shri. Gaurav Tripati Geologist	
4	Date of Inspection	27.08.2024	
5	Previous Inspection date	11.03.2024	

#### **Part-I: General Information**

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S.N o	Particulars	Details
1	Name of the Mine	Birhuli Limestone Mines
2	Total Lease Area (Ha) with breakup of Non- forest and forest land	56.27 (non-forest)
3	Mine code	38MPR35309
4	IBM Registration Number under rule 45 of MCDR,1988	IBM/4349/2011
5	Name of the lessee, Address, Phone, email and fax number	Birla Corporation Limited Address: P.O. Birla Vikas, Dist. Satna-485005 07672-276216 Email: kumar.rajan@birlacorp.com
6	Village	Birhuli
7	Taluka/Mandal	Raghurajnagar
8	District	Satna
9	Pin code	485114
10	State	Madhya Pradesh
11	Post Office	Sagmania
12	Nearest Police Station	Kolgawan
13	Nearest Railway Station	Satna
14	Date of opening of Mine	15/06/2009
15	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. Sandip Ghose 1, Shakespeare Sarani, Kolkata Email: <a href="mailto:sandip.ghose@birlacorp.com">sandip.ghose@birlacorp.com</a> Date of appointment: 01.01.2023
16	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Rajesh Chaubey Add. Birla Colony, Satna -485005 Mob-9998967315 rajesh.chaubey@birlacorp.com Appointment-16.01.2020
17	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Kumar Rajan Add. Birla Colony, Satna -485005 Mob-7611105034 Kumar.rajan@birlacorp.com Appointment-01.02.2020
18	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Mr. VN Singh Add. Birla Colony, Satna -485005 Mob-7611105034 Vashishthanarayan.singh@birlacorp.com Appointment-20.11.2016
19	Whether Geologist (with details of	Yes Appointed

	appointment) and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Mr. Vikas Mohan, Geologist Date of Appointment-01.11.2017
20	Date of Approval of Mine Plan/Modified Mine Plan with five-year period and specific condition in approval letter, if any.	Letter No E 8807 MCDR-MPC0LST/45/2023-JBP-IBM_RO_JBP dt 05.01.2024
21	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	-
22	Mineral(s) granted in lease and approved for Mining	Limestone
23	Method of Mining (Opencast, Underground)	Opencast
24	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
25	Captive/Non-Captive	Captive

# Details about Mining Plan/ Review of Mining Plan etc.

a) Letter No. and date of approval of mining plan	:	Letter No E 8807 MCDR-MPC0LST/45/2023- JBP-IBM_RO_JBP dt 05.01.2024
b) Letter No. and date of approval of review of mining plan	:	No. E 8807 MCDR-MPC0LST/45/2023-JBP-IBM_RO_JBP
c) Condition while approving the MP/ RMP/ modification	:	
d) Period of mining plan/ mining scheme in force:	:	2024-25 to 2028-29

# Exploration (FY 2023-24)

S.N.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year (before 2023-24)	Not proposed	NA	
1b	Exploration over lease area for Geological axis 1 or 2 (for 2023-24)	56.27	56.27	03 boreholes proposed in mining plan (in year 2023-24) have been drilled.
1c	Exploration Agency & Expenditure in Lakh Rupees during the year (for 2023-24)	Not available	M/s. Jaiswal Enterprises (Rs. 3,15,000)	
1d	Balance area to be explored to bring the Geological axis in 1 or 2. (for 2023-24)	Entire lease Area has bought under G1	Entire lease Area has bought under G1	
1e	Balance reserves as on 01.03.2024	12,761,300 T	12,764,614 T	As on 31.03.24
1f	General remarks of Inspecting officer on geology, exploration etc.	As per the last approved Mining plan dated 05/01/2024 the reserves available as on 01/09/2024 were 1,31,21,300 T out of which it is proposed to exploit 3,60,000 T on prorate basis against which the achieved production from Sep 2023 to march 2024 is 356,686 T thus the balance reserves available as on		

## **Development (FY 2023-24)**

S.N.	Item	Proposals	Actual Work	Remarks
2a	Location of Development w.r.t. lease area	E 489303 to E 489490 and N 2723160 to N 2723466, E 489092 to E 489482 and N 2722896 to N 2723192, E 489661 to E 489973 and N 2723071 to N 2723225	The deviation in proposed location is observed.	Violation is pointed out under Rule 11(1).
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Yes	Yes	
2c	Stripping ratio or ore to OB ratio	1:0.07	1:0.06	
2d	Quantity of topsoil generation in m3	14100	14925	
2e	Quantity of overburden generation in m3	33900	42337	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	The Pit has not been developed in the location where it is proposed against which the violation is pointed out under Rule 11(1).		

# **Exploitation FY (FY 2023-24)**

S. N.	Item	Proposals	Actual Work	Remarks
3a	Number of pits proposed for production	02	02	
3b	Quantity of ROM mineral production proposed	600000	597802.000	Upto March-24
3c	Recovery of Salable/usable minerals from ROM production	100%	-100%	
3d	Quantity of mineral reject generation	Not proposed	Not Available	
3e	Grade of mineral reject generation and threshold value declared	Not proposed	Not Available	
3f	Quantity of sub-grade mineral generation	Not proposed	Not Available	
3g	Grade of sub-grade mineral generation	Not proposed	Not Available	
3h	Manual/Mechanized method adopted for segregation from ROM	Not proposed	Not Available	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed	Not Available	

3j	Provision of drilling & blasting in mineral benches	Yes	Yes	
3k	Provision of mining machineries in mineral benches	Yes	Yes	
31	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 (Ha.)	38.40	40.01	
3n	Ore to OB ratio for the pit/mine during the year	1:0.07	1:0.06	
30	Total area put in use under different heads at the end of year	39.88	41.94	
	Production of ROM	Yr-2023-24: 600000	Yr-2023-24 :597802	
	mineral during last five-	Yr-2022-23: 600000	Yr-2022-23: 596151	
Зр	years period, as	Yr-2021-22: 600000	Yr-2021-22: 595317	
	Applicable	Yr-2020-21: 600000	Yr-2020-21: 430526	
		Yr-2019-20: 600000	Yr-2019-20 - 257775	
3q	General remarks of inspecting officer on method of mining etc.	5,97,802 T of production	achieved against the propos	ed 6,00,000 T

# Solid Waste Management-Dumping (FY 2023-24)

S.N.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Yes Yes		Concurrent use of top-soil
4b	Location of topsoil, OB & mineral reject dumps	Top Soil -Stacking and using in topping of the backfilled area. OB- For backfilling	Top Soil -Stacking and using in topping of the backfilled area.  OB- concurrent backfilling	Concurrent use of top-soil
4c	Number of Dumps within lease area and outside lease area	Not proposed	Not Applicable.	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Not proposed	Not Applicable.	
4e	Number of Active & Alive dumps	Not proposed	Not Applicable.	
4f	Number of dead dumps	Not proposed	Not Applicable.	
4g	Number of dumps established	Not proposed	Not Applicable.	
4h	Whether Retaining wall or garland drain all along dumps are there	Not proposed	Not Applicable.	
4i	Length of Retaining wall or garland drain all along dump	Not proposed	Not Applicable.	
4j	Number of settling ponds	Not proposed	Not Applicable.	

	Specific comments of	
4k	inspecting officer on waste dump	The generated OB/waste is being used for the backfilling as proposed.
	management	

# Solid Waste Management-Backfilling (FY 2023-24)

S.N.	Item	Proposals	Actual Work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Backfilling proposed	Backfilling done in RY	
5b	Area under backfilling of mined out area	0.268 На.	0.10 Ha.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Yes	Yes	
5d	Total area fully reclaimed & rehabilitated (Ha)	Not proposed	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	The generated Ob has been utilizing for the backfilling purpose.		

## **Progressive Mine Closure Plan (FY 2023-24)**

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	Yes	Yes Submitted	
6b	Area available for rehabilitation (Ha)	NA	NA	
6c	Afforestation done (ha)	0.24	1.00	
6d	No. of saplings planted during the year	275	2500	As per the AR
6e	Cumulative no. of plants	1	18700	
6f	Any other specific method of rehabilitation	Not proposed	-	
6g	Cost incurred on watch & care during the year	Not proposed	275000	
6h	Compliance on reclamation and rehabilitation by backfilling (i)Voids available for backfilling (L X B X D).	0.268 ha	0.268 ha	
6i	Compliance on reclamation and	0.268 ha	0.268 ha	

	rehabilitation by backfilling				
	(ii) Void filled by waste/tailings.				
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area.	Not proposed	NA		
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir.	Not proposed	NA		
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	Not proposed NA			
6m	Compliance of Rehabilitation of waste land within lease (i)Afforestation	Not proposed	NA		
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha) Method of rehabilitation	Not proposed	NA		
60	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	Not proposed	NA		
6р	Compliance of Environment monitoring (core zone & buffer zone)	Yes, proposed	Fortnightly monitoring done in core zone and quarterly monitoring done in buffer zone		
6q	General remarks of inspecting officer on PMCP compliance & progressive closer operations				

# **Mineral Conservation (FY 2023-24)**

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area 6,00,000 T 5,97,802 T		5,97,802 T	ROM dispatch till March 24
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not proposed	NA	
7c	Different grade of mineral sort out at mine	Not proposed	NA	
7d	Any beneficiation process at mines	Not proposed	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No Grade wise sorting found in the lease area ROM is being dispatched to the crushing plant located outside the Mining lease.		

# Environment (FY 2023-24)

S.N	Item	Proposals	Actual Work	Remarks
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8a	Separate removal and utilization of topsoil (Rule32)	Yes	Yes	
8b	Concurrent use or storage of topsoil	Yes	As proposed	
8c	Separate dumps for overburden waste	Not proposed	NA	

	rock, rejects and fines (Rule 33)			
8d	Use of overburden, waste rock, rejects and fines dump for restoring the land to its original use	0.268 ha	0.268 ha	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	33900	42337	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	275	2500	
8g	Survival rate	- More than 70%		
8h	Water sprinkling on roads to control airborne dust	Water spraying on mines haul road, loading, unloading points proposed.	Water sprinkling carried out on the haul road, unloading points regularly.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	The waste generated is being utilized back filling.		

# Compliance of Rule 45 (FY 2023-24)

S.N.	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	Yes, monthly and annual returns submitted in time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer in charge: Shri Vashishth Narayan Singh Geologist in charge : Shri Vikas Mohan	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	<ol> <li>Covered under current (O-C)         Workings 40.010. Reclaimed-         rehabilitated 3.710.</li> <li>Used for waste disposal 0.650.</li> <li>Occupied by plant, buildings,         residential, welfare buildings and         roads 0.000.</li> <li>Work done under progressive mine         closure plan during the year 0.100.</li> </ol>	
9d	Scrutiny of Annual return on afforestation	<ul> <li>i) Number of trees planted during the year 2500 within the lease outside the lease 22500.</li> <li>ii) Survival rate in percentage 77</li> <li>iii) Total no. of trees at the end of the year within the lease 18700 outside the 29605</li> </ul>	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Not reported	
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Neither the ROM stock nor the grade ore reported	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Cost of production 349.97/- Ex Mine price 349.97/-	

9i	Scrutiny of Annual return on Fixed assets	Value of Fixed Assets ₹ 159,98,26,629 /-
9k	Scrutiny of Annual return on mining Machineries	<ol> <li>DUMPER 60.000 TONNE 3</li> <li>SHOVEL (HYDRAULIC) 3.500 CUM 1</li> <li>ROCK DRILL (NON-ELEC.) 100.000         MM 1     </li> <li>WATER TANKER 8000.000 LITRE 1</li> </ol>

S.No	Violation Under Rule	Issued on	Compliance Received	SCN Issued on	Compliance Received
01	11(1)	05.11.2024	-	-	-
02	45(7)	05.11.2024	-	-	-