# MCDR-MiFLOLST/47/2022-JBP-IBM\_RO\_JBP INDIAN BUREAU OF MINES

#### MINERALS DEVELOPMENT AND REGULATION DIVISION

1/8696/2023

#### MCDR inspection REPORT

#### Jabalpur regional office

Mine file No: MP/STN/LST-314 Mine code: 38MPR35274

(i) Name of the Inspecting :  $\mathbf{G005}$  ) SANJAY M. GIRHE

Officer and ID No.

(ii) Designation : Regional Mining Geologist

(iii) Accompaning mine :

Official with Designation

(iv) Date of Inspection : 27-SEP-22
(v) Prev.inspection date : 20-JUL-21

PART-I : GENERAL INFORMATION

L. (a) Mine Name : BHADANPUR (663 HA)

(b) Registration NO: :

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : MADHYA PRADESH

District : SATNA

Village : BHADANPUR

Taluka : MAIHAR

Post office : SARLANAGAR

Pin Code : 485772

FAX No. : 07674-322306,0761-321881

E-mail : mc\_mines@yahoo.com

Phone : 07601-32043,32067,32068

(f) Police Station : SARLA NAGAR

(g) First opening date :
(h) Weekly day of rest :

2. Address for

correspondance MAIHAR CEMENT

P.O. SARLA NAGAR, MAIHAR, SANTA(M.P.) 485772

3. (a) Lease Number : MPR0423 (b) Lease area : 296.96

(c) Period of lease :

(d) Date of Expiry : 31-MAR-30

4. Mineral worked : LIMESTONE Main

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5. Name and Address of the

Lessee : MAIHAR CEMENT

P.O. SARLA NAGAR, MAIHAR SATNA MADHYA PRADESH

Phone:07601-32043,32067,32068 FAX:07674-322306,0761-321881

Owner : MAIHAR CEMENT

P.O. SARLA NAGAR, MAIHAR,

SATNA MADHYA PRADESH

Phone: N. A. FAX : N. A.

6.	Date	of	approval	of	Mining
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Plan/Scheme of Mining

Fresh under rule 22 MCR1960	27-DEC-01
Modif.of approved Mining Plan	26-MAR-03
Modif.of approved Mining Plan	12-JUL-06
Mining Scheme rule 12 MCDR1988	14-JUN-07
Modif.approved Mining Scheme	19-SEP-11
Mining Scheme rule 12 MCDR1988	30-MAY-12
Modif.approved Mining Scheme	24-APR-14
MP modif under 17(3) MCR 2016	06-MAR-20
MP review under 17(1) MCR 2016	15-NOV-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

### Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During the year 2021-22 total 43 boreholes were proposed	During the year 2021-22 only 21 boreholes were drilled	For the said deviation violation under Rule 11(1) of MCDR,2017 pointed out & issued on 11.11.2022
1b	Exploration over lease area for geological axis 1 or 2	During the year 2021-22 total 43 boreholes were proposed	During the year 2021-22 only 21 boreholes were drilled	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Proposed as Rs. 67.20 Lakhs	Incurred as Rs. 30.53 Lakhs	During the year 2021-22 only 21 boreholes were drilled against the proposals 43 core boreholes
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1- 425 ha. G2-203 ha. G3- 35.0Ha.	G1- 389.8 ha. G2-176.4ha. G3- 39.06Ha.	
1e	Balance reserve as on 01/04/20	Reserves in Million Tonnes Proved(111) - 72.15 Resources in Million Tonnes Feasibility(2 11): 53.49 Pre- Feasibility(2 21):48.72 Measured Resources (111)-125.64 Inferred Resources (333)-63.00 As per MMP approved 06.03.2020 Inferred(333): 361447 MT	Reserves in Million Tonnes Proved(111) -71.00 Resources in Million Tonnes Feasibility(211): 53.49 Pre- Feasibility(221):48.72 Inferred Resources (333)-63.00 As per Annual Return for the year 2021-22 Inferred(333): 361447 MT	

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	1f	General remarks of inspecting officers on geology, exploration etc	NA	NA	The limestone of mining lease area belongs to Vindhyan super group of Bhander formation . The general strike direction is ENE-WSW with dip from10 to 15 deg.
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### Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	It was proposed to work between Eastern Block pit-E1 and Western Block pit-W3	Working carried out at proposed locations	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, Separate benches proposed	Benches maintained as proposed	Nil
2c	Stripping ratio or ore to OB ratio	Proposed as 1:0.09 Tonne/CuM	Acheived as 1:0.06 Tonne/CuM	During the year 2021-22 total 13954 M3 overburden generated
2d	Quantity of topsoil generation in m3	Proposed as 6360 M3	Acheived as 633 M3	For aforementioned deviations, violation under Rule 11(1) of MCDR,2017 pointed out & issued on 11.11.2022
2e	Quantity of overburden generation in m3	Proposed as 21200 M3	Achieved as 13954 M3	For aforementioned deviations, violation under Rule 11(1) of MCDR,2017 pointed out & issued on 11.11.2022

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21	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	NA	There are three working pits of different dimensiosn and limestone mineralisation were seen very well. Pit-1 located at eastern part, Central Pit-C1 & C2 and Western Pit-W3
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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Development & excavation proposed in 02 pits	Working carried out as per the proposals	
3b	Quantity of ROM mineral production proposed	21.9990 Lakh tonnes during the year 2021- 22	21.58194 Lakh tones acheived during the year 2021-22	Production acheived as per approved quantity of ROMP
3с	Recovery of sailable/usable mineral from ROM production	100%	100%	Entire ROM after crushing being consumed in captive cement plant
3d	Quantity of mineral reject generation	No Proposals	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No Proposals	Nil	Nil
3f	Quantity of sub grade mineral generation.	No Proposals	Nil	Nil
3g	Grade of sub grade mineral generation	No Proposals	Nil	Nil
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 Proposals	Nil	Nil
3ј	Provision of drilling and blasting in mineral benches	Deep hole drilling & blasting proposed	Yes, drilling & blasting is done by Atlas Copco BVB-40 (4 - 4.5 inch dia)	
3k	Provision of mining machineries in mineral benches	Excavator- 1.2CuM, Caterpillar Cum Back Hoe- 1.2Cum, Tipper 115 mm, Tipper 16.0 Tonner Drilling-110mm IR Dozer, D-155, 320HP Water Tanker- 12000Ltr.	Excavator-1.2CuM, Caterpillar Cum Back Hoe- 1.2Cum, Tipper 115 mm, Tipper 16.0 Tonner Drilling-110mm IR Dozer, D-155, 320HP Water Tanker- 12000Ltr.	
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	145.19 Ha. proposed as approved MMP dtd 06.03.2020	145.19 Ha. as per annual return 2021-22	
3n	Ore to OB ratio for the pit/mine during the year.		Acheived as 1:0.06 Tonne/CuM	During the year 2021-22 total 13954 M3 overburden generated
30	Total area put in use under different heads at the end of year	182.67на	180.85на.	
3p	Production of ROM mineral during the last five year period as applicable	2017-18-: 2199978 2018-19-: 2199825 2019-20-: 2199825 2020-21-: 2199990 2021-22-: 2199990	2017-18-: 2199105 2018-19-: 2199739 2019-20-: 2164852 2020-21-: 1980539 2021-22-: 2158194	Production details as per annual returns

3q General remarks NA NA Fully Mechanised of inspecting officers on proposed by using method of mining etc.

Tippers combination with deep holes drilling & blasting using wagon drill.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)		Working carried out as per the proposals	Nil
4b	Location of topsoil, OB and mineral reject dumps	No Proposals	There no existing overburden dumps in mining lease area	There no existing overburden dumps in mining lease area
4c	Number of dumps within lease area and outside of lease area	There no existing overburden dumps in mining lease area	There no existing overburden dumps in mining lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	There no existing overburden dumps in mining lease area	There no existing overburden dumps in mining lease area	
4e	Number of active and alive dumps.		There no existing overburden dumps in mining lease area	
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	No Proposals	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposals	Nil	There no existing overburden dumps in mining lease area

4i	Length of Retaining wall or garland drain all along dumps	No Proposals	Nil	There no existing overburden dumps in mining lease area
4j	Number of settling ponds	No Proposals	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	NA	NA	There no existing overburden dumps in mining lease area

# 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.	•	Yes, some of limestone pits limestone exhausted	
5b	Area under backfilling of mined out area	1.0ha.	1.0ha.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)		Concurrently used for plantation proposed	
5d	Total area fully reclaimed and rehabilitated	NA	NA	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	Some of the limestone have matured for reclamation by backfilling and accordingly proposals were given

# Progressive Mine Clousre Plan:

<u>-</u>	Sl.No.	Item	Propasals	Actual work	Remarks
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ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted before 1st July of every year	Yes, submitted by letter No. MCW/PKU/ Mine22/134Dated 30/05/2022	
6b	Area available for rehabilitation (ha) .	No Proposals	Nil	Nil
6c	afforestation done (ha).	No Proposals	Nil	Nil
6d	No. of saplings planted during the year	No Proposals	Nil	Nil
6e	Cumulative no .of plants	No Proposals	Nil	Nil
6f	Any other method of rehabilitation	No Proposals	Nil	Nil
6g	Cost incurred on watch and care during the year	No Proposals	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No Proposals	133.46 Ha. area Cumulative	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	1.0 на.	1.0 на.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	2000 Nos	2000 Nos	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposals	Nil	Nil

61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposals	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Proposed as 8000No.	Carried out as 8000No.	
бп	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	4.0 Ha.	4.0 Ha.	
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposals	Nil	Nil
бр	Compliance of environmental monitoring (core zone and buffer zone)	Periodical Air, Water, Noise monitoring Proposed	Yes,Compliances of environmental monitoring is being carried out.	Analysis reports were provided
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	NA	Scope of backfilling/reclam ation & rehabilitation very well exists as some pits area matured for the same. Periodic monitoring is being carried out by outsourced consultant.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	tonne proposed	21.58194 Lakh tonne production carried out for consumption in cement plant	

7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Only sub Grade	Only sub Grade	
7c	Different grade of mineral sorted out at mines.	No Proposals	Only cement grade limestone production carried out from mine	
7d	Any beneficiation process at mines .	No Proposals	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	NA	Nil

### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposed	Done as per the proposals	Nil
8b	Concurrent use or storage of topsoil	Stack & use	Stack & use	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Dumps	Overburden used for backfilling purpose	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes proposed by backfilling	Backfilling carried out as proposed	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes proposed by backfilling	Backfilling carried out as proposed	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	NA	10000Nos.	2000 plantation over backfilled area and 8000 as Green belt developed
8g	Survival rate	Proposed as 90%	Acheived as 90%	
8h	Water sprinkling on roads to control airborne dust	sprinkling is	Regular water sprinkling is done by water tanker	Water tanker of 5KL capacity is provided for the purpose
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NA	NA	Aesthetic beauty in and around mine area is excellent as huge plantation done in the mining lease area.

# Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	upto- Sept-22	Annual Return for the year 2021-22 submitted within time limit	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Shri Amit Pateriya, Mining Eng. and Shri Akhlesh Kumar Ray, Geologist	Appointed as per the provisions of Rule 55 of MCDR,2017
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Pit- 145.19 Ha. Backfilling -11.73Ha. Subgrade- 4.0 Ha. Infrastructure -1.0Ha.	
9d	Scrutiny of Annual return on afforestation	Given	10000 Nos,	

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9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Given	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	Cement Grade:  O/S-Nil  Despatch-2158194.000 MT  C/S-Nil	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Ex. Mine Price - 374.77	
9h	Scrutiny of Annual return on fixed assets	Given	Total FA for three Mines 5.48 cr	
9k	Scrutiny of Annual return on mining machineries	Given	Excavator-1.2CuM, Caterpillar Cum Back Hoe- 1.2Cum, Tipper 115 mm, Tipper 16.0 Tonner Drilling-110mm IR Dozer, D-155, 320HP Water Tanker- 12000Ltr.	Nil

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Details of violations	observed	during	current	inspection	and	compliance	position	of
violation pointed out								

Violation observed				Show c	ouse position
Rule NO.	Issued on	Compliance	on	Rule NO.	Issued on Compliance on
MCDR17 Rule 11(1)	11-NOV-22				
MCDR17 Rule 45(7)(a	11-NOV-22				

Date: (SANJAY M. GIRHE)

Indian Bureau of Mines