# MCDR-MiFLOLST/7/2023-JBP-IBM\_RO\_JBP INDIAN BUREAU OF MINES

#### MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

## Jabalpur regional office

Mine file No : MP/DAMOH/LST-6 Mine code: 38MPR09003

(i) Name of the Inspecting : MQ09 ) SUDIP RANJAN MAZUMDAR

Officer and ID No.

1/16402/2023

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine : Shri Abhishek Mishra (Mining Engineer),

Official with Shri Ravi Shankar Shukla (Geologist)

Designation

(iv) Date of Inspection : 16-AUG-23
(v) Prev.inspection date : 19-NOV-22

PART-I : GENERAL INFORMATION

1. (a) Mine Name : DIAMOND PATHARIA 1247.267 Ha

(b) Registration NO. : IBM/398/2011

(c) Category : A Fully Mechanized

(d) Type of Working : Opencast

(e) Postal address

State : MADHYA PRADESH

District : DAMOH

Village : SATPARA, JAGTHAR

Taluka : PATHARIA
Post office : Satpara
Pin Code : 470675

FAX No. : 07601-241235

E-mail : dayashankar.vyas@heidelbergcement.in

Phone : 01244503700, 9165511016

(f) Police Station : Patharia

(g) First opening date : 02.12.1999

(h) Weekly day of rest : SUN

2. Address for : M/S HEIDELBERG CEMENT INDIAN LIMITED

correspondance P.O. NARSINGHGARH,

DISTT. DAMOH (M.P.) 470675

3. (a) Lease Number : MPR0103

(b) Lease area : 1247.267 hectares

(c) Period of lease : 50 years
(d) Date of Expiry : 10.11.2042

4. Mineral worked : LIMESTONE Main

#### 1/16402/2023

5. Name and Address of the

Lessee : HEIDELBERGCEMENT INDIAN LIMITED

2<sup>nd</sup> Floor, Plot No. 68 Sector-44 Gurgaon-122002

Owner/Nominated Shri Vimal Kumar Jain.

Owner : He

: Heidelberg Cement India Limited, 2nd Floor, Plot No 68, Sector-44, Gurugram

> (Haryana) - 122002 Phone: 7805085988 FAX : 0124-4147698

Date of appointment - 10.06.2022

E-mail - vimal.jain@heidelbergcement.in

Agent : Shri. Sunil Kumar

Staff colony, Heidelberg Cement India Ltd.

P.O. & Village- Narsingarh Distt. Damoh (M.P.) 470675

Mobile No- 7796519133 FAX - 07601-241235

Date of appointment - 09.09.2022

E-mail- sunil.kumar@heidelbergcement.in

Manager : Shri. Daya Shankar Vyas

Staff colony, Heidelberg Cement India Ltd.

P.O. & Village- Narsingarh Distt. Damoh (M.P.) 470675

Date of appointment - 01.02.2022

Mobile No - 9165511016 FAX - 07601-241235

E-mail - dayashankar.vyas@heidelbergcement.in

Mining Engineer Shri. Abhishek Mishra

Name :

Qualification : B.E. (Mining)
Appointment/ : 30.06.2023

Termination date

Geologist

Name : Shri Ravi Shankar Shukla, Full Time

Qualification : M. Tech. (Applied Geology)

Appointment/ : 02.11.2015

Termination date

6. Date of approval of Mining: MP review under 17(1) MCR 2016 01-FEB-17 Plan/Scheme of Mining MP review under 17(1) MCR 2016 15-NOV-21

Modification Of Mining Plan

Under Rule 17(3) Of MCR, 2016 15-JUN-23

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration:

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not Proposed	Nil	The proposals for 2022-23 has been reviewed in the modification of the mining plan approved dated 15/06/2023 for the period 2023-2024 to 2026-2027.
1b	Exploration over lease area for geological axis 1 or 2	there was no	Nil	-do-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Proposed	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	there was no	As per the modification of the mining plan approved dated 15/06/2023, lease area explored under G1 level of exploration is 1064.767 ha and area proved as Nonmineralized 182.50. Hence, the entire mineralized area has been explored under G1 level of exploration.	
1e	Balance reserve as on 01/04/20	At the beginning of the year 1.4.2022, reserves under 111 category was 167579719.90 tones and resources under 221 category was 36816427 tones	Depletion of reserves during the year 2022-23 was 3925134.90 tones. Balance Reserves as on 01.04.2023 under 111 category is 163654585 tones and resources under 221 category is 36816427 tones.	resources reported as per annual return submitted for the year 2022-23.
1f	General remarks of inspecting officers on geology, exploration etc		There is no backlog in exploration. Entire mineralized area has been explored under G1 level of exploration.	There is no backlog in exploration. Entire mineralized area has been explored under G1 level of exploration.

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Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Development proposed in Pit-03B Between coordinates E314294 to E314900 & N2651623 to N2652260, in Pit-04B between coordinates E313664 to E314388 & N2651408 to N2652330 and in Pit-07 between coordinates E312700 to E313020 & N2651060 to N2651815	Actual development in Pit-03B between coordinates E314581 to E315091 & N2651857 to N2652225; in Pit-04B between coordinates E313692 to E314387 & N2651616 to N2652139; in Pit 5 between coordinates N2650780 to N26514813 & E313699 to E314086, in Pit 6 between coordinates N2652006 to N2652264 & E313578 to E313771 and in Pit-07 between coordinates E312822 to E313020 & N2651015 to N2651359.	The deviation in actual excavation during the year 2022-23 has been reviewed in the modification of the mining plan approved dated 15/06/2023 for theperiod 2023-2024 to 2026-2027.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in topsoil overburden and mineral has been proposed	Separate benches in topsoil overburden and mineral has been maintained	Nil
2c	Stripping ratio or ore to OB ratio	1:0.25 t /m3 In 2022-23,	1:0.37 t/m3 In 2022-23, the actual	The compliance of top soil generation during the year 2022-23 has
2d	Quantity of topsoil generation in m3	<pre>proposal for topsoil</pre>	quantity of topsoil generated was 168000 m3	been reviewed in the Modification of Mining plan approved dated 15/06/2023 for the period 2023-2024 to 2026-2027.
2e	Quantity of overburden generation in m3	In 2022-23, proposal for overburden quantity generation was 1338367 m3	In 2022-23, actual quantity of overburden generated was 1444249 m3	Nil

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I/16402/2023 General remarks of inspecting officers on development of pit w.r.t. type of deposit etc

The deviation in actual excavation during the year 2022-23 has been reviewed in the modification of the mining plan approved dated 15/06/2023 for the period 2023-2024 to 2026-2027.

## Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	year 2022-23, three (03) nos	three (03) nos of pits were exploited namely Pit -03B, Pit 04B & Pit	Nil
3b	Quantity of ROM mineral production proposed	year 2022-23, the ROM	During the year 2022-23, the actual ROM production quantity was 3925134.902 tones.	The compliance of actual production for 2022-23 has been reviewed in the modification of the mining plan approved dated 15/06/2023 for the proposal period 2023-2024 to 2026-2027.
3c	Recovery of sailable/usable mineral from ROM production	4430000 tones	3491860 tones	Recovery of saleable ore is based on the ROM quantity fed to the crusher and has been reviewed in the modification of the mining plan approved dated 15/06/2023 for the proposal period 2023-2024 to 2026-2027.
3d	Quantity of mineral reject generation	843810 tones	784255 tones	-do-

3e	Grade of mineral rejects generation and threshold value declared.	Below 34 % CaO	Below 34 % CaO	Screen rejects below 34% CaO
3f	Quantity of sub grade mineral generation.	Not Proposed	Nil	Nil
3g	Grade of sub grade mineral generation	Not Proposed	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Nil
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	Proposed	Drilling and Blasting is being carried out in mineral benches	Nil
3k	Provision of mining machineries in mineral benches	Proposed	Carried out	Nil
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes suitable	Yes suitable	Nil
3m	Total area covered under excavation/pits	344.58 Ha	339.30 На	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.25 t /m3	1:0.37 t/m3	Nil
30	Total area put in use under different heads at the end of year	384.33 На	379.05 На	Nil

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3p	Production of ROM mineral during the last five year period as applicable	2019-20: 5625000 tones 2020-21: 5625000 tones 2021-22: 5625000 tones	tones 2019-20: 4623313.630 tones 2020-21: 4401598.700 tones 2021-22: 5429162.468 tones 2022-23: 3925134.902	.1
3q	General remarks of inspecting officers on method of mining etc.		The conventional Ni opencast fully mechanized mining with Hydraulic Excavator in conjunction with dumpers is being followed at the mine.	.1

## Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Not Proposed	Nil	Nil
4b	Location of topsoil, OB and mineral reject dumps	Not Proposed	Nil	Nil
4c	Number of dumps within lease area and outside of lease area	Not Proposed	Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not Proposed	Nil	Nil
4e	Number of active and alive dumps.	Not Proposed	Nil	Nil
4f	Number of dead dumps.	Not Proposed	Nil	Nil
4g	Number of dumps established.	Not Proposed	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Not Proposed	Nil	Nil

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4i Length of Proposed Bund Actual bund length was The compliance of Retaining wall length was 475 425 m proposed bund length in 2022-23 or garland drain m all along dumps has been reviewed in modification of the mining plan approved dated 15/06/2023 for the proposal period 2023-2024 to 2026-2027. 4ј Number of Not Proposed Nil Nil settling ponds Specific 4 k No proposal as Nil simultaneous backfilling comments of OB is being done and inspecting spreading of top soil over the backfilled officer on waste dump management 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.	Full extraction of ore before backfilling is proposed	Full extraction of ore before backfilling	Nil
5b	Area under backfilling of mined out area	10.00 На	13.76 На	The compliance of the actual area under backfilling of mined out area for 2022-23 has been reviewed in the modification of the mining plan approved dated 15/06/2023 for the proposal period 2023-2024 to 2026-2027.
5c	Concurrent useof topsoil for restoration or rehabilitation of mineral out area (Rule 32)	196236 m3	168000 m3	-do-
5d	Total area fully reclaimed and rehabilitated	Not Specified	129.56 На	-do-

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Nil

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5e

General remarks of inspecting officers on backfilling and reclamation etc. The compliance of the backfilling proposed during the year 2022-23, has been reviewed in the modification of the mining plan approved dated 15/06/2023 for the proposal period 2023-2024 to 2026-2027.

## 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).	a mining lease		Nil
6b	Area available for rehabilitation (ha).	53.91 На	51.35 На	The compliance of the backfilled area available for Reclamation and Rehabilitation in 2022-23 has been reviewed in the modification of the mining plan approved dated 15/06/2023 for the proposal period 2023-2024 to 2026-2027.
6c	afforestation done (ha).	8.0 Ha	5.5 На	-do-
6d	No. of saplings planted during the year	5000 Nos	6000 Nos	Nil
6e	Cumulative no .of plants	100000 Nos	101000 Nos	Nil
6f	Any other method of rehabilitation	Not Proposed	Nil	Nil

6g	Cost incurred on watch and care during the year	Rs 900000	Rs 2325220	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	258*387*15	285*410*15	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	10.0 На	13.76 На	Nil
6 <u>j</u>	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	8.0 На	5.50 На	The compliance for the 2022-23 has been reviewed in the modification of the mining plan approved dated 15/06/2023 for the proposal period 2023-2024 to 2026-2027.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	Nil	Nil
61	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not Proposed	Nil	Nil
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

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I/16402 <i>/2</i> ,023	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not Proposed	Nil	Nil
бр	Compliance of environmental monitoring (core zone and buffer zone)	-	Carried out	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		The PMCP compliance for the year 2022-23 has been reviewed in the modification of the mining plan approved dated 15/06/2023 for the proposal period 2023-2024 to 2026-2027.	Nil

## Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Crushing, sizing and screening of ROM proposed	Crushing, sizing and screening of ROM carried out	Nil
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	Cement grade	Cement grade	Nil
7d	Any beneficiation process at mines	Crushing, sizing and screening of ROM proposed	Crushing, sizing and screening of ROM carried out	Nil
		<u>.</u> .		Nil

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7e General remarks of inspecting officer on Mineral conservation and beneficiation

issues

Crushing, sizing and screening  $^{
m Nil}$  of ROM carried out

#### Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	_	Carried out	Nil
8b	Concurrent use or storage of topsoil	Concurrent use	Concurrent use	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	Nil	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to original use	-	Backfilling carried out in Pit1, Pit 2, Pit 6 and in Pit 7.	The deviation in actual backfilling during the year 2022-23 has been reviewed in the modification of the mining plan approved dated 15/06/2023 for theperiod 2023-2024 to 2026-2027.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed	Carried out	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	100000 Nos of plants	101000 Nos of Plants	Nil
8g	Survival rate	90%	95%	Nil

#### 1/16402/2023

8i General remarks of inspecting officer on aesthetic beauty in and around mines area

Aesthetic beauty in and Aesthetic beauty around mine has been in and around mine maintained.

been maintained.

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	of MCDR 2017, an annual return shall be submitted before the 1st day of July each year for the preceding	Annual return for 2022-23 has been submitted on 28.06.2023. Monthly returns for the year 2022-23 have been submitted before the tenth day of every month in respect of the preceding month in electronic form.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Engineer, Geologist and Manager have been employed	Mining Engineer, Geologist and Manager have been employed in the mines.	Nil

9c	Annual return on land use pattern for area under pits, reclaimed	exploited and abandoned by opencast (O-C) mining: 43.83 Ha; (ii) Covered under current (O-C) Workings: 112.33 Ha; (iii) Reclaimed-rehabilitated: 183.14 Ha (iv) Occupied by plant, buildings, residential, welfare	(ii) Covered under current (O-C) Workings: 112.33 Ha; (iii) Reclaimed- rehabilitated: 183.14 Ha (iv) Occupied by plant, buildings, residential, welfare buildings and roads: 20.5 Ha (v) Used for any other purpose (specify) Solar power plant, Green belt & Mineral Storage: 18.75 Ha (vi) Work done under progressive mine closure plan during the year:	Nil
9d	Scrutiny of Annual return on afforestation		Within lease area: 6000 Nos	Nil
9e	Annual return on mineral reject generation	Mineral Reject generation is Nil. Screen reject generated was 784255.00 MT		nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore		Closing Stock of ROM is 475927.227 tomnes	Nil

9g	sale value, Ex. Mine price and	(Rs/Tonne) for cement grade ore is Rs 281.33/tonne. Sale value is	consumption. Cost of production is Rs 281.33/tonne.	Nil
9h	Scrutiny of Annual return on fixed assets	Assets	±	Nil
9k	<del>-</del>	nos, Shovel:	Dumper- 17 nos, Shovel: 1No; Backhoe: 4nos; Dozer: 2 no; loader: 1 no etc.	•

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# 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

Date :

(SUDIP RANJAN MAZUMDAR)

Indian Bureau of Mines

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