

**INDIAN BUREAU OF MINES  
MINERALS DEVELOPMENT AND REGULATION DIVISION**

**MCDR inspection REPORT  
Jabalpur regional office**

**Mine file No :** MP/DAMOH/LST-5

**Mine code :** 38MPR09005

- (i) Name of the Inspecting : **KQ06** ) **NARESH KUMAR KATARIYA**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Mr. S K Gupta( Agent), Mr. Gaurav Taluja (Mine Manage  
Official with  
Designation
- (iv) Date of Inspection : 05-FEB-21
- (v) Prev.inspection date : 16-NOV-19

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **DIAMOND (1247.267H)**
- (b) **Registration NO.** :
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address  
State : MADHYA PRADESH  
District : DAMOH  
Village :  
Taluka :  
Post office :  
Pin Code :  
FAX No. : 07601-241235  
E-mail : diam@sancharnet.in  
Phone : 07601-241301 TO 304
- (f) Police Station :
- (g) First opening date : 02-DEC-99
- (h) Weekly day of rest :
2. Address for : M/S HEIDELBERGCEMENT INDIAN LIMITED  
correspondance BIRLAPUR, P.O. NARSINGHGARH  
DISTT. DAMOH (M.P.) 470675
3. (a) Lease Number : MPR0608  
(b) Lease area : 1247.27  
(c) Period of lease : 50  
(d) Date of Expiry : 10-NOV-42
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : HEIDELBERGCEMENT INDIAN LIMITED  
 BIRLAPUR, P.O. NARSINGHGARH  
 DAMOH MADHYA PRADESH  
 Phone:07601-241301 TO 304  
 FAX :07601-241235

Owner : HEIDELBERGCEMENT INDIAN LIMITED  
 BIRLAPUR, P.O.  
 NARSINMGHGARH, DAMOH  
 MADHYA PRADESH  
 Phone: 07601-241301 TO  
 FAX : 07601-241235

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	15-OCT-04
Plan/Scheme of Mining		Modif.of approved Mining Plan	15-OCT-04
		Mining Scheme rule 12 MCDR1988	25-APR-08
		Renewal under rule 24 MCR1960	21-NOV-12
		Modif.of approved Mining Plan	28-MAY-15
		MP review under 17(1) MCR 2016	01-FEB-17

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	
1b	Exploration over lease area for geological axis 1 or 2	NIL	NIL	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	Entire lease area has been explored in G1 category.
1e	Balance reserve as on 01/04/20		Balance Reserve as on 01.04.2020 : 178.42 Million tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			The limestone formation of this region belongs to the Bhandar Group of Upper Vindhyan Super Group in Vindhyan system of Indian Stratigraphy. The Bhandar Group forms one of the productive limestone bearing formation in this region. The Bhandar Limestone band is both overlain and underlain by shale. Sometimes limestone comes just under the soil.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Pit No- 5 & Pit No.- 6	Pit No- 5 & Pit No.- 6	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top Soil-1 bench (0.5-0.75 m) Sub Soil 1 bench (3-6 m) Hard OB -1 bench (3-5 m) Limestone 2 bench (4-6 m)	Top Soil-1 bench (0.5-0.60 m) Sub Soil 1 bench (3-6 m) Hard OB -1 bench (3-5 m) Limestone 2 bench (4-6 m)	
2c	Stripping ratio or ore to OB ratio	1: 0.44	1: 0.37	
2d	Quantity of topsoil generation in m3	225274	201092	
2e	Quantity of overburden generation in m3	2241122	1518854	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The mine pit has been developed as per proposal of approved document.

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two pits	Two pits	
3b	Quantity of ROM mineral production proposed	5625000 Tonnes	4623314 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	NA	NA	
3d	Quantity of mineral reject generation	1125000 Tonnes	834360 Tonnes	

3e	Grade of mineral rejects generation and threshold value declared.	Screen rejects below 34% CaO	Screen rejects below 34% CaO	
3f	Quantity of sub grade mineral generation.	1286302	1682440	As per records, sub-grade mineral is blend with high grade mineral and utilized 100 percent.
3g	Grade of sub grade mineral generation	CaO% 34-38%	CaO% 34-38%	
3h	Manual / Mechanised method adopted for segregating from ROM	The crushing plant & ancillary facilities mainly consist of 1200TPH, impact crusher with screening system which can crush the limestone to (-75 mm) size. The crusher is preceded by a screening system (Wobbler feeder+vibrating screen combination) that will generate a screen rejects which shall be less than 20mm.	The crushing plant & ancillary facilities mainly consist of 1200TPH, impact crusher with screening system which can crush the limestone to (-75 mm) size. The crusher is preceded by a screening system (Wobbler feeder+vibrating screen combination) that will generate a screen rejects which shall be less than 20mm.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NA	NA	

3j	Provision of drilling and blasting in mineral benches	Yes	Yes	
3k	Provision of mining machineries in mineral benches	Yes	Yes	
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	326.06 Hect.	271.71 Hect.	
3n	Ore to OB ratio for the pit/mine during the year.	1: 0.44	1:0.37	
3o	Total area put in use under different heads at the end of year	351.56 Hect.	288.21 Hect.	
3p	Production of ROM mineral during the last five year period as applicable	2015-16 5582300 2016-17 5044800 2017-18 5625000 2018-19 5625000 2019-20 5625000	2015-16 4676976 2016-17 4010110 2017-18 4524086 2018-19 4636100 2019-20 4623314	
3q	General remarks of inspecting officers on method of mining etc.			Fully mechanised opencast mining method is adopted as per approved document.

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Nil	Nil	
4b	Location of topsoil, OB and mineral reject dumps	NA	NA	
4c	Number of dumps within lease area and outside of lease area	NIL	NIL	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NA	NA	
4e	Number of active and alive dumps.	NIL	NIL	
4f	Number of dead dumps.	NIL	NIL	
4g	Number of dumps established.	NIL	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	NIL	NIL	
4i	Length of Retaining wall or garland drain all along dumps	NIL	NIL	
4j	Number of settling ponds	NIL	NIL	
4k	Specific comments of inspecting officer on waste dump management			The waste generated during the mine operation is con-currently used for backfilling.

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Solid Waste Management - Backfilling:

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Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	15.80 Hect	15.03 Hect
5b	Area under backfilling of mined out area	27.84 Hect	16.35 Hect.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)		
5d	Total area fully reclaimed and rehabilitated		
5e	General remarks of inspecting officers on backfilling and reclamation etc.		

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Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Yes	
6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha) .	NIL	NIL	
6d	No. of saplings planted during the year	NIL	NIL	
6e	Cumulative no .of plants	NIL	NIL	

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6f	Any other method of rehabilitation	NIL	NIL
6g	Cost incurred on watch and care during the year	NIL	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( $L \times B \times D$	27.84	20.29
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	27.84	16.35
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	13.40	13.64
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	NIL	NIL

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NIL	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NIL	
6p	Compliance of environmental monitoring (core zone and buffer zone)	YES	Found as per proposal.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Compliance of PMCP is being done as per proposal in approved document.

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Crushed & Screened Limestone Dispatched	Crushed & Screened Limestone Dispatched	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	
7c	Different grade of mineral sorted out at mines.	NA	NA	
7d	Any beneficiation process at mines	NA	NA	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	As per records, Sub-grade mineral is blend with high grade mineral and utilized 100 percent for mineral conservation.
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**Environment:**


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Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Yes	
8b	Concurrent use or storage of topsoil	Concurrent use for topsoil for restoration of mined out land	Concurrent use for topsoil for restoration of mined out land	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Nil	Nil	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Concurrent use of OB for restoring the land in original use.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Yes	

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8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	For the RY 8000 trees in the 13.64 Hect area	In the RY 8000 trees planted and total saplings planted 78650 Nos. in which plants of Rain Tree, Bargad, Arjun, Bamboo,,Pilkhan, , Neeam, Shisham etc. are planted in the RY.	
8g	Survival rate	90%	90%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Top soil is being fully used as top layer over reclaimed area. Progressively increasing green belt area. Creation of water reservoir, Availability of food, shelter to aquatic and non-aquatic life. Secured ambience to variety of birds, mammals, lizards, reptiles and to name a few like deer, rabbits jackals, peacocks etc.

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes	Submission of Monthly and Annual returns for the RY is found in time.	

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9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information regarding Mining Engineer, Geologist and Manager given in annual returns.	found as per AR
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	i) Excavation/pits (Ha.) 326.06 271.71 ii) Top soil storage (Ha.) 0.00 0.00 iii) Waste/Ob/IB dumps (Ha.) 0.00 0.00 iv) Mineral rejects (Ha.) 0.00 0.00 v) Sub grade mineral stacks (Ha.) 0.00 0.00 vi) Mineral stacks (Ha.) 2.00 2.00 vii) Plants, buildings, Infrastructure etc. (Ha.) 7.00 8.50 viii) Others (Specify) Road & Green belt 16.50 6.00 ix) Total area put in use under different heads at the end of year For which FA given (Ha.) 351.56 288.21
9d	Scrutiny of Annual return on afforestation	Yes	found as per AR
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	found as per AR
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	found as per AR
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	found as per AR

9h	Scrutiny of Annual return on fixed assets	Yes	found as per AR
9k	Scrutiny of Annual return on mining machineries	Yes	Found as per AR

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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 :**

**(NARESH KUMAR KATARIYA)**

Indian Bureau of Mines