

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

Check up inspection REPORT

Jabalpur regional office

Mine file No : MP/DAMOH/LST-6

Mine code : 38MPR09003

- (i) Name of the Inspecting : **P013**) **RAJNEESH PUROHIT**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Mr. G.Taluja, Mines manager, Mr. R.N.Rai, Agent. & Mr
Official with
Designation
- (iv) Date of Inspection : 17-MAY-19
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **DIAMOND PATHARIA1247.267H**
- (b) **Registration NO.** : **IBM/398/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : DAMOH
Village : SATPARA, JAGTHAR
Taluka : PATHARIA
Post office : PATHARIA
Pin Code : 470666
FAX No. : 07601-241235
E-mail : diam@sancharnet.in
Phone : 07601-241301 TO 304
- (f) Police Station : NARSINGHPUR
- (g) First opening date : 30-APR-04
- (h) Weekly day of rest : SUN
2. Address for : M/S HEIDELBERGCEMENT INDIAN LIMITED
correspondance BIRLAPUR, P.O. NARSINGHGARH
DISTT. DAMOH (M.P.) 470675
3. (a) Lease Number : MPR0103
- (b) Lease area : 1689.4
- (c) Period of lease : 20
- (d) Date of Expiry : 30-JUL-95
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 : MR S K TIWARI
 DAMOH MADHYA PRADESH
 Phone:
 FAX :

Agent : R.N.RAI
 G.M. (Mines) DIAMOND
 CEMENT, NARSINGHGARH
 DISTT.- DAMOH DAMOH MADHYA
 PRADESH
 Phone: 0761-241301, 241305
 FAX : 0761-241235

Mining Engineer

Name : C.P.DADHICH,Full Time
 Qualification : BE MINING
 Appointment/ :
 Termination date

Geologist

Name : RAVI SHANKER SHUKLA,Full Time
 Qualification : MSC GEOLOGY
 Appointment/ :
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : 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	YES	YES	
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 axis
1e	Balance reserve as on 01/04/20	Reserve in UNFC code qty in Million tonnes 111 183.63 121 122 Balance resources as on 31/03/2019 211 221 35.86 222	As on 31/03/2019 particular UNFC code qty in Million tonnes balance reserve as on 31/03/2019 is 111 183.63 121 122 Balance resources as on 31/03/2019 211 221 35.86 222	Entire lease has been explored in G-1 axis.
1f	General remarks of inspecting officers on geology, exploration etc	Nil	Nil	The total area in G1 axis

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	PIT NO. 05& 06	PIT NO. 05& 06	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top soil - 1 B (0.5 to 0.75 m) OB - 1 B (3-6 m) Ore - 2 B (4-6 m)	Top soil - 1 B (0.5 to 0.75 m) OB - 1 B (3-6 m) Ore - 2 B (4-6 m)	
2c	Stripping ratio or ore to OB ratio	2014-15 0.63 2015-16 0.36 2016-17 0.50 2017-18 0.29 2018-19 0.42	2014-15 0.47 2015-16 0.61 2016-17 0.47 2017-18 0.38 2018-19 0.29	
2d	Quantity of topsoil generation in m3	2014-15 130550 2015-16 177783 2016-17 162637 2017-18 233117 2018-19 276887	2014-15 110033 2015-16 168000 2016-17 182550 2017-18 197470 2018-19 177200	
2e	Quantity of overburden generation in m3	2014-15 1219677 2015-16 1191493 2016-17 1417448 2017-18 661606 2018-19 1099796	2014-15 1017414 2015-16 1684169 2016-17 828913 2017-18 743872 2018-19 484234	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine is systematically developed

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two number of pits. Pit no. 05 & 06	Two number of pits. Pit no. 05 & 06	

3b	Quantity of ROM mineral production proposed	2014-15 4915000 2015-16 5582300 2016-17 5044800 2017-18 5625000 2018-19 5625000	2014-15 4109376 2015-16 4676976 2016-17 4010110 2017-18 4524086 2018-19 4636100
3c	Recovery of sailable/usable mineral from ROM production	Nil	Nil
3d	Quantity of mineral reject generation	2014-15 494857 2015-16 1056178 2016-17 1014500 2017-18 450000 2018-19 450000	2014-15 784848 2015-16 845265 2016-17 658063 2017-18 584190 2018-19 556660
3e	Grade of mineral rejects generation and threshold value declared.	Below 34% CaO	Below 34% CaO
3f	Quantity of sub grade mineral generation.	2014-15 0 2015-16 0 2016-17 500000 2017-18 1280175 2018-19 1693510	2014-15 0 2015-16 0 2016-17 530000 2017-18 1509395 2018-19 1365631
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+vibrati ng 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.	Nil	Nil
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	58 Ha	48.76 Ha

3n	Ore to OB ratio for the pit/mine during the year.	0.42	0.29	
3o	Total area put in use under different heads at the end of year	Excavation/pits (Ha.) 326.06 Top soil storage (Ha.) 0.00 Waste/Ob/IB dumps (Ha.) 0.00 Mineral rejects (Ha.) 0.00 Sub grade mineral stacks (Ha.) 0.00 Mineral stacks (Ha.) 0.00 Plants, buildings, Infrastructure etc. (Ha.) 0.00 Others (Specify) Road & Green belt (Ha.) 2.00 Total area put in use under different heads at the end of year For which FA given (Ha.) 7.00 351.56	Excavation/pits (Ha.) 242.76 Top soil storage (Ha.) 0.00 Waste/Ob/IB dumps (Ha.) 0.00 Mineral rejects (Ha.) 0.00 Sub grade mineral stacks (Ha.) 0.00 Mineral stacks (Ha.) 2.00 Plants, buildings, Infrastructure etc. (Ha.) 7.00 Others (Specify) Road & Green belt (Ha.) 16.50 Total area put in use under different heads at the end of year For which FA given (Ha.) 259.26	
3p	Production of ROM mineral during the last five year period as applicable	2014-15 4915000 2015-16 5582300 2016-17 5044800 2017-18 5625000 2018-19 5625000	2014-15 4109376 2015-16 4676976 2016-17 4010110 2017-18 4010110 2018-19 4636100	

3q	General remarks of inspecting officers on method of mining etc.	NIL	NIL	Work is being carried out as per the approved mining plan.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Yes	Seperate dumping of the topsoil, OB and mineral rejects is being done and simulteneously being used for reclamation.
4b	Location of topsoil, OB and mineral reject dumps	NIL	NIL	
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)	NIL	NIL	
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	NIL	NIL	There is no dump in the mine.
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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.	Nil	Complete mineral is extracted before the commencement of the backfilling.	
5b	Area under backfilling of mined out area	18.9 Ha	14.17 Ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	276887	177200	
5d	Total area fully reclaimed and rehabilitated	13.1 Ha	14.5 Ha	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Nil	Nil	Concurrent Backfilling is being carried out.

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) .	13.1	14.5
6c	afforestation done (ha).	Nil	Nil
6d	No. of saplings planted during the year	Nil	Nil
6e	Cumulative no .of plants	Nil	Nil
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 (Lx B x D	14.38 Ha	17.84 Ha
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	18.9 Ha	14.17 Ha
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	13.1 Ha	14.5 Ha
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)	Done	Quarterly monitoring is carried out as per the proposal	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	Nil	Proposal of backfilling as per the PMCP is carried out.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NA	NA	

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			No any issue found related to mineral conservation.

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)		Entire quantity of the Top Soil exploited has been utilized for spreading over the backfilled area for carrying out plantation.	
8b	Concurrent use or storage of topsoil	As per mining plan top soil is considered 0.3 m to 0.5 m.	Entire quantity of the Top Soil exploited has been utilized for spreading over the backfilled area for carrying out plantation.	
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	NA	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Backfilling and restoration of the mined out area is being done.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Done	Done	
8g	Survival rate	100 %	100 %	
8h	Water sprinkling on roads to control airborne dust	Carried out	Carried out	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Work is carried out for environmental protection as per PMCP.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	Submitted	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Appointed as per rule.	Appointed as per rule.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	matching with PMCP
9d	Scrutiny of Annual return on afforestation	Given	Given
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Done	Done
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The detail information given in the monthly and annual returns.	This is a captive mine. Hence, sale value and ex mine price remains same.
9h	Scrutiny of Annual return on fixed assets	The detailed information given in the annual return.	The detailed information given in the annual return.
9k	Scrutiny of Annual return on mining machineries	The detailed information given in the annual return.	The detailed information given in the annual return.

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 :

(RAJNEESH PUROHIT)

Indian Bureau of Mines