

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/SATNA/LIMESTONE-358

Mine code : 38MPR35325

- (i) Name of the Inspecting : **KQ06**) **NARESH KUMAR KATARIYA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri Akhilesh Singh, Add.VP (Mines), Shri Bharat Saha
Official with
Designation
- (iv) Date of Inspection : 06-SEP-22
- (v) Prev.inspection date : 06-MAR-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BANDHI & GHORWAI 129.802**
- (b) **Registration NO.** :
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : BANDHI GHORWAI
Taluka : MAIHAR
Post office : AJWAIN
Pin Code : 485772
FAX No. :
E-mail :
Phone :
- (f) Police Station :
- (g) First opening date : 15-JAN-16
- (h) Weekly day of rest :
2. Address for : G BLOCK, 1ST FLOOR, 3RD WING
correspondance : DHIRUBHAI AMBANI KNOWLEDGE CITY
KOPARKHAIRANE, NAVI MUMBAI 400710
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : RELIANCE CEMENT CO.PVT.LTD.
H-BLOCK 1ST FLOOR DAKC,
KOPARKHAIRANE THANE BELAPUR
RD MUMBAI (SUBURBAN)
MAHARASHTRA
Phone:02230383333
FAX :02230384399

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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	6 nos	30 nos	
1b	Exploration over lease area for geological axis 1 or 2	G-1	G-1	Exploration has been completed under G1 axis as per records.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	In house	In house	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1- 107.662 Ha G2- 20.67 Ha G3- 1.47 Ha	Total 129.802 area converted into G1 axis	Exploration has been completed under G1 axis as per records.
1e	Balance reserve as on 01/04/20		Balance reserved as on 31.03.2022 111- 14.917 MT 221- 2.808 MT	
1f	General remarks of inspecting officers on geology, exploration etc			The mining lease area of 129.802 Ha falls in Rohtas formation of Vindhyan Supergroup. The occurrence of limestone in the lease area is stratigraphically controlled and is associated with Vindhyan Supergroup in rohtas limestone of Semri group.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	(Top Soil & OB) E-472674- E472869 N-2665200- N2665421 (Limestone) E-472674- E472869 N-2665200- N2665421	(Top Soil & OB) E- 472761-E472839 N-2665298- N2665392 (Limestone) E-472768- E472838 N-2665306- N2665387	Mine development is lagging form the approved proposal. Violation pointed out for the same under rule 11(1) of MCDR 2017
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	
2c	Stripping ratio or ore to OB ratio	1:0.099	1:0.013	
2d	Quantity of topsoil generation in m3	3960 M3	Nil	Mine development is lagging form the approved proposal. Violation pointed out for the same under rule 11(1) of MCDR 2017
2e	Quantity of overburden generation in m3	45640 m3	2409.49 m3	Mine development is lagging form the approved proposal. Violation pointed out for the same under rule 11(1) of MCDR 2017
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine development is lagging form the approved proposal. Violation pointed out for the same under rule 11(1) of MCDR 2017. Mine has been developed as opencast fully mechanised method.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	One pit	One pit	
3b	Quantity of ROM mineral production proposed	500000 MT	192104.79MT	Mine development is lagging form the approved proposal. Violation pointed out for the same under rule 11(1) of MCDR 2017.
3c	Recovery of sailable/usable mineral from ROM production	98%	100%	
3d	Quantity of mineral reject generation	10000 M3	0.00 M3	No mineral reject as per records.
3e	Grade of mineral rejects generation and threshold value declared.	Min 34% CaO and Max 5% MgO	Min 34% CaO and Max 5% MgO	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Not proposed	NA	No sub grade material generated
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.	Not proposed	Not done	
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	(Top Soil & OB) E-472761-E472839 N-2665298- N2665392 (Limestone) E-472768- E472838 N-2665306- N2665387	
3m	Total area covered under excavation/pits	3.3 Ha	0.45 Ha	Mine development is lagging form the approved proposal. Violation pointed out for the same under rule 11(1) of MCDR 2017.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.099	1:0.013	Mine development is lagging form the approved proposal. Violation pointed out for the same under rule 11(1) of MCDR 2017.
3o	Total area put in use under different heads at the end of year	7.55 Ha	3.05 Ha	Mine development is lagging form the approved proposal. Violation pointed out for the same under rule 11(1) of MCDR 2017.
3p	Production of ROM mineral during the last five year period as applicable	2017-18 - 500000 MT 2018-19 - 500000 MT 2019-20 - 500000 MT 2020-21 - 500000 MT 2021-22 - 500000 MT	2017-18 - 00 MT 2018-19 - 3163.01 MT 2019-20 - 39944.19 MT 2020-21 - 25303.92 MT 2021-22 - 192104.79 MT	

3q General remarks of inspecting officers on method of mining etc.

The mine is being operated by adopting mechanized method of mining. All operations of mining are being done by deployment of HEMM for deep hole drilling, excavation, loading and transport. Mine development is lagging from the approved proposal. Violation pointed out for the same under rule 11(1) of MCDR 2017.

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	
4b	Location of topsoil, OB and mineral reject dumps	Top Soil E472694- E472763, N2665430- N2665446 OB Dump E472793- E472812, N2665467- N2665521	Top Soil - NIL OB Dump E472820-E472844 N2665438- N2665519	Topsoil has been concurrently utilized in plantation area
4c	Number of dumps within lease area and outside of lease area	1 (inside ML)	1 (inside ML)	No dump observed outside the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	OB Dump E472793- E472812, N2665467- N2665521	OB Dump E472820-E472844 N2665438- N2665519	

4e	Number of active and alive dumps.	1	1	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	One	One	
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES	
4i	Length of Retaining wall or garland drain all along dumps	Garland drain- 350m	Garland drain- on 31.03.2022)	700m (as
4j	Number of settling ponds	Not Proposed	One	
4k	Specific comments of inspecting officer on waste dump management			The overburden / waste will be removed by excavator / Pay loader with dumper combination. Dumping of OB, soil will be done at northern side of pit as well as all around the excavated pit.

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 mineral befor backfilling.	Full extraction of mineral befor backfilling.	
5b	Area under backfilling of mined out area	Not applicable	Not applicable	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Topsoil has been concurrently utilized in plantation area	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Top soil and over burden has been Concurrently use for restoration or rehabilitation.

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	Submitted	Annual report of PMCP had been already submitted on 07.06.2022 as per Rule 26(2) of MCDR in prescribed format
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	0.5 Ha on waste/barren land	0.4 Ha on waste / barren land.	
6d	No. of saplings planted during the year	600 nos.	500 nos.	
6e	Cumulative no .of plants	Not specified	Cumulative 1482 nos. of plant as on 31.03.2022 (Cumulative 1.06 Ha as on 31.03.22)	
6f	Any other method of rehabilitation	Not proposed	NA	
6g	Cost incurred on watch and care during the year	Rs 25,000 /-	Rs 26,000 /-	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Nil	Nil
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	0.5 Ha (600 no of saplings)	0.4 Ha (500 no of saplings)
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.4 Ha	0.4 Ha

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	By planting saplings	By planting saplings	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Complied of Environment monitoring	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Annual report of PMCP had been already submitted on 07.06.2022 as per Rule 26(2) of MCDR. Plantation has been done as per approved document.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	500000 tonne	192105 tonne	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical	mechanical	
7c	Different grade of mineral sorted out at mines.	Not proposed	Not done	
7d	Any beneficiation process at mines	Not proposed	NA	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Threshold value of limestone is Min 34% CaO and Max 5% MgO. As per records the lessee has used all mineral above 34 % CaO with blending for mineral conservation purpose.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes (Top soil - 3960 Cum)	Nil	Violation pointed out for the same under rule 11(1) of MCDR 2017.
8b	Concurrent use or storage of topsoil	Top soil has been proposed to be stacked in dump.	No top soil generated in the RY	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB is proposed to be stacked in dump.	OB is stacked in dump	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Not done	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	Not done	Area not matured for rehablitation.

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Yes	A total of 1.06 Ha area has been planted in barren land as per records	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Yes	Water sprinkler has been utilized on roads for water sprinkling to control dust suppression.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation has been done along bund and waste/barren land

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR and MR submitted for the RY	Monthly return Submission details: April 2021- 07.05.2021 May 2021- 10.06.2021 June 2021- 10.07.2021 July 2021- 10.08.2021 Aug 2021- 09.09.2021 Sep 2021- 09.10.2021 Oct 2021- 08.11.2021 Nov 2021- 09.12.2021 Dec 2021- 10.01.2022 Jan 2022- 10.02.2022 Feb 2022- 10.03.2022 Mar 2022- 06.04.2022 Annual return Submission date - 27.06.2022	Violation pointed out for late submission of the MR.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Mining Engineer- Shri Deepak Gupta. Geologist- Shri K.B. Basavaraju Manager- Shri Deepak Gupta.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Land use pattern as per Annual Return: Covered under current working- 1.350 Ha Used for waste disposal- 0.150 Ha Occupied by plant, buildings, residential, welfare buildings and roads- 0.70 Ha Other purpose (garland drain etc)- 0.60 Ha Work done under PMCP during the year- 0.250 Ha
9d	Scrutiny of Annual return on afforestation	Yes	No. of trees planted during the year - 500 nos (within ML area) Survival rate- 80.00 %
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	ROM closing stock as on 31.03.2022 - 0.00 tonne
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Sale value - Rs 0.00 Ex.Mine price -Rs 191.13/tonne Production costs- Rs 191.13/tonne
9h	Scrutiny of Annual return on fixed assets	Yes	Fixed assets value - Rs 19227657/-
9k	Scrutiny of Annual return on mining machineries	Yes	machinery Used in opencast BACK HOE 0.9 CUM 1 no. TIPPER 14.000 CUM 3 nos. AIR COMPRESSOR 450 CUM/MN 1 no. BLAST HOST DRILL 115 MM 1 no.

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