

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

MCDR inspection REPORT

Nagpur regional office

Mine file No : MP/NMC/LST-8/NGP

Mine code : 38MPR51001

- (i) Name of the Inspecting : **N006**) **PUKHRAJ NENIVAL**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Shri S C Nigam, Agent, Shri Akhilesh Pratap Singh, Mi
Official with
Designation
- (iv) Date of Inspection : 09-AUG-22
- (v) Prev.inspection date : 01-SEP-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **VIKRAM CEMENT LIMESTONE M**
- (b) **Registration NO.** : **IBM/441/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : MADHYA PRADESH
District : NIMACH
Village : SUVAKHEDA, MOKA, MAHES
Taluka : JAWAD
Post office : KHOR
Pin Code : 458470
FAX No. : 07420-235524
E-mail : vcmail@adityabirla.com
Phone : 07420-230830
- (f) Police Station : JAWAD
- (g) First opening date : 29-DEC-07
- (h) Weekly day of rest : SUN
2. Address for : VIKRAM CEMENT WORKS
correspondance PO : KHOR, TAH : JAWAD
DISTRICT NEEMUCH (M.P.)
3. (a) Lease Number : MPR2209
- (b) Lease area : 342.61
- (c) Period of lease : 50
- (d) Date of Expiry : 27-JAN-52
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : M/S GRASIM INDUSTRIES LTD.
RAIPUR CHHATTISGARH
Phone:
FAX :

Owner : M/s Grasim Cement
M/s Grasim Cement B-1,
Golcha Appartment Shankar
Nagar, Raipur RAIPUR
CHHATTISGARH
Phone: 0771--424827, 4
FAX : 0771--425721

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	21-MAR-01
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	11-APR-11
	:	Mining Scheme rule 12 MCDR1988	24-JUN-15

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	3 Nos / 130 Mtr	2 Nos / 292 mtr	Only 02 nos. of core boreholes are drilled against the proposal of 03 nos. Violation pointed out for same.
1b	Exploration over lease area for geological axis 1 or 2		"G1 - 217.06 ha, G2- 3.98 ha Rest - 121.572 Non Mineralized "	
1c	Exploration Agencies and Expenditure in lakh rupees during the year		Agency - B k Associates Expenditure - Rs 5.99 Lakh	
1d	Balance area to be explored to bring Geological axis in 1 or 2		Analysis of bore hole is under process, 3.98 ha converted in G-1,	
1e	Balance reserve as on 01/04/20		Balanace reserve as on 31/03/22 111 56.73 MT 122 0.88 MT Balanace resource as on 31/03/22 211 38.20 MT 222 1.38 MT	
1f	General remarks of inspecting officers on geology, exploration etc			Only 02 nos. of core boreholes are drilled against the proposal of 03 nos. Violation pointed out for same.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Development was proposed in Pit no-1, Pit no-2 & Pit no.-3.	Mine development was carried out in Pit no-1, Pit no-2 & Pit no.-3.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in topsoil, overburden and mineral proposed	Separate benches in topsoil, overburden and mineral maintained	
2c	Stripping ratio or ore to OB ratio	1:0.30	1:0.46	
2d	Quantity of topsoil generation in m3	24025 cubic meter	9201 cubic meter	It was proposed to remove 24025 M3 of top Soil but only 9201 M3 top soil is removed. Violation pointrd out for same.
2e	Quantity of overburden generation in m3	1027778 cubic meter	1028550 cubic meter	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			It was proposed to remove 24025 M3 of top Soil but only 9201 M3 top soil is removed. Violation pointrd out for same.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3 Pit	3 Pit	
3b	Quantity of ROM mineral production proposed	5000000 tones	4044585 tones	It was proposed to produce 5000000 metric tons of Limestone but only 4044585 tons production achieved. Violation pointed out for same.

3c	Recovery of sailable/usable mineral from ROM production	Yes	Done
3d	Quantity of mineral reject generation	3,00,000 tones	68,557 tones
3e	Grade of mineral rejects generation and threshold value declared.	Not proposed	Not application
3f	Quantity of sub grade mineral generation.	Nil	194691 tones
3g	Grade of sub grade mineral generation	Not proposed	Not application
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Mechanized method
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Screening	Screening
3j	Provision of drilling and blasting in mineral benches	Deephole Drilling & Blasting	Deephole Drilling & Blasting
3k	Provision of mining machineries in mineral benches	HEMM, Exvacavator , Dumper Combination	HEMM, Exvacavator , Dumper Combination
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes - Sutaiable	Yes - Sutaiable
3m	Total area covered under excavation/pits	Excavation/pits (Ha.) - 134.18 ha	Excavation/pits (Ha.) - 80.337 ha

3n	Ore to OB ratio for the pit/mine during the year.	1:0.30	1:0.46
3o	Total area put in use under different heads at the end of year	Excavation/pits (Ha.) - 134.18 Top soil storage (Ha.) - 2.0 Waste/Ob/IB dumps (Ha.) - 6.61 Mineral rejects (Ha.) - Nil Sub grade mineral stacks (Ha.) - Nil Mineral stacks (Ha.) - Nil Plants, buildings, Infrastructure etc. (Ha.) - Nil Mineral stacks (Ha.) - 0.93 Plants, buildings, Infrastructure etc. (Ha.) - 0.89 Others (Specify) Road & Green belt - 19.74 Total area put in use under different heads (Ha.) - 164.35	Excavation/pits (Ha.) - 80.337 Top soil storage (Ha.) - Nil Waste/Ob/IB dumps (Ha.) - 6.61 Mineral rejects (Ha.) - Nil Sub grade mineral stacks (Ha.) - Nil Mineral stacks (Ha.) - 1.294 Plants, buildings, Infrastructure etc. (Ha.) - 1.09 Others (Specify) Road & Green belt - 20 Total area put in use under different heads (Ha.) - 109.328
3p	Production of ROM mineral during the last five year period as applicable	2017-18 - 5500000 Tones 2018-19 - 5500000 Tones 2019-20 - 5500000 Tones 2020-21 - 5000000 Tones 2021-22 - 5000000 Tones	2017-18 - 3246268 Tones 2018-19 - 4457201 Tones 2019-20 - 3343735 Tones 2020-21 - 3873113 Tones 2021-22 - 4044585 Tones

3q	General remarks of inspecting officers on method of mining etc.	It was proposed to produce 5000000 metric tons of Limestone but only 4044585 tons production achieved. Violation pointed out for same.
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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	Top soil used for plantation and OB used in backfilling	
4b	Location of topsoil, OB and mineral reject dumps	Not proposed, Top soil utilisation for plantation and OB to be used for backfilling	Top soil utilized, OB used in backfilling but during the inspection it was observed the backfilling was not done in pit no 2	
4c	Number of dumps within lease area and outside of lease area	Within ML- 2nos	Within ML- 2nos	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump Proposed out side UPL	All Dumps are Outside UPL	
4e	Number of active and alive dumps.	Nil	Nil	
4f	Number of dead dumps.	02 nos	02 nos	
4g	Number of dumps established.	02 nos	02 nos	
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil	Previously Constructed are maintained	

4i	Length of Retaining wall or garland drain all along dumps	Not proposed	Not applicable	
4j	Number of settling ponds	Nil	Previously Constructed are maintained	
4k	Specific comments of inspecting officer on waste dump management			Top soil utilized for plantation and overburden used for backfilling.

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.	Area to be backfilled,	After full extraction, Simultaneously backfilling is being done.	
5b	Area under backfilling of mined out area	34.51 ha	24.533 ha	Backfilling was not done in pit no 02, as proposed. Violation pointed out for same.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil to be used for plantation with in ML area.	Top soil is being utilising for plantation with in ML area.	
5d	Total area fully reclaimed and rehabilitated	11.60 ha	2.95 ha	Backfilling was not done in pit no 02, as proposed. Violation pointed out for same.

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Backfilling was not done in pit no 02, as proposed. Violation pointed out for same. After full extraction, Simultaneously backfilling is being done as per availability of OB.
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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	PMCP report submitted on 22/06/2022	
6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha).	0.5 ha	0.43 ha	
6d	No. of saplings planted during the year	1250 nos	2303 nos	
6e	Cumulative no .of plants	Not specified	15630 nos	
6f	Any other method of rehabilitation	Not proposed	Not done	
6g	Cost incurred on watch and care during the year	Rs 187500.0/-	Rs175680/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	14.50 ha	7.65 ha	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	11.60 ha	2.95 ha
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	1.00 ha	0.79 ha
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Not applicable
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed	Not applicable
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	0.5 ha	1.07 ha
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.5 ha	1.07 ha
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Plantation	Plantation

6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes	Air, water & Noise monitoring is being done regularly.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No benches has been reached at conceptual stage hence no area for rehabilitation is available at mined out benches.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral dispatch	Production 4044585 MT Despatch 4044585 MT	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	Only Cement grade available/ Screening	Only Cement grade available / Screening	
7d	Any beneficiation process at mines	Screening	Screening	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Complete ROM utilized for captive use as per available records.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Removed separately & utilised for plantation.	Top soil is being removed separately for plantation purpose.	Simultaneously utilising for plantation purpose within ML area.
8b	Concurrent use or storage of topsoil	Temporarily	Concurrent use for plantation purpose within ML area.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of OB dump	As per proposal	Overburden used for backfilling as per proposal.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB is proposed to be utilized for backfilling purpose	OB used for backfilling	Backfilling not done as per proposal. Violation pointed out for same.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Simultaneously backfilling of mined out area is in practice	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation proposal given	Plantation done as per proposal Within lease area - 6933 nos Outside lease area - 1107 nos	Plantation is being done over OB Dump & slope of dump backfilled area and along the lease boundary
8g	Survival rate		Plantation done as per proposal Within lease area -79% Outside lease area - 92%	
8h	Water sprinkling on roads to control airborne dust	Sprayed the water on mine road during every shift working.	Water is being sprayed through water tanker on mine road.	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Plantation is being done over OB Dump & slope of dump backfilled area and along the lease boundary
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Monthly returns up to July-2022 Annual returns up to 2021-22 submitted	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		Mining Engineer-Mr Pradeep Kumar Tiwari (28-07-2022) Geologist- Sanjay Kumar Sharma (18/07/2018)	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		Excavation/pits (Ha.) - 80.337 Top soil storage (Ha.) - Nil Waste/Ob/IB dumps (Ha.)- 6.61 Mineral rejects (Ha.) - Nil Sub grade mineral stacks (Ha.) - Nil Mineral stacks (Ha.) - 1.294 Plants, buildings, Infrastructure etc. (Ha.) - 1.09 Others (Specify) Road & Green belt - 20 Total area put in use under different heads (Ha.) - 109.328	
9d	Scrutiny of Annual return on afforestation		Plantation done as per proposal Within lease area - 6933 nos Outside lease area - 1107 nos	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	194691 tones
9f	Scrutiny of Annual return on ROM stock and/or graded ore		Production 4044585 MT Despatch 4044585 MT
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		Ex- Mine Price- Rs.200.55/- Production Cost: - Rs. 200.55/-
9h	Scrutiny of Annual return on fixed assets		Value of Fixed Assets Rs- 466964255/-
9k	Scrutiny of Annual return on mining machineries		SHOVEL (Hydraulic) 4 CUM. 01 no. DUMPER35 TONNER 02 nos. BLAST HOST DRILL115 MM 01 no. WATER TANKER 20KL 01 no.

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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	13-SEP-22			

Date :

(PUKHRAJ NENIVAL)

Indian Bureau of Mines