

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

MCDR inspection REPORT

Nagpur regional office

Mine file No : MP/MND/LST-2/NGP

Mine code : 38MPR23002

- (i) Name of the Inspecting Officer and ID No. : **NQ06**) **PUKHRAJ NENIVAL**
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine Official with Designation : Shri S C Nigam, Agent, Shri Mukesh thawait, Mine mana
- (iv) Date of Inspection : 08-AUG-22
- (v) Prev.inspection date : 31-AUG-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **VIKRAM CEMENT**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : NIMACH
Village : KHOR, KHEDARATHOR ETC
Taluka : JAWAD
Post office : KHOR
Pin Code : 458470
FAX No. : (0712) 533041
E-mail : vikram.cement@gems.vsnl.net
Phone : 533603, 522794
- (f) Police Station : KHOR
- (g) First opening date : 10-MAY-84
- (h) Weekly day of rest : MON
2. Address for correspondance : M/S GRASIM INDUSTRIES LTD.,
VIKRAM CEMENT, VIKRAM NAGAR,
P.O. KHAR 458 470, DISTT. NEEMUCH (M.P)
3. (a) Lease Number : MPR0304
(b) Lease area : 442.92
(c) Period of lease : 50
(d) Date of Expiry : 10-NOV-32
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : M/S VIKRAM CEMENT
 VIKRAMNAGAR, P.O. KHOR -
 458 470 DIST. NEEMUCH (MP)
 NIMACH MADHYA PRADESH
 Phone:07420 - 35514 , 30830
 FAX :07420 - 35524

Owner : SHRI V.T.MOORTHY
 UNIDENTIFIED TAMIL NADU
 Phone:
 FAX :

Agent : S.C.PARIK
 VIKRAM CEMENT LIMESTONE
 MINES P.O-KHOR NIMACH.
 NIMACH MADHYA PRADESH
 Phone:
 FAX :

Mining Engineer

Name : S.C.NIGAM,Full Time
 Qualification : B.TECH (MININIG)
 Appointment/ : 24-SEP-09
 Termination date

Geologist

Name : SHRI R.K.TIWARI,Full Time
 Qualification : M.SC GEOLOGY
 Appointment/ :
 Termination date

Manager

Name : S.C.NIGAM
 Qualification : B.TECH (MINING)
 Appointment/ : 24-SEP-09
 Termination date

6. Date of approval of Mining	:	Modif.approved Mining Scheme	06-OCT-00
Plan/Scheme of Mining	:	Renewal under rule 22 MCR1960	21-OCT-02
	:	Modif.of approved Mining Plan	07-NOV-03
	:	Mining Scheme rule 12 MCDR1988	05-SEP-08
	:	Modif.approved Mining Scheme	22-MAR-12
	:	Mining Scheme rule 12 MCDR1988	16-APR-15

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	As per proposal given in page 21 of approved mining Plan, no additional exploration is carried out during last 04 years. Violation pointed out.
1b	Exploration over lease area for geological axis 1 or 2	Not proposed	Not done	As per proposal given in page 21 of approved mining Plan, no additional exploration is carried out during last 04 years. Violation pointed out.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed	Not applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1 - 227.98 ha G2 - 93.55 ha Non Mineral - 121.393 ha "	G1 - 227.98 ha G2 - 93.55 ha Non Mineral - 121.393 ha "	As per proposal given in page 21 of approved mining Plan, no additional exploration is carried out during last 04 years. Violation pointed out.
1e	Balance reserve as on 01/04/20		Balanace reserve as on 31/03/22 111 3.03 MT 122 3.14 MT Balanace resource as on 31/03/22 211 16.92 MT 222 19.75 MT 333 5.00 MT	

1f	General remarks of inspecting officers on geology, exploration etc	As per proposal given in page 21 of approved mining Plan, no additional exploration is carried out during last 04 years. Violation pointed out.
----	--	---

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Development was proposed in Southern side	Location of development is not found as per proposal	During the year 2021-22 the working was not done in proposed site. Violation pointed out for same.
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	1:0.56	Nil	During the year 2021-22, it was proposed to generate 614490 cubic meter overburden for mine development. But, no overburden generated as per approved document. Violation pointed out for the same under rule 11(1) of MCDR-2017
2d	Quantity of topsoil generation in m3	2100 cubic meter	Nil	It was proposed to remove 2100 M3 of top Soil in the year 2021-22 but no top soil is removed. Violation pointed out.

2e	Quantity of overburden generation in m3	614490 cubic meter	Nil	During the year 2021-22, it was proposed to generate 614490 cubic meter overburden for mine development. But, no overburden generated as per approved document. 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			During the year 2021-22, it was proposed to generate 614490 cubic meter overburden for mine development. But, no overburden generated as per approved document. Violation pointed out for the same under rule 11(1) of MCDR-2017

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit (SK2)	One pit (SK2)	
3b	Quantity of ROM mineral production proposed	320267 tonnes	22349 Tones	It was proposed to produce 320267 Metric tons of Limestone in the year 2021-22 but only 22349 Metric tons production achieved. Violation pointed out for same.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	

3d	Quantity of mineral reject generation	20000 Tones	Nil	No mineral rejects generated
3e	Grade of mineral rejects generation and threshold value declared.	Not proposed	Not Applicable	
3f	Quantity of sub grade mineral generation.	10800 Tones	300 Tones	
3g	Grade of sub grade mineral generation	Not proposed	Not Applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised method	
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	Deep hole drilling & controlled blasting with large dia hole	Drilling of 115 mm hole dia & using slurry & ANFO in connection with NONEL	
3k	Provision of mining machineries in mineral benches	HEMM - Excavator Dumper Combination	HEMM - Excavator Dumper Combination	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes - Suitable	Yes - Suitable	
3m	Total area covered under excavation/pits	Excavation/pit s (Ha.) - 240.53	Excavation/pits (Ha.) - 238.9	

3n	Ore to OB ratio for the pit/mine during the year.	1:0.56	1:0.0	During the year 2021-22, it was proposed to generate 614490 Cubic meter overburden for mine development. But, no overburden generated as per approved document. 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	Excavation/pit s (Ha.) - 240.53 Top soil storage (Ha.) - 0.50 Waste/Ob/IB dumps (Ha.) - 24.90 Mineral rejects (Ha.) - 0.00 Sub grade mineral stacks (Ha.) - 0.40 Mineral stacks (Ha.) - 0.00 Sub grade mineral stacks (Ha.) - 0.40 Mineral stacks (Ha.) - 1.17 Plants, buildings, Infrastructure etc. (Ha.) - 15.18 Others (Specify) Road & Green belt, - 25.84	Excavation/pits (Ha.) - 238.9 Top soil storage (Ha.) - 0.20 Waste/Ob/IB dumps (Ha.) - 24.90 Mineral rejects (Ha.) - 0.00 Sub grade mineral stacks (Ha.) - 0.40 Mineral stacks (Ha.) - 1.17 Plants, buildings, Infrastructure etc. (Ha.) - 14.03 Others (Specify) Road & Green belt, - 18.96	
3p	Production of ROM mineral during the last five year period as applicable	2017-18 - 10,40,000 MT 2018-19 - 3,20,000 MT 2019-20 - 3,20,001 MT 2020-21 - 3,20,002 MT 2021-22 - 3,20,267 MT	2017-18 - 876746 MT 2018-19 - 28887 MT 2019-20 - 14043 MT 2020-21 - 13570 MT 2021-22 - 22349 MT	

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

It was proposed to produce 320267 Metric tons of Limestone in the year 2021-22 but only 22349 Metric tons production achieved. Violation pointed out for same.

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	Not proposed for the RY	No fresh dump observed.	no OB generated during the RY.
4c	Number of dumps within lease area and outside of lease area	Within ML- 11nos	Within ML- 11nos	11 nos of old OB dumps observed.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL	
4e	Number of active and alive dumps.	Nil	Nil	
4f	Number of dead dumps.	11 nos	11 nos	
4g	Number of dumps established.	11 nos	11 nos	
4h	Whether Retaining wall or garland drain all along dumps are there.	No additional proposal, existing will be maintained	Existing is being maintained	
4i	Length of Retaining wall or garland drain all along dumps	No additional proposal, existing will be maintained	Existing is being maintained	

4j	Number of settling ponds	No additional proposal , existing will be maintained	Existing is being maintained	
4k	Specific comments of inspecting officer on waste dump management			No OB generated during the RY. 11 old dumps observed which were established with plantation.

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 was proposed	Full extraction of mineral not done due to less production	
5b	Area under backfilling of mined out area	1.23 ha	Nil	No OB Generated
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.	No topsoil generated in the RY. Violation pointed out.
5d	Total area fully reclaimed and rehabilitated	93.44 ha	82.76 ha	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Full extraction of mineral & backfilling was proposed. But, no OB available for backfilling.

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).	NIL	NIL
6d	No. of saplings planted during the year	NIL	NIL
6e	Cumulative no .of plants	Not specified	300415 plants
6f	Any other method of rehabilitation	Not proposed	Not application
6g	Cost incurred on watch and care during the year	Not specified	Not specified
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	14.00 ha	11 ha
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	1.23 ha	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	0.40 ha	0.40 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	0.4 ha	0.4 ha	
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	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.			Yearly PMCP report submitted under rule 26(2) of MCDR-2017. Plantation was done in the waste land of the lease area.

Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
--------	------	-----------	-------------	---------

7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral was proposed to be dispatched for captive use.	Production 22349 MT Despatch 22349 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 .	No, only crushing and screening proposed	Screening
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Complete excavated ROM mineral was dispatched for captive use. Blending of low grade ore was observed for mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Removed separately & utilised for plantation	Topsoil is not generated in the RY.	
8b	Concurrent use or storage of topsoil	Topsoil is not generated.	Topsoil is not generated.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of OB dump.	No OB generate during this year.	Violation pointed out under rule 11(1) of MCDR-2017

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB to be disposed inside of pit for backfilling purpose.	OB, waste rock, rejects are not generated during this year.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Phased restoration was proposed by backfilling and plantation.	Not done.	No OB generated in the RY.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Not specified.	Cumulative Plantation on Backfilling area is 300415	
8g	Survival rate	Not specified	80%	
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			No place of worship, monuments, protected historical place, place of tourist within ML area

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Yes, Submitted Monthly returns up to July-2022 Yes Annual returns submitted up to 2021-22	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager cum Mining Engineer- Sh. Mukesh Kumar Thawait (w.e.f. 03/11/2020) Geologist- Sh. Manish Kumar Dixit (w.e.f. - 31/10/2019) Geologist - Mr. Shri Vipin Kumar Gautam (w.e.f. - 20-06-2022)
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Excavation/pits (Ha.) - 238.9 Top soil storage (Ha.) - 0.20 Waste/Ob/IB dumps (Ha.) - 24.90 Mineral rejects (Ha.) - 0.00 Sub grade mineral stacks (Ha.) - 0.40 Mineral stacks (Ha.) - 1.17 Plants, buildings, Infrastructure etc. (Ha.) - 14.03 Others (Specify) Road & Green belt, - 18.96
9d	Scrutiny of Annual return on afforestation	Within lease area - 2300 nos Outside lease area - 1107 nos
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Production 22349 MT Despatch 22349 MT Stock - Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price - Rs 169.02/-

9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets (in .) 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 cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	09-SEP-22			
MCDR17	Rule 28(1)	09-SEP-22			

Date :

(PUKHRAJ NENIVAL)

Indian Bureau of Mines