

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/SATNA/LST-338

Mine code : 38MPR35313

- (i) Name of the Inspecting : **SQ05**) **DEEPAK SHARMA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Kousik Das Mines Manager, Sunil Upadhyay Geologist
Official with
Designation
- (iv) Date of Inspection : 16-SEP-21
- (v) Prev.inspection date : 05-NOV-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PRISM CEMENT, BAGHAI, 512.**
- (b) **Registration NO.** : **IBM/267/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : BAGHAI
Taluka : RAMPUR BAGHALAN
Post office : BAIRIHA
Pin Code : 485111
FAX No. : 07672-275303
E-mail : kousik.das@prismjohnson.in
Phone : 07672-275301-2
- (f) Police Station : Rampur Baghelan
- (g) First opening date : 12-DEC-11
- (h) Weekly day of rest : SUN
2. Address for : M/S PRISM CEMENT LIMITED
correspondance : RAJDEEP REWA ROAD
SATNA, MP 485001
3. (a) Lease Number : MPR2702
(b) Lease area : 512.32
(c) Period of lease : 30
(d) Date of Expiry : 27-FEB-41
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : PRISM CEMENT LTD.
RAJDEEP, REWA ROAD, SATNA
MADHYA PRADESH
Phone:(O) 07675 - 504403
FAX : (O) 07675 - 227514 (W) 275303

Owner : PRISM CEMENT LIMITED
PRISM CEMENT LTD. SATNA
MADHYA PRADESH
Phone: N. A.
FAX : N. A.

6. Date of approval of Mining	:	Modif.of approved Mining Plan	13-JUL-12
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	29-FEB-16
	:	MP modif under 17(3) MCR 2016	14-DEC-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NO BACKLOG OF PREVIOUS YEAR EXPLORATION	NO BACKLOG OF PREVIOUS YEAR EXPLORATION	
1b	Exploration over lease area for geological axis 1 or 2	UPTO G1 LEVEL OF EXPLORATION	POTENTIAL MINERALISED AREA OF THE ML IS EXPLORED UPTO THE G1 LEVEL	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	AS PER PROVIDED INFORMATION FOR EXPLORATION TOTAL EXPENDITURE WAS 20.18 LAKHS, EXPLORATION WAS CARRIED OUT BY COMPANIES DRILLING DIVISION	TOTAL EXPENDITURE WAS 19.16 LAKHS, EXPLORATION WAS CARRIED OUT BY COMPANIES DRILLING DIVISION	
1d	Balance area to be explored to bring Geological axis in 1 or 2	POTENTIAL MINERALISED AREA IS EXPLORED UPTO G1 LEVEL	POTENTIAL MINERALISED AREA IS EXPLORED UPTO G1 LEVEL i.e. 223.987 HECT	
1e	Balance reserve as on 01/04/20	AS ON 01.04.2018 111-34.59 MILLION TONNES 211-11.56 MILLION TONNES	AS ON 01.04.2021 111-31.861 MILLION TONNES 211-11.56 MILLION TONNES	DEPLETION OF YEAR 2018-19, 2019-20 AND 2020-21
1f	General remarks of inspecting officers on geology, exploration etc			ML ATREA BELONGS TO VINDHYAN SUPER GROUP OF ROCKS, LIGHT GREY TO DARK GREY LIMESTONE FOUND IN THE ML AREA WITH SHALE PATCHES.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	WORKING WAS PROPOSED IN THE PIT NO 1, 3 & 4	WORKING WAS IN THE SAID LOCATION PIT NO 1, 3 & 4	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	SEPARATE BENCHES ARE PROPOSED IN SOIL OB AND IN MINERAL BENCHES	SEPARATE BENCHES FORMED AND MAINTAINED IN THE SOIL OF 1-2 METER, OB-2-2.5 METER AND IN MINERAL BENCHES 6-8 METER	SOIL AND OB BENCHES VARIES DUE TO DEPOSITION
2c	Stripping ratio or ore to OB ratio	1:1.15	1:0.48	
2d	Quantity of topsoil generation in m3	641870 CUBIC METER	622793 CUBIC METER	
2e	Quantity of overburden generation in m3	1159932 CUBIC METER	1392093 CUBIC METER	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			WORKING WAS IN THE SAID / PROPOSED LOCATION SLIGHT DEVIATION OBSERVED WHICH WAS DUE TO MACHINE MOVEMENT

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	THREE PITS WERE PROPOSED FOR PRODUCTION	PIT NO 1, 3 & 4 WAS PROPOSED FOR PRODUCTION	
3b	Quantity of ROM mineral production proposed	3000008 TONNES	1299551 TONNES	
3c	Recovery of sailable/usable mineral from ROM production	90%	PRODUCED / EXCAVATED ROM IS BEING DISPATCHED TO CAPTIVE CEMENT PLANT	
3d	Quantity of mineral reject generation	NOT PROPOSED	AS THE ROM IS BEING DISPATCHED TO CAPTIVE CEMENT PLANT NO MINERAL REJECT GENERATION	

3e	Grade of mineral rejects generation and threshold value declared.	NOT PROPOSED	NO, MINERAL REJECT PRODUCED
3f	Quantity of sub grade mineral generation.	NOT PROPOSED	NO SUB GRADE MINERAL PRODUCED
3g	Grade of sub grade mineral generation	NOT PROPOSED	NO SUBGRDAE MINERAL PRODUCED
3h	Manual / Mechanised method adopted for segregating from ROM	PROPOSED	SCREENERS WERE INSTALLED IN THE PLANT FOR SEGRAGATION OF ROM AND WASTE
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NOT PROPOSED	NO ANY OTHER METHOD ADOPTED FOR BENEFICIATION
3j	Provision of drilling and blasting in mineral benches	PROPOSED	LARGE DIA DRILL HOLES AS PER APPROVED MINING PLAN
3k	Provision of mining machineries in mineral benches	PROPOSED	HEMM IS BEING USED IN THE MINERAL BENCHES FOR THE EXCAVATION AND TRANSPORTAION OF THE ROM
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	SUITABLE	PROPOSED HEIGHT AND WIDTH OF THE MINERAL BENCHES ARE SUITABLE FOR OPENCAST MECHANISED MINING
3m	Total area covered under excavation/pits	63.35 HECT	56.38 HECT
3n	Ore to OB ratio for the pit/mine during the year.	1:1.23	1:1.25
3o	Total area put in use under different heads at the end of year	123.34 HECT	90.93 HECT

3p	Production of ROM mineral during the last five year period as applicable	2016-17=1300000 2017-18=1300000 2018-19=2000000 2019-20=3000004 2020-21=3000008	2016-17=1290324 2017-18=1298812 2018-19=129443 2019-20=1299678 2020-21=1299551	UNITS ARE IN TONNES
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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)	PROPOSED	SEPARATE DUMPING OF THE MINERAL, WASTE AND OB IN PROGRESS AS PER APPROVED MINING PLAN	
4b	Location of topsoil, OB and mineral reject dumps	DUMPS ARE PROPOSED IN THE NORTH-WESTERN SIDE OF THE ML AREA	DUMPS ARE LOCATED IN THE NORTH-WESTERN SIDE OF THE ML AREA WITHIN THE GRIDS 644E-685E,2092N-2317N,808E-980E,1361N-1553N,927E-959E-1242N-1356,635E-692E-2338E-2379E,879E-904E-2292-2323	
4c	Number of dumps within lease area and outside of lease area	SOIL DUMPS NOS -07 WASTE DUMP NOS -08	WITHIN THE ML AREA IN TOTAL 15 NOS OF DUMPS ARE SITUATED SOIL DUMPS NOS -07, WASTE DUMP NOS -08	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	DUMPS ARE PROPOSED TO THE PITS WITHIN THE UPL	DUMPS ARE WITHIN THE UPL	
4e	Number of active and alive dumps.	4- NOS OF ACTIVE DUMPS	4-NOS OF ACTIVE DUMPS	
4f	Number of dead dumps.	04 DEAD DUMPS	04 DEAD DUMPS	
4g	Number of dumps established.	IN THE YEAR 01 DUMPS ESTABLISHED	IN THE LAST YEAR 01 DUMP WERE ESTABLISHED WITH PLANTATION OVER THE DUMP AREA	

4h	Whether Retaining wall or garland drain all along dumps are there.	NOT PROPOSED	NIL
4i	Length of Retaining wall or garland drain all along dumps	NOT PROPOSED	400-450 METERS GARLAND DRAIN PREPARED IN THE YEAR
4j	Number of settling ponds	ONE	ONE

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 THE MINERAL IS PROPOSED	FULL EXTRACTION OF THE MINERAL IS UNDER PROGRESS	
5b	Area under backfilling of mined out area	13.054 HECT	5.921 HECT	DEVIATION DUE TO LESS GENERATION OF WASTE IN THE PREVIOUS YEARS
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	PROPOSED	SOIL IS BEING USED IN PLANTTAION OVER BACKFILLED AREA	
5d	Total area fully reclaimed and rehabilitated	NOT PROPOSED	RECLAIMANATION UNDER PROCESS DEPENDING UPON THE WASTE GENERATION	

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).	PROPOSED	SUBMITTED	

6b	Area available for rehabilitation (ha) .	13.059 HECT	5.921 HECT
6c	afforestation done (ha).	13.054 HECT	5.681 HECT
6d	No. of saplings planted during the year	13000-15000	5000-6000 NOS APPROX
6e	Cumulative no .of plants	25000-30000 NOS	13500-15000 NOS
6f	Any other method of rehabilitation	NOT PROPOSED	NIL
6g	Cost incurred on watch and care during the year	NOT MENTIONED	NA

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM DISPATCH PROPOSED	ROM IS BEING DISPATCHED TO THE CPATIVE CEMENT PLANT	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	MECHANICAL METHOD PROPOSED	MECHANICAL METHOD i.e. SCREENERS	
7c	Different grade of mineral sorted out at mines.	NOT PROPOSED	NOT APPLICABLE	
7d	Any beneficiation process at mines .	NOT PROPOSED	NOT APPLICABLE	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	PROPOSED	TOP SOIL IS BEING REMOVED SEPARATELY AND USED IN THE PLANTTAION OVER THE BACKFILLED AREA
8b	Concurrent use or storage of topsoil	TOP SOIL PROPOSED TO BE USED IN PLANTATION	TOP SOIL IS BEING USED IN PLANTATION OVER BACKFILLED AREA
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	PROPOSED	AS PER PROPOSAL REMOVED SEPARATELY AND STACKED SEPARATELY
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	PROPOSED	USED FOR EXCAVATED AREA
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	PROPOSED	AS PER PROPOSAL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	PROPOSED	AS PER APPROVED MINING PLAN
8g	Survival rate	70%	70% APPROX
8h	Water sprinkling on roads to control airborne dust	PROPOSED	WATER SPRINKLING IS BEING DONE VIA WATER TANKER IN THE MINE ROADS HAULAGE ROADS AND VIA DRIP METHOD WITHIN THE PLANT AREA

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	AR AND MR SUBMITTED ONLINE	AR AND MR SUBMITTED UPTO DEC-2021 AND 2020-21
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	FURNISHED	Manager Shri.Kousik Das Mining Engineer in charge Shri.Chandra Shekhar Pandit Geologist in charge Shri. Pravin Kumar Tiwari
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	FURNISHED	Lease area (surface area) utilisation as at the end of year (hectares) Under forest Outside forest Total (i) Already exploited & abandoned by opencast (O/C) mining 0.000 0.000 0.000 (ii) Covered under current (O/C) Workings 0.000 56.380 56.380 (iii) Reclaimed/Rehabilitated 0.000 5.680 5.680 (iv) Used for waste disposal 0.000 16.730 16.730 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.000 4.500 4.500 (vi) Other Purpose (Plantation in barrier Jone
9d	Scrutiny of Annual return on afforestation	FURNISHED	5.20 HECT
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	FURNISHED	NOT APPLICABLE

9f	Scrutiny of Annual return on ROM stock and/or graded ore	FURNISHED	ategory Opening stock (in tonne) Production (in tonne) Closing stock (in tonne) (a) Open Cast Workings 0.000 1299551.000 0.000 (b) Underground Workings 0.000 0.000 0.000 (c) Dump Workings 0.000 0.000 0.000
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	FURNISHED	EX MINE PRICE 270.03 inr
9h	Scrutiny of Annual return on fixed assets	FURNISHED	Value of Fixed Assets (in) 1667857324
9k	Scrutiny of Annual return on mining machineries	FURNISHED	Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) Used in opencast/ underground (specify) BACK HOE 2.500 CUM 2 Non Electrical Opencast BACK HOE 2.000 CUM 2 Non Electrical Opencast DUMPER 25.000 TONNE 25 Non Electrical Opencast ROCK DRILL (NON-ELEC.) 115.000 MM 3 Non Electrical Opencast PUMPS (NON-ELEC.) 13300.000 L/MN 2 Non Electrical Opencast WATER TANKER 15000.000 LITRE 2 Non Electrical Opencast EXPLOSIVE VAN 9.000 TONNE 1 Non Electrical Opencast

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 :

(DEEPAK SHARMA)

Indian Bureau of Mines