

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/STN/LST-270

Mine code : 38MPR35137

- (i) Name of the Inspecting : **SQ05**) **DEEPAK SHARMA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Pankaj Mishra Mining Engineer, Shri Sunil Upad
Official with
Designation
- (iv) Date of Inspection : 15-SEP-21
- (v) Prev.inspection date : 20-SEP-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PRISM CEMENT (253.326 HA)**
- (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 : HINOUTI
Taluka : RAMPUR BAGHELAN
Post office : BATHIYA
Pin Code : 485111
FAX No. : (O) 07675 - 227514 (W) 2751
E-mail : shashi.ray@prismjohnson.in
Phone : 07672-75301, 75302
- (f) Police Station : Kolgawa
- (g) First opening date : 28-SEP-96
- (h) Weekly day of rest : SUN
2. Address for : M/S PRISM CEMENT LIMITED
correspondance : RAJDEEP, REWA ROAD,
SANTA (M.P.) 485001
3. (a) Lease Number : MPR1574
- (b) Lease area : 253.33
- (c) Period of lease : 50
- (d) Date of Expiry : 27-SEP-46
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	:	Mining Scheme rule 12 MCDR1988	09-AUG-02
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	11-MAY-06
		Modif.approved Mining Scheme	19-SEP-08
		Mining Scheme rule 12 MCDR1988	21-SEP-11
		Modif.approved Mining Scheme	05-SEP-12
		MP modif under MCR 1960	13-APR-16
		MP modif under 17(3) MCR 2016	23-MAR-18
		MP modif under 17(3) MCR 2016	29-OCT-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	IN THE REPORTING YEAR 2020-21 IT WAS PROPOSED TO DRILL 12 NOS OF CORE BOREHOLES AT THE GRID INTERVAL OF 200X200 METERS	IN THE REPORTING YEAR 10 NOS OF BOREHOLES WERE DRILLED	DUE TO LAND CONSTRAINT 2 NOS OF BOREHOLES WERE NOT DRILLED.
1b	Exploration over lease area for geological axis 1 or 2	THE ENTIRE LEASE AREA IS EXPLORED UPTO THE G1 LEVEL	THE ENTIRE LEASE AREA IS EXPLORED UPTO G1 LEVEL	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	PRISM JHONSON LTD DRILLING DIVISION	PRISM JHONSON LTD DRILLING DIVISION 12.12 LAKH	
1d	Balance area to be explored to bring Geological axis in 1 or 2	ENTIRE LEASE AREA IS EXPLORED UPTO G1 LEVEL	ENTIRE LEASE AREA IS EXPLORED UPTO G1 LEVEL	
1e	Balance reserve as on 01/04/20	AS ON 01.04.2018 111-28.73 MILLION TONNES 222-5.03 MILLION TONNES 331-0.26 MILLION TONNES	AS ON 01.04.2020 111-20.05 MILLION TONNES 222-5.03 MILLION TONNES 331-0.26 MILLION TONNES	

1f	General remarks of inspecting officers on geology, exploration etc	ML AREA BELONGS TO VINDHYAN SUPER GROUP OF ROCKS OF SEMRI FORMATION, LIMESTONE OF THE AREA IS HARD AND COMPACT IN NATURE, MEDIUM TO FINE GRAIN, LIGHT TO DARK GREY IN COLOR, SHALE BAND FOUND WITH THE LIMESTONE AS INTERBEDDED.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Pit-II -772 to-967 N to 1371E and 1605N, Pit-IV 273E to 500E and -800N to -967N	Pit-II -772 to-967 N to 1371E and 1605N, Pit-IV 273E to 500E and --800N to --967N,	AS PER PROPOSAL WITHIN THE PROPOSAL LIMITS
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	PROPOSED	Pit-II - OB- 6m., Mineral-5m., Pit-IV -OB- 8m., Mineral-6m..	
2c	Stripping ratio or ore to OB ratio	1:0.65	1: 0.60	
2d	Quantity of topsoil generation in m3	NOT PROPOSED	DURING THE REPORTING YEAR, TOP SOIL GENERATION WAS NOT PROPSOED AS THE WORKIGN WAS PROPSOED AND DONE IN DEEPNING THE PIT	
2e	Quantity of overburden generation in m3	1425254 CUBIC METER	1388869 CUBIC METER	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			DEVELOPMENT WAS AS PER THE PROPOSED LOCATION

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	THREE PITS PROPOSED TO WORK IN THE YEAR 2020-21	THREE PITS WERE PROPOSED TO WORK IN THE YEAR 2020-21 NAIMLY PIT-2 & PIT-4	
3b	Quantity of ROM mineral production proposed	2175000 TONNES	2174769 TONNES	
3c	Recovery of sailable/usable mineral from ROM production	90 %	90%, ROM IS BEING SENT TO CAPTIVE CEMENT PLANT	
3d	Quantity of mineral reject generation	NOT PROPOSED	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	212.73 HECT	204.677 HECT UPTO YEAR 2020-21		
3n	Ore to OB ratio for the pit/mine during the year.	1:0.65	1:0.60		
3o	Total area put in use under different heads at the end of year	227.947 HECT	221.884 HECT UPTO 2020-21		
3p	Production of ROM mineral during the last five year period as applicable	2016-17 3000000 2017-18 3000000 2018-19 3000000 2019-20 3000000	2016-17 2166122 2017-18 2174813 2018-19 2173643 2019-20 2174244	UNITS ARE IN TONNES	
3q	General remarks of inspecting officers on method of mining etc.		HEMM IS BEING USED IN THE MINERAL BENCHES AND IN THE PITS, SCREENING PROCESS IS BEING DONE FOR SEGRAGATION OF ROM AND WASTE		

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	WASTE DUMP IN THE CENTRAL SOUTHERN PART OF THE ML & SOIL DUMPS IN THE NORTHERN PART OF THE ML AREA	ONE WASTE DUMP IN THE CENTRAL SOUTHERN PART OF THE ML & TWO SOIL DUMPS IN THE NORTHERN PART OF THE ML AREA	
4c	Number of dumps within lease area and outside of lease area	TOTAL 03 DUMPS	TOTAL 03 DUMPS ARE LOACTED WITHIN THE ML AREA 2 SOIL DUMPS AND 1 WASTE DUMP	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	PARTIALLY WITHIN THE UPL	PARTIALLY WITHIN THE UPL (TEMPORARY DUMP)	
4e	Number of active and alive dumps.	TOTAL 03 ACTIVE DUMPS	TOTAL 03 ACTIVE DUMPS, 01-WASTE DUMP & 02-SOIL DUMPS	
4f	Number of dead dumps.	NOT PROPOSED	NOT APPLICABLE	
4g	Number of dumps established.	NOT PERPOSED	NO PROPOSAL FOR DUMP ESTABLISHMENT WAS GIVEN THEREFORE NOT APPLICABLE	
4h	Whether Retaining wall or garland drain all along dumps are there.	NOT PROPOSED	NOT PROPOSED AS THE DUMPS ARE TEMPORARY	
4i	Length of Retaining wall or garland drain all along dumps	NOT PROPOSED	NOT PROPOSED AS THE DUMPS ARE TEMPORARY	
4k	Specific comments of inspecting officer on waste dump management			WASTE IS BEING STACKED SEPARATELY WITHIN THE ML AREA

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	FULL EXTRICATION OF THE MINERAL PROPOSED	FULL EXTRACTION OF THE MINERAL IS PROPOSED AND IN UNDER PROCESS	
5b	Area under backfilling of mined out area	4.50 HECT	4.315 HECT	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	PROPOSED	TOP SOIL IS BEING USE DIN PLANTATION OVER THE BACKFILLED AREA	
5d	Total area fully reclaimed and rehabilitated	50.50 HECT	45.0 HECT APPROX	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			BACKFILLING WAS BEING DONE IN THE FULLY EXCAVATED AREA HOWEVER DUE TO NEW FINDING OF SECOND BAND OF LIMESTONE IN THE ML AREA CURRENTLY BACKFILLING IS STOPED

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) .	NOT PROPOSED	NOT APPLICABLE	
6c	afforestation done (ha) .	4.00 HECT	4.00 HECT	

6d	No. of saplings planted during the year	3580 NOS	4500 NOS	
6e	Cumulative no .of plants	90000 NOS	85000 NOS APPROX	
6f	Any other method of rehabilitation	NOT PROPOSED	NOT APPLICABLE	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP PROPOSAL ARE UP TO THE MARK AS PER PROOSAL NO DEVIATION

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 PRPOSED	NOT APPLICABLE	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			ROM IS BEING DISPATCHED TO THE CAPTIVE CEMNET PLANT AFTER SCREENSRING FOR SEGRAGATION OF ROM AND WASTE

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	PROPOSED	TOP IS BEING REMOVED SEPARATELY AND USED IN THE PLANTTAION OVER THE BACKFILLED AREA	
8b	Concurrent use or storage of topsoil	TOP SOIL PROOSED 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	80%	70-75%	
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	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NEEDS IMPROVEMENTS
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	SUBMITTED	AR AND MR SUBMITTED MR SUBMITTED UPTO DEC 2021 AR SUBMITTED 2020-21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	FURNISHED	Manager Mr. Shashi Shekhar Ray Mining Engineer in charge Mr. Pankaj Mishra Geologist in charge Mr. Vinod Shrivastava	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	FURNISHED	12. 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 0.000 149.077 149.077 (iii) Reclaimed/Rehabilitated 0.000 50.500 50.500 (iv) Used for waste disposal 0.000 13.950 13.950 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.000 3.257 3.257 (vi) Other Purpose (Garland and Plantation) 0.000 1.000 1
9d	Scrutiny of Annual return on afforestation	FURNISHED	(a) Within lease area (b) Outside lease area (i) Number of trees planted during the year 7550 88944 (ii) Survival rate in percentage 70.00 70
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	Production and Stocks of ROM ore at Mine-head (LIMESTONE) Category Opening stock (in tonne) Production (in tonne) Closing stock (in tonne) (a) Open Cast Workings 0.000 2174769.000 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 270.23 inr COST OF PRODUCTION 270.23 inr
9h	Scrutiny of Annual return on fixed assets	FURNISHED	Value of Fixed Assets (in ?) 2792498266

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) SHOVEL (HYDRAULIC) 3.800 CUM 2 Non Electrical Opencast SHOVEL (HYDRAULIC) 4.000 CUM 2 Non Electrical Opencast BACK HOE 2.500 CUM 5 Non Electrical Opencast BACK HOE 2.900 CUM 1 Non Electrical Opencast DUMPER 50.000 TONNE 13 Non Electrical Opencast DUMPER 25.000 TONNE 30 Non Electrical Opencast ROCK DRILL (NONELEC.) 110.000 MM 2 Non Electrical Opencast DOZER 324.000 HP 1
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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

Date :

(DEEPAK SHARMA)

Indian Bureau of Mines