INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

Mining Plan Modification REPORT

Jabalpur regional office

Mine file No : MP/STN/LST-270 **Mine code : 38MPR35137**

(i) Name of the Inspecting Officer and ID No. : **KQ06) NARESH KUMAR KATARIYA**

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine Official with Designation : S/Sh Manoj Singh (VP Mine) S S Ray (Mine Manager), S

(iv) Date of Inspection : 30-SEP-20

(v) Prev.inspection date : 25-FEB-16

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) 275
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 correspondance : M/S PRISM CEMENT LIMITED
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 Plan/Scheme of Mining :

Mining Scheme rule 12 MCDR1988	09-AUG-02
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

PART – II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NA	NA	
1b	Exploration over lease area for geological axis 1 or 2	12 Core Boreholes	13 Core Boreholes	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Prism Jonson Ltd MRM and 14.4 Lakh	Prism Jonson Ltd MRM and 19.2 Lakh	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserve as on 01/04/20		Balance reserve as on 01/04/2020 : 24.068 Million tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			The limestone deposit of the area belongs to Bhander Series. The lithological succession of various formation encountered as; OB soil, Buff Magnesian Limestone, Upper grey Limestone (UGL), Middle shale, Grey/purple nodular shale, grey limestone(LGL) and High Magnesian Limestone.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Second Band	Second Band	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes. 4 benches in ore & 4 benches in waste from the top RL	
2c	Stripping ratio or ore to OB ratio	1:2.34	1:1.61	
2d	Quantity of topsoil generation in m3	140445 CuM	139386 CuM	
2e	Quantity of overburden generation in m3	2819104 CuM	1407348 CuM	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			One pit has been developed. OB- 3 bench (6-8m), LS1- (6m), LS2- (6m) suitable as per local geology of the deposit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	
3b	Quantity of ROM mineral production proposed	3000000 Tonnes	2174244 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	NA	NA	
3d	Quantity of mineral reject generation	NA	NA	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	

3f	Quantity of sub grade mineral generation.	NA	NA
3g	Grade of sub grade mineral generation	NA	NA
3h	Manual / Mechanised method adopted for segregating from ROM	NA	NA
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NA	NA
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	YES
3m	Total area covered under excavation/pits	212.73 Hect.	204.143 Hect.
3n	Ore to OB ratio for the pit/mine during the year.	1: 2.34	1:1.61
3o	Total area put in use under different heads at the end of year	227.947 Hect.	221.35 Hect.

3p	Production of ROM mineral during the last five year period as applicable	2015-16 - 3000000 2016-17 - 3000000 2017-18 - 3000000 2018-19 - 3000000 2019-20 - 3000000	2015-16 - 2174591 2016-17 - 2166122 2017-18 - 2174813 2018-19 - 2173643 2019-20 - 2174244	
3q	General remarks of inspecting officers on method of mining etc.			The conventional fully mechanized opencast mining method adopted with HEMM. After removing top soil, OB and mineral excavation is being done by drilling and blasting. Waste rock generated is utilized for concurrent backfilling of mined out area.

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	Yes	Found in order	
4c	Number of dumps within lease area and outside of lease area	03 (02 Soil Dumps, 01 Waste Dump)	03 (02 Soil Dumps, 01 Waste Dump)	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	With in UPL (temporary dumps)	With in UPL (temporary dumps)	
4e	Number of active and alive dumps.	One	One	

4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil	Nil	
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management			Temporary in pit dumping observed. The dumps are being used for backfilling of the mined out area.

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	Full extraction	
5b	Area under backfilling of mined out area	6.99 Hect	0.79 Hect	Mineral not fully extracted from the pit.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	top soil stacked for spreading on backfilled area.	top soil stacked for spreading on backfilled area.	
5d	Total area fully reclaimed and rehabilitated	NA	NA	

5e	General remarks of inspecting officers on backfilling and reclamation etc.	The mineral was not fully extracted from the pit due to which backfilling and reclamation was not done as per proposal. The document modified for the same.

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	Yes	
6b	Area available for rehabilitation (ha) .	6.99 Hect	0.79 Hect.	Mineral not fully extracted and backfilling could not done in the area. The targets revised and incorporated in the modified approved document.
6c	afforestation done (ha).	NA	NA	Mineral not fully extracted and backfilling could not done in the area. The targets revised and incorporated in the modified approved document.
6d	No. of saplings planted during the year	3550 saplings	9073 saplings	
6e	Cumulative no .of plants	85755 nos	91278 nos	
6f	Any other method of rehabilitation	Not proposed	NA	

6g	Cost incurred on watch and care during the year	Rs 857550	Rs 912780
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	304x500x50 m3	304x500x50 m3
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NA	NA
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	
6p	Compliance of environmental monitoring (core zone and buffer zone)	YES	YES	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance and progressive closure operations not completed as per proposal due to unavailability of area for bacfilling. Modifications incorporated in the modified approved document.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM is to be used for captive use of cement plant.	ROM is being used for captive use.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Not proposed	NA	
7c	Different grade of mineral sorted out at mines.	Not proposed	NA	

7d	Any beneficiation process at mines .	NA	NA	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			ROM is being used for captive use.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	To be used for restoration and rehabilitation	Used for restoration and rehabilitation	
8b	Concurrent use or storage of topsoil	Top soil has been stored for backfilling	Top soil has been stored for backfilling	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Temporary dumps proposed for OB and top soil.	three temporary dumps found.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Yes	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Yes	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation over greenbelt	Plantation over greenbelt	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			General maintanence of the road is found in order. Plantation done in the green belt. old pits are being used as water reservaior.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns			Monthly Returns from Apr-19 to Mar-20 and Annual return of RY 2019-20 have been submited.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Mining Engineer - Sh Pankaj Mishra Mine Geologist - Sh Vinod Shrivastava	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	as per AR	
9d	Scrutiny of Annual return on afforestation	Yes	As per AR	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	as per AR
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	as per AR
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	as per AR
9h	Scrutiny of Annual return on fixed assets	Yes	as per AR
9k	Scrutiny of Annual return on mining machineries	Yes	as per AR

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 :

(**NARESH KUMAR KATARIYA**)

Indian Bureau of Mines