

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

Mining Plan Modification REPORT

Jabalpur regional office

Mine file No : MP/STN/LST-314

Mine code : 38MPR35274

- (i) Name of the Inspecting : **SQ05**) **DEEPAK SHARMA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Agent S K Sinha, S K Jain GM Geology
Official with
Designation
- (iv) Date of Inspection : 09-SEP-19
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BHADANPUR (663 HA)**
- (b) **Registration NO.** :
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : BHADANPUR
Taluka : MAIHAR
Post office : SARLANAGAR
Pin Code : 485772
FAX No. : 07674-322306,0761-321881
E-mail : mc_mines@yahoo.com
Phone : 07601-32043,32067,32068
- (f) Police Station : SARLA NAGAR
- (g) First opening date :
- (h) Weekly day of rest :
2. Address for :
correspondance MAIHAR CEMENT
P.O. SARLA NAGAR, MAIHAR, SANTA (M.P.) 485772
3. (a) Lease Number : MPR0423
(b) Lease area : 296.96
(c) Period of lease :
(d) Date of Expiry : 30-MAR-30
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : MAIHAR CEMENT
P.O. SARLA NAGAR, MAIHAR
SATNA MADHYA PRADESH
Phone: 07601-32043, 32067, 32068
FAX : 07674-322306, 0761-321881

Owner : MAIHAR CEMENT
P.O. SARLA NAGAR, MAIHAR,
SATNA MADHYA PRADESH
Phone: N. A.
FAX : N. A.

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	27-DEC-01
Plan/Scheme of Mining		Modif.of approved Mining Plan	26-MAR-03
		Modif.of approved Mining Plan	12-JUL-06
		Mining Scheme rule 12 MCDR1988	14-JUN-07
		Modif.approved Mining Scheme	19-SEP-11
		Mining Scheme rule 12 MCDR1988	30-MAY-12
		Modif.approved Mining Scheme	24-APR-14

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	In the reportign year 2018-19, 35 numbers of core boreholes were proposed	54 numbers of core boreholes were drilled during the year	
1b	Exploration over lease area for geological axis 1 or 2	it was proposed to explored upto G1 level of exploration	G2 area is being explored / upgraded upto the level of G1 level; gradually	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	In house M/s Maihar Cement works	In house M/s Maihar Cement Works	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1-264.74 G2-243.27 in hectare	G1-389.90 G2-176.40 in hectare balance 176.40 hectare of G2 category and 39.06 hectare of G3 is to explore upto G1 level proposal given for next plan period to explored the remaining area	
1e	Balance reserve as on 01/04/20	111-72.15063 121-NIL 122-NIL	111-71.07 121-24.23 122-NIL	reserves has been changed in categories deu to exploration done in the past plan period

1f	General remarks of inspecting officers on geology, exploration etc	limestone of the lease area belongs to the Vindhyan Super Group of Rohtas formaion mailny, limestone of teh lease area is of grey in colour comprises of fine grain, along with interclated shale.
----	--	--

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	in the reporting year 2018-19 it was proposed to ddo development work in the Eastern block in pit E1 and Western Block in pit W3	Development work is being carried out in the proposed pit W3 however in pit E1 deviation observed	violation for the deviation issued
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Seperate benche in top soil OB and Mineral proposed Top Soil 1-1.5 meter (depending upon the availibility) Limestone 5-meter (E1 pit) 7-meter (W3pit)	Seperate benches had been prepared in top soil 1-1.5 meter Limestone 5-6 meter (E1 pit) Limestone 7 meter (w3 pit)	
2c	Stripping ratio or ore to OB ratio	1:0.002	1:0.002	
2d	Quantity of topsoil generation in m3	5600 cubic meter	5600 cubic meter	

2e	Quantity of overburden generation in m3	1.12286 lac cubic meter	1.19574 lac cubic meter	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development has some deviation violation issued for the same development

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	two pits were proposed for mineral production pit E1 and pit W3	production is being doen from two proposed pits pit E1 and W3	
3b	Quantity of ROM mineral production proposed	21.99823 lac tonnes	21.99739 lac tonnes	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	ROM is being used in captive cement plant
3d	Quantity of mineral reject generation	NIL	NIL	
3e	Grade of mineral rejects generation and threshold value declared.	Not Proposed	NIL	
3f	Quantity of sub grade mineral generation.	Not Proposed	NIL	ROM is being used in captive cement plant
3g	Grade of sub grade mineral generation	not proposed	NIL	
3h	Manual / Mechanised method adopted for segregating from ROM	Not Proposed	NIL	No segragatio process adopted ROM is being used in Captive cement plant

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	NIL
3j	Provision of drilling and blasting in mineral benches	drillign and blasting proposed	drilling and blasting is being used in the lease area with protective measures
3k	Provision of mining machineries in mineral benches	Proposed	HEMM is being used in mineral bench
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	proposed benches in mineral bench and OB and top soil i ssuitable for method of mining	proposed height of benches suitable for mining proposed
3m	Total area covered under excavation/pits	124.97 hectare	124.97 hectare
3n	Ore to OB ratio for the pit/mine during the year.	1:0.002	1:0.002
3o	Total area put in use under different heads at the end of year	191.55 hectare	191.55 hectare
3p	Production of ROM mineral during the last five year period as applicable	2017-18- 2199978 2018-19- 2199825	2017-18 - 2199000 2018-19 - 2199739
3q	General remarks of inspecting officers on method of mining etc.		mechanised method of mining adopted for the mining along with provisions of drillign and blasting with use of HEMM and Showels

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of top soil and mineral proposed	top soil is being dumped separately	
4b	Location of topsoil, OB and mineral reject dumps	top soil is being proposed to dump in between grid line E 3489580 to 3489700 to N 741690 to 741710	top soil is being dumped in beetween grid line E 3489550 to 3489650 to N 741650 to 741700 (aprox)	
4c	Number of dumps within lease area and outside of lease area	5 dumps within lease area	5 dumps within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out Side the UPL	dumps are out side UPL	
4e	Number of active and alive dumps.	5	5	
4f	Number of dead dumps.	NIL	NIL	
4g	Number of dumps established.	not proposed	NIL	
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	NIL	
4j	Number of settling ponds	1	1	
4k	Specific comments of inspecting officer on waste dump management			Top Soil is being used in 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 proposed before backfilling	full extraction is being done before backfilling, reconfirmation of minerals existence is being checked by random drilling before backfilling	
5b	Area under backfilling of mined out area	1.5 hectare	1.45 hectare	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	plantation proposed for the use of top soil	top soil is being used in plantation over the backfilled and virgin (non-mineralized) area	
5d	Total area fully reclaimed and rehabilitated	6.73	6.73	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			backfilling over the excavated area is being done simultaneously and plantation is being done over the backfilled area

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).	submitted	submitted	
6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha) .	3.0	2.5	
6d	No. of saplings planted during the year	6000	5000	

6e	Cumulative no .of plants	12000	12500 aprox	
6f	Any other method of rehabilitation	not proposed	NIL	
6g	Cost incurred on watch and care during the year	not mentioned	NA	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL	during the year no voids available
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	proposed	done as per proposal on available area	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	not proposed	NIL	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	not proposed	NIL	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	proposed	done as per proposal	

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.5	1.5	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	proposed	backfilling and planttaion	
6p	Compliance of environmental monitoring (core zone and buffer zone)	proposed	as per mining plan regular monitoring is being done	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			full extracted area is being backfilled with waste and planttaion over teh backfilled area is being done with generated top soil

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 captive cement plant	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	not proposed	NIL	rom is being dispatched to captive cement plant
7c	Different grade of mineral sorted out at mines.	not proposed	NIL	

7d	Any beneficiation process at mines .	not proposed	NIL	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			ROM is being dispatched to teh captive cement plant, all the excavated ROM is being used

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	proposed	Separate removal and utilization in plantation proposed and being done	
8b	Concurrent use or storage of topsoil	proposed	planttaion over the backfillied area is being done from top soil generated	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	proposed	as per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	proposed	waste and OB proposed to be used in reclaimanation program in fully extracted 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 proposal	
8g	Survival rate	100	95%	
8h	Water sprinkling on roads to control airborne dust	propsoed	as per proposal fro water tanker and sprinklers installed in the lease area	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			need improments

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR submmitted upto 2018-19 MR submitted upto feb 2020		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	furnished	Manager Pradeep Rai and A K Singh Geologist S K Jain and A K Ray Mining Engineer Amit Pateriya	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	furnished	furnished in AR	
9d	Scrutiny of Annual return on afforestation	furnished	furnished	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NA	NA	ROM used in Captive cement plant

9f	Scrutiny of Annual return on ROM stock and/or graded ore	furnished	furnished
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	furnished	230.10 RS cost of production
9h	Scrutiny of Annual return on fixed assets	furnished	furnished
9k	Scrutiny of Annual return on mining machineries	furnished	furnished

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)	09-SEP-19			
MCDR17	Rule 33	09-SEP-19			

Date :

(DEEPAK SHARMA)

Indian Bureau of Mines