

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

**Mining Plan Modification REPORT**

**Jabalpur regional office**

**Mine file No :** MP/SATNA/LST.344

**Mine code :** 38MPR35317

- (i) Name of the Inspecting : **SQ05** ) **DEEPAK SHARMA**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Mr Bharat Sahastrabudhe Geologist Mr Sudhakar Kumar (  
Official with  
Designation
- (iv) Date of Inspection : 01-OCT-19
- (v) Prev.inspection date : 10-JAN-17

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **SADHERA (291.792HA)**
- (b) **Registration NO.** : **IBM/15031/2013**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : MADHYA PRADESH  
District : SATNA  
Village : SADHERA  
Taluka : MAIHAR  
Post office : BHADANPUR  
Pin Code : 485772  
FAX No. : 02230384399  
E-mail :  
Phone : 02230383333
- (f) Police Station : MAIHAR
- (g) First opening date : 11-APR-13
- (h) Weekly day of rest : SUN
2. Address for :  
correspondance
3. (a) Lease Number : MPR2424
- (b) Lease area : 363.44
- (c) Period of lease : 30
- (d) Date of Expiry : 29-JUL-40
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : RELIANCE CEMENT CO.PVT.LTD.  
H-BLOCK 1ST FLOOR DAKC,  
KOPARKHAIRANE THANE BELAPUR  
RD MUMBAI (SUBURBAN)  
MAHARASHTRA  
Phone:02230383333  
FAX :02230384399

6. Date of approval of Mining	:	MP modif under MCR 1960	30-MAY-14
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	17-MAR-15
		Modif.approved Mining Scheme	06-JUN-16

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	it was proposed to drill 5 core borehole in the year 2018-19	5 core boreholes been drilled during the year 2018-19	
1b	Exploration over lease area for geological axis 1 or 2	it was proposed to explored entire potential lease area upto G1 level of exploration	entire potential lease area explored upto G1 level of exploration	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	name of exploration agency mentioend expenditure not mentioned	M/s Khanna Associates , M/s RCCPL Pvt Ltd expenditure not mentioned	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	total lease area already explored upto G1 level	
1e	Balance reserve as on 01/04/20	as on 01/04/2016 111-61.99 122-19.12	as on 01/04/2019 111-65.68 122-8.0	
1f	General remarks of inspecting officers on geology, exploration etc			limestone of the lease area belongs to Vindhyan super group, comprises from rohtas to bhandar formation, limestone of the lease is compact dark grey in colour, grain size are very fine, limestone deposition is mix with interclated shales

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	development was proposed in between grid interval E 474938 to E 475647 and N 2668120 to N 2668500	Development is as per proposal in between grid interval E 474930 to E 475640 and N 2668110 to N 2668450	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed one top soil bench of 1.5-2 meter, two 1st bench 10 meter and one 1st bench of 6 meter	Top Soil bench 1-2 meter (depending upon the occurrence of top soil in the area) Limestone first two benches are of 9-10 meter third 1st nbecnh is of 5-6 meter	
2c	Stripping ratio or ore to OB ratio	1:0.038	1:0.024	
2d	Quantity of topsoil generation in m3	7995 cubic meter	3110 cubic meter	
2e	Quantity of overburden generation in m3	125625 cubic meter	48101 cubic meter	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development was done in the proposed location

## 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	3500000	3487161	

3c	Recovery of sailable/usable mineral from ROM production	100%	100%
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
3g	Grade of sub grade mineral generation	Not Proposed	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical method proposed	mechanical method adopted
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	Proposed	Drillign and blasting method adopted as per proposal
3k	Provision of mining machineries in mineral benches	Proposed	As per proposal mining machineries are in use in mineral benches
3m	Total area covered under excavation/pits	55.54	53.50
3n	Ore to OB ratio for the pit/mine during the year.	1;0.038	1:0.024

3o	Total area put in use under different heads at the end of year	83.519	62.939	
3p	Production of ROM mineral during the last five year period as applicable	2016-17-3100000 2017-18-3500000 2018-19-3500000	2016-17-3059279 2017-18-3117966 2018-19-3487161	
3q	General remarks of inspecting officers on method of mining etc.			HEMM is being used in mineral benches, drilling and blasting method adopted as per proposal.

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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 dumpign for topsoil and OB as per proposal	
4b	Location of topsoil, OB and mineral reject dumps	three OB dumps were proposed	One OB dump is in northern portion of the lease area in between grid line N 2669700 to N 2669300 and E 475000 to E 474800 rest two dumps are in the southren portion of the lease area in beetween grid line N 2667300 to N 2667500 to E 474800 to E 475000 N 2667700 to N 2667500 to E 475400 to E 475600	
4c	Number of dumps within lease area and outside of lease area	three OB dumps	three OB dumps	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out Side teh UPL	Out Side teh UPL	

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4e	Number of active and alive dumps.	three	three OB dumps whcih are active	
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.	proposed	retainig wall of 400 meter and garland drain of 788 m prepared all along the dumps	
4i	Length of Retaining wall or garland drain all along dumps	proposed	retainig wall of 400 meter and garland drain of 788 m prepared all along the dumps	
4j	Number of settling ponds	two	two	
4k	Specific comments of inspecting officer on waste dump management			OB is being dump in teh designated location for future use in bakcfilling of fully extracted area

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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 extratction of mineral proposed	full extaction fo mineral is beign rechecked by drilling before bakcfilling any area	
5b	Area under backfilling of mined out area	Not proposed	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	proposed	top soil is being used in planttaion	

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5d	Total area fully reclaimed and rehabilitated	1.0	1.0 by means of plantation	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			plantaion is being done on beckfiling area for reclamation program

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) .	NIL	NIL	
6c	afforestation done (ha).	1.0 hectare	1.0 hectare	
6d	No. of saplings planted during the year	2000	2500	
6e	Cumulative no .of plants	6000	5500	
6f	Any other method of rehabilitation	not proposed	NIL	
6g	Cost incurred on watch and care during the year	not mentioned	NIL	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	NIL	



6p	Compliance of environmental monitoring (core zone and buffer zone)	proposed	as per proposal	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			planttaion is being done on fully extracted backfilled area for PMCP complaince as per proposal given in approved mining plan

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Dispatch proposed	ROM si being dispatched	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical method proposed	mechanical method adopted i.e screening	
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 the captive cement plant

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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	proposed	separate removal and utilization process adopted for the disposal of generated top soil	
8b	Concurrent use or storage of topsoil	proposed	planttaion is being done from the generate top soil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	proposed	separate dumps availabel for OB and temporary dumps for top soil	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB is proposed to be used in backfilling	OB is being used in fully extracted area for backfilling	
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	90	90-95	
8h	Water sprinkling on roads to control airborne dust	proposed	as per proposal water tankes are in used for haulage roads and sprinklers installed	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			good

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## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR submitted upto 2018-19 MR submitted upto feb 2020	AR submitted upto 2018-19 MR submitted upto feb 2020	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	furnished	Geologist Bharat Shahastrabuddhe, Mining Engineer Sudhakar Kumar	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	furnished	furnished	
9d	Scrutiny of Annual return on afforestation	furnished	furnished	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	furnished	furnished	
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	172.09 INR cost per ton	
9h	Scrutiny of Annual return on fixed assets	furnished	1583717645 INR (for two adjacent lease)	
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 cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

**Date :**

**(DEEPAK SHARMA)**

Indian Bureau of Mines