

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

**MCDR inspection 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 : Shri Sudhakar Kumar (Mining Engineer), Shir Bharat S
Official with
Designation
- (iv) Date of Inspection : 12-FEB-21
- (v) Prev.inspection date : 19-MAR-18

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
Plan/Scheme of Mining

: MP modif under MCR 1960	30-MAY-14
Mining Scheme rule 12 MCDR1988	17-MAR-15
Modif.approved Mining Scheme	06-JUN-16
MP modif under 17(3) MCR 2016	06-NOV-19
MP review under 17(1) MCR 2016	02-JUL-20
MP review under 17(1) MCR 2016	02-JUL-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NO EXPLORATION PROPOSED	NO EXPLORATION DONE, ML ALREADY EXPLORED UP TO G1	
1b	Exploration over lease area for geological axis 1 or 2	IT WAS PROPOSED TO EXPLORE ML UPTO G1 LEVEL	ML HAS EXPLORED UPTO G1 LEVEL	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	RCCPL (EXPLORATION UNIT) INR 750000	RCCPL (EXPLORATION UNIT) INR 850000	
1d	Balance area to be explored to bring Geological axis in 1 or 2	AREA EXPLORED UPTO G1	G1 - 250.1 HECT Non Mineralized - 113.34 HECT	
1e	Balance reserve as on 01/04/20	AS ON 01.04.2019 111-65.68 122-8.00 211-6.947 222-7.234	AS ON 01.04.2020 111-79.763 122-0 211-6.947 221-7.234	
1f	General remarks of inspecting officers on geology, exploration etc			ML BELONGS TO BHANDER FORMATION OF VINDHYAN SUPER GROUP OF ROCKS, LIGHT TO DARK GREY COLOURED LIMESTONE,, FINE GRAINED HARD AND COMPACT, EXPLORATION LEVEL G1 (MINERALISED AREA)

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	PROPOSED LOCATION OF DEVELOPMENT E474400- E474887 N2667732- N2668380 E475423- E475677 N2668031- N2667005	ACTUAL LOCATION OF DEVELOPMENT E474390-E474890 N2667730-N2668385 E475423-E475677 N2668031-N2667005	NO DEVIATION IN WORKING
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	OB-1.5mts height Lst I Bench - 9.5mtr II Bench-9.5mtr III Bench-6 mtr	OB-1.5mts height Lst I Bench -9.5mtr II Bench-9.5mtr III Bench-6 mtr	
2c	Stripping ratio or ore to OB ratio	1:0.07	1:0.084	
2d	Quantity of topsoil generation in m3	26000 CUBIC METER	12500 CUBIC METER (UPTO FEB 2021)	
2e	Quantity of overburden generation in m3	336174 CUBIC METER	249778.10 CUBIC METER	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			DEVELOPMENT WORK AS PER PROPOSAL WITHIN THE PROPOSE LOCATION NO DEVIATION OBSERVED DURING THE YEAR

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	5000000 METRIC TONNES	3110678.97 METRIC TONNES (up to Jan21)	AS PER THE LAST APPROVED QUANTITY OF EC, FRESH EC NOT OBTAINED YET
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-0	NIL-0	
3e	Grade of mineral rejects generation and threshold value declared.	NIL-0	NIL-0	
3f	Quantity of sub grade mineral generation.	NIL-0	NIL-0	
3g	Grade of sub grade mineral generation	NIL-0	NIL-0	
3h	Manual / Mechanised method adopted for segregating from ROM	NOT PROPOSED	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	PROPOSED	AS PER PROPOSAL	
3k	Provision of mining machineries in mineral benches	PROPOSED	HEMM IS BEING USED IN MINERAL BENCHES FOR DEVELOPMENT, PRODUCTION AND TRANSPORTATION	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	PROPOSED HEIGHT AND WIDTH SUITABLE FOR MINING	AS PER PROPOSAL HEIGHT AND WIDTH SUITABLE	

3m	Total area covered under excavation/pits	64.00 HECTARE	63.50 HECTARE	
3n	Ore to OB ratio for the pit/mine during the year.	01:0.07	01:0.84	
3o	Total area put in use under different heads at the end of year	97 HECTARE	96.029 HECTARE	
3p	Production of ROM mineral during the last five year period as applicable	2015-16=3100000 2016-17=3100000 2017-18=3500000 2018-19=3500000 2019-20=5000000 (SUBJECTED TO OBTAINING EC)	2015-16=3005791.84 2016-17=3059279.03 2017-18=3117965.70 2018-19=2487161.27 2019-20=3406286.56	
3q	General remarks of inspecting officers on method of mining etc.			HEMM IS BEING USED FOR DEVELOPMENT , PRODUCTION AND TRANSPORTAION OF ROM, ROM IS BEING USED IN CAPTICE CEMENT PLANT, DRILLING AND BLASTING IS BEING USED AS PER PROPOSAL.

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 TOP SOIL AND WASTE AS PER PROPOSAL	

4b	Location of topsoil, OB and mineral reject dumps	OB Dump (D1) N-24 07' 10.13'' '' E-80 45' 12.77" '' to N-24 07' 04.13'' E-80 45' 58.55" '' to N-24 07' 04.13'' E-80 45' 08.38" '' to N-24 08' 05.6'' E-80 45' 05.76" '' to N-24 08' 17.71'' E-80 45' 14.4'' '' to N-24 08' 05.6'' E-80 45' 05.76" '' to N-24 08' 17.71'' E-80 45' 14.4'' '' to N-24 07' 17.57'' E-80 45' 26.36" '' to N-24 07' 10.36'' E-80 45' 36.5'' '' to N-24 07' 60'' E-80 45' 13" '' to N-24 08' 01'' E-80 45' 13" '' to N-24 07' 10.36'' E-80 45' 36.56'' '' to N-24 07' 60'' E-80 45' 13" '' to N-24 08' 01'' E-80 45' 13" ''	OB Dump (D1) N-24 07' 10.13'' '' E-80 45' 12.77" '' to N-24 07' 04.13'' E-80 45' 58.55" '' to N-24 08' 05.6'' E-80 45' 05.76" '' to N-24 08' 17.71'' E-80 45' 14.4'' '' to N-24 07' 17.57'' E-80 45' 26.36" '' to N-24 07' 10.36'' E-80 45' 36.5'' '' to N-24 07' 60'' E-80 45' 13" '' to N-24 08' 01'' E-80 45' 13" '' to N-24 07' 60'' E-80 45' 13" '' to N-24 08' 01'' E-80 45' 13" ''
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4c	Number of dumps within lease area and outside of lease area	FOUR-4	FOUR-4
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4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	OUTSIDE THE UPL	OUTSIDE THE UPL
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4e	Number of active and alive dumps.	FOUR-4	FOUR-4	
4f	Number of dead dumps.	NIL-0	NIL-0	
4g	Number of dumps established.	NIL-0	NIL-0	
4h	Whether Retaining wall or garland drain all along dumps are there.	PROPOSED	GARLAND DRAIN AND RETAINING WALL PREPARED AROUND THE DUMPS	
4i	Length of Retaining wall or garland drain all along dumps	250 METERS	400X1X1 METERS APROX	
4j	Number of settling ponds	TWO-2	TWO-2	
4k	Specific comments of inspecting officer on waste dump management			DUMPS ARE OUTSIDE THE UPL, RETAINIGN WALL AND GARLAND DRAINS PREPARED ALL AROUND THE DUMPS

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	NO BACKFILLING DONE AS FULL EXTRACTION NOT DONE YET	
5b	Area under backfilling of mined out area	NOT PROPOSED	NIL-0	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	PROPOSED	TOP SOIL IS BEING USED IN PLANTTAION	
5d	Total area fully reclaimed and rehabilitated	NIL-0	NIL-0	

5e	General remarks of inspecting officers on backfilling and reclamation etc.	NO BACKFILLING PROPOSED DURING THE YEAR
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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-0	NIL-0	
6c	afforestation done (ha).	3.50 HECT	4.20 HECT	
6d	No. of saplings planted during the year	1500 NOS	2000 NOS APROX	
6e	Cumulative no .of plants	10000 NOS	14500 NOS APROX	
6f	Any other method of rehabilitation	NOT PROPOSED	NA	
6g	Cost incurred on watch and care during the year	NOT FURNISHED	NA	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NOT PROPOSED	NA	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NOT PROPOSED	NA	

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NOT PROPOSED	NA
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NOT PROPOSED	NA
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NOT PROPOSED	NA
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NOT PROPOSED	NA
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NOT PROPOSED	NA
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NOT PROPOSED	NA
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.	NA
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	DISPATCH OF ROM PROPOSED	ROM IS BEING DISPATCHED TO CAPTIVE CEMENT PLANT	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	MECHANICAL METHOD PROPOSED	SCEENING METHOD PROPOSED	
7c	Different grade of mineral sorted out at mines.	NOT PROPOSED	NA	
7d	Any beneficiation process at mines .	NOT PROPOSED	NA	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			MECHANICAL METHOD (SCREENING) IS BEING USED

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	PROPOSED	TOP SOIL IS BEING USED FOR PLANTATION	

8b	Concurrent use or storage of topsoil	PROPOSED	TOP SOIL IE BEING USED IN PLANTATION
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	PROPOSED	DUMPS OB AND SOIL IS BEING STACKED SEPARATELY
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NOT PROPOSED	NA
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NOT PROPOSED	NA
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 TANKER AND SPRINKLERS ARE USED
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		NEEDS IMPROVEMENTS

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	SUBMITTED	AR AND MR SUBMITTED ONLINE
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	FURNISHED	Mining Engineer in charge Shri Sudhakar Kumar Geologist in charge Shir Bharat Sahasrabudhe
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 12.170 39.330 51.500 (ii) Covered under current (O/C) Workings 0.000 0.000 0.000 (iii) Reclaimed/Rehabilitated 0.000 0.000 0.000 (iv) Used for waste disposal 0.000 0.000 0.000 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.000 11.524 11.524 (vi) Other Purpose (Building and Roads) 1.475 0.900 2.375 (vii) Wor
9d	Scrutiny of Annual return on afforestation	FURNISHED	FURNISHED

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	FURNISHED	NA
9f	Scrutiny of Annual return on ROM stock and/or graded ore	FURNISHED	NA
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	FURNISHED	EX MINE PRICE INR 166.40 COST OF PRODUCTION INR 216.80
9h	Scrutiny of Annual return on fixed assets	FURNISHED	Value of Fixed Assets (INR) 1512326567 (in respect of the mine, beneficiation plant, mine work-shop, power and water installation)

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 2.800 CUM 1 Non Electrical Opencast SHOVEL (HYDRAULIC) 6.100 CUM 2 Electrical Opencast DUMPER 55.000 TONNE 6 Non Electrical Opencast DOZER 385.000 HP 1 Non Electrical Opencast FRONT END LOADER 6.000 CUM 1 Non Electrical Opencast EXPLOSIVE VAN 6.000 TONNE 1 Non Electrical Opencast MOTOR GRADER 150.000 HP 1 Non Electrical Opencast BLAST HOST DRILL 115.000 MM 2 N
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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