

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

Check up inspection REPORT

Jabalpur regional office

Mine file No : MP/SATNA/LST.344

Mine code : 38MPR35317

- (i) Name of the Inspecting : **P013**) **RAJNEESH PUROHIT**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : 1. Mr. Sudhakar Kumar (Mining Engineer)
Official with
Designation
- (iv) Date of Inspection : 13-MAR-20
- (v) Prev.inspection date : 29-JUL-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 |
| | | MP modif under 17(3) MCR 2016 | 06-NOV-19 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|-------------------|--|---|
| 1a | Backlog of previous year | 4 Boreholes | 4 Boreholes | Total mineralized area converted in to G-1 category |
| 1b | Exploration over lease area for geological axis 1 or 2 | G1 - 242.60 Hect. | G1 - 242.60 Hect. | Total mineralized area converted in to G-1 category |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | In-house | In-house. Expenditure incurred during the year- Rs 5,45,983 Bore drilled by Atlas Copco, CS 1000-P4. | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Nil | Nil | |
| 1e | Balance reserve as on 01/04/20 | | Total Mineral Reserves 111 - 62.43 MT 122 - 8.0 MT Total Remaining Resources 221 - 6.947 MT 222 - 7.234 | considered as per approved Mining plan dated- 6/11/19 |
| 1f | General remarks of inspecting officers on geology, exploration etc | | | |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--|--|---------|
| 2a | Location of development w.r.t.lease area | Mining is proposed for FY 2019-20 is in the diverted forest area | Work is being carried as approved in Mining Plan | |

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|----|---|---|---|--------------------|
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | TS+OB bench 1 to 2mtrs 310x270x1.5 I Bench 320X190x10 II Bench 320X160x10 III Bench 200X150x6 | TS+OB bench 1 to 2mtrs 310x270x1.5 I Bench 320X190x10 II Bench 320X160x10 III Bench 200X150x6 | |
| 2c | Stripping ratio or ore to OB ratio | 1:0.036 | 1:0.042 | |
| 2d | Quantity of topsoil generation in m3 | 14900m3 | 13000m3 | Separately stacked |
| 2e | Quantity of overburden generation in m3 | 165489m3 | 129095.03m3 | Separately stacked |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | | | |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------|-----------------------------|---------|
| 3a | Number of pit proposed for production | 1 | 1 | |
| 3b | Quantity of ROM mineral production proposed | 5000000MT | 3249830.58MT (up to Feb 20) | |
| 3c | Recovery of sailable/usable mineral from ROM production | 100% | 100% | |
| 3d | Quantity of mineral reject generation | NIL | NIL | |

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|----|--|--|-----------------------------|
| 3e | Grade of mineral rejects generation and threshold value declared. | NIL | NIL |
| 3f | Quantity of sub grade mineral generation. | NIL | NIL |
| 3g | Grade of sub grade mineral generation | NIL | NIL |
| 3h | Manual / Mechanised method adopted for segregating from ROM | NIL | NIL |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | NIL | NIL |
| 3j | Provision of drilling and blasting in mineral benches | As per page no. 58& 59 of approved Mining Plan | Same as proposed |
| 3k | Provision of mining machineries in mineral benches | As per approved Mining Plan | As per approved Mining Plan |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | | YES |
| 3m | Total area covered under excavation/pits | 53.5 | 50.5hect. Till Feb 2020 |
| 3n | Ore to OB ratio for the pit/mine during the year. | 01:0.036 | 01:0.043 |

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|----|--|--------------|--------------|--|
| 3o | Total area put in use under different heads at the end of year | 80.339Hect. | 72.809Hect | |
| 3p | Production of ROM mineral during the last five year period as applicable | 19000000 MT. | 15924236 MT. | Till Feb 2020 Production proposed for 2019- 20 - 5000000. |
| 3q | General remarks of inspecting officers on method of mining etc. | | | |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|---|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Separate Topsoil dump and waste dumps are proposed | Separate Topsoil dump and waste dumps are being made asper (Rule 32,33) | |

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|----|---|--|---|
| 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' 07.84'' E-80 45' 08.38" to N-24 07' 07.84'' E-80 45' 08.38" OB Dump (D2) N-24 08' 05.6'' E-80 45' 05.76" to N-24 08' 17.71'' E-80 45' 14.4" OB Dump (D3) N-24 07' 17.57'' E-80 45' 26.36" to N-24 07' 10.36'' E-80 45' 36.56 | OB Dump (D1) N-24 07' 10.13 '' E-80 45' 12.77" to N-24 07' 07.84'' E-80 45' 08.38" OB Dump (D2) N-24 08' 05.6'' E-80 45' 05.76" to N-24 08' 17.71'' E-80 45' 14.4 OB Dump (D3) N-24 07' 17.57'' E-80 45' 26.36" to N-24 07' 10.36'' E-80 45' 36.56 |
| | | OB Dump (D3) N-24 07' 17.57'' E-80 45' 26.36" to N-24 07' 10.36'' E-80 45' 36.56 | Top Soil Dump N-24 07' 60'' E-80 45' 13" to N-24 08' 01'' E-80 45' 13" |
| | | Top Soil Dump N-24 07' 60'' E-80 45' 13" to N-24 08' 01'' E-80 45' 13" | |
| 4c | Number of dumps within lease area and outside of lease area | 4 Including topsoil Dump proposed inside the ML area | 4 Including topsoil Dump proposed inside the ML area |

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|----|--|---|---|
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Waste Dumps are proposed away from UPL | Waste Dumps are being made separately away from the UPL |
| 4e | Number of active and alive dumps. | 4 | 4 |
| 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. | Garland drain & Retaining wall are proposed all along the Dumps | Garland drains and Retaining wall are all along dumps |
| 4i | Length of Retaining wall or garland drain all along dumps | 1600 mtrs Retaining Wall & Garland Drain | 1600 mtrs Retaining Wall & Garland Drain |
| 4j | Number of settling ponds | 2 | 2 |
| 4k | Specific comments of inspecting officer on waste dump management | | |

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. | No Backfilling proposed in the year | No backfilling done | |
| 5b | Area under backfilling of mined out area | na | na | |

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|----|---|----|----|
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | NA | NA |
| 5d | Total area fully reclaimed and rehabilitated | NA | NA |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | |

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). | Report on PMCP as per rule 23 E(2) | Report sent on PMCP sheet on dated 15.05.2019 | |
| 6b | Area available for rehabilitation (ha) . | NA | NA | |
| 6c | afforestation done (ha) . | NA | NA | |
| 6d | No. of saplings planted during the year | 2000 Nos. 01 Hect. NA | 5000 Nos. 02Hect. NA | |
| 6e | Cumulative no .of plants | | | |
| 6f | Any other method of rehabilitation | NA | NA | |
| 6g | Cost incurred on watch and care during the year | NA | NA | |

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|----|--|--------------------------------|---|
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | 1Ha | 2Ha |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | NA | NA |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | As proposed in the Mining Plan | Done as given in the approved Mining Plan |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|--|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | Total ROM mineral is planned to dispatch | Total ROM mineral is being dispatched. | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | NA | NA | |
| 7c | Different grade of mineral sorted out at mines. | NA | NA | |
| 7d | Any beneficiation process at mines | NA | NA | |

7e General remarks
of inspecting
officer on
Mineral
conservation and
beneficiation
issues

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|--|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | Top soil is separately removed and stacked | Top soil is separately removed and stacked | |
| 8b | Concurrent use or storage of topsoil | Stacking | Stacking | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Proposed as per Rule 33 Separate dumps are made | Proposed as per Rule 33 Separate dumps are made | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | NA | NA | |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | NA | NA | |

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|----|--|-----|-----|--|
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | | | Total cumulative 28617 nos. of sapling have been planted so far, out of this 17506 have been survived. In the year out of 5000 saplings have been planted during the year 2019-20 & total 4000 saplings have been survived |
| 8g | Survival rate | | | |
| 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 | | | |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------|---|---|
| 9a | Status of submission of Monthly and Annual returns | | M.R. Submitted up to Feb-20 A.R. submitted up to 2018-19 | M.R. Submitted up to Feb-20 A.R. submitted up to 2018-19 |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | | 1. Mr. Sudhakar Kumar (Mining Engineer) 2. Mr. Bharat Sahasrabudhe (Geologist) 3. Mr. Vijay Shukla (Surveyor) | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | furnished | furnished in sr no 12 in AR | |

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|----|---|-----------|---|---|
| 9d | Scrutiny of Annual return on afforestation | furnished | furnished in sr no 12 total 1.289 hectare | |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | | | |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | | furnished | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | | 172.10 INR | (cost per tonne and ex mine price same due to captive cement plant) |
| 9h | Scrutiny of Annual return on fixed assets | furnished | 1583717645 INR (for two adjacent lease) | |
| 9k | Scrutiny of Annual return on mining machineries | | 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 :

(RAJNEESH PUROHIT)

Indian Bureau of Mines