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# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### MCDR inspection REPORT

#### Jabalpur regional office

Mine file No: Mine code: 38MPR47128

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : Shri Ram Bihari Bagri (Mining Engineer) & Shri Arvind

Official with Tamrakar (Geologist)

Designation

(iv) Date of Inspection : 25-MAY-24
(v) Prev.inspection date : 15-SEP-23

PART-I : GENERAL INFORMATION

(a) Mine Name : SALAIYA PAHARHAI(4.12 Hect.)

(b) Registration NO. : IBM/744/2011

(c) Category : A Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : MADHYA PRADESH

District : KATNI

Village : SALAIYA PAHARHAI
Taluka : VIJAYRAGHAVGARH
Post office : SALAIYA PAHARHAI

Pin Code : 483880 FAX No. : N.A.

E-mail : ranjan grover4@yahoo.com

Phone : 07622-405474

(f) Police Station : V.GARH

(g) First opening date : 22-JUL-09

(h) Weekly day of rest : SUN

2. Address for : Shri Madan Lal Grover (Lease Holder),

correspondance Civil Line, P.O. Katni, District - Katni (M.P.)-

483501

3. (a) Lease Number : N.A. (b) Lease area : 4.12

(c) Period of lease : 50 Years (22-JUL-09 TO 21-JUL-59)

(d) Date of Expiry : 21-JUL-59

4. Mineral worked : LIMESTONE Main

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5. Name and Address of the

Lessee : Shri Madan Lal Grover (Lease Holder),

Civil Line, P.O. Katni, District - Katni (M.P.) - 483501

Shri Madan Lal Grover (Lease Holder),

: Civil Line, P.O. Katni, District - Katni (M.P.) - 483501 Owner

6. Date of approval of Mining : MP under rule 22 of MCR1960 Plan/Scheme of Mining Scheme of Mining plan under 25-MAR-09

29-SEP-14

rule 12(3) MCDR1988

Modification of Mining under 18-JUN-19

Rule 17(3) Of MCR2016

Review of Mining under rule 30-APR-24

17(2) Of MCR2016

#### **Exploration**

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| S.N. | Item   | Proposals   | Actual Work  | Remarks |  |  |
|------|--|---|--|---------|--|--|
| 1a   | Backlog of previous year   | No proposals  | Nil  |         |  |  |
| 1b   | Exploration over lease area for Geological axis 1 or 2.            | No exploration proposals<br>during year 2023-24 for<br>G1/G2 levels   | Potential Mineralized area explored up to G1 level.                                  |         |  |  |
| 1c   | Exploration Agency & Expenditure in Lakh Rupees during the year    | Not specified.  | Not specified.   |         |  |  |
| 1d   | Balance area to be explored to bring Geological axis in 1 or 2.    | Nil   | Nil  |         |  |  |
| 1e   | Balance reserves as on 01.04.2024                                  | Nil   | Balance reserve as<br>on<br>01/04/2024 – 111 -<br>164548.61 & 122 –<br>681150 tonnes |         |  |  |
| 1f   | General remarks of Inspecting officer on geology, exploration etc. | Entire lease area explored up to G1 Level of exploration. Light colored clayey limestone inter beds are present, generally near the upper contact. Lime stones occur as intercalated with shale. Thickness of limestone varies from few cm to 1m. The thickness and nature of the soil depends on climatic and morphological exposure intensity of ground water circulation & nature of the source rock. No backlog of exploration. |  |         |  |  |

#### **Development**

| S.N. | ltem   | Proposals  | Actual Work  | Remarks |  |
|------|--|--|--|---------|--|
| 2a   | Location of Development w.r.t. lease area  | Development was proposed towards North of the quarry 1 & also towards East & South of the quarry 2.  | As per proposal  |         |  |
| 2b   | Separate benches in topsoil overburden and mineral (Rule 15)                           | Separate bench for top<br>soil, Over burden &<br>mineral proposed  | Yes, Separate bench<br>for top soil, Over<br>burden & Mineral<br>were found. |         |  |
| 2c   | Stripping ratio or ore to OB ratio   | 1:1.09   | 1:1.1  |         |  |
| 2d   | Quantity of topsoil generation in m <sup>3</sup>                                       | 11448 cu.m   | 11510 cu.m   |         |  |
| 2e   | Quantity of overburden generation in m <sup>3</sup>                                    | 10410 cu.m   | 10485 cu.m   |         |  |
| 2f   | General remarks of Inspecting officer on development of pit w.r.t type of deposit etc. | Development was carried towards North of the quarry 1 & also towards East & South of the quarry 2. Permission under rule 111(1) of MCR, 1961 expired on 03/05/2022. Violation in this regard have been pointed out through violation of rule11(1). |  |         |  |

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#### **Exploitation**

| S.N. | Item   | Proposals   | Actual Work   | Remarks |
|------|--|---|---|---------|
| 3a   | Number of pits proposed for production   | Two pit   | Two pit   |         |
| 3b   | Quantity of ROM mineral production proposed (2023-24)  | 49986 tonnes  | 49932 tonnes  |         |
| 3c   | Recovery of Salable/usable mineral from ROM production   | 80 %  | 80 %  |         |
| 3d   | Quantity of mineral reject generation  | Not proposed  | Not applicable  |         |
| 3e   | Grade of mineral reject generation and threshold value declared                                      | Not proposed  | Not applicable  |         |
| 3f   | Quantity of sub-grade mineral generation   | Not proposed  | Not applicable  |         |
| 3g   | Grade of sub-grade mineral generation  | Not proposed  | Not applicable  |         |
| 3h   | Manual/Mechanized method adopted for segregation from ROM  | Mechanized  | Mechanized  |         |
| 3i   | Any analysis or beneficiation study proposed & carried out for subgrade mineral and reject           | Not proposed  | Not applicable  |         |
| 3j   | Provision of drilling & blasting in mineral benches  | Proposed, spacing – 2.40 to 2.50 m, Burden – 2.0 to 2.20 m, depth of hole – 2.80 to 2.90 m, dia of hole – 80 mm, charge per hole – 5-10 kg. | Drilling & blasting carried out as proposed.  |         |
| 3k   | Provision of mining machineries in mineral benches   | proposed  | HEMM is being used in mineral benches for excavation and transportation.  Back hoe – 1 – 1.2 cu.m  Air Compressor - 1 – 210 cu.m./min.  Water Tanker – 1 – 5000 liter  Dumper – 2 – 16 tonne  Dumper – 1 – 10 tonne |         |
| 31   | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Proposed  | Height of o/b & mineral benches is suitable for method of mining as proposed.   |         |
| 3m   | Total area covered under excavation /pits  | 2.27 hect.  | 2.10 hect.  |         |
| 3n   | Ore to OB ratio for the pit/mine during the year   | 1:1.09  | 1:1.1   |         |

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| ŀ | 30 | Total area put in use under different heads at the end of year | 3.27 hect.   |         | 2.56 hect. |  |
|---|----|--|--|---------|------------|--|
|   | 3р | Production of ROM mineral during                               | 2019-20  | 49947 t | 49900 t    |  |
|   |    | last five-years period, as Applicable                          | 2020-21  | 49990 t | 49856 t    |  |
|   |    |  | 2021-22  | 49318 t | 47370 t    |  |
|   |    |  | 2022-23  | 49972 t | 49950 t    |  |
|   |    |  | 2023-24  | 49986 t | 49932 t    |  |
|   | 3q | General remarks of inspecting officer on method of mining etc  | Category A mines having adopted mechanized method of mining. |         |            |  |

#### **Solid Waste Management-Dumping**

| S.N. | ltem  | Proposals   | Actual Work  | Remarks         |  |
|------|---|---|--|-----------------|--|
| 4a   | Separate dumping of topsoil, OB & mineral reject (Rule 32,33)     | Separate dumping of top soil and OB were proposed.  | Separate dumping of top<br>soil and OB were<br>observed.   |                 |  |
| 4b   | Location of topsoil, OB & mineral reject dumps                    | One soil dump in south<br>block; one OB dump in<br>south of quarry 2 & one OB<br>dump in North of quarry 1.   | One soil dump in south<br>block; one OB dump in south<br>of quarry 2 & one OB dump<br>in North of quarry 1 were<br>observed. |                 |  |
| 4c   | Number of Dumps within lease area and outside lease area          | 3 dumps within the lease area   | 3 dumps within the lease area  | Existing dumps. |  |
| 4d   | Location of Dumps w.r.t. ultimate pit limit (Rule 16)             | within ultimate pit limit   | within ultimate pit limit  |                 |  |
| 4e   | Number of Active & Alive dumps                                    | 03 dumps  | 03 dumps   |                 |  |
| 4f   | Number of dead dumps  | Not proposed  | Not applicable   |                 |  |
| 4g   | Number of dumps established                                       | Not proposed  | Not applicable   |                 |  |
| 4h   | Whether Retaining wall or garland drain all along dumps are there | Not proposed  | Not applicable   |                 |  |
| 4i   | Length of Retaining wall or garland drain all along dump          | Not proposed  | Not applicable   |                 |  |
| 4j   | Number of settling ponds  | Not proposed  | Not applicable   |                 |  |
| 4k   | Specific comments of inspecting officer on waste dump management  | One dump of top soil & 2 OB dump were observed. Top soil generated during the year utilized for topping on backfilled area & OB generated during the year utilized for backfilling. |  |                 |  |

#### **Solid Waste Management-Backfilling**

| S.N. | ltem   | Proposals | Actual Work   | Remarks |
|------|--|-----------|---|---------|
| 5a   | Status on part or full extraction of mineral from mined out area before starting backfilling |           | Full extraction of mineral under progress up to the UPD |         |
|      |  |           |   |         |

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| 4 | 5b | Area under backfilling of mined out area  | 0.45 hectare cum.   | 0.45 hectare cum.   |
|---|----|---|---|---|
|   | 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | Proposed for topping on backfilled area for afforestation.  | As per proposal   |
|   | 5d | Total area fully reclaimed & rehabilitated  | 0.13 hectare mined out area proposed for reclamation during the year and 0.05 hectare area proposed for rehabilitation by plantation during the year. | As per proposal   |
|   | 5e | General remarks of inspecting officer on backfilling, reclamation etc                   | Top soil generated during the generated during the year utilized.   | year utilized for topping on backfilled area & O zed for backfilling. |

### **Progressive Mine Closer Plan**

| S.N. | ltem  | Proposals                | Actual Work                | Remarks |
|------|---|--------------------------|----------------------------|---------|
| 6a   | Whether Annual report on PMCP submitted on time and correctly-Rule 23E (2). Details should be given in the format as given in Annexure-20 | Proposed                 | Submitted                  |         |
| 6b   | Management of worked/mined out benches  |                          |                            |         |
|      | i) Area available for<br>rehabilitation (Ha)  | Not proposed             | Not applicable             |         |
|      | ii) Afforestation done (ha.)  | Not Proposed             | Not applicable             |         |
|      | iii) No. of saplings planted<br>during the year   | Not Proposed             | Not applicable             |         |
|      | iv) Cumulative no. of plants  | Not specified            | Not applicable             |         |
|      | v) Any other specific method<br>of rehabilitation   | Not proposed             | Not applicable             |         |
|      | vi) Cost incurred on watch & care during the year   | Not Specified.           | Not applicable             |         |
|      | Compliance on reclamation and rehabilitation by backfilling  i) Voids available for backfilling (L*B*D)  ii) Void filled by               | 0.13 hect.<br>0.13 hect. | 0.13 hect.<br>0.13 hect.   |         |
| 6C   | waste/tailings iii) Afforestation on the backfilling  | 0.05 hect.  Not Proposed | 0.05 hect.  Not applicable |         |
|      | <ul><li>iv) Rehabilitation by making water reservoir</li><li>v) Any other specific means</li></ul>  | Not Proposed             | Not Applicable             |         |
| 6d   | Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitation iii) Method of rehabilitation            | Not Proposed             | Not Applicable             |         |

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| 24 | 6e | Compliance      | of     | Environment | Proposed  | Within prescribed limit. |  |  |
|----|----|-----------------|--------|-------------|---|--------------------------|--|--|
| -  |    | monitoring      | (core  | zone &      |   |                          |  |  |
|    |    | Buffe           | er zon | e)          |   |                          |  |  |
|    | 6f | General remai   | rks of | , ,         | Pit is not reached up to ultimate pit depth resulting PMCP activities like backfi |                          |  |  |
|    |    | officer on PM0  | CP con | npliance &  | of mined out area, stablisation of benches etc. work are yet to be started.       |                          |  |  |
|    |    | progressive clo | oser o | perations   |   |                          |  |  |

### **Mineral Conservation**

| S.N. | ltem   | Proposals   | Actual Work             | Remarks |
|------|--|---|-------------------------|---------|
| 7a   | ROM mineral dispatch or gradewise sorting within lease area                          | ROM mineral dispatch to steel and cement industries | As per proposal         |         |
| 7b   | Method of grade-wise mineral sorting i.e. manual or mechanical                       | Mechanical  | Mechanical              |         |
| 7c   | Different grade of mineral sort out at mine  | Cement grade  | Cement grade            |         |
| 7d   | Any beneficiation process at mines   | Not Proposed  | Not applicable          |         |
| 7e   | General remarks of inspecting officer on Mineral conservation & beneficiation issues | ent and steel industries dire                       | ectly. No beneficiation |         |

#### **Environment**

| S.N. | ltem   | Proposals  | Actual Work   | Remarks |
|------|--|--|---|---------|
| 8a   | Separate removal and utilization of topsoil (Rule32)   | Proposed   | As per proposal   |         |
| 8b   | Concurrent use or storage of topsoil   | Top soil is proposed for protective bund & spreading for plantation purpose.               | Topsoil utilized for plantation & for protective bund.    |         |
| 8c   | Separate dumps for overburden waste rock, rejects and fines (Rule 33)  | Separate dumping of OB is proposed.  | Separate<br>dumping of OB is<br>observed.                 |         |
| 8d   | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use                    | Proposed for dumping   | Separate dumping of OB is observed.                       |         |
| 8e   | Phased restoration, reclamation<br>and rehabilitation of lands affected<br>by mining operations (Pits, dumps<br>etc) | There is no specific Approved proposal for Reclamation and Rehabilitation of pit and dumps | There is no effective reclamation and rehabilitation work |         |

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| 8f | Baseline information on existence of plantation & additional plantation done (Rule 41) | Plantation proposed on barrier zone from BP no. 10 to 11 & 11 to 1. | As per proposal   |  |
|----|--|---|---|--|
| 8g | Survival rate  | 80%   | 80%   |  |
| 8h | Water sprinkling on roads to control airborne dust                                     | Proposed  | Water sprinkling on<br>roads to control<br>airborne dust carried<br>out with the use of water<br>tanker |  |
|    | General remarks of inspecting officer on aesthetic beauty in and around mine area      |   |   |  |

### Compliance of Rule 45:-

| S.N. | ltem  | Proposals                                      | Actual Work  | Remarks |
|------|---|--|--|---------|
| 9a   | Status of submission of Monthly and Annual returns  | Submitted both<br>Monthly and Annual<br>Return | Submitted  |         |
| 9b   | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager           | Mining Engineer and<br>Geologist               | Shri Ram Bihari Bagri<br>(Mining Engineer) & Shri<br>Arvind Tamrakar (Geologist)   |         |
| 9c   | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Yes  | Covered under current (O-C) Workings – 2.1 hect. Reclaimed-rehabilitated – 0.13 hect. green belt – 0.2 hect. PMCP – 0.13 hect. |         |
| 9d   | Scrutiny of Annual return on afforestation  | Yes  | 100 trees planted during the year  |         |
| 9e   | Scrutiny of Annual return on mineral reject generation (Grade and quantity)                   | Yes  | Nil  |         |
| 9f   | Scrutiny of Annual return on ROM stock and/or graded ore                                      | Yes  | ROM closing stock as on 01/04/2024 - 73.480 tonnes   |         |
| 9g   | Scrutiny of Annual return on sale value, Ex. Mine price and production cost                   | Yes  | Ex. Mine price -<br>397.52 and<br>production cost –<br>282.79  |         |
| 9h   | Scrutiny of Annual return on fixed assets   | Yes  | Value of Fixed Assets* (₹<br>1577763)  |         |
| 9k   | Scrutiny of Annual return on mining machineries   | Yes  | $Back\ hoe - 1 - 1.2\ cu.m$ $Air\ Compressor - 1 - 210$ $cu.m./min.$ $Water\ Tanker - 1 - 5000\ liter$                         |         |

| /36535/2024 |  | Dumper – 2 – 16 tonne<br>Dumper – 1 – 10 tonne |  |
|-------------|--|--|--|
|             |  |  |  |

Details of Violations observed during current inspection and compliance position of violation pointed out:-

Rule -11(1) of MCDR 2017 dated -02/07/2024

Rule - 31(4) of MCDR 2017 dated - 02/07/2024

Rule - 33 of MCDR 2017 dated - 02/07/2024

Name: Akash Arun Mittarwar Designation: Assistant Mining Engineer 1/36535/2024