# MCDR-MiFLOLST/25/2023-JBP-IBM\_RO\_JBP INDIAN BUREAU OF MINES

#### MINERALS DEVELOPMENT AND REGULATION DIVISION

1/17417/2023

#### MCDR inspection REPORT

#### Jabalpur regional office

Mine file No : MP/SATNA/LIMESTONE-346 Mine code: 38MPR35319

Name of the Inspecting : C004 ) ROBERT SIMON C

Officer and ID No.

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine : Shri Sankata Prasad Dwiwedi, Shri Nithin Nath Pande

Official with

Designation

(iv) Date of Inspection : 23-AUG-23 Prev.inspection date : 20-SEP-21 (v)

PART-I : GENERAL INFORMATION

(a) Mine Name : JURA 29.163HA.

(b) Registration NO. : IBM/15145/2013

(C) Category : B Manual (d) Type of Working Opencast

(e) Postal address

> State : MADHYA PRADESH

District SATNA Village **JOORA** Taluka MAIHAR Post office : JOORA

Pin Code : FAX No.

E-mail : -sankathadwivedi@gmail.com

Phone 9425811881

(f) Police Station

First opening date : 31-JAN-09 (g)

Weekly day of rest (h) : SUN

Address for : P.O.GORAIYA correspondance

DIST. SATNA

MP

3. Lease Number : MPR2269 (a) (b) Lease area : 29.16 Period of lease : 30 (C)

> (d) Date of Expiry : 12-JAN-39

Mineral worked 4. : LIMESTONE Main

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5. Name and Address of the

Lessee : SANKATHA PRASAD DWIVEDI

VILLAGE GORAIYA DISSTT. SATNA,M.P. - SATNA MADHYA

PRADESH Phone:-FAX:-

Owner : SANKATHA PRASAD DWIVEDI

P.O. GORAIYA DISTT. SATNA MP SATNA MADHYA PRADESH

Phone: FAX : -

6. Date of approval of Mining : MP review under 17(1) MCR 2016 28-AUG-19

Plan/Scheme of Mining

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

## Exploration :

| Sl.No. | Item  | Proposals     | Actual work                               | Remarks  |
|--------|---|---------------|---|--|
| 1a     | Backlog of previous year  | Not proposed  | AN  |  |
| 1b     | Exploration over lease area for geological axis 1 or 2                  | Not Proposed  | Entire lease area already explored in G1. |  |
| 1c     | Exploration Agencies and Expenditure in lakh rupees during the year     | NA            | NA  |  |
| 1d     | Balance area to<br>be explored to<br>bring Geological<br>axis in 1 or 2 | NA            | NA  |  |
| 1e     | Balance reserve as on 01/04/20  | Not specified | 111-2548556 Т                             |  |
| 1f     | General remarks of inspecting officers on geology, exploration etc      |               |   | The lease area from a part of the Bhander Group and comprises rocks belonging to Nagod limestone which is grey, light gray, fine to Medium Grained and Slightly fractured. Limestone is stratified. The limestone is bedded with intercalations of argillaceous material and inter bedded with shale. In general strike of limestone is WNW-ESE with significant plunging of strike towards south. Entire lease area already explored in G1. |

## Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
|        |      |           |             |         |

| 2a | Location of development w.r.t.lease area                                   | 488106m and N-  | E 487945 to E 488106m and N- 2683688 to N- 2683816. |
|----|--|---|---|
| 2b | Separate benches<br>in topsoil,<br>overburden and<br>minerals (Rule<br>15) | Separate<br>benches<br>proposed in<br>top soil ,OB<br>and Mineral | Separate benches maintained                         |
| 2c | Stripping ratio or ore to OB ratio   | 1:0.23  | 1:0.20  |
| 2d | Quantity of topsoil generation in m3                                       | 5100  | 4950  |
| 2e | Quantity of overburden generation in m3                                    | 11853   | 9800  |

2f General remarks of inspecting officers on development of pit w.r.t. type of deposit etc

The development of the quarry is done towards north and west of quarry. The working were being done in area between coordinate E 487945 to E 488106m and N- 2683688 to N-2683816. The 1st bench is in soil and 2nd in Shaly/Reject limestone. The OB soil were being removed in top bench of average thickness 1.0m and then shaly/Reject limestone of thickness 1.5m. The width is 6m towards working face. The 3rd and 4th bench was in Limestone inter bedded with mud stone / Shale.

#### Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |  |
|--------|------|-----------|-------------|---------|--|
|        |      |           |             |         |  |

| 3a | Number of pit proposed for production   | 01  | 01  |
|----|---|---|---|
| 3b | Quantity of ROM mineral production proposed   | 49530   | 47165   |
| 3с | Recovery of sailable/usable mineral from ROM production   | 100%  | 100%  |
| 3d | Quantity of mineral reject generation   | No mineral reject generation was proposed               | Nil   |
| 3e | Grade of mineral rejects generation and threshold value declared.   | Not proposed  | Nil   |
| 3f | Quantity of sub grade mineral generation.   | NA  | NA  |
| 3g | Grade of sub<br>grade mineral<br>generation   | NA  | NA  |
| 3h | Manual / Mechanised method adopted for segregating from ROM   | Mechanised  | Mechanised  |
| 3i | Any analysis or<br>beneficiation<br>study proposed<br>and carried out<br>for sub grade<br>mineral and<br>rejects. | Not proposed  | Nil   |
| 3ј | Provision of drilling and blasting in mineral benches   | Proposed 2.9m depth holes                               | Extraction of mineral is being carried out by the drilling and blasting |
| 3k | Provision of mining machineries in mineral benches  | For drilling jack hammers and rock drills were proposed | As per proposal   |

| 31 | Whether height<br>of benches in<br>overburden and<br>mineral suitable<br>for method of<br>mining proposed<br>in MP/SOM | Soil bench 1.0m,bench in reject stone1.5m and two mineral benches of 3.0m each hight. | As per the   | proposal                                       |   |
|----|--|---|--|--|---|
| 3m | Total area covered under excavation/pits   | Not specified   | 2.95 ha  |  |   |
| 3n | Ore to OB ratio for the pit/mine during the year.  | 1:0.23  | 1:0.20   |  |   |
| 30 | Total area put in use under different heads at the end of year   | 3.15 ha   | 3.15 ha  |  |   |
| 3p | Production of<br>ROM mineral<br>during the last<br>five year period<br>as applicable                                   | T<br>2019-20  | 2018-19<br>2019-20<br>2020-21<br>2021-22<br>2022-23- | Nil<br>2000 T<br>3000 T<br>12560 T<br>47,165 T |   |
| 3q | General remarks of inspecting officers on method of mining etc.  |   |  |  | Mining method is being carried out through HEMM with the Combination of loaders and tippers and with short hole blasting. |

#### Solid Waste Management - Dumping:

| Sl.No. | Item   | Propasals                             | Actual work                 | Remarks |
|--------|--|---------------------------------------|-----------------------------|---------|
| 4a     | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Separate<br>dumping of OB<br>proposed | Separate dumping of OB done |         |

| 4b | Location of topsoil, OB and mineral reject dumps                   | OB dump:<br>Latitude<br>(dd:mm:ss.ss)<br>24:15:57.24,<br>24:15:58.55<br>Longitude<br>(dd:mm:ss.ss)<br>80:52:57.79<br>80:52:59.81 | Latitude (dd:mm:ss.ss) 24:15:57.24, 24:15:58.55 Longitude (dd:mm:ss.ss) 80:52:57.79 80:52:59.81 |   |
|----|--|--|---|---|
| 4c | Number of dumps within lease area and outside of lease area        | 01   | 01  |   |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16)              | within UPL   | within UPL  |   |
| 4e | Number of active and alive dumps.                                  | 01   | 01  |   |
| 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. | 110 garland drain proposed   | 140 garland drain maintained  |   |
| 4i | Length of<br>Retaining wall<br>or garland drain<br>all along dumps | 110 garland<br>drain proposed  | 140 garland drain maintained  |   |
| 4j | Number of settling ponds   | Nil  | Nil   |   |
| 4k | Specific comments of inspecting officer on waste dump management   |  |   | The generated OB is being dumped and plantation done on it. |

# 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 proposed before backfilling | Full extraction adopted before backfilling |         |
| 5b     | Area under<br>backfilling of<br>mined out area  | 0.03 ha                                     | 0.03 ha                                    |         |

| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | Stacking<br>proposed | Stacking done & some porting is being utilised for plantation |  |
|----|---|----------------------|---|--|
| 5d | Total area fully reclaimed and rehabilitated  | 0.03 ha              | 0.03 ha   |  |
| 5e | General remarks<br>of inspecting<br>officers on<br>backfilling and<br>reclamation etc.    |                      |   | Area is fairly new and backfilling is being done in 7.5 m barrier. |

#### Progressive Mine Clousre Plan:

| Sl.No. | Item   | Propasals    | Actual work   | Remarks |
|--------|--|--------------|---------------|---------|
| ба     | Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).                               | Yes          | Submitted     |         |
| 6b     | Area available for rehabilitation (ha) .   | 0.03         | 0.03          |         |
| 6c     | afforestation done (ha).   | 0.03 ha      | 0.03 ha       |         |
| 6d     | No. of saplings planted during the year  | Not proposed | 200 nos       |         |
| 6e     | Cumulative no .of plants   | Not proposed | Not available |         |
| 6f     | Any other method of rehabilitation   | NA           | NA            |         |
| 6g     | Cost incurred on watch and care during the year  | NA           | NA            |         |
| 6h     | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D | 0.03 HA      | 0.03 HA       |         |

| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings         | 0.03 HA | 0.03 HA                    |  |
|----|---|---------|----------------------------|--|
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | NA      | NA                         |  |
| 61 | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.                  | AN      | NA                         |  |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation                                  | AN      | NA                         |  |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)                      | AN      | NA                         |  |
| 60 | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation                     | NA      | NA                         |  |
| бр | Compliance of environmental monitoring (core zone and buffer zone)  | Yes     | Done at regular intervals. |  |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.         |         |                            | PMCP operations viz backfilling, plantations were being carried out in 7.5 m barrier zone. |

## Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |  |
|--------|------|-----------|-------------|---------|--|
|        |      |           |             |         |  |

| 7a | ROM Mineral dispatch or grade-wise sorting within lease area                           | ROM mineral dispatch | ROM mineral dispatch    |  |
|----|--|----------------------|-------------------------|--|
| 7b | Method of grade-<br>wise mineral<br>sorting i.e.<br>manual or<br>mechanical.           | Mechanical           | Mechanical              |  |
| 7c | Different grade of mineral sorted out at mines.  | Not specified        | Cement grade-47165.00 T |  |
| 7d | Any beneficiation process at mines .   | Not Proposed         | Not done                |  |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues |                      |                         | ROM mineral dispatch after grade wise sorting within lease area for Cement grade-47165.00 T is done. |

#### Environment:

| Sl.No. | Item  | Propasals  | Actual work   | Remarks |
|--------|---|--|---|---------|
| 8a     | Separate removal and utilization of topsoil (Rule 32)   | removal and  | Separate removal and utilization of topsoil done    |         |
| 8b     | Concurrent use or storage of topsoil  | For plantation   | For plantation                                      |         |
| 8c     | Separate dumps<br>for overburden,<br>waste rock,<br>rejects and<br>fines (Rule 33)                | for overburden waste rock                                  | Separate dump for overburden waste rock maintained. |         |
| 8d     | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Separate dumps<br>for overburden<br>waste rock<br>proposed | Dumpind of OB done                                  |         |

| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Not proposed | Area is not mined out to carry backfilling within lease. |  |
|----|---|--------------|--|--|
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41)                    | Not proposed | Nil  |  |
| 8g | Survival rate   | 80%          | 80%  |  |
| 8h | Water sprinkling<br>on roads to<br>control airborne<br>dust   | Yes          | Water sprinkling done.                                   |  |
| 8i | General remarks<br>of inspecting<br>officer on<br>aesthetic beauty<br>in and around<br>mines area           |              |  | Aesthetic beauty in and around mine area is maintained by carrying out plantation. |

# Compliance of Rule 45:

| Sl.No. | Item  | Propasals | Actual work  | Remarks |
|--------|---|-----------|--|---------|
| 9a     | Status of<br>submission of<br>Monthly and<br>Annual returns                         | Given     | Returns submitted online.  |         |
| 9b     | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Given     | Manager: Nitin Nath Pandey Mining Engineer in charge: Nitin Nath Pandey Geologist in charge: Brajnandan Mishra |         |

| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | abandoned by opencast (O-C) mining 0.000 | plan is not given.                              | Violation pointed out under Rule 45(7). |
|----|---|--|---|---|
| 9d | Scrutiny of<br>Annual return on<br>afforestation  | Given                                    | 200 saplings planted.                           |   |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity)                   | Nil                                      | Nil   |   |
| 9f | Scrutiny of<br>Annual return on<br>ROM stock and/or<br>graded ore                             | Given                                    | Cement grade limestone closing stock-5702.879 T |   |

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| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Given | Ex-mine price- Rs.300<br>Cost of production per<br>tonne of ore-mineral<br>produced- Rs.270.03  |  |
|----|---|-------|---|--|
| 9h | Scrutiny of<br>Annual return on<br>fixed assets                             | Given | Value of Fixed Assets*<br>(Rs. 251107)  |  |
| 9k | Scrutiny of Annual return on mining machineries                             | Given | Type of machinery Capacity of eachtype ofmachinery Unit(in whichcapacity isreported) No. ofmachinery Electrical Nonelectrical(specify) Used inopencastunderground(specify) AIR COMPRESSOR 0.300 CUM/MN 1 Non Electrical Opencast BLAST HOST DRILL 33.000 MM 1 Non Electrical Opencast DUMPER 10.000 TONNE 1 Non Electrical Opencast | The details of machinery reported is inconsistent with the actual ones existed in the lease area and as per approved mining plan. Hence Violation pointed out under rule 45(7) of MCDR 2017. |

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| Details of violat violation pointed |           | during current | inspection          | and compliance | position of     |
|-------------------------------------|-----------|----------------|---------------------|----------------|-----------------|
| Violation observed                  |           |                | Show couse position |                |                 |
| Rule NO.                            | Issued on | Compliance or  | Rule NO             | ). Issued o    | n Compliance on |

Date : (ROBERT SIMON C)

Indian Bureau of Mines