# MCDR INSPECTION REPORT 2022-23

#### General:

| Particulars  | Details   |
|--|---|
| Name of the Mine                                     | Pitora Limestone Mine   |
| Date of Inspection:                                  | 28.06.2023  |
| Name of Inspecting Officer                           | Prasant Kumar Sahu,   |
|  | Asst. Mining Engineer   |
| Name of official accompanying inspection             | Shri B. L. Ramani, Authorised   |
|  | Signatory and Dr. Manoj Kumar,  |
|  | Geologist   |
| Last date of Inspection & Officer                    | 17.08.20222 and Shri A. K. Gadatia,   |
| Total Lassa Area (Ha) with breakup of Non forest     | AME<br>Non-forest land : 1.99 Ha,   |
|  | Forest Land: Nil.   |
| and forest fand                                      | Total : 1.99 Ha   |
| Mine code  | 38CHG05026  |
| IBM Registration Number under rule 45 of             | IBM/11310/2012  |
| MCDR,1988  |   |
| Name of the Lease, Address, Phone, email and fax     | Shri Tikendra Chandrakar, Kabir   |
| number   | Nagar,Ward No-21, Village-  |
|  | Kukda, Teshsil-Patan, District-Durg,  |
|  | Chhattisgarh, Pin Code-490042   |
|  | Email-blramani7@gmail.com   |
| Village  | Phone No-8839327409<br>Pitora   |
|  |   |
|  | Dhamda  |
|  | Durg  |
|  | 490036  |
|  | Chhattisgarh  |
| Post Office  | Nandini Khundni   |
| Nearest Police Station                               | Nandini Nagar   |
| Nearest Railway Station                              | Bhilai  |
| Date of Grant of Mining Lease                        | 26/11/1985 to 25/11/1995 for 10 years   |
| Date of Execution                                    | 26/11/1995  |
| Weekly day of rest                                   | Sunday  |
| Date of opening of Mine                              | 22/12/1995  |
|  | 26/11/1995 to 25/11/2015 for 20 years   |
| expiry   |   |
| Date of Second Renewal, if applicable and its period | 26/11/2015 to 25/11/2035 for 20 years   |
| & expiry   |   |
| Date of submission of renewal application if Mining  | NA  |
|  |   |
| Name of the Nominated Owner with Address,            | Shri Tikendra Chandrakar,   |
|  | TZ 1 ' NT - XXZ - 1 NT - 0.4 - XZ <sup>11</sup>   |
| phone, email, fax number and date of appointment     | Kabir Nagar, Ward No-21, Village-<br>Kukda, Teshsil-Patan, District-Durg,   |
|  | Date of Inspection:Name of Inspecting OfficerName of official accompanying inspectionLast date of Inspection & OfficerTotal Lease Area (Ha) with breakup of Non-forest<br>and forest landMine codeIBM Registration Number under rule 45 of<br>MCDR,1988Name of the Lease, Address, Phone, email and fax<br>numberVillageTaluka/MandalDistrictPin codeStatePost OfficeNearest Police StationNearest Railway StationDate of Grant of Mining LeaseDate of opening of MineDate of First Renewal, if applicable and its period &<br>expiryDate of Second Renewal, if applicable and its period<br>& expiry |

|    |  | Email-blramani7@gmail.com   |
|----|--|---|
|    |  | Phone No-8839327409   |
| 26 | Name of the Mine Agent with Address, phone,  | Not appointed   |
| 20 | email, fax number and date of appointment  |   |
| 27 | Name of the Mine Manager with Address, phone,  | Not appointed   |
|    | email, fax number and date of appointment in mines                                       |   |
| 28 | Name of the Mining Engineer, Qualification and   | Shri Hulash Ram, Mining Engineer,                                       |
|    | total experience with address, phone, email, fax   | Diploma in Mining Engineering,  |
|    | number and date of appointment in the mine   | Date of appointment-22.08.2022  |
|    |  | Dr. Manoj Kumar, Geologist  |
|    |  | Phd. in Geology   |
| •  |  | Date of appointment-22.08.2022  |
| 29 | Whether Geologist and Mining Engineer  | Yes   |
|    | appointment in mines satisfy the rule 55 & carrying                                      |   |
| 30 | out their duties as per rule 56 & 57<br>Date of Approval of Mine Plan/Modified Mine Plan | 1. Mining Plan approved vide letter no.                                 |
| 50 | with five- year period and specific condition in   | DRG/LST/MPLN-481/NGP Nagpur   |
|    | approval letter, if any.   | dated 04/07/1995, Proposal Period:                                      |
|    |  | 1995-96 to 1999-2000  |
|    |  | 2. Modified Mining Plan approved vide                                   |
|    |  | letter no. DRG/LST/MPLN-1108/2017-                                      |
|    |  | RPR dated 01/09/2017, Proposal Period:                                  |
|    |  | 2016-17 to 2020-21  |
| 31 | Date of Approval of Scheme of Mining/Modified  | 1. Scheme of Mining approved vide                                       |
|    | Scheme of Mining with five- year period and  | letter no. DRG/LST/MPLN-481/NGP   |
|    | specific condition in approval letter, if any.   | dated 29.08.2013, Proposal Period:                                      |
|    |  | 2011-12 to 2015-16  |
|    |  | 2. Review of Mining Plan approved vide                                  |
|    |  | letter no. DRG/LST/MPLN-1276/2021-<br>RAIPUR dated 20.05.2021, Proposal |
|    |  | Period: 2021-22 to 2025-26  |
| 32 | Mineral(s) granted in lease and approved for Mining                                      | Limestone   |
| 33 | Method of Mining (Opencast, Underground)   | Opencast  |
| 34 | Category (Fully Mechanized, Others or Manual)  | Category-B, Manual  |
| 35 | Captive/Non-Captive  | Non-Captive   |
| 36 | Present EC Status  | 10000 Tonne Per Year, EC granted on                                     |
|    |  | 11/02/2019  |
| 37 | Status of Financial Assurance  | BG No-0732IGF001267821 dated  |
|    |  | 13.05.2021, Amount- Rs.5,00,000/-                                       |
|    |  | Valid up to 31.03.2026  |

## Scientific Mining: Compliance of proposals of approved Mining Plan/Review of Mining Plan:

#### 1.0 Exploration:

| S.N. | Item  | Proposals<br>(2022-23)  | Actual Work<br>(2022-23) | Remarks  |
|------|---|---|--------------------------|--|
| 1a   | Backlog of previous year proposals                                    | 02 Core<br>borehole<br>proposed in<br>2021-22   | Not carried<br>out       | Violation under Rule<br>11(1) of MCDR, 2017<br>issued.   |
| 1b   | Exploration over lease area for<br>Geological axis 1 or 2.            | No<br>proposal  | Nil                      | Entire lease area of 1.99<br>ha. was explored in G1<br>category through<br>development of quarry<br>(about 13.5 meter<br>thickness of exposed<br>limestone considered<br>for reserve estimation) |
| 1c   | Exploration Agency & Expenditure in<br>Lakh Rupees during the year    | No<br>Proposal  | Not<br>Applicable        |  |
| 1d   | Balance area to be explored to bring<br>Geological axis in 1 or 2.    | -   | Not<br>Applicable        | Entire lease area of 1.99<br>ha explored in G1<br>category   |
| 1e   | Balance reserves as on 01.04.2023                                     | Under 111 : 89570 tonneAs per AR 2022-Under 211: 144250 tonnesubmitted  |                          | As per AR 2022-23<br>submitted   |
| 1f   | General remarks of Inspecting officer<br>on geology, exploration etc. | No exploration has been proposed in the approved<br>RMP during the FY 2022-23. Exploration proposed in<br>the FY 2021-22 has not been carried out so far.<br>Violation under Rule 11(1) of MCDR, 2017 issued. |                          |  |

## 2.0 <u>Development:</u>

| S.N | Item  | Proposals<br>(2022-23)                            | Actual Work<br>(2022-23)                                  | Remarks                                      |
|-----|---|---|---|--|
| 2a  | Location of Development w.r.t.<br>lease area          | W-05 to E-90<br>N-10 to N-60                      | Carried out<br>within the<br>proposed area                | As per proposal                              |
| 2b  | Separate benches in topsoil<br>overburden and mineral | Separate benches in<br>OB and Mineral<br>proposed | Separate<br>benches<br>maintained in<br>OB and<br>Mineral | Current working<br>restricted to ore<br>body |
| 2c  | Stripping ratio or ore to OB ratio                    | 1:01  | 1:00  | No OB/Waste<br>generated                     |
| 2d  | Quantity of topsoil generation in m <sup>3</sup>      | No Proposal                                       | Nil   | No topsoil generated                         |
| 2e  | Quantity of overburden generation in m <sup>3</sup>   | No Proposal                                       | Nil   |  |

| 2f | General remarks of Inspecting       | Production and development was carried out within the |
|----|-------------------------------------|---|
|    | officer on development of pit w.r.t | proposed area. However, actual development is less in |
|    | type of deposit etc.                | comparison to proposal for lack of market demand.     |

#### 3.0 Exploitation:

| S.N | Item  | Proposals<br>(2022-23)                             | Actual Work<br>(2022-23)                                 | Remarks  |
|-----|---|--|--|--|
| 3a  | Number of pits proposed for production  | One (01)   | One (01)   | As per proposal  |
| 3b  | Quantity of ROM mineral production proposed   | 10000 tonne  | 375 tonne  | Within the<br>proposal limit and<br>less production<br>due to lack of<br>market demand |
| 3c  | Recovery of Salable/usable mineral from ROM production  | 100 %  | 100 %  | No generation of OB/MR   |
| 3d  | Quantity of mineral reject generation   | 200  | Nil  | No generation of mineral rejects   |
| 3e  | Grade of mineral reject generation<br>and threshold value declared  | No Proposal  | Not Applicable   | Nil  |
| 3f  | Quantity of sub-grade mineral generation  | No Proposal  | Not Applicable   | Nil  |
| 3g  | Grade of sub-grade mineral generation   | No Proposal  | Not Applicable   | Nil  |
| 3h  | Manual/Mechanized method<br>adopted for segregation from<br>ROM   | Manual   | Manual   |  |
| 3i  | Any analysis or beneficiation<br>study proposed & carried out for<br>sub-grade mineral and reject             | No beneficiation studyproposed                     | No such study<br>carried out                             | Not required for limestone mineral   |
| 3ј  | Provision of drilling & blasting in mineral benches   | Light shallow<br>drilling and<br>blasting proposed | Light shallow<br>drilling and<br>blasting carried<br>out | ANFO and ready<br>mixed slurry<br>explosive used for<br>blasting                       |
| 3k  | Provision of mining machineries<br>in mineral benches   | No proposal for<br>mining<br>machineries           | Manual open<br>cast mining<br>adopted                    |  |
| 31  | Whether height of benches in<br>overburden and mineral suitable<br>for method of mining proposed in<br>MP/SOM | Bench height in ore 3 mt.                          | Average bench<br>height and width<br>maintained          |  |
| 3m  | Total area covered under<br>excavation /pits  | 1.3540 ha up to<br>end of plan period<br>2025-26   | About 1.3 ha up<br>to 2022-23                            | As per AR<br>submitted for<br>2022-23  |
| 3n  | Ore to OB ratio for the pit/mine<br>during the year   | 1:01   | 1:00   | No generation of waste   |

| 30 | Total area put in use under<br>different heads at the end of year | Total area 1.8673<br>ha up to end of<br>plan period 2025-<br>26 | About 1.351 ha<br>up to 2022-23 |                                      |
|----|---|---|---------------------------------|--------------------------------------|
| 3p | Production of ROM mineral during last five-years period, as       | 2018-19: 10000  | 2018-19: 420.00                 |                                      |
|    | Applicable (tonne)  | 2019-20: 10000  | 2019-20: 120.00                 |                                      |
|    |   | 2020-21: 10000  | 2020-21:<br>1080.00             | Actual production<br>within proposed |
|    |   | 2021-22:10000   | 2021-22:1055                    | limit                                |
|    |   | 2022-23:10000   | 2022-23:375                     |                                      |
| 3q | General remarks of inspecting officer on method of mining etc     | Mining operation is<br>comparison to prop                       |                                 | production is less in market demand. |

#### 4.0 Solid Waste Management-Dumping:

| S.N. | Item  | Proposals<br>(2022-23) | Actual Work<br>(2022-23) | Remarks  |
|------|---|------------------------|--------------------------|--|
| 4a   | Separate dumping of topsoil, OB<br>& mineral reject                     | No proposal            | Nil                      | No top soil and OB<br>generated during<br>the year |
| 4b   | Location of topsoil, OB & mineral reject dumps                          | No proposal            | Nil                      |  |
| 4c   | Number of Dumps within lease area and outside lease area                | No proposal            | Nil                      |  |
| 4d   | Location of Dumps w.r.t.<br>ultimate pit limit                          | No proposal            | Nil                      |  |
| 4e   | Number of Active & Alive<br>dumps                                       | No proposal            | Nil                      |  |
| 4f   | Number of dead dumps  | No proposal            | Nil                      |  |
| 4g   | Number of dumps established   | No proposal            | Nil                      |  |
| 4h   | Whether Retaining wall or<br>garland drain all along dumps are<br>there | No proposal            | Nil                      |  |
| 4i   | Length of Retaining wall or garland drain all along dump                | No proposal            | Nil                      |  |
| 4j   | Number of settling ponds  | No proposal            | Nil                      |  |
| 4k   | Specific commends of inspecting<br>officer on waste dump<br>management  | No top soil and was    | te generated duri        | ng the year.                                       |

## 5.0 Solid Waste Management-Backfilling:

| S.N. | Item   | Proposals<br>(2022-23) | Actual Work<br>(2022-23) | Remarks  |
|------|--|------------------------|--------------------------|--|
| 5a   | Status on part or full extraction of<br>mineral from mined out area before<br>starting backfilling | No proposal            | Not<br>applicable        | Area is not fully<br>exhausted for back<br>filling |
| 5b   | Area under backfilling of mined out area   | No proposal            | Not<br>applicable        |  |
| 5c   | Concurrent use of topsoil for<br>restoration or rehabilitation of mined<br>out area                | No proposal            | Not<br>applicable        |  |
| 5d   | Total area fully reclaimed & rehabilitated   | No proposal            | Not<br>applicable        |  |
| 5e   | General remarks of inspecting officer<br>on backfilling, reclamation etc                           | The area is no         | t fully exhausted        | for backfilling.                                   |

# 6.0 Progressive Mine Closer Plan:

| S.<br>N. | Item  | Proposals<br>(2022-23)            | Actual Work<br>(2022-23)                | Remarks  |
|----------|---|-----------------------------------|---|--|
| 6а       | Whether Annual report on PMCP<br>submitted on time and correctly-Rule<br>26 (2)   | PMCP report<br>to be<br>submitted | PMCP report<br>has not been<br>received | Violation of<br>Rule 26 (2) of<br>MCDR,2017 is<br>issued |
| 6b       | Management of worked/mined out<br>benches<br>Area available for rehabilitation (Ha)<br>Afforestation done (ha)<br>No. of saplings planted during the year<br>Cumulative no. of plants<br>Any other specific method of<br>rehabilitation<br>Cost incurred on watch & care during<br>the year | No proposal                       | Nil                                     | No area is<br>matured for<br>backfilling                 |
| 6с       | Compliance on reclamation and<br>rehabilitation by backfilling<br>Voids available for backfilling<br>(L*B*D)<br>Void filled by waste/tailings<br>Afforestation on the backfilling<br>Rehabilitation by making water<br>reservoir<br>Any other specific means                                | No proposal                       | Nil                                     | No area is<br>matured for<br>backfilling                 |
| 6d       | Compliance of Rehabilitation of waste land within lease   | No proposal                       | Nil                                     | No waste dump<br>within the lease                        |

|    | i. Afforestation                      |                |                     | area              |
|----|---------------------------------------|----------------|---------------------|-------------------|
|    | ii. Area rehabilitation (ha)          |                |                     |                   |
|    | iii. Method of rehabilitation         |                |                     |                   |
| 6e | Compliance of Environment             |                | Environmental       |                   |
|    | monitoring (core zone & buffer zone)  | Proposed       | monitoring          |                   |
|    |                                       |                | carried out         |                   |
| 6f | General remarks of inspecting officer | The annual ret | urn in respect of P | MCP under Rule    |
|    | on PMCP compliance & progressive      | 26(2) was not  | submitted for w     | hich violation is |
|    | closer operations                     | issued.        |                     |                   |
|    |                                       |                |                     |                   |

## 7.0 Mineral Conservation:

| S.N. | Item   | Proposals<br>(2022-23)   | Actual Work<br>(2022-23) | Remarks                       |
|------|--|--|--------------------------|-------------------------------|
| 7a   | ROM mineral dispatch or grade wise sorting within lease area                               | ROM mineral dispatch   | ROM mineral dispatch     |                               |
| 7b   | Method of grade-wise mineral sorting<br>i.e. manual or mechanical                          | No Proposal  | Not done                 | Not required for<br>Limestone |
| 7c   | Different grade of mineral sort out at mine  | No proposal  | Nil                      | Not required                  |
| 7d   | Any beneficiation process at mines   | No proposal  | Nil                      | Not required                  |
| 7e   | General remarks of inspecting officer<br>on mineral conservation &<br>beneficiation issues | The mining operation is being carried out by open<br>cast manual method (Category-B). No proposal for<br>beneficiation of limestone. |                          |                               |

## 8.0 Environment:

| S.N. | Item  | Proposals<br>(2022-23)                               | Actual Work<br>(2022-23) | Remarks  |
|------|---|--|--------------------------|--|
| 8a   | Separate removal and utilization of topsoil   | No proposal  | Nil                      | Top soil is not<br>encountered at this<br>stage and working<br>is in ore zone only |
| 8b   | Concurrent use or storage of topsoil  | No proposal  | Nil                      |  |
| 8c   | Separate dumps for overburden waste rock, rejects and fines   | No proposal  | Nil                      | No waste<br>encountered  |
| 8d   | Use of overburden, waste rock, rejects<br>and fines dumps for restoring the land<br>to its original use           | No proposal  | Nil                      |  |
| 8e   | Phased restoration, reclamation and<br>rehabilitation of lands affected by<br>mining operations (Pits, dumps etc) | No proposal  | Nil                      | No area is matured<br>for reclamation  |
| 8f   | Baseline information on existence of plantation & additional plantation done                                      | Plantation<br>proposed:<br>WML: 600<br>nos. saplings | Within lease<br>area-20  | AsperARsubmitted for 2022-23. Violation underRule11(1)                             |

|    |   | in 2022-23   |                          | MCDR, 2017<br>issued for less<br>plantation. |
|----|---|--|--------------------------|--|
| 8g | Survival rate   | Not specified  | Within lease<br>area-20% |  |
| 8h | Water sprinkling on roads to control airborne dust                                      | Proposed   | Yes                      |  |
| 8i | General remarks of inspecting officer<br>on aesthetic beauty in and around mine<br>area | Top soil and OB not encountered at this stage and<br>mineral is not fully exhausted for reclamation and<br>rehabilitation. Violation under Rule 11(1) of<br>MCDR, 2017 issued for less plantation. |                          |  |

## 9.0 <u>Compliance of Rule 45:</u>

| S<br>N | Item  | Comments   |   | Remarks   |
|--------|---|--|---|---|
| 9a     | Status of submission of monthly<br>and Annual returns   | MR being submitted regularly   |   | AR for the FY 2022-<br>23 submitted on<br>12.06.2023.                           |
|        |   | AR submitted up to 2022-23   |   |   |
| S<br>N | Item  | Details Given<br>in A.R.   | Observation of<br>I/Officer                                 |   |
| 9<br>b | Scrutiny of Annual return for<br>information on Mining Engineer,<br>Geologist and Manager           | Mining<br>Engineer-<br>Hulash Ram,<br>Geologist-<br>Dr. Manoj<br>Kumar | Employed  |   |
| 9c     | Scrutiny of Annual return on land<br>use pattern for area under pits,<br>reclaimed area, dumps etc. | About 1.351 ha<br>up to 2022-23  | Appears to be correct                                       |   |
| 9<br>d | Scrutiny of Annual return on afforestation  | Within lease<br>area-20,<br>Survival rate is<br>less than 20%          | Appears to be<br>correct                                    |   |
| 9e     | Scrutiny of Annual return on<br>mineral reject generation (Grade &<br>Quantity)                     | Nil  | No generation<br>of mineral<br>rejects<br>reported          |   |
| 9f     | Scrutiny of Annual return on ROM stock and/or grade ore   | Opening-0.00 T<br>Production-375<br>T<br>Closing-0.00 T                | Opening-0.00<br>T<br>Production-<br>375 T<br>Closing-0.00 T | The quarry is water<br>logged and stock<br>position could not be<br>ascertained |
| 9<br>g | Scrutiny of Annual return on sale<br>value, Ex. Mine price &<br>production costs                    | Sale value-Rs<br>72900/-,<br>Ex. Mine Price-<br>Rs. 405/-              | Sale value-Rs<br>72900/-,<br>Ex. Mine<br>Price- Rs.         |   |
|        |   | Cost of production-Rs.   | 405/-<br>Cost of  |   |

|    |   | 372/-          | production-Rs. 372/- |                     |
|----|---|----------------|----------------------|---------------------|
| 9i | Scrutiny of Annual return on Fixed assets | Rs. 15100000/- | Rs. 15100000/-       |                     |
| 9  | Scrutiny of Annual return on              | Electric motor | Observed in          | Used for pumping of |
| k  | mining Machineries                        | of 20 H.P      | mine                 | water from pit      |

**10-** Details of violations observed during current inspection: Violation 11(1) and 26(2) of MCDR, 2017 is pointed out after current inspection.

Date: 15.09.2023

प्रशान्त कुमर साहू / Prasant Kumar Sahu सहायक खनन अभियंता / Assistant Mining Engineer भारतीय खान ब्यूरो, रायपुर / Indian Bureau of Mines, Raipur