

## MCDR INSPECTION REPORT

### GENERAL

| Sr. No. | Particulars  | Details   |
|---------|--|---|
| 1       | Name of the Mine   | Risda-Kukurdih Limestone Mine   |
| 1a      | Name of Inspecting officer with Designation<br>Name of Accompanying person,<br>Date of Inspection                                      | Rajesh Kumar Das, SrACOM,<br>Shri Ajay Khare, Manager Mine<br>24.11.2020  |
| 2       | Total Lease Area (Ha) with breakup of Non-forest and forest land   | 395.05 ha, Non forest   |
| 3       | Mine code  | 38CHG19001  |
| 4       | IBM Registration Number under rule 45 of MCDR, 1988  | IBM/16679/2013  |
| 5       | Name of the lessee, Address, phone, email and fax number   | NU Vista Limited  |
| 6       | Village  | Risda   |
| 7       | Taluka/Mandal  | Baloda Bazar  |
| 8       | District   | Baloda Bazar-Bhatapara  |
| 9       | Pin code   | 493332  |
| 10      | State  | Chhattisgarh  |
| 11      | Post office  | Risda   |
| 12      | Nearest police station   | Baloda Bazar  |
| 13      | Nearest Railway station  | Bhatapara   |
| 14      | Date of Grant of Mining Lease  | 12.11.2007  |
| 15      | Date of Execution  | 08.09.2009  |
| 16      | Date of opening of Mine  | 07.08.2013  |
| 17      | Date of first Renewal, if applicable and its period & expiry   | N.A.  |
| 18      | Date of second Renewal, if applicable and its period & expiry  | N.A.  |
| 19      | Date of submission of renewal application if Mining Operations are continuing under deemed extension                                   | N.A.  |
| 20      | Name of the Nominated Owner with Address, phone, email, fax number and date of appointment   | Shri Vivek Chawla,<br>Address- Acropolis Mall, 15 <sup>th</sup> Floor,<br>Rajdanga Road, Kasba, EM Bypass, Kolkata-<br>700107. E-mail-<br>vivek.chawla@nuvoco.com<br>Date of appointment 04.02.2017   |
| 21      | Name of the Mine Agent with Address, phone, email, fax number and date of appointment  | Shri Anant Kumar Mahobe,<br>Address- NU Vista Limited,<br>Village: Risda, Suhela Road, District: Baloda<br>Bazar- Bhatapara (Chhattisgarh).<br>E-mail: anant.mahobe@nuvoco.com<br>Date of appointment- 09.04.2019                               |
| 22      | Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines                                      | Shri Ajay Khare,<br>Address- NU Vista Limited,<br>Village: Risda, Suhela Road, District: Baloda<br>Bazar- Bhatapara (Chhattisgarh).<br>E-mail: ajay.khare@nuvoco.com<br>Phone No. 7247725868<br>Date of appointment-15.05.2020                  |
| 23      | Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine | Shri Jaiprakash Dwevedi,<br>Address- NU Vista Limited,<br>Village: Risda, Suhela Road, District: Baloda<br>Bazar- Bhatapara (Chhattisgarh).<br>E-mail: Jaiprakash.dwevedi@nuvoco.com<br>Phone No. 7583807064.<br>Date of appointment 25.05.2017 |

|    |   |   |
|----|---|---|
| 24 | Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.           | Shri Manoj Rajnarayan Kushwaha<br>Address- NU Vista Limited,<br>Village: Risda, Suhela Road, District: Baloda<br>Bazar- Bhatapara (Chhattisgarh).<br>E-mail: manoj.kushwaha@nuvoco.com<br>Phone no. 7247716565<br>Date of appointment 20.08.2018. |
| 25 | Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.           | Letter No. Balodaba/Chup/Khyo-1226/2019 dated 10.01.2020  |
| 26 | Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any. | 19.01.2015  |
| 27 | Mineral(s) granted in lease and proved for mining   | Limestone   |
| 28 | Method of Mining(Opencast, Underground)   | Opencast  |
| 29 | Category (Fully Mechanized, Others or Manual)   | Fully Mechanized  |
| 30 | Captive/Non Captive   | Captive   |
| 31 | Environment Clearance   | Dated 6.04.2018 for 5.5 MTPA  |

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

### EXPLORATION

| Sr. No. | Item   | Proposals  | Actual work   | Remarks  |
|---------|--|--|---|--|
| 1a      | Backlog of previous year   | 34   | 25  | 20 nos-2018-19 & 14 proposed in 2019-20  |
| 1b      | Exploration over lease area for Geological axis 1 or 2.            | 34   | 25  | -  |
| 1c      | Exploration Agency & Expenditure in lakh Rupees during the year    | Gem Consultant Drilling<br>34 no's of bore holes   | 1670m<br>(25 drill hole done)                           | 09 drill holes left due to COVID-19 lockdown.  |
| 1d      | Balance area to be explored to bring Geological axis in 1 or 2     | Nil  | Nil   |  |
| 1e      | Balance reserves as on 31.03.2020                                  | <b>UNFC Code 111&amp;121,122</b><br>: 225.624.20 million Tons  | Reserve as on<br>31.03.2020 - 225.624<br>million tonnes | MP approved on 10.01.2020 and as per approved document reserve given 227.20 million tons |
| 1f      | General remarks of inspecting officer on geology, exploration etc. | The area is small part of Chhattisgarh basin and comprises of dolomite, limestone and shale of Chandi formation of Raipur group. The general trend of out crop is in NE-SW direction. The beds almost horizontal as exemplified by detail mapping and drilling.. The lease area broadly drilled in 150X150m intervals and drilled 191 bore holes of approx 7563 meter but still few borehole terminate in limestone therefore lessee proposed extra bore hole. In 2019-20 additional 24 boreholes of approx 1355 meter drilled but still drilling is not done as per proposal and 10 more holes left for drilling and due to corona reason drilling stopped. |   |  |

### DEVELOPMENT

| S.N. | Item  | Proposals   | Actual work  | Remarks   |
|------|---|---|--|-----------|
| 2a   | Location of development w.r.t. lease area   | North block: N2393685-N2394187 & E615302-E615836, South block: N2393796-N2393992 & E614460-E615268                                  | Broadly as per proposal.   |           |
| 2b   | Separate benches in topsoil, overburden and mineral (Rule 15)                           | One bench in top Soil 1-3 mtrs,<br>OB- 3.5 mtrs<br>Two Limestone benches-10 mtrs  | One bench in top Soil 1-3 mtrs,<br>OB- 3.5 mtrs<br>Two Limestone benches-10 mtrs | 2019-2020 |
| 2c   | Stripping ratio or ore to OB ratio  | 1 : 0.29  | 1:0.14   |           |
| 2d   | Quantity of topsoil generation in m <sup>3</sup>  | 603,270m <sup>3</sup>   | 234,199m <sup>3</sup>  |           |
| 2e   | Quantity of overburden generation in m <sup>3</sup>                                     | 261,750m <sup>3</sup>   | 256,295m <sup>3</sup>  |           |
| 2f   | General remarks of inspecting officer on development of pit w.r.t. type of deposit etc. | The top soil and OB/IB generation is more compare to proposal and production done therefore stripping ratio is more w.r.t proposal. |  |           |

### EXPLOITATION

| Sr. No. | Item  | Proposals                 | Actual work                   | Remarks                                    |
|---------|---|---------------------------|-------------------------------|--|
| 3a      | Number of pits proposed for production                          | 3 Nos                     | 3 Nos                         | 2019-20                                    |
| 3b      | Quantity of ROM mineral production proposed                     | 6.5 million tonnes        | 4.842million tonnes           | EC clearance was only for 5.5 Million Ton. |
| 3c      | Recovery of salable/usable mineral from ROM production          | 90%                       | 94.65%                        |  |
| 3d      | Quantity of mineral reject generation                           | Screen reject_550000 tons | Screen reject_215422tons      |  |
| 3e      | Grade of mineral reject generation and threshold value declared | Threshold value CaO >34%  | Mineral reject CaO 25 to 30 % |  |
| 3f      | Quantity of sub-grade mineral generation                        | N.A.                      | N.A.                          |  |
| 3g      | Grade of sub-grade mineral generation                           | N.A.                      | N.A.                          |  |
| 3h      | Manual / Mechanized method adopted for segregating from ROM     | Mechanized                | Mechanized                    |  |

|    |  |   |   |           |
|----|--|---|---|-----------|
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject          | N.A.  | N.A.  |           |
| 3j | Provision of drilling & blasting in mineral benches  | Yes   | Yes   |           |
| 3k | Provision of mining machineries in mineral benches   | Yes   | Yes   |           |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | 1-5m & 10m  | 1-5m & 10m  | 2019-2020 |
| 3m | Total area covered under excavation/pits   | 108.30 ha   | 65.540ha  |           |
| 3n | Ore to OB ratio for the pit/mine during the year   | 1: 0.29   | 1:0.14  |           |
| 3o | Total area put in use under different heads at the end of year                                       | i) Total Exploitation area-108.30ha<br><br>ii)Road, plant ,buildings, water storage tank -15.27ha<br><br>iii) Dump area (waste+ screen) =11.5ha   | i)Total exploitation area -65.540 ha<br><br>ii)Road, plant ,buildings -5.72ha<br><br>iii) Dump area (waste screen) =5.30 ha   |           |
| 3p | Production of ROM mineral during last five-year period, as applicable                                | <b>Last Five year proposal</b><br>2014-15_0.5 MT<br>2015-16_0.5 MT<br>2016-17_3.17 Million tons<br>2017-18_5.5 Million tons<br>2018-19_5.5 Million Tonnes<br>2019-2020_6.5 million tonnes<br>Total Proposed Production- <b>21.67</b> Million Tons | <b>Last Five year</b><br>2014-15_0.0 MT<br>2015-16_0.0 MT<br>2016-17_0.99 Million tons<br>2017-18_3.169 Million tons<br>2018-19- 4.79 Million tonnes<br>2019-2020_4.627million tonnes<br>Total production- <b>13.576</b> Million Tons |           |
| 3q | General remarks of inspecting officer on method of mining etc.                                       | The method of mining is opencast using HEMM and bench height in ore is 10 meters and broadly as per proposal.   |   |           |

### SOLID WASTE MANAGEMENT-DUMPING

| S.N. | Item   | Proposals | Actual work | Remarks   |
|------|--|-----------|-------------|-----------|
| 4a   | Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) | Yes       | Yes         | 2019-2020 |

|    |   |   |                               |  |
|----|---|---|-------------------------------|--|
| 4b | Location of topsoil, OB & mineral reject dumps                    | <b>Topsoil Dump</b><br>E615990-616184<br>N2393620-2393481<br><br><b>Location of OB-</b><br>E614580-614466<br>N2393114-2392935<br><br><b>mineral Reject-</b><br>E614334-614533<br>N2393235-2393120 | Broadly as per proposal.      |  |
| 4c | Number of dumps within lease area and outside lease area          | 4 no's  | 4 no's                        | Within the lease                               |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16)             | SW & E of Lease area  | SW & E of Lease area.         |  |
| 4e | Number of active & alive dumps                                    | 2   | 2                             |  |
| 4f | Number of dead dumps  | 1   | 1                             |  |
| 4g | Number of dumps stabilized  | 1   | 1                             |  |
| 4h | Whether Retaining wall or garland drain all along dumps are there | yes   | yes                           | Toe-bund and garland drain made along the dump |
| 4i | Length of Toe-bund or garland drain all along dump                | Toe-bund 1320m<br>Garland 1335m   | Toe-bund 1329<br>Garland 1345 | along the dump area                            |
| 4j | Number of settling ponds  | NA  | NA                            |  |
| 4k | Specific comments of inspecting officer on waste dump management  | No comments   |                               |  |

### SOLID WASTE MANAGEMENT-BACKFILLING-N.A.

| S.N. | Item  | Proposals  | Actual work | Remarks |
|------|---|--|-------------|---------|
| 5a   | Status on part or full extraction of mineral from mined out area before starting        | N.A  | N.A.        |         |
| 5b   | Area under backfilling of mined out area  | N.A  | N.A.        |         |
| 5c   | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | N.A  | N.A.        |         |
| 5d   | Total area fully reclaimed & rehabilitated  | N.A  | N.A.        |         |
| 5e   | General remarks of inspecting officer on backfilling, reclamation etc                   | The lease area is new and not matured for backfilling. |             |         |

### PROGRESSIVE MINE CLOSURE PLAN

| S.N. | Item   | 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. | Submission of report as per Rule | Submitted PMCP report 2019-2020 on dated 29.05.2020. |         |

|    |   |   |   |  |
|----|---|---|---|--|
| 6b | Management of worked/mined out benches<br>i) Area available for rehabilitation (ha)<br>ii) Afforestation done (ha)<br>iii) No. of saplings planted during the year<br>iv) Cumulative no. of plants<br>v) Any other specific method of 2019-20 rehabilitation<br>vi) Cost incurred on watch & care during the year | i. Not applicable<br>ii. 1.94 ha<br>iii. 2156<br>iv. 61781<br>v. Not applicable<br>vi. INR 291,060.00 | i. Not applicable<br>ii. 2.50ha<br>iii.5000<br>iv.83535<br>v. Not applicable<br>vi.657,000.00 |  |
| 6c | Compliance on reclamation and rehabilitation by backfilling<br>i) Voids available for backfilling (L *B * D)<br>ii) Void filled by waste/tailings<br>iii) Afforestation on the backfilled area<br>iv) Rehabilitation by making water reservoir<br>v) Any other specific means                                     | i) N.A.   | i) N.A.   |  |
| 6d | Compliance of Rehabilitation of waste land within lease<br>i) Afforestation<br>ii) Area rehabilitated (ha)<br>iii) Method of rehabilitation   | i) N.A.   | i) N.A.   |  |
| 6e | Compliance of Environmental monitoring (core zone & buffer zone)  |   | Complied  |  |
| 6f | General remarks of inspecting officer on PMCP compliance & progressive closure operations   | Broadly as per proposal.  |   |  |

### MINERAL CONSERVATION

| S.N. | Item   | Proposals   | Actual work          | 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 i.e. manual or mechanical                       | Blending from different area as per required grade  | As per Proposal      |         |
| 7c   | Different grade of mineral sorted out at mines                                       | N.A.  | N.A.                 |         |
| 7d   | Any beneficiation process at mines   | Screen  | Screen               |         |
| 7e   | General remarks of inspecting officer on Mineral conservation & beneficiation issues | Broadly the entire ROM is used only some area of top benches where clay inclusion is there screening is done. |                      |         |

### ENVIRONMENT

| S.N. | Item  | Proposals  | Actual work                              | Remarks |
|------|---|------------|--|---------|
| 8a   | Separate removal and utilization of topsoil (Rule 32) | Yes        | Separate stacking & used for Plantation. |         |
| 8b   | Concurrent use or storage of topsoil                  | Plantation | Plantation                               |         |

|    |   |  |                 |  |
|----|---|--|-----------------|--|
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33)                                      | Yes  | Yes             |  |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use           | N.A.   | N.A.            |  |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | N.A.   | N.A.            |  |
| 8f | Baseline information on existence of plantation & additional plantation done (Rule 41)                      | 61781nos plantation  | 83535           |  |
| 8g | Survival rate   | 80%  | 70%             |  |
| 8h | Water sprinkling on roads to control airborne dust  | By water tanker  | By water tanker |  |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area                          | The lessee is taking care of all environmental preventive measures as per statute i.e Air, Water, Noise, ground vibration monitoring. The plantation is done and dust suppression water sprinkling is done on regular basis. There is no adverse impact observed during mine visit on aesthetic beauty in and around mines area. |                 |  |

### COMPLIANCE OF RULE 45

| S.N. | Item  | COMMENTS   |   | Remarks |
|------|---|--|---|---------|
| 9a   | Status of submission of Monthly and Annual returns  | Annual Return for 2019-20 submitted.<br>Monthly return submitted till oct' 2020.   |   |         |
| S.N. | Item  | Details GIVEN in A.R.  | 2019-2020   |         |
| 9b   | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager           | Jaiprakash Dwiedi (Mining Engineer)<br><br>Manoj Kushwaha (Mining Geologist)<br><br>Ajay Khare (Mine Manager)                                      | Jaiprakash Dwiedi (Mining Engineer)<br><br>Manoj Kushwaha (Mining Geologist)<br><br>Ajay Khare (Mine Manager)                 |         |
| 9c   | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | i) Total Exploitation area- 108.30ha<br><br>ii) Road, plant ,buildings, water storage tank - 15.27ha<br><br>iii) Dump area (waste+ screen) =11.5ha | i) Total exploitation area -65.540 ha<br><br>ii) Road, plant ,buildings -5.72ha<br><br>iii) Dump area (waste screen) =5.30 ha |         |
| 9d   | Scrutiny of Annual return on afforestation  | Given  |   |         |

|    |   |                            |                 |  |
|----|---|----------------------------|-----------------|--|
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & quantity) | 468023 tonnes              | 215422 tonnes   |  |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore                  | ROM –Nil                   | Nil             |  |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost | Nil                        | Rs. 231.14      |  |
| 9i | Scrutiny of Annual return on fixed assets                                 | Annual Return 2019-2020    | Rs.2816533890/- |  |
| 9k | Scrutiny of Annual return on mining machineries                           | Machineries list furnished |                 |  |

**Details of violations observed during current inspection and compliance position of earlier violation pointed out:-** During Last inspection the violation issued mostly complied only the violation regarding exploration is still continuing due to Covid-19 and lock down but now it is under process and therefore no further action has been initiated.

**(Rajesh Kumar Das, Senior Assistant Controller of Mines)**