

## MCDR INSPECTION REPORT

### General

| S.N. | Particulars                                                                                          | Details                                                                                                                                                                                                                |
|------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Name of the Mine<br>Date of Inspection:<br>Name of Inspecting Officer                                | Rawan Jhipan Limestone Mine<br>07/10/2017<br>Shri R K Das (Sr ACOM)<br>Rudra N. Mishra (SMG)                                                                                                                           |
| 2    | Total Lease Area (Ha) with breakup of Non-forest and forest land                                     | Lease area – 722.834 Ha,<br>Non Forest area – 722.834 Ha,<br>Forest Area – Nil.                                                                                                                                        |
| 3    | Mine code                                                                                            | 38MPR28018                                                                                                                                                                                                             |
| 4    | IBM Registration Number under rule 45 of MCDR,2017                                                   | IBM/441/2011                                                                                                                                                                                                           |
| 5    | Name of the Lease, Address, Phone, email and fax number                                              | M/s UltraTech Cement Limited<br>Address - 'B' Wing, Ahura Centre 2nd floor, Mahakali caves Road, Andheri (E), Mumbai 400093<br>Fax No. - 02266928109<br>Phone No. - 02266917800<br>Email - ajit.ostwal@adityabirla.com |
| 6    | Village                                                                                              | Rawan                                                                                                                                                                                                                  |
| 7    | Taluka/Mandal                                                                                        | Simga                                                                                                                                                                                                                  |
| 8    | District                                                                                             | BalodaBazar Bhatapara                                                                                                                                                                                                  |
| 9    | Pincode                                                                                              | 493196                                                                                                                                                                                                                 |
| 10   | State                                                                                                | Chhattisgarh                                                                                                                                                                                                           |
| 11   | Post Office                                                                                          | Simga                                                                                                                                                                                                                  |
| 12   | Nearest Police Station                                                                               | Suhela                                                                                                                                                                                                                 |
| 13   | Nearest Railway Station                                                                              | Tilda                                                                                                                                                                                                                  |
| 14   | Date of Grant of Mining Lease                                                                        | 01/11/1993                                                                                                                                                                                                             |
| 15   | Date of Execution                                                                                    | 04/12/1993                                                                                                                                                                                                             |
| 16   | Date of opening of Mine                                                                              | 05/02/1994                                                                                                                                                                                                             |
| 17   | Date of First Renewal, if applicable and its period & expiry                                         | As per MMDR Amendment Act, 2015 section 8A Validity of the lease period: 01/11/1993 to 31/10/2043 (Fifty years)                                                                                                        |
| 18   | Date of Second Renewal, if applicable and its period & expiry                                        | Not applicable                                                                                                                                                                                                         |
| 19   | Date of submission of renewal application if Mining Operations are continuing under deemed extension | Not applicable                                                                                                                                                                                                         |
| 20   | Name of the Nominated Owner with Address, phone, email, fax number and date of appointment           | Mr.Omprakash Purnamalka<br>Ahura Centre, B Wing,<br>2nd floor, Mahakali Caves Road<br>Andheri (E) Mumbai 400093.<br>DOA: 18.07.2017                                                                                    |
| 21   | Name of the Mine Agent with Address, phone, email, fax number and date of appointment                | Shri V. D. Mali<br>UltraTechCement Ltd.<br>Hirmi Cement Works, PO – Hirmi,<br>Dist. BalodaBazar- Bhatapara                                                                                                             |

|    |                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                              |
|----|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                            | 09826909505<br>Phone - 07726281217/18/19/20/21<br>Fax - 07726-281572<br><a href="mailto:vijaykumar.mali@adityabirla.com">vijaykumar.mali@adityabirla.com</a><br>DOA:15.03.2016                                                                                                                                                                                                               |
| 22 | Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines                                           | Shri P K Upadhyay<br>Rawan Jhipan Limestone Mine<br>Grasim Vihar Rawan,<br>Tahsil – Simga, District – Baloda Bazar<br>Bhatapara (Chhattisgarh)<br>Email –<br>pratyendra.upadhyay@adityabirla.com<br>Phone no – 07726288217 ext- 2212<br>Date of Appointment – 25/07/2014                                                                                                                     |
| 23 | Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine | Shri Mukesh Kumar Thawait<br>Qualification – BE (Mining)<br>Total Experience – 12 years<br>Address - Rawan Jhipan Limestone Mine<br>Grasim Vihar Rawan,<br>Tahsil – Simga, District – Baloda Bazar<br>Bhatapara (Chhattisgarh)<br>Email –<br>mukesh.thawait@adityabirla.com<br>Phone no - Phone no – 07726288217 ext-2224<br>Date of Appointment – 27/06/2012                                |
| 24 | Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.            | Yes<br>Shri Prateek Jha<br>Qualification: M. Sc (geology)<br>Total Experience: 07 Years<br>Address: Rawan Jhipan Limestone Mine<br>Grasim Vihar Rawan,<br>Tahsil – Simga, District – Baloda Bazar<br>Bhatapara (Chhattisgarh)<br>Phone: 09617686420<br>Email: prateek.jha@adityabirla.com<br>Date of Appointment: 27/06/2012                                                                 |
| 25 | Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.                 | <b>Mining Plan</b> approved vide letter no. RAP/LST/MPLN-283/NGP Nagpur dated 22/06/1993<br>Period: 1993-1994 to 1997-98<br><b>Modified Mining Plan</b> approved vide letter no. 314(3)95-MCCM(C)/MP-11 Nagpur dated 02/12/1996<br>Period: 1996-97 to 1997-98<br><b>Mining Plan</b> approved vide letter no. 314(3)/2012/MCCM(CZ)MP/33 Nagpur dated 14/10/2013<br>Period: 2013-14 to 2017-18 |
| 26 | Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.    | <b>1st Scheme of Mining</b> approved vide letter no. 314(3)/96-MCCM(C)/MP/Scheme-15 Nagpur dated 18/08/1999,Period: 1999-2000 to 2003-04                                                                                                                                                                                                                                                     |

|    |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                     | <p><b>Modified Scheme of Mining</b> approved vide letter no. 314(3)/2003-MCCM(C)/S-10 Nagpur dated 10/11/2003<br/>Period: 2003-04</p> <p><b>2nd Scheme of Mining</b> approved vide letter no. 314(3)/2004-MCCM(C)/S-3 Nagpur dated 04/11/2004<br/>Period: 2004-05 to 2008-09</p> <p><b>Modified Scheme of Mining</b> approved vide letter no. 314(3)/2006-MCCM(CZ)/S-22 Nagpur dated 24/05/2007,Period: 2007-08 to 2008-09</p> <p><b>3rd Scheme of Mining</b> approved vide letter no. 314(3)/2006-MCCM(CZ)/S-30 Nagpur dated 21/05/2009<br/>Period: 2009-10 to 2013-14</p> <p><b>Modified Scheme of Mining</b> approved vide letter no. 314(3)/2009-MCCM(CZ)/MP/MS/PMCP-16 Nagpur dated 04/12/2009,Period: 2009-10 to 2013-14</p> <p><b>Modified Scheme of Mining</b> approved vide letter no. 314(3)/2009-MCCM(CZ)/MP/MS/PMCP-31 Nagpur dated 06/01/2012<br/>Period: 2011-12 to 2013-14</p> |
| 27 | Mineral(s) granted in lease and approved for Mining | Limestone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 28 | Method of Mining (Opencast, Underground)            | Opencast                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 29 | Category (Fully Mechanised, Others or Manual)       | Fully Mechanised                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 30 | Captive/Non-Captive                                 | Captive mine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

### Exploration

| S.N. | Item                                                            | Proposals (2016-17)                                                                                                           | Actual Work (2016-17)                                                                                          | Remarks                                    |
|------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 1a   | Backlog of previous year                                        | During Mining Plan period, it has been proposed to carry out 08 nos. of Core Boreholes up to a cumulative depth of 400 meters | 07 nos. of DTH boreholes with a cumulative depth of 210 meters have been drilled so far.                       | One bore hole needs to be drill.           |
| 1b   | Exploration over lease area for Geological axis 1 or 2.         | G1 Category:570.954ha<br>G2 category: 7.5 ha<br>G3 Category:144.38 ha<br>Under G4 category: NIL<br>Non Mineralised: NIL       | G1Category:570.954ha<br>G2 category:7.5 ha<br>G3 Category:144.38ha<br>G4 category: NIL<br>Non Mineralised: NIL |                                            |
| 1c   | Exploration Agency & Expenditure in Lakh Rupees during the year | Not given in the approved document                                                                                            | Not applicable                                                                                                 | Outsourcing has been done for exploration. |

|    |                                                                    |                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                            |  |
|----|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--|
| 1d | Balance area to be explored to bring Geological axis in 1 or 2.    | G2 category: 7.5 Ha<br>G3 Category:144.38 Ha                                                                                                                                                                                                                                                                                                               | G2 category: 7.5 Ha G3<br>Category: 144.38ha                                                                               |  |
| 1e | Balance reserves as on 01.04.2017                                  | (111) Category: 150MT<br>(122) Category: 10.9MT<br>(211)Category:40.62MT<br>(332) Category: 4.5 MT<br>(333) Category:26.0 MT                                                                                                                                                                                                                               | 111 Category:154.08<br>MT<br>122Category:10.9 MT<br>211Category: 40.62<br>MT<br>332Category: 4.5 MT<br>333Category:26.0 MT |  |
| 1f | General remarks of Inspecting officer on geology, exploration etc. | The limestone deposit of the lease area of investigation belongs to the Chandi formation of Raipur group in the Chhattisgarh Basin.The area covered by irregularspreading of top soil.In the northern zone of mining lease soil coverage is underlain gray limestone.The deposit of Limestone is sloping at dip of almost 1° towards South West direction. |                                                                                                                            |  |

### Development

| S.N . | Item                                                                                   | Proposals (2016-17)                                                                                                                                                                                                                                                    | Actual Work (2016-17)                                                                   | Remarks |
|-------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------|
| 2a    | Location of Development w.r.t. lease area                                              | N2384500 – N2385905 to E601830 - E603236 North, South and West direction wrt. Lease/pit                                                                                                                                                                                | N2384500 – N2385905 to E601830 - E603236 North, South and West direction wrt. Lease/pit |         |
| 2b    | Separate benches in topsoil overburden and mineral (Rule 15)                           | Ore/ Mineral: 04 no.<br>Waste: 01 no.                                                                                                                                                                                                                                  | Ore/ Mineral:<br>04 no.<br>Waste: 01 no.                                                |         |
| 2c    | Stripping ratio or ore to OB ratio                                                     | 1:0.28                                                                                                                                                                                                                                                                 | 1:0.18                                                                                  |         |
| 2d    | Quantity of topsoil generation in m <sup>3</sup>                                       | 17775 m <sup>3</sup>                                                                                                                                                                                                                                                   | 61700 m <sup>3</sup>                                                                    |         |
| 2e    | Quantity of overburden generation in m <sup>3</sup>                                    | 777778 m <sup>3</sup>                                                                                                                                                                                                                                                  | 646929 m <sup>3</sup>                                                                   |         |
| 2f    | General remarks of Inspecting officer on development of pit w.r.t type of deposit etc. | Thin parting of shale intercalation within limestone has degraded the quality of limestone in most of the limestone bands. Chocolate brown limestone is usually high in quality towards the top and the quality decreases gradually at depth. Development is in order. |                                                                                         |         |

### Exploitation

| S.N . | Item                                                  | Proposals (2016-17)  | Actual Work (2016-17) | Remarks |
|-------|-------------------------------------------------------|----------------------|-----------------------|---------|
| 3a    | Number of pits proposed for production                | 01 no.               | 01 no.                |         |
| 3b    | Quantity of ROM mineral production proposed (2016-17) | 7500000 Metric Tonne | 6298723 Metric Tonne  |         |

|    |                                                                                                      |                                                                                     |                                                                                |         |
|----|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------|
| 3c | Recovery of Salable/usable mineral from ROM production                                               | 94%                                                                                 | 100%                                                                           |         |
| 3d | Quantity of mineral reject generation                                                                | 450000 Metric Tonnes                                                                | 0.0 Metric Tonnes                                                              |         |
| 3e | Grade of mineral reject generation and threshold value declared                                      | Limestone (Screen Reject)<br>CaO (in reject)<br>26.8%                               | Limestone<br>CaO 25%                                                           |         |
| 3f | Quantity of sub-grade mineral generation                                                             | 100000 Metric Tonnes                                                                | NIL                                                                            |         |
| 3g | Grade of sub-grade mineral generation                                                                | CaO- 36.17 %                                                                        | Sub Grade mineral generation FY 2016-17- Nil                                   |         |
| 3h | Manual/Mechanized method adopted for segregation from ROM                                            | Dry crushing and Screening                                                          | Dry crushing and Screening                                                     |         |
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject          | Not proposed in the approved document                                               | Not applicable                                                                 |         |
| 3j | Provision of drilling & blasting in mineral benches                                                  | Provision has been given<br>Dia: 152 mm<br>Spacing: 7.5 m<br>Burden: 4.0 m          | Carried out as per proposal.<br>Dia: 152 mm<br>Spacing: 7.5 m<br>Burden: 4.0 m |         |
| 3k | Provision of mining machineries in mineral benches                                                   | Provision has been given                                                            | Carried out as per proposal.                                                   |         |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Ore: 8 meter<br>Waste: 3 meter                                                      | Ore: 8 meter<br>Waste: 3 meter                                                 |         |
| 3m | Total area covered under excavation /pits                                                            | 200.31 Ha                                                                           | 174.36 Ha                                                                      |         |
| 3n | Ore to OB ratio for the pit/mine during the year                                                     | 1:0.28                                                                              | 1:0.18                                                                         |         |
| 3o | Total area put in use under different heads at the end of year                                       | Pit- 207.66 Ha<br>Waste/reject- 43.66Ha<br>Others- 110.83 Ha<br>(at the end of SOM) | Pit- 174.362 Ha<br>Waste/reject- 27.020 Ha<br>Others- 12.08 Ha                 |         |
| 3p | Production of ROM mineral during last five-years period, as Applicable(Tons)                         | 2012-13                                                                             | 7500000                                                                        | 2405490 |
|    |                                                                                                      | 2013-14                                                                             | 7500000                                                                        | 3720613 |
|    |                                                                                                      | 2014-15                                                                             | 7500000                                                                        | 5132648 |
|    |                                                                                                      | 2015-16                                                                             | 7500000                                                                        | 5773563 |
|    |                                                                                                      | 2016-17                                                                             | 7500000                                                                        | 6298723 |
| 3q | General remarks of inspecting officer on method of mining etc                                        | Working are being carried out as per approved documents.                            |                                                                                |         |

### Solid Waste Management-Dumping

| S.N. | Item                                                              | Proposals (2016-17)                                                                                                                                                                      | Actual Work (2016-17)                                                                                                                                                                    | Remarks                                                |
|------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 4a   | Separate dumping of topsoil, OB & mineral reject (Rule 32,33)     | Proposal has been given for separate dumping of top soil, OB and Mineral reject.                                                                                                         | Carried out as per proposal.                                                                                                                                                             |                                                        |
| 4b   | Location of topsoil, OB & mineral reject dumps                    | <b>Topsoil:</b> N2386303 - N2386132 and E602767 – E602897<br><b>OB/Waste:</b> N238478 – N2384131 and E603003 – 603604<br><b>Screen Reject:</b> N2384232 – N2383939 and E602575 - E602912 | <b>Topsoil:</b> N2386303 - N2386132 and E602767 – E602897<br><b>OB/Waste:</b> N238478 – N2384131 and E603003 – 603604<br><b>Screen Reject:</b> N2384232 – N2383939 and E602575 - E602912 |                                                        |
| 4c   | Number of Dumps within lease area and outside lease area          | Within Lease area: 06 nos.                                                                                                                                                               | Within Lease area: 06 nos.                                                                                                                                                               |                                                        |
| 4d   | Location of Dumps w.r.t. ultimate pit limit (Rule 16)             | Beyond ultimate pit limit                                                                                                                                                                | Beyond ultimate pit limit                                                                                                                                                                |                                                        |
| 4e   | Number of Active & Alive dumps                                    | 03                                                                                                                                                                                       | 03                                                                                                                                                                                       |                                                        |
| 4f   | Number of deed dumps                                              | 03                                                                                                                                                                                       | 03                                                                                                                                                                                       |                                                        |
| 4g   | Number of dumps established                                       | 01                                                                                                                                                                                       | 01                                                                                                                                                                                       | (Stabilized in earlier year)                           |
| 4h   | Whether Retaining wall or garland drain all along dumps are there | (i) Proposal given for garland drains around the toe of dump.<br>(ii) Proposal given for construction of parapet wall/stone wall around the toe of dump                                  | (i) Constructed garland drains around the toe of dump.<br>(ii) Parapet wall/stone wall around the toe of dump has not been constructed.                                                  | Deviation has been pointed out in earlier MCDR Report. |
| 4i   | Length of Retaining wall or garland drain all along dump          | Not mentioned in the approved document.                                                                                                                                                  | Constructed garland drains around the toe of dump                                                                                                                                        |                                                        |
| 4j   | Number of settling ponds                                          | Not mentioned in the approved document.                                                                                                                                                  | Not applicable                                                                                                                                                                           |                                                        |
| 4k   | Specific commends of inspecting officer on waste dump management  | Waste is being dump at designated place as per approved documents.                                                                                                                       |                                                                                                                                                                                          |                                                        |

### Solid Waste Management-Backfilling

| S.N. | Item                                                                                         | Proposals (2016-17)                                                                          | Actual Work (2016-17)                   | Remarks |
|------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------|---------|
| 5a   | Status on part or full extraction of mineral from mined out area before starting backfilling | Proposal has been given in the approved document as the area is not matured for backfilling. | Not applicable.                         |         |
| 5b   | Area under backfilling of mined out area                                                     | Area not matured for backfilling                                                             | Not applicable.                         |         |
| 5c   | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)      | Based on the availability – used for spreading for Plantation                                | Spread at lease boundary for plantation |         |
| 5d   | Total area fully reclaimed & rehabilitated                                                   | Area not matured for reclamation and rehabilitation.                                         | Not applicable.                         |         |
| 5e   | General remarks of inspecting officer on backfilling, reclamation etc                        | Area is not matured for backfilling and reclamation.                                         |                                         |         |

### Progressive Mine Closer Plan

| S. N. | Item                                                                                                                                           | Proposals (2016-17)                                  | Actual Work (2016-17) | 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      | Yes                                                  | Yes                   |         |
| 6b    | Management of worked/mined out benches                                                                                                         | Area not matured for reclamation and rehabilitation. | Not applicable.       |         |
|       | i) Area available for rehabilitation (Ha)                                                                                                      |                                                      |                       |         |
|       | ii) Afforestation done (ha)                                                                                                                    |                                                      |                       |         |
|       | iii) No.of saplings planted during the year                                                                                                    |                                                      |                       |         |
|       | iv) Cumulative no. of plants                                                                                                                   |                                                      |                       |         |
|       | v) Any other specific method of rehabilitation                                                                                                 |                                                      |                       |         |
|       | vi) Cost incurred on watch & care during the year                                                                                              |                                                      |                       |         |
| 6c    | Compliance on reclamation and rehabilitation by backfilling<br>i) Voids available for backfilling (L*B*D)<br>ii) Void filled by waste/tailings | Area not matured for reclamation and rehabilitation  | Not applicable        |         |

|    |                                                                                                                                         |                                                                 |                                            |  |
|----|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------|--|
|    | iii) Afforestation on the backfilling<br>iv) Rehabilitation by making water reservoir<br>v) Any other specific means                    |                                                                 |                                            |  |
| 6d | Compliance of Rehabilitation of waste land within lease<br>i) Afforestation<br>ii) Area rehabilitation<br>iii) Method of rehabilitation | 2500 nos.<br>1.0 Ha<br>Plantation                               | 8200 nos.<br>3.28 Ha<br>Plantation         |  |
| 6e | Compliance of Environment monitoring (core zone & buffer zone)                                                                          | Monitoring of ambient air, water, noise level, Ground vibration | Monitoring has been done as per MoEF norms |  |
| 6f | General remarks of inspecting officer on PMCP compliance & progressive closer operations                                                | PMCP report submitted and implementation is in order.           |                                            |  |

### **Mineral Conservation**

| S.N. | Item                                                                                 | Proposals (2016-17)                                                                                                                                     | Actual Work (2016-17)                    | Remarks                       |
|------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|
| 7a   | ROM mineral dispatch or grade wise sorting within lease area                         | 7500000<br>Metric Tonnes                                                                                                                                | ROM dispatched:<br>6298723 Metric Tonnes |                               |
| 7b   | Method of grade-wise mineral sorting i.e. manual or mechanical                       | Mechanical                                                                                                                                              | Mechanical                               |                               |
| 7c   | Different grade of mineral sort out at mine                                          | NA                                                                                                                                                      | NA                                       | ROM directly feed to crusher. |
| 7d   | Any beneficiation process at mines                                                   | NA                                                                                                                                                      | NA                                       |                               |
| 7e   | General remarks of inspecting officer on Mineral conservation & beneficiation issues | The top bench material is mixed with clay is separated at the face itself. Machines(excavator) deployed in two or three faces for blending of subgrade. |                                          |                               |

### **Environment**

| S.N. | Item                                                                  | Proposals                                              | Actual Work                                 | Remarks |
|------|-----------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------|---------|
| 8a   | Separate removal and utilization of topsoil (Rule32)                  | Separate removal and utilization of topsoil proposed   | Complied – top soil utilized for plantation |         |
| 8b   | Concurrent use or storage of topsoil                                  | Concurrent use (based on the available area ) proposed | Top soil used concurrently                  |         |
| 8c   | Separate dumps for overburden waste rock, rejects and fines (Rule 33) | Separate dumps for                                     | Complied                                    |         |



|    |                                                                                                             |                                                      |                                                          |  |
|----|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------|--|
|    |                                                                                                             | overburden, waste rock, rejects is proposed          |                                                          |  |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use           | Area not matured for reclamation and rehabilitation. | Not applicable.                                          |  |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Area not matured for reclamation and rehabilitation. | Not applicable.                                          |  |
| 8f | Baseline information on existence of plantation & additional plantation done (Rule 41)                      | Not mentioned in the approved document               | Plantation has been done as per approved species by DFO. |  |
| 8g | Survival rate                                                                                               | Not mentioned in the approved document               | 78%                                                      |  |
| 8h | Water sprinkling on roads to control airborne dust                                                          | Water sprinkling by Water Tanker                     | Water sprinkling has been done with the Water Tanker     |  |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mine area                           | EMP parameters are regularly being monitored.        |                                                          |  |

#### **Compliance of Rule 45**

| <b>S. N.</b> | <b>Item</b>                                                                                   | <b>Comments</b>                                                                            | <b>Remarks</b> |
|--------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------|
| 9a           | Status of submission of monthly and Annual returns                                            | M.R. Submitted upto–September -2017<br>A.R. submitted upto- 2016-17                        |                |
| 9b           | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager           | Yes                                                                                        |                |
| 9c           | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Pit: 174.362 Ha<br>Reclaimed/Rehabilitated: 2.680 Ha<br>Dump: 27.020 Ha<br>Others: 9.40 Ha |                |
| 9d           | Scrutiny of Annual return on afforestation                                                    | 8200 nos. of saplings have been plated.                                                    |                |
| 9e           | Scrutiny of Annual return on mineral reject generation (Grade & Quantity)                     | Over Burden/ Screen Reject:CaO: 25%                                                        |                |
| 9f           | Scrutiny of Annual return on                                                                  | ROM Stock: NIL                                                                             |                |

|                                                 |                                                                           |                                                          |     |          |                                                                   |
|-------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------|-----|----------|-------------------------------------------------------------------|
|                                                 | ROM stock and/or grade ore                                                |                                                          |     |          |                                                                   |
| 9g                                              | Scrutiny of Annual return on sale value, Ex.Mine price & production costs | Ex-Mine Price: Rs. 220.81<br>Production Cost: Rs. 220.81 |     |          |                                                                   |
| 9i                                              | Scrutiny of Annual return on Fixed assets                                 | Rs. 25.59 Crores                                         |     |          |                                                                   |
| 9k                                              | Scrutiny of Annual return on mining Machineries                           | Equipment                                                | Nos | Capacity | Make & model                                                      |
| Scrutiny of Annual return on mining Machineries | Dumper                                                                    |                                                          | 4   | 55 MT    | Komatsu-HD 465-7                                                  |
|                                                 | Dumper                                                                    |                                                          | 7   | 55 MT    | BEML- BH 50                                                       |
|                                                 | Excavator                                                                 |                                                          | 3   | 6.5 CUM  | Komatsu-PC 1250                                                   |
|                                                 | Excavator                                                                 |                                                          | 1   | 4.0 CUM  | L & T -CK-300                                                     |
|                                                 | Drill                                                                     |                                                          | 2   | 150 mm   | Atlas Copco-IDM-30                                                |
|                                                 | Drill                                                                     |                                                          | 1   | 115 mm   | DP1100i - Sandvik                                                 |
|                                                 | Loader                                                                    |                                                          | 1   | 3.0 CUM  | Komatsu WA 380                                                    |
|                                                 | Dozer                                                                     |                                                          | 2   | 308 HP   | Komatsu-D 155                                                     |
|                                                 | Backhoe cum Rock breaker                                                  |                                                          | 1   | 324 HP   | L & T CK-300(Excavator) Atlas Copco -HB 4200-(Breaker attachment) |
|                                                 | Water Tanker                                                              |                                                          | 1   | 28 KL    | BEML WS28                                                         |
|                                                 | Water Tanker                                                              |                                                          | 1   | 8 KL     | Tata-1612                                                         |

Details of Violations observed during Mining plan inspection: No serious Violation observed  
Last inspection: Shri S. Kartikeya, Jr. Mining geologist, IBM Raipur dated 23/08/2017.

Compliance position of earlier violation pointed out:-

| नियम              | उल्लंघन के प्रकार का विस्तृत ब्यौरा                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Compliance Status                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Rule 11(1)</b> | <p>The following deviations have been found in the mine from the approved Mining Plan vide 314(3)/2012/MCCM(CZ)/MPLN-33 Nagpur dated 14/10/2013 for the period of 2013-14 to 2017-18:</p> <p><b>Borehole:</b> During Mining Plan period, it has been proposed to carry out 08 nos of Core Boreholes up to a cumulative depth of 400 meters; whereas, 04 nos. of DTH boreholes with a cumulative depth of 120 meters have been drilled so far.</p> <p><b>Protective Measures:</b> There was a proposal given for construction of parapet wall/stone wall around the toe of dump, the same has not been constructed.</p> | <p>07 Borehole Drilled so far, one Borehole needs to be drilled.</p> <p>Parapet Wall/Stone wall around the Toe of Dump not Constructed</p> |

Date: 23/11/2017

Name: Shri R. K. Das & Rudra N Mishra  
Designation: SrACOM & SMG