

ARASMETA LIMESTON MINE OF M/S LAFARGE INDIA LTD

INDIA

VILLAGE ARASMETA, DISTT. JANJGIR - CHAMPA, CHHATTISGARH

Environment clearance

Letter No. J11015/64/2003- IA, II (M) GOI, and MoEF dated 18/7/2005 for production of 2.7 MTPA for Arasmeta Limestone mine.

**CONSENT TO OPERATE**

Air Consent Letter NO. 1004/TS/CECB/2016 Date 17/05/2016 for 2.7 MTPA

Water Consent Letter NO. 1002/TS/CECB/2016 Date 17/05/2016 for 2.7 MTPA

**Monitoring Data for the Month <sup>Oct</sup> Nov` 2016**

| KEY PARAMETERS  |                                  |   |                           |                     |      |                |      |                          |      |
|---|----------------------------------|---|---------------------------|---------------------|------|----------------|------|--------------------------|------|
| <b>A ) STATIC INFORMATION</b>   |                                  |   |                           |                     |      |                |      |                          |      |
| 1   | MINE LEASE AREA                  | :   | 499.987 Hect.             |                     |      |                |      |                          |      |
| 2   | PRODUCTION                       | :   | 2.7 MTPA                  |                     |      |                |      |                          |      |
| 3   | LEASE DURATION                   | :   | 2019                      |                     |      |                |      |                          |      |
| 4   | DATE OF COMMENCEMENT OF WORK     | :   | Mines operated since 1982 |                     |      |                |      |                          |      |
| <b>B) DYNAMIC PARAMETERS</b>  |                                  |   |                           |                     |      |                |      |                          |      |
| <b>(i) Ambient Air Quality</b>  |                                  |   |                           |                     |      |                |      |                          |      |
| Ambient Air Quality Monitoring Station                                    |                                  |   |                           |                     |      |                |      |                          |      |
| Parameters  |                                  | Pit Boundary (East)   |                           | Mines office (West) |      | Colony (North) |      | Arasmeta village (South) |      |
|   |                                  | I   | II                        | I                   | II   | I              | II   | I                        | II   |
| PM10  | (µg/m3)                          | 46  | 50                        | 51                  | 58   | 49             | 52   | 55                       | 50   |
| PM2.5   | (µg/m3)                          | 25  | 31                        | 28                  | 34   | 28             | 27   | 32                       | 31   |
| Sulphur Dioxide SO2   | (µg/m3)                          | 6.3   | 6.9                       | 7.1                 | 7.7  | 6.4            | 6.4  | 6.9                      | 6.5  |
| Nitrogen Dioxide NO2  | (µg/m3)                          | 7.6   | 8.5                       | 9.2                 | 9.2  | 7.9            | 7.6  | 9.2                      | 8.2  |
| Carbon Monoxide CO  | (mg/m3)                          | 0.13  | 0.15                      | 0.16                | 0.19 | 0.14           | 0.15 | 0.16                     | 0.16 |
| BDL - Below Detection Limit-  |                                  |   |                           |                     |      |                |      |                          |      |
| <b>(ii)</b>   | <b>Vibration (PPV)</b>           | 2.28 mm / Sec at the distance of 300 meter from blast site. - |                           |                     |      |                |      |                          |      |
| <b>(iii) Quality of Discharge Water:- Zero Discharge Water From Mines</b> |                                  |   |                           |                     |      |                |      |                          |      |
| 1   | Total Dissolved Solid (TDS)      | :   | -                         |                     |      |                |      |                          |      |
| 2   | Dissolved Oxygen(DO)             | :   | -                         |                     |      |                |      |                          |      |
| 3   | PH                               | :   | -                         |                     |      |                |      |                          |      |
| 4   | Total Suspended solids (TSS)     | :   | -                         |                     |      |                |      |                          |      |
| <b>(iv) Greenbelt/Plantation</b>  |                                  |   |                           |                     |      |                |      |                          |      |
| 1   | Nos of Trees planted till date - | 1005783 Around Plant, Colony & Included Arasmeta Mines        |                           |                     |      |                |      |                          |      |
| 2   | Calendar year wise (progressive) | 2015  |                           |                     |      | 2016           |      |                          |      |
|   |                                  | 7108  |                           |                     |      | 12000          |      |                          |      |

For Lafarge India Limited,  
(Arasmeta Cement Plant)

  
(Ramesh Chandra Pathak)  
Vice President

**KIRARI LIMESTONE MINE OF M/S LAFARGE INDIA LTD.**  
**VILLAGE KIRARI - CHORBHATTI**  
**DISTT. JANJGIR - CHAMPA, CHHATTISGARH**

INDIA

**Environment clearance**

Environment clearance. Letter No. J11015/23/2002- IA, II (M) GOI, and MoEF dated 9/12/2003 for production of 0.36 MTPA for Kirari Limestone mine.

**CONSENT TO OPERATE**

Air Consent Letter NO. 3825/TS/CECB/2015 Date 10/11/2015 for 0.36 MTPA  
 Water Consent Letter NO. 3823/TS/CECB/2015 Date 10/11/2015 for 0.36 MTPA

**Monitoring Data For the Month of Oct` 2016**

| KEY PARAMETERS  |                                  |   |                           |               |      |                      |      |                |      |
|---|----------------------------------|---|---------------------------|---------------|------|----------------------|------|----------------|------|
| <b>A ) STATIC INFORMATION</b>   |                                  |   |                           |               |      |                      |      |                |      |
| 1   | MINE LEASE AREA                  | :   | 167.048 Hect.             |               |      |                      |      |                |      |
| 2   | PRODUCTION                       | :   | 0.36 MTPA                 |               |      |                      |      |                |      |
| 3   | LEASE DURATION                   | :   | 2020                      |               |      |                      |      |                |      |
| 4   | DATE OF COMMENCEMENT OF WORK     | :   | Mines operated since 2006 |               |      |                      |      |                |      |
| <b>B) DYNAMIC PARAMETERS</b>  |                                  |   |                           |               |      |                      |      |                |      |
| <b>(i) Ambient Air Quality</b>  |                                  |   |                           |               |      |                      |      |                |      |
| Ambient Air Quality Monitoring Station                                    |                                  |   |                           |               |      |                      |      |                |      |
| Parameters  |                                  | Chorbatti (East)  |                           | Banhil (West) |      | Mines office (North) |      | Kirari (South) |      |
|   |                                  | I   | II                        | I             | II   | I                    | II   | I              | II   |
| PM10  | (µg/m3)                          | 47  | 49                        | 58            | 62   | 55                   | 58   | 53             | 54   |
| PM2.5   | (µg/m3)                          | 27  | 29                        | 37            | 37   | 32                   | 35   | 31             | 33   |
| Sulphur Dioxide SO2   | (µg/m3)                          | 6.1   | 6.1                       | 8.3           | 8.5  | 6.7                  | 7.4  | 6.4            | 6.8  |
| Nitrogen Dioxide NO2  | (µg/m3)                          | 7.5   | 7.6                       | 9.9           | 10.4 | 7.7                  | 9.0  | 8.0            | 8.6  |
| Carbon Monoxide CO  | (mg/m3)                          | 0.12  | 0.14                      | 0.19          | 0.20 | 0.15                 | 0.17 | 0.13           | 0.15 |
| <b>(ii) Vibration (PPV)</b>   |                                  | 2.31 mm / Sec at the distance of 200 meter from blast site. - |                           |               |      |                      |      |                |      |
| <b>(iii) Quality of Discharge Water:- Zero Discharge Water From Mines</b> |                                  |   |                           |               |      |                      |      |                |      |
| 1   | Total Dissolved Solid (TDS)      | :   | -                         |               |      |                      |      |                |      |
| 2   | Dissolved Oxygen(DO)             | :   | -                         |               |      |                      |      |                |      |
| 3   | PH                               | :   | -                         |               |      |                      |      |                |      |
| 4   | Total Suspended solids (TSS)     | :   | -                         |               |      |                      |      |                |      |
| <b>(iv) Greenbelt/Plantation</b>  |                                  |   |                           |               |      |                      |      |                |      |
| 1   | Nos of Trees planted till date - | 40275 nos. Plantation at Kirari Mines                         |                           |               |      |                      |      |                |      |
| 2   | Calendar year wise (progressive) | 2015  |                           |               |      | 2016                 |      |                |      |
|   |                                  | 6000 Nos.   |                           |               |      | 6000 Nos.            |      |                |      |

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