

**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 Aug` 2016**

**KEY PARAMETERS**

**A ) STATIC INFORMATION**

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) DYNAMIC PARAMETERS**

**(i) Ambient Air Quality**

Parameters	Ambient Air Quality Monitoring Station							
	Chorbatti (East)		Banhil (West)		Mines office (North)		Kirari (South)	
	I	II	I	II	I	II	I	II
PM10 (µg/m3)	39	41	54	56	42	48	40	46
PM2.5 (µg/m3)	25	26	34	36	26	32	24	27
Sulphur Dioxide SO2 (µg/m3)	5.3	5.3	6.6	7.5	5.5	6.6	5.5	5.9
Nitrogen Dioxide NO2 (µg/m3)	6.6	6.5	9.1	9.4	6.5	8.7	6.9	7.6
Carbon Monoxide CO (mg/m3)	0.13	0.14	0.17	0.19	0.14	0.16	0.13	0.14

**(ii) Vibration (PPV)** 2.68 mm / Sec at the distance of 200 meter from blast site. -

**(iii) Quality of Discharge Water:-** Zero Discharge Water From Mines

1	Total Dissolved Solid (TDS)	:	-
2	Dissolved Oxygen(DO)	:	-
3	PH	:	-
4	Total Suspended solids (TSS)	:	-

**(iv) Greenbelt/Plantation**

1	Nos of Trees planted till date -	37475 nos. Plantation at Kirari Mines
2	Calendar year wise (progressive)	2015
		6000 Nos.
		2016
		3200 Nos.

For Lafarge India Limited,  
Arasmata Cement Plant,

  
(Ramesh Chandra Pathak)  
Vice President

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 AUG` 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)	44	41	51	48	38	37	50	47
PM2.5	(µg/m3)	28	25	30	28	27	24	32	30
Sulphur Dioxide SO2	(µg/m3)	5.9	5.9	6.8	6.6	5.7	5.8	6.1	6.2
Nitrogen Dioxide NO2	(µg/m3)	7.2	7.6	8.9	8.1	5.8	6.5	7.8	7.6
Carbon Monoxide CO	(mg/m3)	0.15	0.15	0.17	0.16	0.15	0.14	0.15	0.15
BDL - Below Detection Limit-									
<b>(ii)</b>	<b>Vibration (PPV)</b>	2.57 mm / Sec at the distance of 300 meter from blast site. -							
<b>(iii)</b>	<b>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 -	1002973 Around Plant, Colony & Included Arasmeta Mines							
2	Calendar year wise (progressive)	2015				2016			
		7108				9190			

For Lafarge India Limited,  
(Arasmeta Cement Plant)

  
(Ramesh Chandra Pathak)  
Vice President