



Reg A.D
JK Cement LTD.

CIN : L17229UP1994PLC017199

ISO 9001:2008, ISO 14001:2004 & OHSAS 18001 : 2007 CERTIFIED COMPANY

Ref.No.:NBH-PC-13/ 3045

Phone : +91-1477-220098, 220087
Fax : +91-1477-220027, 220049
E-mail : jkc.nbh@jkcement.com
Web : www.jkcement.com

J.K. Cement Works
Kailash Nagar - 312617, Nimbahera
Distt. Chittorgarh (Raj.) INDIA

Date: 21.09.2017

To,

➔ **The Director,**
Ministry of Environment and Forests,
Regional office (Central Region),
Kendriya Bhawan, 5th Floor, Sector 'H',
ALIGANJ, LUCKNOW- 226020 (U.P.)

SUBJECT: Environmental Statement for the year 2016 – 2017

Dear Sir,

Kindly find herewith enclosed **Environment Statement Report of J.K. Cement Works Nimbahera** for the **year 2016 - 2017** for your reference and record. We trust you will find the same in order.

Thanking You.

Gayatri
Yours Faithfully
For J.K. Cement Works, Nimbahera

S.K. Rathore
Unit Head

Encl. : a / a

Corporate & Registered Office : Kamla Tower, Kanpur-208001, (U. P.) INDIA
Phone : +91-512-2371478 to 81 **Fax :** 2399854 **E-mail :** ho.grey@jkcement.com



J. K. Cement Works, Nimbahera
J. K. Cement Works Mangrol
J. K. Cement Works, Gotan
J. K. Cement Works, Jharli

J. K. Power, Bamania
J. K. Cement Works, Muddapur
J. K. White Cement Works, Gotan
J. K. White, Katni



Government of India
Ministry of Environment and Forest

“ FORM - V ”

(See rule 14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31STMARCH 2017

PART - A

(I) NAME & ADDRESS OF THE OWNER / OCCUPIER OF THE INDUSTRY OPERATION OR PROCESS (AS PER FACTORY ACT)	S. K. Rathore Unit Head J.K. Cement Works, Kailash Nagar: 312617 NIMBAHERA, Chittorgarh (Raj.)						
(II) INDUSTRY CATEGORY PRIMARY :- (STC CODE) SECONDARY :- (SIC CODE)	Primary						
(III) CEMENT PRODUCTION CAPACITY :- (DESIGNED / INSTALLED CAPACITY)	3.6 MMTPA						
(IV) YEAR OF ESTABLISHMENT :- UNITS	<table border="0"><tr><td>UNIT I</td><td>UNIT II</td><td>UNIT III</td></tr><tr><td>1974</td><td>1978</td><td>1982 & 1988 Upgraded in 98-99</td></tr></table>	UNIT I	UNIT II	UNIT III	1974	1978	1982 & 1988 Upgraded in 98-99
UNIT I	UNIT II	UNIT III					
1974	1978	1982 & 1988 Upgraded in 98-99					
(V) DATE OF LAST ENVIRONMENTAL STATEMENT SUBMITTED	September 2016.						

PART - B

WATER & RAW MATERIAL CONSUMPTION

(1) **WATER CONSUMPTION M³/day**

Process	:	NIL
Cooling	:	2160 M ³ /day
Domestic	:	385 M ³ /day

NAME OF THE PRODUCTS	PROCESS WATER CONSUMPTION PER PRODUCT OUTPUT	
	PREVIOUS FINANCIAL YEAR	CURRENT FINANCIAL YEAR
	(1)	(2)
CEMENT	Being a dry process cement plant, process water consumption is nil.	

(II) **RAW MATERIAL CONSUMPTION**

NAME OF RAW MATERIAL USED	NAME OF PRODUCTS	CONSUMPTION OF RAW MATERIAL PER UNIT OF OUTPUT	
		DURING THE PREVIOUS FINANCIAL YEAR	DURING THE CURRENT FINANCIAL YEAR
Limestone	CEMENT	1.1352	1.093
Laterite		0.0800	0.092
Gypsum		0.0602	0.068
Flyash		0.1371	0.149

* Industry may use codes if disclosing details of raw material would violate contractual obligations
Otherwise all industries have to name the raw materials used.

PART - C

POLLUTION DISCHARGE TO ENVIRONMENT / UNIT OF OUTPUT

(Parameters as specified in the consent issued)

(1)	Pollutants	Quantity of Pollutants discharged (Mass / day)	Concentrations of Pollutants in discharged (Mass / volume)	Percentage of variation from prescribed standards with reasons
(a)	Water	:		
(i)	colonial	:	370 KL/day (treated Sewage water analysis report is enclosed in Table No. VIII)	
(ii)	Industrial	:	NIL	
(b)	Air	:	(See Table No.IV, V,VI & VII in report)	

PART - D

(As specified under Hazardous Waste Management, Handling and Trans Boundary Movement rules 2008

HAZARDOUS WASTE		TOTAL QUANTITY (KGS.)	
		DURING THE PREVIOUS FINANCIAL YEAR	DURING THE CURRENT FINANCIAL YEAR
(a)	From Process(DG & Plant Machinery)	11.80 K.L.	29.0 K.L.
(b)	From Pollution Control facilities	N. A.	N. A.

PART - E
SOLID WASTES

TOTAL QUANTITY		
	DURING THE PREVIOUS FINANCIAL YEAR	DURING THE CURRENT FINANCIAL YEAR
(a) From Process	N. A.	N. A.
(b) From Pollution control facilities	190231.906 MT	155837.963 MT
(c) (i) Qty. recycled or reused with in the unit	190231.906 MT	155837.963 MT
(ii) Sold	NIL	NIL
(iii) Disposed	NIL	NIL

PART - F

PLEASE SPECIFY THE CHARACTERISATIONS (IN TERMS OF COMPOSITION AND QUANTUM) OF HAZARDOUS AS WELL AS WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE CATEGORIES OF WASTES.

- * Soild waste generated from PCE (i. e. from ESP' s, Bag filters & dust cyclones) in form of bottom dust is completely recycled .
- * Hazardous waste is generated in the form of used / spent oil, wastes/ residues containing oil which is stored in 210 ltr. capacity drums at safe side and sale of to approved party from Moef / Rajasthan Pollution Control Board.

PART - G

IMPACT OF THE POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION .

- * By recycling total solid waste generated from pollution control facilities, the industry has conserve natural raw materials .

PART - H

ADDITIONAL MEASURES / INVESTMENT PROPOSALS FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT POLLUTION, PREVENTION OF POLLUTION .

N. A.

PART - I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT.

- * Industry has planted 8241 plants in and around factory area during the period under review.



For J.K.CEMENT WORKS
NIMBAHERA

J.K.CEMENT WORKS, NIMBAHERA
ANALYSIS OF SEWAGE WATER (STP OUTLET)
(2016-17 Yearly Average)
TABLE - VIII

S.No.	PARAMETER	RESULT
1	pH	7.7
2	Total Suspended Solids (TSS)	41.7
3	Chemical Oxygen Demand (COD)	40.2
4	Bio-Chemical Oxygen Demand (BOD)	9.1
	(3 Days at 27 ⁰ C)	
5	Oil & Grease	2.0
6	Ammononical Nitrogen (as N)	4.1
7	Sulphide (as S)	0.7
8	Chlorides	73.1
9	Total Kjeldahl Nitrogen (as N)	4.2
10	Residual Chlorine	Nil

J.K.CEMENT WORKS, NIMBAHERA
STACK EMISSION CONCENTRATION
(MONTHLY AVERAGE IN mg/NM³)
FY 2016-17
TABLE - IV

MONTH	L.S.C.	KILN1M	KILN1A	KILN2	KILN3	P.C.	F.C.	CL1	CL2	CL3	CL4	CM1	CM2	CM3	CM4	P1	P2	P3	P4	P5	P6
Apr-16	40.0	75.0	79.0	81.0	84.0	87.0	25.0	27.0	24.0	20.0	68.0	UM	15.0	70.0	19.0	26.0	24.0	32.0	25.0	21.0	23.0
May-16	33.0	UM	UM	UM	82.0	85.0	22.0	UM	UM	19.0	65.0	18.0	20.0	75.0	16.0	21.0	23.0	28.0	24.0	27.0	22.0
Jun-16	48.0	UM	UM	UM	79.0	83.0	27.0	UM	UM	21.0	62.0	17.0	19.0	65.0	13.0	23.0	28.0	25.0	20.0	19.0	27.0
Jul-16	42.0	UM	UM	77.0	UM	UM	UM	UM	20.0	UM	UM	21.0	15.0	62.0	22.0	19.0	26.0	23.0	18.0	22.0	24.0
Aug-16	27.0	UM	UM	84.3	UM	UM	UM	UM	26.5	UM	UM	15.4	17.4	74.0	20.1	28.2	22.0	26.2	23.6	18.1	29.3
Sep-16	26.0	UM	UM	72.3	20.2	18.4	28.1	UM	25.4	23.2	21.7	19.2	18.7	66.7	17.6	20.6	21.4	19.6	24.2	23.6	25.1
Oct-16	24.3	UM	UM	79.6	14.6	17.2	24.8	UM	22.6	18.9	20.3	16.8	14.6	64.4	19.6	22.4	25.6	21.5	20.1	17.6	28.7
Nov-16	28.1	UM	UM	UM	12.4	15.8	27.6	UM	UM	20.7	17.6	22.3	19.2	69.7	14.8	24.4	27.3	29.1	26.4	20.5	18.7
Dec-16	25.7	UM	UM	UM	16.2	17.4	26.3	UM	UM	22.4	19.6	20.8	17.6	68.5	16.6	18.4	21.5	26.8	24.6	22.8	23.3
Jan-17	27.8	UM	UM	64.5	13.6	14.8	25.4	UM	17.6	15.8	12.3	18.6	16.7	60.2	13.8	17.9	20.2	23.7	27.8	21.1	22.3
Feb-17	23.4	UM	UM	70.0	11.7	13.8	24.3	UM	27.0	18.6	15.4	21.2	20.4	UM	17.4	21.4	23.6	25.4	22.8	24.0	26.6
Mar-17	26.5	UM	UM	75.0	17.4	19.2	38.8	UM	18.0	13.0	16.2	17.3	18.4	12.0	14.3	19.3	21.1	22.0	23.2	25.0	27.4

L.S.C.= LIME STONE CRUSHER, STACK, M = MAIN, A = ADDITIONAL, P.C.= PRE-CALCINER, F.C.= FOLAX COOLER, CL= COAL MILL, CM = CEMENT MILL, P = PACKER.

J.K.CEMENT WORKS, NIMBAHERA
STACK EMISSION CONCENTRATION
(% variation from prescribed standard)
FY 2016-17
TABLE - V

MONTH	L.S.C.	KILN1M	KILN1A	KILN2	KILN3	P.C.	F.C.	CL1	CL2	CL3	CL4	CM1	CM2	CM3	CM4	P1	P2	P3	P4	P5	P6
Apr-16	-59.98	UM	UM	-19.0	-16.1	-13.0	-75.0	UM	-76.0	-80.0	-32.0	UM	-85.0	-30.0	-81.0	-74.0	-76.0	-68.0	-75.0	-79.0	-77.0
May-16	-67.0	UM	UM	UM	-18.1	-15.0	-78.1	UM	UM	-81.0	-35.0	-82.0	-80.0	-25.1	-84.1	-79.0	-77.0	-72.0	-76.0	-73.0	-78.0
Jun-16	-52.0	UM	UM	UM	-21.0	-17.0	-73.0	UM	UM	-79.0	-38.0	-83.0	-81.0	-35.0	-87.0	-77.0	-72.0	-75.0	-80.0	-81.0	-73.0
Jul-16	-58.0	UM	UM	-23.0	UM	UM	UM	UM	-80.0	UM	UM	-79.0	-85.0	-38.1	-78.0	-81.0	-74.0	-77.0	-82.0	-78.0	-76.0
Aug-16	-73.0	UM	UM	-15.8	UM	UM	UM	UM	-73.6	UM	UM	-84.7	-82.6	-26.0	-79.9	-71.8	-78.0	-73.8	-76.4	-81.9	-70.7
Sep-16	-74.0	UM	UM	-27.7	-79.8	-81.6	-71.9	UM	-74.6	-76.8	-78.3	-80.8	-81.3	-33.4	-82.5	-79.4	-78.6	-80.4	-75.8	-76.4	-74.9
Oct-16	-75.7	UM	UM	-20.4	-85.4	-82.8	-75.2	UM	-77.4	-81.1	-79.7	-83.2	-85.4	-35.7	-80.4	-77.6	-74.4	-78.5	-79.9	-82.4	-71.3
Nov-16	-71.9	UM	UM	UM	-87.6	-84.3	-72.4	UM	UM	-79.3	-82.4	-77.7	-80.8	-30.3	-85.3	-75.6	-72.7	-70.9	-73.6	-79.5	-81.3
Dec-16	-74.3	UM	UM	UM	-83.9	-82.6	-73.7	UM	UM	-77.6	-80.4	-79.2	-82.4	-31.5	-83.4	-81.6	-78.5	-73.2	-75.4	-77.2	-76.7
Jan-17	-72.2	UM	UM	-35.5	-86.4	-85.3	-74.7	UM	-82.4	-84.2	-87.8	-81.4	-83.4	-39.8	-86.2	-82.1	-79.8	-76.3	-72.2	-78.9	-77.7
Feb-17	-76.6	UM	UM	-30.0	-88.4	-86.3	-75.7	UM	-73.1	-81.4	-84.6	-78.8	-79.6	UM	-82.6	-78.6	-76.4	-74.6	-77.2	-76.0	-73.4
Mar-17	-73.5	UM	UM	-25.0	-82.6	-80.8	-61.3	UM	-82.0	-87.1	-83.9	-82.7	-81.6	-88.0	-85.7	-80.7	-78.9	-78.0	-76.8	-75.0	-72.6

L.S.C.= LIME STONE CRUSHER, STACK, M = MAIN, A = ADDITIONAL, P.C.= PRE-CALCINER, F.C.= FOLAX COOLER, CL= COAL MILL, CM = CEMENT MILL, P = PACKER.

J.K.CEMENT WORKS, NIMBAHERA
STACK EMISSION GENERATED
(MONTHLY AVERAGE IN TONNES/DAY)
FY 2016-17
TABLE - VI

MONTH	L.S.C.	KILN1M	KILN1A	KILN2	KILN3	P.C.	F.C.	CL1	CL2	CL3	CL4	CM1	CM2	CM3	CM4	P1	P2	P3	P4	P5	P6
Apr-16	0.010	0.151	0.100	0.345	0.383	0.745	0.195	0.008	0.011	0.009	0.065	UM	0.007	0.042	0.016	0.006	0.006	0.007	0.006	0.004	0.004
May-16	0.009	UM	UM	UM	0.375	0.743	0.173	UM	UM	0.008	0.064	0.005	0.009	0.045	0.009	0.005	0.005	0.006	0.006	0.005	0.004
Jun-16	0.012	UM	UM	UM	0.347	0.697	0.213	UM	UM	0.008	0.057	0.004	0.008	0.039	0.008	0.005	0.006	0.005	0.004	0.003	0.004
Jul-16	0.010	UM	UM	0.320	UM	UM	UM	UM	0.009	UM	UM	0.005	0.007	0.036	0.013	0.004	0.006	0.005	0.004	0.004	0.004
Aug-16	0.007	UM	UM	0.345	UM	UM	UM	UM	0.012	UM	UM	0.004	0.008	0.043	0.012	0.006	0.005	0.006	0.005	0.003	0.005
Sep-16	0.007	UM	UM	0.293	0.090	0.148	0.210	UM	0.011	0.008	0.022	0.005	0.008	0.038	0.010	0.004	0.005	0.005	0.005	0.004	0.005
Oct-16	0.006	UM	UM	0.330	0.065	0.135	0.193	UM	0.010	0.007	0.020	0.005	0.006	0.036	0.012	0.004	0.006	0.005	0.005	0.003	0.005
Nov-16	0.008	UM	UM	UM	0.055	0.120	0.210	UM	UM	0.008	0.017	0.006	0.008	0.040	0.009	0.005	0.006	0.007	0.006	0.004	0.003
Dec-16	0.007	UM	UM	UM	0.068	0.133	0.195	UM	UM	0.008	0.019	0.006	0.008	0.038	0.010	0.004	0.005	0.006	0.005	0.005	0.004
Jan-17	0.007	UM	UM	0.250	0.055	0.110	0.168	UM	0.007	0.006	0.012	0.005	0.007	0.033	0.008	0.004	0.005	0.006	0.006	0.004	0.004
Feb-17	0.006	UM	UM	0.285	0.050	0.105	0.183	UM	0.012	0.007	0.016	0.006	0.008	UM	0.010	0.004	0.006	0.005	0.005	0.005	0.005
Mar-17	0.007	UM	UM	0.310	0.075	0.140	0.250	UM	0.008	0.005	0.015	0.005	0.008	0.007	0.008	0.004	0.005	0.005	0.005	0.005	0.005

L.S.C.= LIME STONE CRUSHER, STACK, M = MAIN, A = ADDITIONAL, P.C.= PRE-CALCINER, F.C.= FOLAX COOLER, CL= COAL MILL, CM = CEMENT MILL, P = PACKER.

J.K.CEMENT WORKS, NIMBAHERA
AMBIENT AIR QUALITY MONITORING DATA FOR SPM
(MONTHLY AVERAGE $\mu\text{g}/\text{M}^3$)

TABLE - VII

	NEAR	NEAR	NEAR N.J.K.	NEAR
MONTH	MAIN SECURITY	STACKER TRANSFER	FACTORY GATE	MINE GATE
	GATE	POINT		
Apr-16	332.5	372.0	353.3	346.3
May-16	345.8	393.8	367.7	363.7
Jun-16	307.3	340.0	323.5	318.0
Jul-16	290.2	347.0	320.2	322.5
Aug-16	185.8	229.3	204.8	217.5
Sep-16	217.2	340.7	250.8	270.8
Oct-16	314.2	353.8	331.8	342.0
Nov-16	315.2	360.7	335.0	340.7
Dec-16	324.0	375.3	339.0	359.8
Jan-17	311.5	370.3	326.8	352.2
Feb-17	324.3	362.0	340.8	337.5
Mar-17	333.7	390.2	351.0	371.0