

JK Cement LTD.

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

CIN : L17229UP1994PLC017199

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

Ref. No.: MGR-PC -13/ 2393

Date: 27.09.2018

To,
The Member Secretary,
Rajasthan State Pollution Control Board 4,
Industrial Area, Jhalana Dungri
JAIPUR – 302004 (Raj)

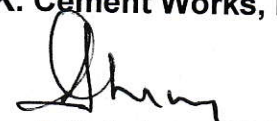
SUBJECT: **Environmental Statement for the year 2017-2018 (02 Copies)**

Dear Sir,

Kindly find herewith enclosed **Environment Statement Report of J.K. Cement Works Mangrol Line-1** for the **year 2017-2018** for your reference and record. We trust you will find the same in order.

Thanking You.

Yours Faithfully
For J.K. Cement Works, Mangrol


S.K. Acharya
Astt. V.P. (E& I)

Encl. : a / a

Copy to -

The Regional Officer, Rajasthan State Pollution Control Board, Near FCI Godown,
Chandaria, Distt.- CHITTORGARH (RAJ)

Corporate & Registered Office : Kamla Tower, Kanpur-208001, (U. P.) INDIA
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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
2018**

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, Mangrol, Chittorgarh (Raj.) (line-1) |
| (II) INDUSTRY CATEGORY PRIMARY :- (STC CODE) SECONDARY :- (SIC CODE) | Primary |
| (III) CEMENT PRODUCTION CAPACITY :- (DESIGNED / INSTALLED CAPACITY) | 0.95 MMTPA |
| (IV) YEAR OF ESTABLISHMENT :- | 1995 Started Grinding & packing Unit Plant Commissioned in Dec-2001 |
| (V) DATE OF LAST ENVIRONMENTAL STATEMENT SUBMITTED | 16 th September 2017. |

PART - B

WATER & RAW MATERIAL CONSUMPTION

(1) **WATER CONSUMPTION M³/day**

| | | |
|----------|---|-------------------------|
| Process | : | NIL |
| Cooling | : | 140 M ³ /day |
| Domestic | : | 35 M ³ /day |

NAME OF THE PRODUCTS

PROCESS WATER CONSUMPTION PER
PRODUCT OUTPUTPREVIOUS FINANCIAL
YEARCURRENT FINANCIAL
YEAR

(1)

(2)

CEMENT

Being a dry process cement plant , process water
consumption is nil.(II) RAW MATERIAL CONSUMPTIONNAME OF
RAW MATERIAL
USEDNAME OF
PRODUCTSCONSUMPTION OF RAW MATERIAL
PER UNIT OF OUTPUTDURING THE
PREVIOUS
FINANCIAL
YEARDURING THE
CURRENT
FINANCIAL
YEAR

Limestone

CEMENT

1.2958

1.000

Laterite

0.1187

0.132

Gypsum

0.0587

0.054

Flyash

0.0000

0.158

* 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)

| (I) | 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 : | 10 KL / day (treated Sewage water analysis report 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 & Other waste Management rules-2016)

| HAZARDOUS WASTE | | TOTAL QUANTITY (KGS.) | |
|-----------------|--------------------------------------|---------------------------------------|--------------------------------------|
| | | DURING THE PREVIOUS FINANCIAL YEAR | DURING THE CURRENT FINANCIAL YEAR |
| (a) | From Process (DG & Plant Machinery) | 10.00K.L. | 16.38 K.L. (including unit-2) |
| (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 | 47738.473 MT | 243774.114 MT |
| (c) | (i) Qty. recycled or reused with in the unit | 47738.473 MT | 243774.114 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.

- * Solid 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

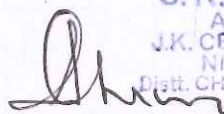
ADDITIONAL MEASURES / INVESTMENT PROPOSALS FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT POLLUTION, PREVENTION OF POLLUTION .

N. A.

PART - I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT.

* Industry has planted 5000 plants (including unit-2) in and around factory area during the period under review.


S.K. ACHARYA
A.V.P. (E&I)
J.K. CEMENT WORKS
NIMBAHERA
Distt. CHITTORGARH (Raj.)

For J.K.CEMENT WORKS
MANGROL

Prepared by :

Paryavar
Control
System

J.K.Cement Works,Mangrol (Line-1)
DUST CONCENTRATION FROM STACK
 (MONTHLY AVERAGE IN mg/NM³)
 FY 2017-18
 TABLE - IV

| Month | Kiln Bag house Stack | Cooler ESP Stack | Coal Mill B.F. Stack | Cement Mill -1 B.F. Stack | Cement Mill -2 B.F. Stack |
|--------|----------------------------|---------------------|-------------------------|------------------------------|------------------------------|
| Apr-17 | UM | UM | UM | Stop | 42.3 |
| May-17 | 14.2 | 44.3 | 13.7 | Stop | 40.2 |
| Jun-17 | 12.6 | 24.3 | 15.4 | Stop | 26.3 |
| Jul-17 | 13.6 | 22.1 | 18.5 | Stop | 25.3 |
| Aug-17 | 15.4 | 35.2 | 14.4 | Stop | 23.7 |
| Sep-17 | 17.2 | 33.2 | 12.7 | Stop | 21.6 |
| Oct-17 | 16.2 | 31.4 | 17.4 | Stop | 24.5 |
| Nov-17 | 11.7 | 34.0 | 15.8 | Stop | 22.4 |
| Dec-17 | 14.5 | 40.3 | 11.8 | Stop | 15.6 |
| Jan-18 | 18.4 | 38.7 | 13.6 | Stop | 11.5 |
| Feb-18 | 13.5 | 42.4 | 10.5 | Stop | 9.7 |
| Mar-18 | 11.4 | 39.8 | 12.3 | Stop | 10.8 |

J.K.CEMENT WORKS, MANGROL (Line-1)
STACK EMISSION CONCENTRATION
(% variation from prescribed standard)
FY 2017-18
TABLE - V

| Month | Kiln Bag house Stack | Cooler ESP Stack | Coal Mill B.F. Stack | Cement Mill -1 B.F. Stack | Cement Mill -2 B.F. Stack |
|--------|----------------------|------------------|----------------------|---------------------------|---------------------------|
| Apr-17 | UM | UM | UM | Stop | -57.7 |
| | | | | | |
| May-17 | -85.9 | -55.8 | -86.3 | Stop | -59.8 |
| | | | | | |
| Jun-17 | -87.5 | -75.7 | -84.7 | Stop | -73.7 |
| | | | | | |
| Jul-17 | -86.4 | -77.9 | -81.5 | Stop | -74.7 |
| | | | | | |
| Aug-17 | -84.6 | -64.8 | -85.6 | Stop | -76.3 |
| | | | | | |
| Sep-17 | -82.8 | -66.9 | -87.3 | Stop | -78.4 |
| | | | | | |
| Oct-17 | -83.8 | -68.6 | -82.6 | Stop | -75.5 |
| | | | | | |
| Nov-17 | -88.3 | -66.0 | -84.2 | Stop | -77.6 |
| | | | | | |
| Dec-17 | -85.5 | -59.7 | -88.2 | Stop | -84.4 |
| | | | | | |
| Jan-18 | -81.7 | -61.4 | -86.4 | Stop | -88.5 |
| | | | | | |
| Feb-18 | -86.6 | -57.6 | -89.5 | Stop | -90.3 |
| | | | | | |
| Mar-18 | -88.6 | -60.2 | -87.7 | Stop | -89.2 |

J.K.Cement Works,Mangrol (Line-1)
DUST GENERATION FROM STACK
(MONTHLY AVERAGE IN TONNES / DAY)

FY 2017-18

TABLE - VI

| Month | Kiln Bag house Stack | Cooler ESP Stack | Coal Mill B.F. Stack | Cement Mill -1 B.F. Stack | Cement Mill -2 B.F. Stack |
|--------|----------------------|------------------|----------------------|---------------------------|---------------------------|
| Apr-17 | UM | UM | UM | Stop | 0.014 |
| | | | | | |
| May-17 | 0.074 | 0.142 | 0.013 | Stop | 0.014 |
| | | | | | |
| Jun-17 | 0.064 | 0.080 | 0.014 | Stop | 0.009 |
| | | | | | |
| Jul-17 | 0.067 | 0.073 | 0.017 | Stop | 0.009 |
| | | | | | |
| Aug-17 | 0.076 | 0.109 | 0.013 | Stop | 0.008 |
| | | | | | |
| Sep-17 | 0.079 | 0.100 | 0.011 | Stop | 0.007 |
| | | | | | |
| Oct-17 | 0.076 | 0.101 | 0.016 | Stop | 0.008 |
| | | | | | |
| Nov-17 | 0.056 | 0.108 | 0.014 | Stop | 0.008 |
| | | | | | |
| Dec-17 | 0.066 | 0.127 | 0.011 | Stop | 0.003 |
| | | | | | |
| Jan-18 | 0.089 | 0.126 | 0.012 | Stop | 0.003 |
| | | | | | |
| Feb-18 | 0.064 | 0.136 | 0.010 | Stop | 0.003 |
| | | | | | |
| Mar-18 | 0.055 | 0.144 | 0.011 | Stop | 0.003 |

J.K.Cement Works,Mangrol (Line-1 & 2)
AMBIENT AIR QUALITY MONITORING DATA FOR SPM
(MONTHLY AVERAGE IN $\mu\text{g}/\text{M}^3$)
FY 2017-18
TABLE - VII

| Month | Location | | | |
|--------|------------------|--------------------------|------------------------|-------------------------|
| | NEAR TIME OFFICE | NEAR THERMAL POWER PLANT | NEAR RAW MATERIAL GATE | NEAR PACKING PLANT GATE |
| Apr-17 | 346.3 | 388.0 | 355.0 | 323.5 |
| May-17 | 379.0 | 397.5 | 366.8 | 349.8 |
| Jun-17 | 347.2 | 377.7 | 350.2 | 350.3 |
| Jul-17 | 295.8 | 315.2 | 295.8 | 275.0 |
| Aug-17 | 296.3 | 342.2 | 312.3 | 282.0 |
| Sep-17 | 328.3 | 379.3 | 355.5 | 311.7 |
| Oct-17 | 335.8 | 384.0 | 359.0 | 319.0 |
| Nov-17 | 328.5 | 345.0 | 394.2 | 358.5 |
| Dec-17 | 343.0 | 381.5 | 399.7 | 369.3 |
| Jan-18 | 319.3 | 352.5 | 377.0 | 350.3 |
| Feb-18 | 334.7 | 350.8 | 392.7 | 373.8 |
| Mar-18 | 335.8 | 363.3 | 420.3 | 383.3 |

J.K.CEMENT WORKS, Mangrol(Line-1 & 2)
ANALYSIS OF SEWAGE WATER (STP OUTLET)
(2017-18 Yearly Average)
TABLE - VIII

| S.No. | PARAMETER | RESULT |
|-------|---|--------|
| 1 | pH | 7.5 |
| 2 | Total Suspended Solids (TSS) | 9.6 |
| 3 | Chemical Oxygen Demand (COD) | 79.5 |
| 4 | Bio-Chemical Oxygen Demand (BOD) (3 Days at 27 ⁰ C) | 14.6 |
| 5 | Oil & Grease | 5.5 |
| 6 | Ammononical Nitrogen (as N) | <0.1 |
| 7 | Sulphide (as S) | <0.1 |
| 8 | Chlorides | 108.7 |
| 9 | Total Residual Chlorine | <0.1 |