

JKCW/MGR/PC/ESR/21/22-23

Reg

Date: 23/09/2023

To,
The Member Secretary
Rajasthan State Pollution Control Board
4, Industrial Area
Jhalana Doongri
Jaipur - 302004 (Raj)

Sub: Submission of Environmental Statement Report in Form-V for Financial Year 2022-2023 by M/s JK Cement Works, Mangrol, Sushila Nagar Residential Colony/Township, in Mangrol Village, Tehsil Nimbahera, Chittorgarh and Rajasthan-312601.

Ref.:

1. F (CPM) / Chittorgarh (Nimbahera)/ 11(1)/ 2018 - 2019 /2727-2729
Order No. 2019 - 2020 / CPM / 5562 dated 07.11.2019.

Dear Sir,

With reference to the above cited subject, we M/s. J.K. Cement Works, Mangrol, Sushila Nagar Residential Colony/Township hereby submitting the Environmental Statement Report in Form-V for Financial Year 2022-2023 as per, Rule No 14 of The Environment (Protection) Rules, 1986, CTO order.

This is for your information please.

Thanking You
Yours Faithfully
For J.K. Cement Works, Mangrol



R. B. M. Tripathi
Unit Head & President (Operations).

Encl: Form-V Environment Statement report.]

Copy: The Regional Officer, Rajasthan State Pollution Control Board, Near FCI Godown, Chanderiya, Dist. - Chittorgarh (Raj)-312021.

Corporate Office

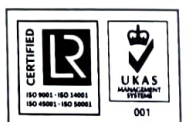
- Prism Tower, 6th Floor, Ninaniya Estate,
Gwal Pahari, Gurugram - 122102, Haryana
- 0124-6919000
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JK SUPER
CEMENT
BUILD SAFE

Manufacturing Units at :

Nimbahera, Mangrol, Gotan (Rajasthan) | Muddapur (Karnataka)
Jharli (Haryana) | Katni (M.P.) | Aligarh (U.P.) | Balasinor (Gujarat)

JK CEMENT
WallMaxX
White Cement Wall Putty



ENVIRONMENTAL STATEMENT

FORM - V

Environmental Statement for the financial year 2022-23, ending the 31st March 2023

PART-A

i. Name an address of the owner/occupier of the industry operation or process	Sh. R.B.M.Tripathi Unit Head & President (Operations) J.K. Cement Works, Mangrol Township along with STP, Sushila Nagar Colony Village Mangrol, Tehsil-Nimbahera District- Chittorgarh ,Rajasthan , Pin code- 312617
ii. Industry category Primary - (STC Code) Secondary - (STC Code)	Red Category Industry Residential Colony/Township
iii. Production capacity/Area	Total Area : 22.47 hector. Buildup area : 19967.80 Sq.Mtr. Sewage Treatment Plant : 200 KLD
iv. Year of establishment- (UNIT WISE)	Year 2015
v. Date of last environmental statement submitted	19 th September 2022

PART-B

WATER AND RAW MATERIAL CONSUMPTION

i. WATER CONSUMPTION in m³/day

Process	: -	NIL
Cooling	: -	NIL
Domestic	: -	240 m ³ /day

Name of products	Water consumption (For Domestic & Drinking)	
	During the previous financial year (2021-22) (KL/ANNUM)	During the current financial year (2022-23) (KL/ANNUM)
For Domestic & Drinking	63248	57342

Water Consumption in Residential Colony/Township for the financial year 2022-2023

Month & Year	Water Consumption M3
Apr-22	5182
May-22	5745
Jun-22	4656
Jul-22	5167
Aug-22	6167
Sep-22	6409
Oct-22	3310
Nov-22	3986
Dec-22	2820
Jan-23	3564
Feb-23	5164.31
Mar-23	5171.84
TOTAL	57,342

ii. RAW MATERIAL CONSUMPTION

***As it is residential colony/Township no raw materials are required and products are manufactured here hence this condition is Not applicable

PART-C**POLLUTION DISCHARGE TO ENVIRONMENT / UNIT OF OUTPUT**

Pollutants	Quantity of pollutants discharged (Ton/Day)	Concentration of pollutants in discharge (mg/Nm3)	Percentage of variation from prescribed standards with reasons
(a) Water	Domestic waste water generated from the colony and canteen is being treated in STP and treated water used in plantation & horticulture purpose within the premises.		
(b) Air	***As it is residential colony/Township no products are manufactured here hence this condition is Not applicable.		

Month/ Year	Ambient Air Quality Monitoring Results for the financial year 2022-2023																			
	NEAR TIME OFFICE (Up Wind)					NEAR THERMAL POWER PLANT (Cross Wind)					NEAR FACTORY GATE (Down Wind)					NEAR COLONY GATE (Cross Wind)				
	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO
Apr-22	42.5	30.9	11.1	14.8	599.2	39.9	28.6	9.9	11.6	533.1	45.8	34.8	13.1	17.6	617.0	40.6	31.6	10.7	13.8	646.3
May-22	46.3	34.2	14.4	18.4	624.7	42.0	31.6	12.3	15.2	581.4	51.1	38.7	16.0	23.7	647.6	43.3	33.1	13.2	16.2	670.5
Jun-22	48.4	37.6	16.2	20.1	638.7	40.7	29.5	11.5	13.5	608.1	56.2	42.3	17.8	27.3	657.7	45.1	36.5	12.2	15.9	683.2
Jul-22	41.0	28.7	13.2	17.9	618.3	37.8	25.7	10.9	12.9	597.9	52.3	40.1	15.6	22.3	633.6	39.0	28.9	11.2	14.7	622.1
Aug-22	31.3	22.6	9.8	12.8	582.7	26.5	19.6	8.0	10.8	524.2	43.9	31.0	12.3	18.4	614.5	28.7	17.8	10.1	14.8	657.7
Sep-22	40.2	29.3	14.0	28.0	694.6	43.7	30.5	18.0	23.2	664.1	50.4	32.8	13.1	24.1	760.8	45.3	31.5	12.6	25.0	709.9
Oct-22	50.4	35.5	14.8	26.1	702.3	50.7	32.1	19.9	28.1	723.9	52.1	32.9	18.1	26.5	760.8	47.6	27.1	16.7	25.4	653.9
Nov-22	43.7	23.4	17.1	21.9	694.6	44.6	26.1	17.7	31.5	715.0	38.7	27.9	11.5	22.6	603.0	41.2	31.1	10.7	19.1	746.8
Dec-22	43.9	31.2	20.2	21.3	638.7	46.6	30.8	22.7	23.4	713.7	34.7	23.6	20.7	20.7	638.7	35.6	24.7	22.7	23.3	698.5
Jan-23	50.9	30.6	12.3	23.6	656.9	56.4	42.3	12.3	19.8	654.1	61.9	31.2	12.5	21.0	656.9	54.1	31.4	15.0	17.8	692.7
Feb-23	55.2	21.6	12.5	20.7	632.6	57.5	26.7	15.0	28.0	568.0	51.5	33.0	13.9	21.8	635.6	53.4	27.7	16.5	24.6	579.0
Mar-23	58.0	31.9	16.2	26.1	438.0	60.3	32.7	17.5	25.3	455.1	60.5	35.5	19.1	26.1	476.6	54.2	26.0	11.3	14.7	373.6
Yearly AVG	46.0	29.8	14.3	21.0	626.8	45.6	29.7	14.6	20.3	611.6	49.9	33.6	15.3	22.7	641.9	44.0	28.9	13.6	18.8	644.5
% of Deviation wrt standard	-23%	-70.2%	-71%	-48%	CO 1 Hr Standar d is 4000 µg/M ³	-24%	-70.3%	-71%	-49%	CO 1 Hr Standar d is 4000 µg/M ³	-17%	-66.4%	-69%	-43%	CO 1 Hr Standar d is 4000 µg/M ³	-27%	-71.1%	-73%	-53%	CO 1 Hr Standar d is 4000 µg/M ³
NAAQMS Yearly Avg Standard Limit	PM ₁₀ =60 µg/M3					PM _{2.5} = 40 µg/M3					SO ₂ =50 µg/M3					NO _x =40 µg/M3				

STP treated water quality data

STP treated water Quality		
Parameters	Standards	Average results of YTD
pH	Between 5.5 to 9.0	7.89
Total Suspended solids	Not to exceed 100 mg/l	27.33
Biological Oxygen Demand (3 days at 27 Degree C)	Not to exceed 30 mg/l	9.84
Chemical Oxygen Demand	Not to exceed 250 mg/l	50.79
Oil & Grease	Not to exceed 10 mg/l	1.49
Ammonical Nitrogen (as N)	Not to exceed 50 mg/l	7.38
Sulphide (as S)	Not to exceed 2.0 mg/l	<0.1
Total Residual Chlorine	Not to exceed 1.0 mg/l	<0.1

Noise level monitoring data

Month & Year	Noise Monitoring Report FY 2022-23							
	Near Time office		Near Thermal Power Plant		Near Raw Material Gate		Near Packing Plant Gate	
	Day	Night	Day	Night	Day	Night	Day	Night
Apr-22	61.5	52.3	58.3	47.1	63.2	55.8	65.3	58.9
May-22	59.7	45.1	56.7	46.8	66.8	53.7	61.3	49.2
Jun-22	64.2	53.9	67.1	53.1	66.2	52.7	63.9	48.6
Jul-22	62.3	48.7	60.4	45.7	64.5	50.4	67.8	59.7
Aug-22	63.2	49.1	59.7	42.9	65.3	51.7	68.2	60.8
Sep-22	63.9	50.5	61.1	46.8	66.4	53.4	64.7	56.3
Oct-22	61.6	49.3	60.2	46.5	65.7	52.6	61.4	44.8
Nov-22	61.3	49.6	59.7	46.3	64.9	52.4	60.2	43.1
Dec-22	60.7	48.8	59.5	46.1	64.4	52.2	60.1	43.3
Jan-23	69.5	52.3	62.6	52.1	68.8	50.8	61.2	48.6
Feb-23	65.2	55.3	69.1	50.1	67.3	54.5	65.4	53.3
Mar-23	65.4	51.8	64.3	52.1	68.9	53.1	60.1	45.01
Avg	63.21	50.56	61.56	47.97	66.03	52.78	63.3	50.97
Ambient Noise Standard							75dBA	70 dBA

PART-D

(As specified under Hazardous & Other Waste Management Rules-2016)

Hazardous waste	Total Quantity	
	During previous financial year (2021-22) (KL)	During current financial year (2022-23) (KL)
(a) From process	Not applicable	Not applicable
(b) From pollution Control facilities	Not applicable	Not applicable

PART-E

SOLID WASTE

		Total Quantity	
		During previous financial year (2021-22) (MT/Year)	During current financial year (2022-23) (MT/Year)
(a)	From process	Nil	Nil
(b)	From pollution control facility (STP Sludge)	The sludge generated is used as manure for plants	
(c)	Quantity reutilized with in the unit	100%	100%

* Sludge is being generated from Sewage Treatment Plant, which is utilization in plantation as a manure.

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.

***As it is residential colony/Township no products are manufactured here hence this condition is Not applicable.

The sewage sludge generated from Sewage treatment plant is used as manure to plants.

PART-G

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

Water is mainly used by residents of colony and in plant for drinking & domestic purposes. Waste water generated as domestic Sewage and same treated in STP installed at Sushila Nagar. The Sewage Treatment Plant Installed Capacity is 200 M³ per day. Treated water is being utilizing for horticulture purpose within the premises.

PART-H

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

- 1) Continuous Ambient Air Quality Monitoring Systems (CAAQMS) has been installed in colony.

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT

- 1) Monitoring of water quality is being done regularly as mentioned in consent to operate.
- 2) Domestic waste water generated is being treated in sewage treatment plant (STP). Treated water is utilized for plantation/horticulture development, hence maintaining Zero Liquid Discharge unit.
- 3) Proper Housekeeping and cleaning is being done with the help of four road sweeping machines.
- 4) 16 Rain water harvesting structures have been constructed in plant and colony area to recharge ground water.
- 5) Cemented road constructed to avoid fugitive dust generation during the movement of vehicle.
- 6) Telemetry system installed for online ground water level monitoring.
- 7) 10,723 plants were planted in this plant and a colony of which 4,745 plants will be located at the Miyawaki Plantation in FY 2022-2023.
