

J.K. Cement WORKS, Mangrol (RAJ)

10 MW WASTE HEAT RECOVERY PLANT

Outlet of Waste heat recovery plant

(April' 2017 - September' 2017)

MONTH/ PARAMETRS	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
Total Suspended Solids (TSS) (Mg/l)	49	46	42	46	49	45
Oil & Grease (Mg/l)	<1.2	<1.6	<1.2	<1.8	<1.6	<1.3
Total Residual Chlorine (Mg/l)	NIL	NIL	NIL	NIL	NIL	NIL
Phosphate (Mg/l)	3.9	3.7	3.95	4.1	4	4.1
Free available chlorine (Mg/l)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH Value	7.6	7.35	7.5	7.25	7.6	7.35
Temperature	4°C Higher then the intake water	4°C Higher then the intake water	4°C Higher then the intake water	4°C Higher then the intake water	4°C Higher then the intake water	4°C Higher then the intake water
Copper as (Cu) (Mg/l)	<0.03	<0.01	<0.02	<0.03	<0.01	<0.02
Zinc (as Zn) (Mg/l)	<0.02	<0.02	<0.03	<0.02	<0.03	<0.01
Iron (Total) (Mg/l)	0.2	0.1	0.2	0.2	0.1	0.2
Chromium (total) (Mg/l)	0.005	0.002	0.004	0.006	0.003	0.005
BOD (Mg/l)	NA	NA	7.7	7.2	8.7	8.3
COD (Mg/l)	NA	NA	32	39	41	46

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25 MW THERMAL POWER PLANT

Outlet of Power Plant

(April' 2017 - September' 2017)

PARAMETERS/MONTH	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
Total Suspended Solids (TSS)	48	42	39	42	46	42
Oil & Grease	<1.6	<1.1	<1.4	<1.6	<1.2	<1.6
Total Residual Chlorine	NIL	NIL	NIL	NIL	NIL	NIL
Free available chlorine	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH Value	7.85	7.50	7.65	7.40	7.85	7.60
Temperature	40c higher than the intake water temperature	40c higher than the intake water temperature	40c higher than the intake water temperature	40c higher than the intake water temperature	40c higher than the intake water temperature	40c higher than the intake water temperature
Copper as (Cu)	<0.01	<0.02	<0.03	<0.02	<0.03	<0.02
Zinc (as Zn)	<0.02	<0.01	<0.02	<0.01	<0.02	<0.01
Iron (Total)	0.1	0.2	0.1	0.2	0.1	0.2
Chromium (total)	0.002	0.005	0.002	0.004	0.006	0.003
BOD	NA	NA	8.1	7.6	8.1	8.9
COD	NA	NA	39	42	39	49
Phosphate	NA	NA	3.45	3.6	3.9	3.75

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25 MW THERMAL POWER PLANT

Stack monitoring results (April 2017 - September 2017)

Location/Month	SPM (Mg/Nm3)					
	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
Stack attached with Boiler	16.0	18.0	15.0	17.0	15.0	17.0
Stack attached with Coal Crusher	14.0	16.0	18.0	14.0	17.0	13.0

J.K. Cement WORKS, MANGROL (RAJ)

AMBIENT AIR QUALITY AVERAGE RESULTS (SPM) COMMON

FOR UNIT-1, UNIT-2, 25 MW CPP & 10 MW WHR

(ALL VALUES IN MICROGRAMS / CUBIC METER)

(April' 2017 - September' 2017)

S.No. & Month	LOCATION / PERAMETER	NEAR TIME OFFICE	NEAR THERMAL POWER PLANT	NEAR RAW MATERIAL GATE	NEAR PACKING PLANT GATE	Remarks
April' 2017						
1	SPM	346.3	388.0	355.0	323.5	
2	SO2	12.9	16.4	13.5	10.4	
3	NOX	25.9	32.4	28.9	21.0	
4	CO	572.5	744.3	687.0	472.3	
May' 2017						
1	SPM	379.0	397.5	366.8	349.8	
2	SO2	15.4	16.8	14.2	11.5	
3	NOX	28.9	31.7	25.0	22.6	
4	CO	572.5	744.3	687.0	472.3	
June' 2017						
1	SPM	347.2	377.7	350.2	350.3	
2	SO2	14.2	16.8	14.9	13.8	
3	NOX	26.4	32.2	29.4	26.4	

4	CO	458.0	715.6	615.4	486.6	
July' 2017						
1	SPM	295.8	315.2	295.8	275.0	
2	SO2	8.4	9.7	7.4	6.5	
3	NOX	16.8	18.5	14.7	13.4	
4	CO	443.7	472.3	486.6	415.1	
August' 2017						
1	SPM	296.3	342.2	312.3	282.0	
2	SO2	8.7	12.0	10.2	7.0	
3	NOX	17.6	23.4	20.0	15.0	
4	CO	500.9	615.4	453	429.4	
September' 2017						
1	SPM	328.3	379.3	355.5	311.7	
2	SO2	13.0	15.9	12.0	10.1	
3	NOX	25.0	31.0	23.0	19.9	
4	CO	444	615.4	558.2	372.1	
Six monthly Average						
1	SPM	332.1	366.7	339.3	315.4	
2	SO2	12.1	14.6	12.0	9.9	
3	NOX	23.4	28.2	23.5	19.7	
4	CO	498.6	651.2	581.2	441.3	

Fugitive Emission Monitoring Report
April' 2017 - September' 2017

Month/Year	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
NEAR COAL YARD	1970.3	1614.6	1449.7	1128.5	1208.0	1363.6