

Through: Courier Service

Reg.No. JKCW/ENV/Env. Statement/ICP/2022-23/60/17

Date: 05.09.2022

To

The Member Secretary,
Karnataka State Pollution Control Board,
49, 4th & 5th floor,
Parisara Bhavana, Church Street,
Bangalore - 560 001.

Dear Sir,


Sub: Submission of **Environmental Statement Report in "Form-V" FY 2021-22** of Integrated Cement & Captive Power Plant of JK Cement works, Muddapur. (Unit: JK Cement Ltd) located at Muddapur Village, Mudhol Taluk, Bagalkot District, Karnataka-reg
Ref:-1 Notification No.Vide GSR 329 (E)dated 13.03.92 and GSR 386 (E)dated 22.04.1993.
Ref:-2 Vide Combined Consent Order AW-326481 dated 30.08.2021.

As mentioned in the above cited subject matter, we are here by submitting the "Environmental Statement Report" FY 2021-22 in the prescribed format (Form V) under Environment (Protection) Rules, 1986 pertaining to our Integrated Cement & Captive Power Plant located at Muddapur Village, Mudhol Taluk, Bagalkot District, Karnataka

Kindly acknowledge the receipt of the same.

Yours faithfully

For J.K. Cement Works, Muddapur (Karnataka)
(Unit: J.K. Cement Ltd.)

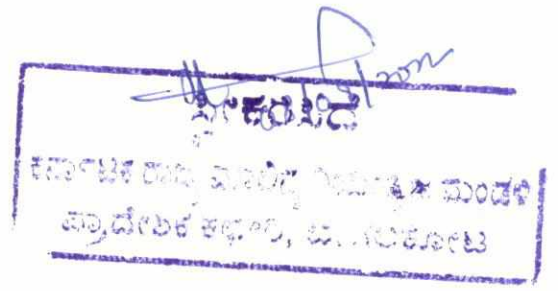


Uma Shankar Choudhary
(Unit Head)

Enc: as above

cc:

1. The Environmental Officer, Karnataka State Pollution Control Board, Sector No. 07, by pass road, Navanagar, Bagalkot- 587 102



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**JK SUPER
CEMENT**
BUILD SAFE

Manufacturing Units at :
Nimbahera, Mangrol, Gotan (Rajasthan) | Muddapur (Karnataka)
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WallMaxX**
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Registered Office : 🏠 Kamla Tower, Kanpur-208001, U.P., India. ☎ +91-512-2371478 to 85 ☎ 91-512-2399854 🌐 www.jkcement.com

2. Additional Principal Chief Conservator of Forests (C), Ministry of Environment & Forest, Govt. of India, Regional office (Southern zone), Kendra Sedan, IVth Floor, E & F Wings, 17th Main Road, II Block, Koramangala, Bengaluru, Karnataka -560 034.
3. Scientist 'D' & Incharge, Central Pollution Control Board, 1st & 2nd Floors, Nisarga Bhavan, A-Block, Thimmaiah, Main Road, 7thD Cross, Shivanagar, Opp. Pushpanjali Theatre, Bengaluru, Karnataka 560 079



ENVIRONMENTAL AUDIT STATEMENT [FORM-V]



for
Integrated Cement Plant of JK Cement Ltd, Muddapur
Clinker :2.2 MTPA
Cement: 3.5 MTPA (OPC, Blended & PSC)
and
Captive Power Plant-50 MW (2*25)

FOR THE
FINANCIAL YEAR
2021-2022

by



M/s.JK Cement Works, Muddapur
Unit: JK Cement Ltd.
Muddapur Village, Mudhol Taluk, Bagalkot District, Karnataka-587122



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FORM - V

(See Rule 14) of Environment (Protection) Rules, 1986)

Environmental Statement for the Financial Year ending the 31st March 2022

PART – A

(i)	Name and address of the owner /occupier of the industry operation or process.	:	Mr. Umashankar Choudhary (Unit Head) J.K. Cement Works (Unit: J. K. Cement Limited) Village- Muddapur, Taluka- Mudhol, District- Bagalkot (Karnataka)- 587122 India
(ii)	Industry category Primary (STC Code) Secondary (SIC Code)	:	Large- Red (17 Cat) Cement
(iii)	Production Capacity	:	<div> Clinker -: 2.2 Million Tons Per Annum (MTPA) </div> <div> OPC & Blended Cement, Slag Cement -: 3.5 Million Tons Per Annum (MTPA) </div> <div> Captive Power Plant -: 2X25 MWH (50MWH) </div>
(iv)	Year of Establishment	:	2009
(v)	Date of Last Environmental Statement submitted	:	09.09.2021

PART – B

Water and Raw Material Consumption

(i) Water Consumption:

Description	During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
a) Process & Cooling	Cement Plant -117529.8 KL CPP - 93090 KL	Cement Plant -120671.14 KL CPP - 83551 KL
b) Domestic	31506 KL	39135 KL

Name of the Product	Process Water Consumption per unit of Product Output			
	During the Previous Financial Year (2020-21)	During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)	During the Current Financial Year (2021-22)
Cement (OPC, PPC, Slag and Cement Based Adhesive) (m ³ /MT)	0.0581 m ³ /MT of cement	0.066 m ³ /MT of Clinker	0.0507 m ³ /MT of cement	0.062 m ³ /MT of Clinker

(ii) Raw Material Consumption

a. Cement Plant:

Name of the Raw Material		Name of the Product	Consumption of Raw Material (metric ton) per unit (metric ton) of Output	
			During the Previous Financial Year (2020-2021)	During the Current Financial Year (2021-2022)
1	Lime Stone	Cement (OPC, Blended cement, PSC)	1.110	1.04
2	Laterite		0.010	0.0095
3	Iron-ore		0.010	0.0095
4	Coal/Pet coke (Cement Plant)		0.052	0.058
5	AFR		0.049	0.065
6	Gypsum		0.048	0.069
7	Fly ash		0.294	0.324
8	Slag (for PSC)		0.659	0.675
9	Slag (for OPC)		0.048	0.049

b. Power Plant

Name of the Raw Material	Name of the Product	Consumption of Raw Material (metric ton) per MW of Output	
		During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
1 Coal / Petcoke (CPP)	Power	0.000946	0.000953

c. Total Cement & Clinker production (MT):

During the Previous Financial Year (2020-21)		During the Current Financial Year (2021-22)	
Clinker	1775855	Clinker	1944166
OPC	864385	OPC	878832
Blended cement	1021990	Blended cement	1352760
PSC	134645	PSC	147762

d. Total Cement Based Adhesive (Tile fixer) production (MT):

During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
0.0	0.0

e. Total Power consumption in Captive Power Plant (KWH/ KWH of power production):

During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
7.60 %	7.98 %

PART-C

Pollution Discharged to Environment / Unit of output (Parameter as specified in the Consent issued)

a. Cement Plant:

Water			
Pollutant	Concentrations of Pollutants in Discharges (Mass/volume) mg/litre	Standards in mg/liter	Percentage of variation from prescribed standards with reasons
pH Value	7.63	6.5 to 9.0	Within prescribed limits
BOD	7.27	10	Within prescribed limits
COD	25.18	50	Within prescribed limits
TSS	8.31	20	Within prescribed limits
Ammonical Nitrogen as NH₄	3.90	5	Within prescribed limits
Total Nitrogen	7.32	10	Within prescribed limits
Fecal coliform	Nil	<100	Within prescribed limits

Stack gas Quality			
Pollutant	Avg. Concentrations of Pollutants in Discharges (Mass/volume) mg/Nm³	Standards in mg/Nm³	Percentage of variation from prescribed standards with reasons
Kiln stack			
PM	10.8	30	Within prescribed limits
SO ₂	0	100	Within prescribed limits
NO _x	620.1	800	Within prescribed limits
Coal Mill stack			
PM	13.2	30	Within prescribed limits
Cement Mill stack			
Cement Mill-1 PM	8.8	30	Within prescribed limits
Cement Mill-2 PM	11.3	30	Within prescribed limits
Cement Mill-3 PM	13.1	30	Within prescribed limits
Cooler stack			
PM	7.4	30	Within prescribed limits

Ambient Air Quality			
Pollutant	Concentrations of Pollutants in Discharges (Mass/volume) $\mu\text{g}/\text{m}^3$	Annual Avg in $\mu\text{g}/\text{m}^3$	Percentage of variation from prescribed standards with reasons
Core zone- Plant			
Near Administration Building			
PM ₁₀	59.8	60	Within Prescribed limits
PM _{2.5}	24.9	40	Within Prescribed limits
SO ₂	7.1	50	Within Prescribed limits
NO _x	17.1	40	Within Prescribed limits
Near Weigh Bridge			
PM ₁₀	57.9	60	Within Prescribed limits
PM _{2.5}	24.5	40	Within Prescribed limits
SO ₂	7.3	50	Within Prescribed limits
NO _x	18.0	40	Within Prescribed limits
Colony Guest House			
PM ₁₀	55.3	60	Within Prescribed limits
PM _{2.5}	24.4	40	Within Prescribed limits
SO ₂	7.2	50	Within Prescribed limits
NO _x	17.4	40	Within Prescribed limits
D Block Colony Quarters			
PM ₁₀	56.6	60	Within Prescribed limits
PM _{2.5}	29.1	40	Within Prescribed limits
SO ₂	7.12	50	Within Prescribed limits
NO _x	17.2	40	Within Prescribed limits
Buffer Zone			
Bommanbudhini			
PM ₁₀	49.2	60	Within Prescribed limits
PM _{2.5}	25.4	40	Within Prescribed limits
SO ₂	9.0	50	Within Prescribed limits
NO _x	14.5	40	Within Prescribed limits
Thimmapur			
PM ₁₀	50.7	60	Within Prescribed limits
PM _{2.5}	26.2	40	Within Prescribed limits
SO ₂	8.4	50	Within Prescribed limits
NO _x	14.2	40	Within Prescribed limits
Petlur			
PM ₁₀	51.0	60	Within Prescribed limits
PM _{2.5}	24.7	40	Within Prescribed limits
SO ₂	7.6	50	Within Prescribed limits
NO _x	15.4	40	Within Prescribed limits

Halki Village			
PM₁₀	52.6	60	Within Prescribed limits
PM_{2.5}	29.9	40	Within Prescribed limits
SO₂	8.5	50	Within Prescribed limits
NO_x	16.1	40	Within Prescribed limits
Ningapur			
PM₁₀	52.1	60	Within Prescribed limits
PM_{2.5}	28.4	40	Within Prescribed limits
SO₂	8.0	50	Within Prescribed limits
NO_x	15.3	40	Within Prescribed limits
Kasba-Jambgi			
PM₁₀	51.5	60	Within Prescribed limits
PM_{2.5}	27.7	40	Within Prescribed limits
SO₂	8.5	50	Within Prescribed limits
NO_x	14.8	40	Within Prescribed limits
Metgudda Village			
PM₁₀	52.8	60	Within Prescribed limits
PM_{2.5}	28.0	40	Within Prescribed limits
SO₂	8.4	50	Within Prescribed limits
NO_x	16.6	40	Within Prescribed limits
Dadanatti Village			
PM₁₀	52.0	60	Within Prescribed limits
PM_{2.5}	28.5	40	Within Prescribed limits
SO₂	8.8	50	Within Prescribed limits
NO_x	16.1	40	Within Prescribed limits

B.Power Plant:

Pollutants	Concentrations of Pollutants in Discharges (Mass/volume) mg/litre Except pH	Standards in mg/litre	Percentage of variation from prescribed standards with reasons
(a) Water			
pH	8.22	5.5 to 9.0	Within prescribed limits
Suspended Solids	48.9	100	Within prescribed limits
Oil & Grease	Nll	10	Within prescribed limits
Temperature	0.41	Not more than 5°C higher than the intake water temperature	Within prescribed limits

Pollutants	Concentrations of Pollutants in Discharges (Mass/volume) mg/litre Except pH	Standards in mg/litre	Percentage of variation from prescribed standards with reasons
(b) Air			
PM	24	50	Within prescribed limits
SO₂	144	600	Within prescribed limits
NO_x	57.1	450**	Within prescribed limits

**Note: NO_x Standard as per MoEF & CC notification dated GSR 622 (E) dated 19th October 2020

PART – D

Hazardous Wastes

(Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and amendments thereof)

Hazardous Waste		Total Quantity Generated in KL	
		During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
(a)	From Process Used Oil (Category No 5.1)	Generated Qty of 2.217KL has been used in our cement plant.	Generated Quantity in 1.355 KL which is used in our cement plant.
(b)	From Pollution Control Facilities	NIL	NIL

Quantity of e-waste under E-Waste (Management) Rules, 2016-

We have disposed following quantity of e-waste to KSPCB authorized recycler in 2021-22:

S.No	E-Waste Name	E-Waste quantity in stock at the beginning of the year 2021-22	E-Waste quantity generated during the year 2021-22	E-Waste quantity sent to recycler during the year 2021-22	E-Waste quantity in storage at the end of the year 2021-22
1	E-waste	384 kg	2296 kg	2680 kg	0 kg

Batteries (Management and Handling) Rules, 2001, 2012 and amended 2022 there to

We have purchased 169 No's batteries and disposed 106 No's to KSPCB authorized Recyclers in FY 2021-22.

PART – E

Solid Wastes

Solid Waste		Total Quantity in metric tons	
		During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
(a)	From Cement Process:	NIL	NIL
(b)	From Pollution Control Facilities- Generated	Recycled back to Process	Recycled back to Process
(c)	1. Quantity recycled or re-utilized within the unit a. Fly Ash b. Bottom Ash	28477.0 MT 3545 MT	12740.12 MT 1326.65 MT
	2. Sold a. Fly Ash b. Bottom Ash	NIL NIL	NIL NIL
	From Captive Thermal Power plant: 3. Disposed a. Fly Ash b. Bottom Ash	28477.0 MT 3545 MT	12740.12 MT 1326.65 MT

PART – F

Please specify the characterizations (in terms of composition of quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes

Name of the Waste	Quantity	Characteristics	Disposal Practice Adopted
(1) Hazardous Waste Used / Spent Oil (Category No.5.1)	Opening Stock (01.04.2022) : NIL Generation (Apr'21 - Mar'22) : 1.355KL Consumption (Apr'21 - Mar'22) : 1.355KL Closing Stock (31.03.2022) : NIL	Waste Oil containing 5000-7000 kcal/Kg of GCV	Used for lubrication of conveyors, chain blocks and other motors within the Plant.
(2) Solid Waste Bottom Ash	Opening Stock (01.04.2022) : NIL Generation (Apr'21 - Mar'22) : 1326.65MT Consumption (Apr'21 - Mar'22) : 1326.65MT Closing Stock (31.03.2022) : NIL	Solid containing SiO ₂ : 40-42%, Fe ₂ O ₃ : 4-5 % LOI : <1 % Al ₂ O ₃ : 18-20%	100% Utilized within the premises (replacement of Boiler bed materials, used as sand for masonry works)
(3) Solid Waste Fly Ash	Opening Stock (01.04.2022) : NIL Generation (Apr'21 - Mar'22) : 12740.12MT Consumption (Apr'21 - Mar'22) : 12740.12MT Closing Stock (31.03.2022) : NIL	Solid containing SiO ₂ : 30 %, Fe ₂ O ₃ : 20% LOI : 5-10 % K ₂ O : 1% Na ₂ O : 5.7% Al ₂ O ₃ : 14 %	100 % of Fly Ash Utilized in Cement production.
(4) Dust collected in ESP, Bag House and Bag Filters	-	-	recycled back into the process.

PART – G

Impact of the Pollution Abatement Measures Taken on Conservation of Natural Resources and on the Cost of Production.

Following measures have been adopted for abatement of pollution, conservation of natural resources: -

- ★ Air cooled condensers have been installed to reduce water consumption at Captive Power Plant.
- ★ Stack Emissions were controlled by installation of Pollution control equipment's of ESP's and Baghouses.
- ★ Regular monitoring of Ambient Air Quality, Stack Emissions, Fugitive and Effluent Quality of treated wastewater have been taken up to the evaluate the efficiency of the pollution control systems and necessary control measures have takenup.
- ★ Roof top rain water recharge measures and rain water harvesting pits have been constructed for collection and utilization of rain water.
- ★ As our pollution control equipment's are working with higher efficiency, the maximum portion of materials collected in APCD's are recycled and used in process, thus conserving raw material and reducing dust emission.
- ★ Flyash Generated from CPP and procurement from surrounding Power Plants are being used in the manufacturing of PPC, thus utilizing waste and conserving limestone.
- ★ Utilization of low grade limestone from mine is used for cement manufacturing process and thereby conserving the mineral and increasing the mine life.
- ★ Treated effluent from CPP & Domestic sewage from residential colony to confirming the prescribing standards and then using to greenbelt development, dust suppression and ash quenching. Thus, the same amount of fresh is being conserved.
- ★ Various types of AFR (Hazardous and non-hazardous) wastes from nearby ULB's and other industries as alternate fuel in kiln which helps in conserving fossil fuel i.e., Coal.
- ★ Various Energy Projects have been taken up to conserve energy are follows

S.No.	Energy efficiency improvement measures (EEIM)	Energy Saving (KWH)
1	Cooler ESP Fan - Installation of VFD panel & motor derating from 550 KW motor (HT) to 400 KW motor (LT)	201885
2	Optimization in speed of P & V Blower, by downsizing of motor pulley.(Cooling of PH Fan motor 1 & 2)	17640
3	Air slide blower (351FN346) Motor de-rating from 9.3 KW to 2.2 KW (1800 CMH)	26460
4	Reduction in pressure drop at ESP fan inlet damper reduced by 20 mmWg and Fan power reduced by 20 KWH.	141120
5	Optimization in Reverse air fan running hrs.	246960
6	Bag filter BF500 fan speed optimization from 50 % to 45 % (VFD equipped)	6641
7	Optimization in Limestone crusher Bag filter fan (5.5 KW/HR. power reduced)	19165
8	Optimization in lighting power consumption.140 units reduction in power consumption / day.	51100
9	Replacement of Conventional lights by LED.	1197
10	Optimization in lighting power consumption.	588
11	LAFR tanker unloading carried out by Dencil pump instead of compressed air (Kiln shutdown)	6958
12	Optimization in Packer blower running hrs	8303
13	Process Optimization in BH fan speed resulting in speed reduction from 76% to 72%.	211680
14	Pressure drop reduction in Raw Mill cyclones	246960
15	Separator static (axial) gap reduced by blocking the top part of Rotor and Stator to stator gap reduced.	404544
16	Preheater fan inlet Fresh Air damper auto operation taken from CCR.	57506
17	Raw Mill – Process optimization had carried out for Energy conservation (29 KWH Fan power reduced, 80 KWH Main drive power reduced. Mill specific power got reduced upto 0.4 KW/MT)	299880
18	Optimization in lighting energy consumption	7000
19	Raw Mill Reject Vibro conveyor angle reduction from 6°C to 0 °C.	282240
20	Slag mill Dam ring height reduction up to 40 mm(Optimization in Main drive Power)	332052
21	Optimization in Raw mill dam ring height (Reduced - 20 mm)	211680
22	RABH - Reduction in pressure drop across damper	38102
23	Replacement of Conventional lights by LED.	26192
24	Clinker tunnel belt 481BC170 vibro-feeder (481VF530) motor counter weights added to increase the vibration.	4000
25	Installation of two flood lights to improve the illumination around the magazine. (Halki Mines)	6424
26	Slag mill - Isolation of hydraulic cylinder accumulator.	300000
27	Derating of Raw mill fan motor.	294000

28	Optimization of Raw mill dam ring height (Reduced - 20 mm)	147000
29	Upgradation of Lime stone reclaimer belt motor from normal Standard efficiency motor to Premium efficiency motor	39728
30	Optimization in Limestone reclaimer belt running hrs.	256438
31	Slag mill motor swapping had carried out for Energy conservation.	400
32	Replacement of Conventional well glass fittings by LED glass fittings at Packing Plant Belt Area & Loader Area to improve the illumination	4015
33	In-house modification in CM-3 mill building bag filter, hopper building bag filter & belt area bag filters purging line.	69178
34	Utilization of Idle screw compressor from CPP & stopped 2 JM compressors.	164380
35	Utilization of Unit I Boiler FD Fan VFD (idle) to Unit II Boiler FD Fan (running)	240000
36	Upgradation of Bucket elevator motor & gearbox set	60000
37	Replacement of Conventional light by LED light (CPP)	900
38	Utilization of Unit I Boiler PA Fan VFD (idle) to Unit I ACC Fan no. 06 (running)	54000
39	Cooling tower sump level set point raised from 85 % to 95 % to improve cooling efficiency and thereby reduction in power consumption.	756
40	Optimization of PA fan header pressure.	24000
41	Optimization of fluidization Bed DP.	40000
42	Throttling of Cooling water Line to Generator Cooler at part load condition.	7000
43	ACC Fins cleaning activity by high pressure jet water system.	36000
44	Split AC's switch On/Off practice (VFD panel room) during plant shutdown.	36000
45	Optimization in ACW pump (monobloc) running to maintain Package AC room temperature during plant shutdown.	2800
46	Generator (02 nos.) Space heater had been made off, to control import power consumption during plant shutdown	6000
47	Isolation of Lime screen & Bucket elevator usage during limestone crushing	4000
	Total Energy saving	4642872
48	Blending of AFR (Rice husk + Bio. Briquettes) with coal (Thermal saving)	38263 (Mio KCal)

***Approximately 21657 Tons of Carbon foot prints have been reduced by implementing these projects

PART – H

Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution

Investment Proposal for Environmental Production for the year 2021-22

1. Repair of damaged roads and new CC roads were constructed to reduce fugitive emissions near cement mill, Fly ash silo area, AFR shed to raw material gate.



New CC Roads constructed at AFR area & Kiln area



CC Road in front of Cement Mills

2. Fugitive dust emission control measures are in place such as deployment of road sweeping machines, closed material conveying system, raw material and finished products are stored in closed sheds and silos, all the material transfer points & silo tops are provided with bag filter, pneumatic handling of flyash and water spraying on the material yards and roads.



CC Road at Packing Plant



Road at Admin Building



Coal storage sheds



Sweeping machines for Cleaning of roads



Closed conveying system



mobile water sprinkler



AFR storage shed



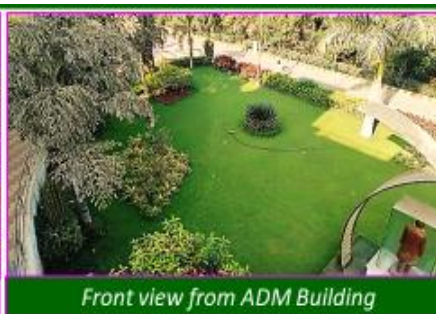
Gypsum storage shed



On the way to CCR Building



Birds eye view from Plant



Front view from ADM Building



Plant Main Road – Maintained by Security Team



Dense Green Covering around CPP

3. Adequate funds are earmarked for environmental management activities. Capital and recurring expenditure incurred for the same for the period FY2021-22 is tabulated as under.

S.No	Description of the Expenditure	Amount incurred in Lakhs
1	Operation & Maintenance cost of PCE (ESP, Bag filters, Baghouses), Electricity cost of PCE	1789.05
2	Fly ash Silo's and ash handling systems	157.06
3	Operation & Maintenance of CAAQM & CEMS	10.04
4	Green Belt Development, Sewage Treatment plant and Water Harvesting Schemes for plant	51.33
5	Extra expenditure on green purchase (Purchase of green fuel, recycled materials or any other such purchase (AFR purchase, Fly ash and Slag purchase) to reduce environmental footprint	7860.26
6	Other environmental management costs (AFR system operation, odour control, environmental training/Award, SNCR system CPP, Environmental License Fees)	265.79
	Total cost	10134

Additional Measures Proposed for Environmental Protection:

1. Proposal for new CC Road from Slag shed to Pond as shed is under progress. This helps to reduce fugitive emissions.
2. We have constructed rain water harvesting structures inside Plant & colony premises.
3. Increase in usage of Alternative Fuels and Raw Material (AFR).
4. Increase in manufacturing of PPC grade cement.
5. Conducting various awareness campaigns on Environmental & Sustainability aspects

PART – I

Any other particulars for improving the quality of environment

- a. Green Belt development has been taken up in phased manner, during the FY 2021-22, we have planted 5062 no's saplings in Plant and colony, covering area of 4 Acres. The total plantation covered from inception of plant to 31st March 2022 in plant and colony is 156357 no's covering an area of 119 Acres @ 46.03% of total land area (258.37 Acre).



- b. Further we have planned for plantation of 5000 no's Saplings in the Year 22-23.
c. No discharge of effluent to surrounding areas and wastewater generated is treated and reused in Cement Plant for development of Green Belt.



Colony STP



Neutralization Pit

- d. Integrated Management Systems have been Implemented - ISO 9001, ISO 14001 & OSHAS 45001.
- e. Full-fledged Environmental Cell to carryout Environmental monitoring of stack Emissions, Ambient Air, Noise and Fugitive dust emissions &, compliance tracking software of Lex care, Green Belt development, operation and maintenance of CAAQMS & CEMS and STP Operations.
- f. We have full pledged AFR laboratory for testing of finger print analysis.
- g. Environmental Awareness:

World Environment Day 5th June 2022 is the biggest international day for the environment, led by the United Nations Environment Programme (UNEP), and held annually since 1972, it has grown to be the largest global platform for environmental outreach. It is celebrated by millions of people across the world. World Environment Day 2022 is hosted by Sweden.

JKCW, Muddapur has conducted World Environment Week from 5th to 10th June, with a theme "**Only One Earth**" is the campaign slogan, with the focus on "Living Sustainably in Harmony with Nature" as declared by UNEP, various events like plantation drives and awareness programs have been conducted across organization to create awareness, glimpses of the event are follows.



World Environment Day Plantation at Colony



WED awareness program at Govt. Degree College, Bagalkot



Plantation at Plant using miyawaki plantation technique



Environment Dept. has taken awareness program on World Environment Day-2022 and awareness speech on Effects of plastics on Environment to children of Sir Padam Pat school - JK Cement Muddapur



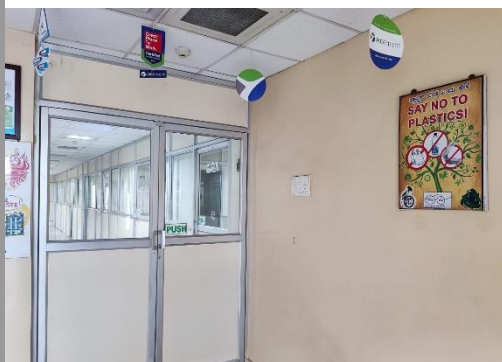
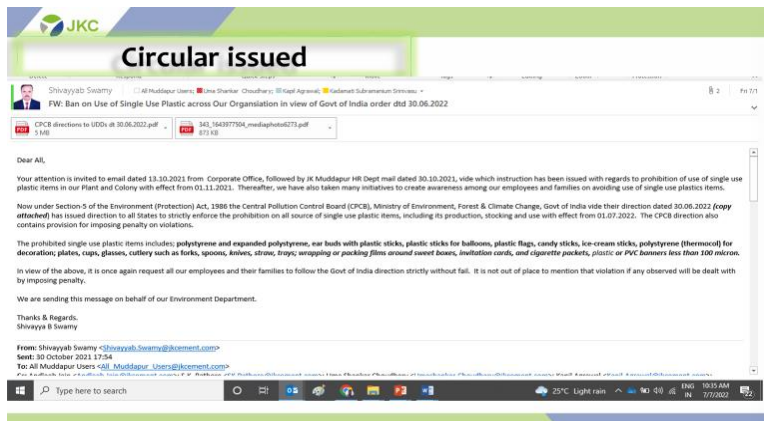
Distributed cloth bags



Awareness drive march

KSPCB, Bagalkot has organized World Environment day -2022 Celebrations at district police Head Quarters, Bagalkot in collaboration with JK Cement for banning of single use plastics and Distributed cloth bags to all the students and members attend to eradicate plastics.

Ban of Single Use Plastic: JKCW, Muddapur has issued a circular on "Ban of Single Use Plastics" in Plant and Colony premises. We have conducted awareness programs on ban of single use plastics to colony residents, workers and "No to single use plastic" display boards have been installed in plant and colony.



Display Boards at Plant & colony

Awareness drives on premises at various locations.



Awareness to Workers at Canteen and Guesthouse workers for Ban Single Use Plastics as a part of awareness drive.



Awareness to Colony residents for Ban Single Use Plastics & Distributed cloth bags



JKCW, Muddapur has celebrated Plastic awareness program on 11th November-2021 at City municipal council Hall Bagalkot during Azadi ka Amrut Mahatsov celebrations on behalf of Environment Department. As a sustainable Initiative we have distributed cloth bags to Public and corporation officials to create awareness about “no to single use plastics” In presence of Eminent Personalities I.e., Additional district Judge, Bagalkot & E.O-KSPCB, Bagalkot & City Municipal Corporation officials have attended.”

