JK Cement Works, Balasinor
A unit of JK Cement Ltd.
CIN: L17229UP1994PLC017199
Ahmedabad-Indore Highway, Village : Vadadala,
Tehsil : Balasinor, Distt. Mahisagar-388 255. (Gujarat), INDIA
+91 - 97245 66868 jkc.balasinor@jkcement.com
www.jkcement.com

PCB-ID-69109

BL/EMD/HOPB/F 03/ 015 Date: 24.09.2021

To,
The Unit Head – Godhra Division,
GPCB, Paryavaran Bhavan,
Sector-10/A, **Gandhinagar** - 382 010
E. mail:- uh-gpcb-godh@gujarat.gov.in

Sub.: Environmental Statement Report (Form - V) for the F. Year- 2020 - 2021 of J.K. Cement Limited, Balasinor (Gujarat).

Ref.: - 1. File No. GPCB/ CCA-PN-705/ ID: 69109.
2. Consent Order No. AWH-109494, Date of issue: 28/09/2020.

Dear Sir,

With reference to above subject matter, please find enclosed herewith Environment Statement Report (Form - V) of J.K. Cement Limited, Balasinor (Gujarat) for the FY 2020 - 2021 for your reference and record. You will find the same in order.

We trust you will find the same in order.

Thanking you,

Yours Faithfully

J K Cement Limited

For, J. K. Cement Ltd.

Authorised Signatory

Arun Sharma
Unit Head

Encl.: Form - V along with Supporting Annexures (04 Nos.)

Copy: The Regional Officer, Gujarat Pollution Control Board, Haidri Society, Near DSP Office, Gita Nagar **Godhra**, - 389 001 (Gujarat)
E. mail:- ro-gpcb-godh@gujarat.gov.in

ENVIRONMENTAL STATEMENT
FORM - V

Environmental Statement for the financial year 2020 - 21, ending the 31st March' 2021

PART-A

i. Name an address of the owner/occupier of the industry operation or process	**JK Cement Works (Clinker Grinding Unit) (A Unit of JK Cement Limited) Village: Vadadala, Tehsil: Balsinor, District: Mahisagar (Gujarat)**
ii. Industry category Primary - (STC Code) Secondary - (STC Code)	Primary
iii. Production capacity	Cement- 1.00 Million TPA (94,500 MT per Month)
iv. Year of establishment- (UNIT WISE)	**7th October' 2020**
v. Date of last environmental statement submitted	Not Applicable unit started October' 2020.

PART-B

WATER AND RAW MATERIAL CONSUMPTION

i. **WATER CONSUMPTION (in m3/day)**

Process : 36.06 M^3/Day

Domestic : 5.36 M^3/Day

Name of products	Process water consumption per unit of products	
	During the previous financial year (2019-20) (KL/MT)	During the current financial year (2020-21) (KL/MT)
1. Pozzolana Portland Cement (PPC)	Not Applicable Unit started October` 2020	0.027

ii. **RAW MATERIAL CONSUMPTION**

Name of Raw Material	Name of products	Consumption of Raw Material per unit of output	
		During the previous financial year (2019-20)	During the current financial year (2020-21)
Clinker	Cement	--	0.61
Gypsum		--	0.06
Flyash		--	0.32

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	Cement Grinding Unit is being operated on dry process technology, hence no liquid effluent is generated. Domestic waste water generated from the office toilet and pantry are being discharged and treated in STP (Sewage Treatment Plant). STP treated water analysis report is attached as **Annexure-I**.		
(b) Air	1. Stack Emission Monitoring Report is attached as **Annexure- II.** 2. Ambient Air Monitoring Report is attached as **Annexure- III.** 3. Ambient Air Noise monitoring Report is attached as **Annexure- IV.**		

PART-D

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

Hazardous waste	Total Quantity	
	During previous financial year (2019-20) (KL)	During current financial year (2020-21) (KL)
(a) From Process	Not Applicable Unit started October` 2020	Used oil (5.1) - NIL Waste oil (5.2) – NIL Cat. (33.1)- NIL Cat. (33.2)- NIL
(b) From Pollution Control facilities	Not Applicable	Not Applicable

* Hazardous waste generated will be sold to authorized recycler authorized by CPCB.

PART-E
SOLID WASTE

Source	Total Quantity	
	During previous financial year (2019-20) (MT/Year)	During current financial year (2020-21) (MT/Year)
(a) From process	Not Applicable Unit started October' 2020	NONE
(b) From pollution control facility		Dust collected in bag house and bag filters are recycled into the system
(c) Quantity rejected or reutilized with in the unit		100%

Other Waste

Name of solid waste	Total Quantity	
	During previous financial year (2019-20) (MT/Year)	During current financial year (2020-21) (MT/Year)
Metal Scrap	Not Applicable as Unit Started in October 2020	59.82
Plastic Scrap		NIL
Empty Drums		NIL
Wooden Scrap		43.71
Cable Scrap		1.48
Paper Waste		NIL
Torn PP Bags & Other Plastic Waste		8.37
E-Waste (Old computers, printers, circuit boards etc.)		NIL
Spent Batteries		NIL
Filter bags scrap		NIL
Cotton waste/cotton rags		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.

1) Hazardous waste generated in the form of used / spent oil, waste / residue containing oil, which is stored in barrels at safe & dedicated area and will be sold to recycler approved by Central Pollution Control Board.
2) Dust collected from pollution control equipment's (i.e. from Bag house and Bag filter) is totally recycled in the process.

PART-G

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

Cement manufacturing is a dry process technology, hence no effluent generated from process. Which is cost effective and environmentally clean technology. The advantage of dry process is also in fuel economy. The stack emissions from the plant are controlled by equipment like Bag filters installed at various material transfer points to arrest the fugitive emissions. The particulate matter collected from the pollution control equipment is recycled in process and optimizing the cost of operation of pollution control equipment, conserving natural raw material and hence no impact on the environment.

PART-H

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

1) Closed clinker storage silo constructed to reduce the fugitive dust emission, with sufficient Bag filters.
2) Fly ash stored in closed silo constructed to reduce the fugitive dust emission, with sufficient Bag filters.
3) Gypsum stored in covered raw material yard to reduce the fugitive dust emission, with sufficient Bag filters.

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT

1) Monitoring of stack emission and ambient air and water quality is being done regularly as mentioned in consent to operate.
2) 3 Nos. of Ambient Air Quality Monitoring Systems have been installed at periphery of the plant.
3) Continuous Emission Monitoring Systems (CEMS) for PM have been installed at stack of Cement Mill and real time data transfer to Pollution Control Board server.
4) Bag Filters have been installed at various material transfer points to control fugitive emission.
5) Cement being manufacturing in dry process and there is no any effluent generated from the process hence maintaining Zero Liquid Discharge (ZLD) unit.
6) Fly ash purchased from nearby Thermal Power Plant and use for Cement production of PPC.
7) Raw materials are stored in covered shed, product in closed silo with high efficient Bag Filters for control of fugitive dust emission.
8) Proper Housekeeping and cleaning is being done with the help of Road Sweeping Machines.
9) Cover shed Constructed to store the Raw Material, to avoid fugitive emission., Finish product stored in closed silo.
10) All Belt Conveyor are fully covered & also installed Bag filter at all material transfer points
11) Cemented Road constructed to avoid fugitive dust generation during the movement of vehicle.
12) Online Digital Water Level Recorder installed for online ground water level monitoring.
13) Industry has constructed 05 Nos. of Rain Water Harvesting Structures in plant to recharge ground water.
14) Total 2341 plants planted inside the plant under greenbelt/ plantation and area covered 0.98 Hectares 12.15% of total Plant area of 8.06 Hectares upto Financial Year 2020 - 2021. Plantation work is going on and will be covered 33% as per guidelines.

Yours Faithfully

J K Cement Limited

For, J. K. Cement Ltd.

Authorised Signatory

Arun Sharma
Unit Head

Annexure-I

J.K.Cement Works, Balasinor (Gujarat)

Sewage STP Treated Water Analyses Report (Quarterly)

(F. Year- 2020 - 2021)

S. No.	Parameter	III[rd] Quarter	IV[th] Quarter
1	pH	8.05	7.60
2	Bio-Chemical Oxygen Demand (BOD) (3 Days at 27^0C) (mg/l)	17.00	18.00
3	Total Suspended Solids (TSS) (mg/l)	16.00	20.00
4	Fecal Coliform (FC) (Most Probable Number 100 milliliter, MNP/1000 ml)	33.00	34.00

For, J. K. Cement Ltd.

Authorised Signatory

Annexure-II

J.K.Cement Works, Balasinor (Gujarat)

Cement Mill Bag House Stack Emission Report

(F. Year- 2020 - 2021)

Month	PM (Monthly average in mg/Nm3)	PM (TPD)	PM (TPM)	PM (Kg/Tons of Cement)	% variation from prescribed standard
April' 20	Plant started in October 2020				
May' 20					
June' 20					
July' 20					
Aug' 20					
Sept.' 20					
Oct.' 20	10.4	0.010	0.180	0.013	-19.6
Nov.' 20	9.1	0.009	0.207	0.009	-20.9
Dec.' 20	9.7	0.010	0.276	0.007	-20.3
Jan.' 21	8.8	0.009	0.255	0.005	-21.2
Feb.' 21	9.2	0.009	0.248	0.005	-20.8
March' 21	9.0	0.009	0.270	0.005	-21.0

For, J. K. Cement Ltd.

Authorised Signatory

Annexure-III

J.K.Cement Works, Balasinor (Gujarat)

Ambient Air Quality Report (Monthly Average Data in µg/M3)

(F. Year- 2020 - 2021)

Month	Near STP Plant Eastern Boundary				Near Project Office, North Direction				Near Security Tower,South Direction			
	PM10	PM2.5	SO_2	NO_X	PM10	PM2.5	SO_2	NO_X	PM10	PM2.5	SO_2	NO_X
April' 20	Plant Production Started from October' 2020											
May' 20												
June' 20												
July' 20												
Aug' 20												
Sept.' 20												
Oct.' 20	54.11	33.52	10.40	20.54	56.27	40.68	10.90	21.03	54.47	38.28	14.10	21.10
Nov.' 20	55.66	35.48	15.24	21.83	56.00	32.96	12.91	21.19	57.75	36.70	15.08	21.45
Dec.' 20	53.96	38.26	15.07	21.04	52.41	35.82	14.43	21.22	56.80	35.85	14.44	22.19
Jan.' 21	55.50	31.53	10.26	20.55	50.20	34.30	11.08	21.8	50.16	35.80	11.70	20.89
Feb.' 21	49.26	38.05	13.22	22.66	56.84	35.15	10.93	21.54	55.26	36.70	14.41	22.72
March' 21	53.60	37.41	13.48	22.14	52.75	35.72	12.19	21.35	56.62	35.74	11.62	22.00
Average	**53.68**	**35.71**	**12.95**	**21.46**	**54.08**	**35.77**	**12.07**	**21.36**	**55.18**	**36.51**	**13.56**	**21.73**

For, J. K. Cement Ltd.

Authorised Signatory

Annexure-IV

J.K.Cement Works, Balasinor (Gujarat)

Monthly Average Noise Level Monitoring Report (Leq : dB (A)

(F. Year- 2020 - 2021)

MONTH	Near STP Plant, Eastern Boundary		Near Project Office, North Direction		Near Security Tower, South Direction	
	Day	**Night**	**Day**	**Night**	**Day**	**Night**
April' 20	Plant started in October 2020					
May' 20						
June' 20						
July' 20						
Aug' 20						
Sept.' 20						
Oct.' 20	63.0	58.0	64.0	55.0	61.0	54.0
Nov.' 20	63.0	57.0	64.0	54.0	63.0	53.0
Dec.' 20	66.0	58.0	63.0	55.0	62.0	53.0
Jan.' 21	63.0	55.0	63.0	53.0	65.0	54.0
Feb.' 21	63.0	56.0	65.0	55.0	65.0	54.0
March' 21	64.0	56.0	65.0	56.0	66.0	56.0
Average	**63.7**	**56.7**	**64.0**	**54.7**	**63.7**	**54.0**

For, J. K. Cement Ltd.

Authorised Signatory