

Letter No. – JK/CTO-(PLANT) /2022-23/19/01**Date: 21-09-2022**

The Member Secretary
Madhya Pradesh Pollution Control Board,
E-5 Arera Colony,
Paryavaran Parisar Bhopal-16 (M.P.)

**Subject- Environmental Statement Report (Form-V) of M/s Jaykaycem (Central) Limited,
Plot No. Various khasra at Village-Devra, Harduaken, Puraina, Sotipura,
Maddayan, Amanganj-Hata Road, Tehsil-Amanganj (Old Pawai), Distt. Panna for
the F.Y. 2021-22**

Dear Sir

Please find herewith enclosed Environmental Statement Report (Form-V) for M/s Jaykaycem (Central) Ltd, Plot No. Various khasra at Village-Devra, Harduaken, Puraina, Sotipura, Maddayan, Amanganj-Hata Road, Tehsil-Amanganj (Old Pawai), Distt. Panna for the F.Y. 2021-2022 for your kind information and record, please.

Thanking you,

Yours faithfully,
M/s Jaykaycem Central Ltd.



Anil Badgotri
V.P. (Project & Commercial)

Encl: Duly filled Form-V

CC: Regional Officer, Madhya Pradesh Pollution Control Board, Pt. Deen Dayal Nagar Housing Board Colony, Sagar, M.P.

Corporate Office

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**JK SUPER
CEMENT**
BUILD SAFE

Grinding Unit :
Village Ingotha, District : Hamirpur, Uttar Pradesh, India, Pin - 210341

**JK SUPER
STRONG**
BUILD SAFE

FORM – V
ENVIRONMENTAL STATEMENT REPORT FOR THE FINANCIAL YEAR 2021-22

PART – A

(I)	Name & Address of the Owner / Occupier of the Industry Operation or Process	Anil Badgotri V.P. (Project & Commercial) M/s Jaykaycem (Central) Ltd. Plot No. Various khasra at Village-Devra, Harduaken, Puraina, Sotipura, Maddayan, Amanganj-Hata Road, Tehsil-Amanganj (Old Pawai), Distt. Panna-488441 (M.P.).
(II)	Industry Category Primary (STC CODE) Secondary (SIC CODE)	Red Category
(III)	Production Capacity	Cement-3.0 MTPA Clinker – 3.3 MTPA WHRP – 25 MW DG Set – 1750 KVA
(IV)	Year of Establishment	Yet to be commissioned
(V)	Date of last Environmental Statement Submitted	N.A. (Submitting first time)

PART – B

Water & Raw Material Consumption and Lime stone production

A. Water

Over All Consumption

- (i) Process (Dust Suppression) - 0.0 KL
- (ii) Cooling - 0.0
- (iii) Domestic - 37930 KL

Consumption per unit of production

Name of the Product	Process Water Consumption per unit of Product Output (MT)	
	During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
Cement	00	00
Waste Heat Recovery Plant (WHRS)	00	00

B. Raw Material Consumption

Name of the Raw Material	Name of Product	Consumption of Raw Material per Unit Product Output (KL/MT of Limestone)	
		During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
Lime Stone	Cement	00	00
Iron-Ore		00	00
Coal		00	00
Pet Coke		00	00
Gypsum		00	00
Fly ash		00	00

Laterite/Red Ochre/Red Mud		00	00
Alternate Fuel	Cement	00	00
Alternate Raw Material and Performance improver	Cement	00	00
Slag	Cement	00	00
Waste hot gases from Kiln & Cooler	Power (Electricity)	00	00

C. Total Cement and Clinker Production (MT)

Product	During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
OPC	00	00
PPC	00	00
PSC	00	00
Clinker	00	00

D. Total Power Production from WHRS (KWH)

Product	During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
WHRs (Power Production)	00	00

E. Total Power consumption in Cement Plant (KWH/ Ton of Cement)

During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
00	00

PART - C

Pollutant Discharged To Environment / Unit of Output
(Parameters as specified in the consent issued)

S. No.	Pollutants	Quantity of Pollutants Discharged (Mass / day) (tonne/day)	Concentrations of Pollutants in discharged (Mass / Volume) (kg/m ³)	Percentage of variation from prescribed standard with reasons
(a)	Water	1.As plant will be operated on dry process technology, no liquid effluent will be generated from cement plant. 2.Domestic waste water generated from office toilet and canteen being treated with STP and treated water is being used in green belt development in plant premises. 3.Treated Effluent water from WHRS will be used in Cement Plant Process hence Zero Liquid Discharge (ZLD) will be maintained. 4.Plant was not in operation in FY 2021-22, so there is no Stack Emission. Also there is no Stack in WHRS hence no air pollution will be produced.		

(b)	Air	Please refer Ambient Air Quality Monitoring Reports as Annexure I and Noise Monitoring reports as Annexure II
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PART – D

(As specified under Hazardous waste / Management and Handling rules, 1989 as Amended -2016)

Hazardous waste		During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
From Process	(a) Category 35.3 Chemical sludge from waste water treatment	00	00
	(b) Category 35.4 Oil And Grease, Skimming	00	00
	(c) Category 33.1 Empty Barrels/Containers/Liners Contaminated with Hazardous Chemicals /Wastes	00	00
	(d) Category 33.2 Contaminated Cotton Rags or Other Cleaning Materials	00	00
	(e) Category 5.2 Wastes or Residues Containing Oil	00	00
	(f) Category 1.7 Oil from Waste Water Treatment	00	00
	(g) Category 4.1 Oily Sludge or Emulsion	00	00
	(h) Category 35.2 Spent Ion Exchange Resin Containing Toxic Metals	00	00
	(i) Category 5.1 Used or Spent Oil	00	00
From Pollution Control Facilities	Nil	00	00

PART – E

Solid Wastes

Solid Waste		Total Quantity	
		During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
(a)	From Process	Nil	Nil

(b)	From Pollution Control facilities	NA	Dust Collected in ESP, Bag house and Bag Filters and will be recycled back into the process.
(c)	(i) Qty. recycled or reused Within the unit.	NA	Dust collected in APCD will be 100% utilized in cement manufacturing
	(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 SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THE CATEGORIES OF WASTES.

Hazardous waste: Hazardous waste generated in the form of used/spent oil which will be stored in barrel at safe and dedicated area and sold to recycler approved by MPPCB. Other waste which are generated from plant will disposed through Co-processing mode as listed below:

Sr. No.	Hazardous Waste	Mode of Disposal
1	Category 35.3 Chemical sludge from waste water treatment	Co-processing in Cement Kiln
2	Category 35.4 Oil And Grease, Skimming	Co-processing in Cement Kiln
3	Category 33.1 Empty Barrels/Containers/Liners Contaminated with Hazardous Chemicals /Wastes	Co-processing in Cement Kiln
4	Category 33.2 Contaminated Cotton Rags or Other Cleaning Materials	Co-processing in Cement Kiln
5	Category 5.2 Wastes or Residues Containing Oil	Co-processing in Cement Kiln
6	Category 1.7 Oil from Waste Water Treatment	Co-processing in Cement Kiln
7	Category 4.1 Oily Sludge or Emulsion	Co-processing in Cement Kiln
8	Category 35.2 Spent Ion Exchange Resin Containing Toxic Metals	Co-processing in Cement Kiln
9	Category 5.1 Used or Spent Oil	Will be sold to the MPPCB registered recycler

Solid waste: Dust collected from pollution control equipment (i.e. from ESP, Bag house and Bag filters) will be totally recycled in 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 fugitive emissions from the plant will be controlled by equipment like ESPs and Bag filters installed at various material transfer points. The particulate matter collected from the pollution control equipment will be recycled in process and optimizing the cost of operation of pollution control equipment, conserving natural raw material and hence no impact on the environment. Extensive tree plantation has also been done in and around the plant premises. In FY 2021-22, we have planted 12649 no. of plants out of which 12399 no. of plants have been planted in and around the plant boundary and 250 plants have been planted in nearby villages.

PART – H

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

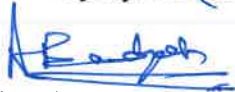
Extensive tree plantation has also been done in and around the plant premises. In FY 2021-22, we have planted 12649 no. of plants out of which 12399 no. of plants have been planted in and around the plant boundary and 250 plants have been planted in nearby villages.

PART – I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT.

- 1- Domestic Waste is collected and disposed properly
- 2- Ambient air and Noise are being monitored regularly
- 3- Surface water and ground water are being tested time to time by NABL Accredited Lab.
- 4- Telemetry system has been install for online ground water level monitoring.

For M/s Jaykaycem (Central) Limited



Anil Badgotri

V.P. (Project & Commercial)

ANNEXURE NO. 1

AMBIENT AIR QUALITY MONITORING DATA FOR FY-2021-22 (Jan 2022)					
Sr. No.	Location	Parameters			
		PM10 (µg/Cum)	PM2.5 (µg/Cum)	SO2 (µg/Cum)	NO2 (µg/Cum)
1	Near Worker Colony	60.2	37.8	7.8	13
2	Near Zero Point (Plant SW direction)	50.1	30.2	6.5	10
3	Near General Store Shed	64.8	38.4	7.8	16
4	Near Plant Boundry Towards Packing Plant	65.2	40.5	8.8	17
5	Maximum	65.2	40.5	8.8	17
6	Minimum	50.1	30.2	6.5	10
7	Average	60.07	36.72	7.72	14

ANNEXURE NO. 2

AMBIENT NOISE MONITORING DATA FOR FY-2021-22											
Sr. No.	Location Name	May-21		Oct-21		Minimum		Maximum		Average	
		Day (dB) Leq	Night (dB) Leq	Day (dB) Leq	Night (dB) Leq	Day (dB) Leq	Night (dB) Leq	Day (dB) Leq	Night (dB) Leq	Day (dB) Leq	Night (dB) Leq
1	Near Plant Boundary in SW direction	49.5	41	50.6	41.8	49.5	41	50.6	41.8	50.05	41.4
2	Near Project Office	53.7	43.3	62.4	52.4	53.7	43.3	62.4	52.4	58.05	47.85
3	Near Ready Mix Plant	54.2	44.9	59.8	49.6	54.2	44.9	59.8	49.6	57	47.25
4	Near Labour Colony	48.6	42.2	50.3	43	48.6	42.2	50.3	43	49.45	42.6
5	Near Main Gate of Plant	53.8	43.7	55.4	46.1	53.8	43.7	55.4	46.1	54.6	44.9
6	Near Canteen	54	44	60.2	50.5	54	44	60.2	50.5	57.1	47.25

ANNEXURE NO. 3

SURFACE WATER ANALYSIS REPORTS FOR FY-2021-22					
Sr. No.	Parameters	Prescribed Limits		Ken River	
		Required (Acceptable Limit)	Permissible Limit	May-21	Oct-21
1	Color, Hazen Units	5	15	<1	<1
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	Agreeable	Agreeable	Agreeable	Agreeable
4	pH	6.5-8.5	No Relaxation	7.31	7.18
5	Turbidity	1	5	0.22	0.33
6	Dissolved Solids	500 mg/L	2000 mg/L	243	316
7	Electrical Conductivity $\mu\text{S}/\text{cm}$	-	-	352	460
8	Aluminium	0.03 mg/L	0.2 mg/L	<0.01	<0.01
9	Ammonia	0.5 mg/L	No Relaxation	<0.2	<0.2
10	Anionic Detergents as MBAS	0.2 mg/L	1.0 mg/L	<0.1	<0.1
11	Barium	0.7 mg/L	No Relaxation	<0.1	<0.1
12	Boron	0.5 mg/L	2.4 mg/L	<0.1	<0.1
13	Calcium	75mg/L	200 mg/L	35.2	38.4
14	Chloramines	4.0 mg/L	No Relaxation	<1.0	<1.1
15	Chloride	250 mg/L	1000 mg/L	15.99	29.99
16	Copper	0.05 mg/L	1.5 mg/L	<0.01	<0.01
17	Fluoride	1.0 mg/L	1.5 mg/L	0.56	0.49
18	Free Residual Chlorine	0.2 mg/L	1.0 mg/L	<0.1	<0.1
19	Iron	0.3 mg/L	No Relaxation	0.02	0.02
20	Magnesium	30 mg/L	100 mg/L	13.61	16.52
21	Manganese	0.1 mg/L	0.3 mg/L	<0.01	<0.01
22	Nitrate	45 mg/L	No Relaxation	<0.5	3.56
23	Phenolic Compound	0.001 mg/L	0.002 mg/L	<0.001	<0.001
24	Selenium	0.01 mg/L	No Relaxation	<0.01	<0.01
25	Sulphate	200 mg/L	400 mg/L	18.44	23.08
26	Sulphide	0.05 mg/L	No Relaxation	<0.05	<0.05
27	Total Alkalinity	200 mg/L	600 mg/L	148	180
28	Total Hardness	200 mg/L	600 mg/L	144	164
29	Zinc	5 mg/L	15 mg/L	<0.01 mg/L	<0.01 mg/L
30	Cadmium	0.003 mg/L	No Relaxation	<0.003 mg/L	<0.003 mg/L
31	Lead	0.01 mg/L	No Relaxation	<0.01 mg/L	<0.01 mg/L
32	Mercury	0.001 mg/L	No Relaxation	<0.001 mg/L	<0.001 mg/L
33	Total Arsenic	0.01 mg/L	No Relaxation	<0.005 mg/L	<0.005 mg/L
34	Total Chromium	0.05 mg/L	No Relaxation	0.01 mg/L	0.01 mg/L
35	Nickel	0.05 mg/L	No Relaxation	0.01 mg/L	0.01 mg/L

ANNEXURE NO. 4

GROUND WATER ANALYSIS REPORT FOR FY-2021-22									
Sr. No.	Parameters	Prescribed Limits		Bore Well No. 1 (Near Zero Point)		Bore Well No. 2 (Near Plant Main Gate)		Bore Well No. 3 (Near Proposed Old LS Crusher Area)	
		Required (Acceptable Limit)	Permissible Limit	May-21	Oct-21	May-21	Oct-21	May-21	Oct-21
1	Color, Hazen Units	5	15	<1	<1	<1	<1	<1	<1
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	pH	6.5-8.5	No Relaxation	7.87	7.71	7.95	7.43	7.18	7.6
5	Turbidity	1	5	0.17	0.13	0.12	0.2	0.13	0.17
6	Dissolved Solids	500 mg/L	2000 mg/L	1033	1116	514	583	931	975
7	Electrical Conductivity $\mu\text{S}/\text{cm}$	-	-	1560	1670	788	895	1340	1460
8	Aluminium	0.03 mg/L	0.2 mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
9	Ammonia	0.5 mg/L	No Relaxation	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
10	Anionic Detergents as MBAS	0.2 mg/L	1.0 mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
11	Barium	0.7 mg/L	No Relaxation	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
12	Boron	0.5 mg/L	2.4 mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Calcium	75mg/L	200 mg/L	32	35.2	64	67.2	128	134.4
14	Chloramines	4.0 mg/L	No Relaxation	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
15	Chloride	250 mg/L	1000 mg/L	153.95	165.95	13.99	33.99	73.98	85.98
16	Copper	0.05 mg/L	1.5 mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
17	Fluoride	1.0 mg/L	1.5 mg/L	0.67	0.75	0.85	1	0.7	0.83
18	Free Residual Chlorine	0.2 mg/L	1.0 mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
19	Iron	0.3 mg/L	No Relaxation	0.04	0.04	0.03	0.03	0.06	0.06
20	Magnesium	30 mg/L	100 mg/L	11.66	13.61	32.08	35.96	44.71	47.63
21	Manganese	0.1 mg/L	0.3 mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
22	Nitrate	45 mg/L	No Relaxation	<0.5	1.25	18.41	24.12	2.28	4.51
23	Phenolic Compound	0.001 mg/L	0.002 mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
24	Selenium	0.01 mg/L	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
25	Sulphate	200 mg/L	400 mg/L	163.69	186.36	10.06	16.35	261.43	279.2
26	Sulphide	0.05 mg/L	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
27	Total Alkalinity	200 mg/L	600 mg/L	396	424	352	368	340	344

28	Total Hardness	200 mg/L	600 mg/L	128	144	292	316	504	532
29	Zinc	5 mg/L	15 mg/L	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L
30	Cadmium	0.003 mg/L	No Relaxation	<0.003 mg/L	<0.003 mg/L	<0.003 mg/L	<0.003 mg/L	<0.003 mg/L	<0.003 mg/L
31	Lead	0.01 mg/L	No Relaxation	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L
32	Mercury	0.001 mg/L	No Relaxation	<0.001 mg/L	<0.001 mg/L	<0.001 mg/L	<0.001 mg/L	<0.001 mg/L	<0.001 mg/L
33	Total Arsenic	0.01 mg/L	No Relaxation	<0.005 mg/L	<0.005 mg/L	<0.005 mg/L	<0.005 mg/L	<0.005 mg/L	<0.005 mg/L
34	Total Chromium	0.05 mg/L	No Relaxation	0.01 mg/L	0.01 mg/L	0.01 mg/L	0.01 mg/L	0.01 mg/L	0.01 mg/L
35	Nickel	0.05 mg/L	No Relaxation	0.01 mg/L	0.01 mg/L	0.01 mg/L	0.01 mg/L	0.01 mg/L	0.01 mg/L