

JKCW/MGR/ESR/TLSM/FY-23-24

Date: 27/09/2024

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 2023-2024 by M/s JK Cement Works, Mangrol, **Tilakhera Limestone Mine** in Mangrol Village, Tehsil Nimbahera, Chittorgarh and Rajasthan-312601.

Ref.:

F (Mines)/Chittorgarh(Nimbahera)/1873(1)/2021-2022/457-461

Order No: 2021-2022/Mines/10257 Dated 04/06/2021

Dear Sir,

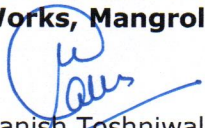
With reference to the above cited subject, we M/s. J.K. Cement Works, Mangrol, **Tilakhera Limestone Mine** hereby submitting the Environmental Statement Report in Form-V for Financial Year 2023-2024 as per, Rule No 14 of The Environment (Protection) Rules, 1986, EC & CTO order.

This is for your information please.

Thanking You



Yours Faithfully
For J.K. Cement Works, Mangrol



Manish Toshniwal
Unit Head (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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- 🌐 www.jkcement.com

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 2023-2024, ending the 31st March 2024

PART-A

Name an address of the owner/ occupier of the industry operation or process	Sh. Manish Toshniwal Unit Head (Operations) J.K. Cement Works, Mangrol, Tilakhera Limestone Mine Village Mangrol, Tehsil-Nimbahera District- Chittorgarh, Rajasthan, Pin code- 312617
Industry category Primary - (STC Code), Secondary - (STC Code)	Red Category Limestone Mining
Production capacity	Limestone -2.4 MMTPA
Year of establishment	Year 1979
Date of last environmental statement submitted	23-09-2023

PART-B

WATER AND RAW MATERIAL CONSUMPTION

Water Consumption in m³/day

Process	Nil
Dust Suppression	55 m ³ /day
HEMM Washing	10 m ³ /day
Plantation	12 m ³ /day
Domestic	3 m ³ /day

Name of products	Process water consumption per unit of products	
	During the previous financial year (2022-23) KL/Ton of output	During the current financial year (2023-24) KL/Ton of output
Limestone	0.0083	0.0052

RAW MATERIAL CONSUMPTION

Name of raw material	Name of products	Consumption of raw material per unit of output	
		During the previous financial year (2022-23)	During the current financial year (2023-24)

AMMONIUM NITRATE 'PRILLED'	LIMESTONE	0.0915KG/MT	0.091 KG/MT
ED		0.0012KG/MT	0.001 KG/MT
Dynaex Boost-83 MM		0.0002 KG/MT	0.0005 KG/MT
KELVEX 600 -83 MM		0.0105 KG/MT	0.010 KG/MT
AQUADYNE-83 MM		0.0030 KG/MT	0.002 KG/MT
EMUAL BOOST -125 GRM		0.0008 KG/MT	0.001 KG/MT
KELVEX-P -83 MM		0.0011 KG/MT	0.001 KG/MT
KELVEX 500-83 MM		0.0099 KG/MT	0.009 KG/MT
ENERGEL-83 MM		0.0043 KG/MT	0.001 KG/MT
D- FUSE		0.0490 KG/MT	0.048 KG/MT
MSDD		0.0003 KG/MT	0.0001 KG/MT
Nonel's		0.0094 KG/MT	0.009 KG/MT
HSD (High Speed Diesel)		0.5454 LITER/MT	0.6352 LITER/MT

PART-C

POLLUTION DISCHARGE TO ENVIRONMENT / UNIT OF OUTPUT

Pollutants	Quantity of pollutants discharged (Tons/Day)	Concentration of pollutants in discharge (Mass/Volume)	Percentage of variation from prescribed standards with reasons
A. Water	NIL		
B. Air: There is no continuous source emission. The dust generated during the mining operation is monitored by establishing the Ambient Air Quality monitoring stations at different stations and the results are within the prescribed limits.			

Month & Year	Near Ravana Office-Mangrol Tilakhhera Limestone mines				Near Mine Office-Mangrol Tilakhhera Limestone mines			
	PM10	PM2.5	SO2	NOX	PM10	PM2.5	SO2	NOX
April-2023	71	26.8	10.3	26.4	81	25.7	12.7	23.1
May-2023	68.8	24.1	11.3	19.8	71	31	9.1	14.3
June-2023	71.4	38.3	13.5	18.1	78.7	30.5	12.6	24.4
July-2023	68.3	43.7	13	19.2	73.3	44.1	11.7	19.1
August-2023	71.2	43	8.9	17.9	73.3	44.8	11.1	18.7
September-2023	70.4	38.2	11.3	19.9	72.3	38.1	11.4	23.2
October-2023	71.9	35.8	10.7	18.8	73.5	37.5	12.1	21.4
November-2023	69.2	31.8	9.8	16.1	70.5	33.1	11.3	18.6
December-2023	68	34	10.5	18.2	72	36	12.1	20.6
January-2024	75	21.4	11.4	21.7	75	28	11.5	21.4

February-2024	65	18.3	14.2	17.3	68	37	12.7	18.3
March-2024	71	22.1	10.9	16.8	72	32	14.2	20.8
AVERAGE	70.10	31.46	11.32	19.18	73.38	34.82	11.88	20.33
% of Deviation from Standard	-29.90	-47.57	-85.85	-76.02	-26.62	-41.97	-85.16	74.59

Month & Year	Near Mine Office		Near Ravana Office		Towards Factory gate		Near Ravana Office	
	Day time	Night Time	Day time	Night Time	Day time	Night Time	Day time	Night Time
April-2023	70.4	48.1	69.1	48.3	65.1	50.1	64.7	49.6
May-2023	64.1	49.7	62.7	48.3	62.7	48.4	68.4	47.8
June-2023	67.1	48.7	62.1	49.7	68.1	50.2	63.8	49.6
July-2023	64.1	52.8	66.8	50.7	62.1	50.8	64.3	51.4
August-2023	67.9	51.8	66.4	52.9	65.3	51.8	67.1	52.4
September-2023	66.4	51.3	62.8	48.4	66.5	51.8	64.8	50.6
October-2023	65.1	50.1	60.6	47.4	65.3	50.7	62.8	48.4
November-2023	63.8	50.5	61.2	48.3	63.6	50.8	62.8	49.3
December-2023	65.3	51.2	60.4	49.6	64.5	49.5	63.8	50.2
January-2024	68.2	49.7	67.3	49.1	66.3	51.2	65.7	49.8
February-2024	64.8	50.1	63.5	48.4	62.9	48.9	69.1	48.4
March-2024	66.4	49.5	61.9	49.3	68.8	50.1	64.2	49.8
AVERAGE	66.13	50.29	63.73	49.20	65.10	50.36	65.13	49.78

PART-D

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

Hazardous waste	Total Quantity	
	During previous financial year (2022-23) (KL)	During current financial year (2023-24) (KL)
From process	Used oil (5.1)- * 7.6KL Waste oil (5.2)- *4.4 KL	Used oil (5.1)- * NIL Waste oil (5.2)- 5.2*KL
From pollution Control facilities	Not applicable	Not applicable

***The hazardous wastes generated are used/waste oil from lines 1, 2, and 3 of cement plants, CPP, WHRS, limestone mines, etc. The hazardous waste generated is sold through CPCB certified recyclers.

PART-E SOLID WASTE

S. No	Description	Total Quantity	
		During previous financial year (2022-23) (MMT/Year)	During current financial year (2023-24) (MMT/Year)
	From process		
1	Sub grade	0.542	0.2497
2	Interstitial Clay/ Screen rejects/ Waste	0.0389	0.0
3	Top Soil	0.0099	0.0

PART-F

PLEASE SPECIFY THE CHARACTERISTICS (IN TERMS OF COMPOSITION AND QUANTUM) OF HAZARDOUS AS WELL AS WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE CATEGORIES OF WASTES.

The hazardous waste generated is used waste oil from vehicle operations is send to the authorized recycler authorized by CPCB/RSPCB

PART-G

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

1. Use of wet drilling system is adopted to control fugitive dust emission
2. Blasting: Blasting is between 12: noon to 3:00 PM when air density is low. Use of Control blasting technique (Non-EI) Non-Electrical with delay detonators to avoid noise and vibration. Dozing: The floor near the blasting face is dozed evenly to avoid heavy dust generation with the movement of dumpers.
3. Loading: Water spray on the blasted rock is being carried out for dust suppression before they load on to the dumpers.
4. No secondary blasting is being done during the mining operation. Oversized boulders are broken by use of Hydraulic Rock breaker.
5. Haul road Dust Suppression: Mobile Water tanker is deployed to control the fugitive road dust emissions at mimes
6. Permanent water sprinklers are provided in mine haulage road.
7. All the required PPE's have been provided to all the employees and workmen.
8. Periodical maintenance of Heavy earth moving machinery to meet the emission levels. Operator cabin is dust proof & closed to control noise.

PART-H

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

Expenditure incurred on environment protection during the financial year 2023-2024 Pollution Control expenses others:

Tilakhera Mines-environment	37,300
Tilakhera Mines-environment	18,800
Total	56,100

CSR Expenditure: 349645.05 Rupees

SDS Expenditure :14399141.05 Rupees Beneficiaries : 2771

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT

1. Monitoring of ambient air & water quality is being carried out at regular intervals as per the consent order.
2. Ambient air emissions are within the prescribed norms.
3. One CAAQM station is installed at Mines office to monitor the air quality continuously 24/7 and the data is being uploaded to the RSPCB & CPCB.
4. Rain water harvesting is being done through mine pit water stored in lower most benches and constructed one recharge well & 02 Nos. Check Dams to augment the water resources in the mines area
5. As per mining plan, groundwater values are measured in the network of existing wells. 3piezo holes for periodicals and one DWLR with a telemetry system for online monitoring of groundwater levels.
- 6.
7. Green belt development: Plantation of native species to protect the species diversity and also develop the local ecosystem. Arrest the soil erosion Noise control and aesthetic beauty of the plant. In addition, 7.5 mts is being developed as a shelter belt to arrest the dust emissions and noise control.

TILAKHERA LIMESTONE MINES					
DESCRIPTION	FY- 19-20	FY-20-21	FY- 21-22	FY-22-23	FY -23-24
NO OF SAPLINGS	2000	4000	13766	5785	3910
AREA IN HECTARE	1.01	1.913	2.8	0.8	1.2

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