

JK Cement Works, Panna (Formerly known as Jaykaycem (Central) Ltd. now amalgamated) A Unit of JK Cement Ltd.

CIN: L17229UP1994PLC017199

- Village Harduwaken, Tehsil Amanganj District - Panna, State - Madhya Pradesh, India - 488 441
- \$ 9329141591

 ikc.panna@jkcement.com
- # www.jkcement.com

Ref: JK/CTO-(KAKRA)/2024-25/18/05

Date- 10.09.2024

To, Member Secretary, MP Pollution Control Board, Paryawaran Parisar, E-5, Arera Colony, Bhopal (MP).

Subject: Environment Statement Report (Form-V) for FY. 2023-24 of Kakra- Panna Lime Stone Mine of M/s. J K Cement Limited, located at Various khasra at Village- Kakra, Kamtana, Saptai, Judi, Devripurohit, Devra, Tehsil Amanganj, Distt- Panna (M.P.)

Reference No.:

- 1. Ministry (MoEF&CC) letter no. J-11015/190/2016-IA-II(M) dated 31.08.2020
- 2. Corrigendum in EC Letter no. J-11015/190/2016-IA-II(M) dated 08.03.2021
- 3. Consent No: AWH-57726 dated 03.03.2023

Dear sir,

With reference to aforesaid subject, please find herewith enclosed Environment Statement Report (Form-V) for FY.2023-24 of Kakra- Panna Lime Stone Mine of M/s. JK Cement Limited, located at Various khasra at Village- Kakra, Kamtana, Saptai, Judi, Devripurohit, Devra, Tehsil Amanganj, Distt- Panna (M.P.).

This is for your kind information and record, please.

Thanking you.

Yours faithfully,

For Kakra Panna Limestone Mine (Unit of JK Cement Limited)

Kapil Agrawal

(Unit Head) Encl: As above

CC: 1- The Regional Office (WZ), MoEF&CC, Kendriya Paryavaran Bhawan, Bhopal - 462 016

2- Regional Officer, Regional Office, MP Pollution Control Board, Makronia, Sagar (MP)

Corporate Office

- Prism Tower, Ground Floor, Ninaniya Estate,
 Gwal Pahari, Gurugram, Haryana 122102, India
- +0124-6919000
- admin.prismt@jkcement.com
- www.jkcement.com CIN: L17229UP1994PLC017199







Manufacturing Units at : Nimbahera, Mangrol, Gotan (Rajasthan) | Muddapur (Karnataka) Jharli (Haryana) | Katni, Panna, Ujjain (M.P.) | Prayagraj, Aligarh, Hamirpur (U.P.) | Balasinor (Gujarat) | Fujairah

FORM - V

ENVIRONMENTAL STATEMENT REPORT FOR THE FINANCIAL YEAR 2023-24

Kakra-Panna Limestone Mine (Unit: M/s J K Cement Limited) PART – A

(i).	Name and address of the owner/ Occupier of the industry/operation or process.	:	Kapil Agrawal Unit Head Kakra-Panna Limestone Mine, M/s. J K Cement Limited, Various Khasra at Village-Kakra, Kamtana, Saptai,Judi,Dev, Village-Kakra, Kamtana,Saptai, Judi,Devripurohit, Devra,Tah- Amanganj, Distt-Panna (MP)
(ii).	Industry Category - Primary (STC Code) / Secondary (STC Code)	:	Red Large Scale
(iii).	Production Capacity Units	:	Mining of Limestone-4.08 Million Ton per year Mine Waste-0.18 Million Ton per year Mining of Sub –grade Limestone-0.58 Million Ton per year Mining of Inter burden –1.51 Million Ton per year Mining of Soil / Alluvium-1.26 Million Ton per year
(iv).	Year of establish	:	2023
(v).	Date of the Last Environmental Statement Submitted	:	29.07.2023

<u>PART – B</u> Water & Raw Material Consumption and Lime stone production

A. Water consumption KL/Day Over All Consumption

(i) Process (Dust Suppression) - 56.7 KL/Day (Total 20700 KL)

(ii) Cooling - NA

(iii) Domestic - 1.11 KL/Day (Total 405 KL)

Consumption per unit of production

Name of the Product	Process Water Consumption per unit of Product Output (KL/MT of Limestone)		
Name of the Product	During the Previous	During the Current	
	Financial Year (2022-23)	Financial Year (2023-24)	
Lime Stone	0.00	0.025	

A. Raw Material Consumption

Name of the Raw	Name of	Consumption of Raw Material per Unit	
Material	Product	Product Output (KL/MT of Limestone)	
		During the Previous	During the Current

		Financial Year (2022-23)	Financial Year (2023-24)
Diesel	Limestone	0.00	0.00087

This is a captive mine where Limestone excavated from the mining lease for manufacturing cement. The supporting raw materials used for mining are fuel (HSD).

B. Raw material Consumption

(*) Name of Raw Materials Description	Unit	During the previous Financial year	During the current Financial year (2023-24)
Discol	1 :4	(2022-23)	, ,
Diesel	Liters	0	726003
Lubricant Oil	Liters	0	6477
Grease	KG	0	227
AFNO	KG	0	0.00
Slurry (Column, Prime, and base)	KG	0	197425
Electrical Detonators	(In No's)	0	379
Nonel Detonators	(In No's)	0	90343
Detonating fuse	(in Mts)	0	0.00

This is a captive mine where Limestone excavated from the mining lease for manufacturing cement. The supporting raw materials used for mining are fuel (HSD), Lubricant Oil and Grease for Heavy Earth Moving Machineries (HEMM) and Explosives for blasting.

C. Total Material Production (in Ton)

Product	During the Previous Financial	During the Current Financial	
Product	Year (2022-23)	Year (2023-24)	
Lime Stone	0.00	833847.84	
Waste	0.00	45872.10	
Sub-grade Lime Stone	0.00	0.00	
Inter Burden	0.00	0.00	
Soil/Alluvium	0.00	269533.6	

Note- Month wise production data enclosed as Annexure-1.)

D. Total Power consumption (KWH/ MT of Limestone)

During the Previous Financial Year (2022-23)	During the Current Financial Year (2023-24)
0.00	1.46

E. Total Power consumption (KWH)

During the Previous Financial Year (2022-23)	During the Current Financial Year (2023-24)
0.00	3551170

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/m³)	Percentage of variation from prescribed standard with reasons
(a)	Water	Waste water generated from the office toilets is being discharged into the soak pit via septic tank. There is no waste water in the mine. Mine's pit water is used for dust suppression & plantation in mine.		
(b)	Air	Air monitoring parameters as specified in consent and its percentage of variation from prescribed standards are enclosed as Annexure-2 .		

PART - D

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

Hazardous waste generated will be stored in a dedicated area and will be disposed through registered recycler. During **FY: 2023-24** HW generation and disposed details is given below.

Haza	rdous Wastes	Total Quantity	Total Quantity sold to recycler	
D	escription	During the previous Financial year (2022-23)	During the current Financial year (2023-24)	
	(a) Category 5.1 Used / Spent Oil	0.0	9.348 MT	
	(b) Category 5.2 Waste Residue Containing oil	0.0	0.0	
(a) From Process	(c) Category 3.3 Sludge& Filters contaminated with oil	0.0	0.0	
	(d) Category 33.1 Empty Barrels/containers/liners/contam inated with hazardous chemicals/wastes	0.0	0.0	
(b) From Pollution	Nil		aste is generated	
Control Facilities		during mining activi	ity.	

Note- Used or Spent Oil HW Category (5.1)- 9.348 MT sent to register recycler M/s Jay Bajarang Oil Industries, Plot no.4/9 GIDC, Chandisar, Tal-Palanpur Dist-Banaskantha, Gujarat-385510.

PART - E

SOLID WASTES

	Total Quantity		
Solid Wastes	During the previous Financial year (2022-23)	During the current Financial year (2023-24)	
(a) From Process	N.A	N.A	
(b) From Pollution Control Facilities	N.A	N.A	
(c) Quantity recycled or reutilized (i) Within the unit.	N.A	N.A	
(ii) Sold	N.A	N.A	
(iii) Dispose	0.0 MT	Mining of Inter burden: - Nil Mining of Soil / Alluvium: - 269533.6 MT Mine Waste: - 45872.10 MT	

PART – F

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

Hazardous waste: Hazardous wastes like used spent oil generated from the mine are stored and subsequently disposed off to PCB's authorized recycler.

We have authorization for following type of Hazardous Waste and its mode of disposal.

Sr.No.	Hazardous Waste	Mode of Disposal
1	Category 5.1- Used or Spent Oil	CTSDF/Sale to Recyclers authorized with
		SPCB
2	Category 5.2- Wastes or residues	CTSDF/Sale to Recyclers authorized with
	containing oil	SPCB
3	Category 3.3- Sludge & Filters	CTSDF/Sale to Recyclers authorized with
	contaminated with oil	SPCB
4	Category 33.1-Empty	CTSDF/Sale to Recyclers authorized with
	Barrels/containers/liners/contaminat	SPCB
	ed with hazardous	
	chemicals/wastes	

PART - G

Impact of the pollution abatement measures taken on conservation of natural resources.

There is no impact observed on vegetation & water bodies in the surrounding areas due to dust, as it is suppressed on its generating sources.

The following measures are taken to suppress the dust at the source as well as to prevent the same spreading in the atmosphere:

- 1- Wet drilling system is provided on the drill machines.
- 2- Regular water sprinkling is done on haul road during operation.
- 3- Blasting parameters are optimised for proper fragmentation to reduce dust generation.
- 4- Plantation and development of Green Belt is done as per the approved mining plan.

WATER

- 1- Being Mechanized Limestone mine, it requires water mainly for Wet Drilling, Road Spraying and Green Belt Development. The source of water will be the accumulated rainwater in the lower most benches. There will be no discharged of liquid effluent / waste water from the Mine.
- 2- There will be no discharge of rain water or waste water from the mine to outside lease area. Rain water in the catchment area of mine lease will be diverted through drainage in to mine pits and the water is used for dust suppression and plantation purpose.

NOISE

- 1- Green Belt development for reducing noise.
- 2- PPEs will be provided to all workers.

PART – H

Additional measures/investment proposed for environmental protection including abatement of pollution/prevention of pollution.

Green belt development and tree plantation has been done as per approved Mining Plan.

Blasting is done by using a combination of high strength and low strength explosives. Non-electric initiation is used in all of the blasts, which is costlier than conventional method of blasting. Non-electric initiation ensures least blast induced vibration, noise and fly rocks. Vibration is monitored by seismograph for each and every blast to ensure the parameters within specified limits.

Corporate Environment Responsibility (CER) Expenditure Report of Kakra-Panna Limestone Mine:

S.No.	Activities	Expenditure till Oct., 2023 (in Lakhs)	Expenditure from November 23 to March, 2024 (in Lakhs)
1	Health (Health, Check-up, Camp, Sports etc.)	211.73	7.75
2	Education (Books, Bags, Stationary etc.)	54.80	154.31
3	Sanitation (Domestic water, Toilets etc.)	40.99	2.55
4	Skill Development (Training centre etc.)	8.21	4.80
5	Infrastructure (Road, Community Centre etc.)	132.0	22.65

6	Other Local Social Need	45.33	5.74
7	Greenery Development Nearby Area	251.66	0
Total		744.72	197.8

PART – I

Any other particulars for improving the quality of the environment.

Various measures taken for the improvement of environment, details along with the photographs are given below.

- 1- CAAQMS is installed at Kamtana Village.
- 2- Third Party Environment Monitoring (NABL Accredited) is done on regular basis.
- 3- Sprinkling of water for dust suppression round the clock.
- 4- Green belt area developed as per the approved mining plan.
- 5- Use of non-electric initiation system in the blasting operation to reduce air blast & no fly rock

Photographs showing various Environment protection measures at Mines







Water sprinkling photo







Organized mega health camps in village Kakra and Kamtana





Construction of Roof water Harvesting Structure at Devra Community Centre



Name: Kapil Agrawal

Unit Head (M/s J K Cement Limited., For Kakra-Panna Lime Stone Mine

Dated: 10.09.2024

Annexure-1

M/s -J K Cement Limited, Kakra -Panna Limestone Mines Village- Kakra, Kamtana, Saptai, Judi, Devripurohit, & Devra, Tehsil: - Amanganj Distt- Panna (MP)

	FY: 2023-24				
	Limestone Production (MT)	Mine Waste (MT)	Mining of Sub –grade Limestone (MT)	Mining of Inter burden (MT)	Mining of Soil / Alluvium (MT)
Apr-23	18	0	0	0	924
May-23	0	0	0	0	1684
Jun-23	128	0	0	0	2380
Jul-23	0	0	0	0	0
Aug-23	0	0	0	0	0
Sep-23	99	0	0	0	2061
Oct-23	631	0	0	0	3500
Nov-23	115694	5258	0	0	54958
Dec-23	159055	7111	0	0	65310
Jan-24	125820	8235	0	0	85208
Feb-24	32365	1592	0	0	35672
Mar-24	400038	23677	0	0	17836
Total	833847.84	45872.10	0	0	269533.6

M/s -J K Cement Limited, Kakra -Panna Limestone Mines Village- Kakra, Kamtana, Saptai, Judi, Devripurohit, & Devra, Tehsil: - Amanganj Distt- Panna (MP)

AMBIENT AIR QUALITY AT MINE (CORE ZONE)

(Year 2023-24)

Area	Description	Permissible Limit (µg/m³)	Yearly Average (μg/m3)	% variation from limit
	PM _{2.5}	40	32.04	-19.91
Near Mine	PM_{10}	60	56.06	-6.56
office	SO ₂	50	11.41	-77.17
	NO _X	40	16.42	-58.96
Noor	PM _{2.5}	40	33.75	-15.61
Near	PM ₁₀	60	57.89	-3.52
Crusher	SO ₂	50	11.90	-76.21
Area	NO_X	40	17.89	-55.27
	PM _{2.5}	40	27.73	-30.66
Kakra Mine	PM ₁₀	60	55.71	-7.14
Lease Area	SO ₂	50	12.15	-75.71
	NO _X	40	14.94	-62.65

M/s -J K Cement Limited, Kakra -Panna Limestone Mines Village- Kakra, Kamtana, Saptai, Judi, Devripurohit, & Devra, Tehsil: - Amanganj Distt- Panna (MP)

AMBIENT AIR QUALITY AT MINE (BUFFER ZONE)

(Year 2023-24)

Area	Description	Permissible Limit (μg/m³)	Yearly Average (µg/m3)	% variation from limit
	PM _{2.5}	40	32.34	-19.15
Purena	PM ₁₀	60	50.86	-15.24
Village	SO ₂	50	9.59	-80.82
	NO _X	40	15.07	-62.32
	PM _{2.5}	40	34.34	-14.14
Kamtana	PM ₁₀	60	48.45	-19.25
Village	SO ₂	50	10.67	-78.66
	NO _X	40	15.83	-60.43
	PM _{2.5}	40	33.87	-15.33
Pagra	PM ₁₀	60	51.15	-14.75
Village	SO ₂	50	9.57	-80.85
	NO _X	40	13.68	-65.80