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 jkc.panna@jkcement.com
www.jkcement.com

**Ref: JK/CTO-(KONI)/2024-25/17/04** **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 Koni Simariya Lime Stone Mine of M/s. JK Cement Limited, located at Various khasra at Villages- Koni, Boda & Vanbhai, Tehsil: Simariya Distt: Panna (M.P.)**

Reference No.:

1. Ministry (MoEF&CC) letter no. J-11015/80/2020/IA.II(M) dated 01.11.2021
2. Consent No: AWH-56349 dated 25.07.2022

Dear sir,

With reference to aforesaid subject, please find herewith enclosed Environment Statement Report (Form-V) for **FY. 2023-24** of Koni Simariya Lime Stone Mine of M/s. JK Cement Limited, located at Various khasra at Villages- Koni, Boda & Vanbhai, Tehsil: Simariya Distt: Panna (M.P.)

This is for your kind information and record, please.

Thanking you.
Yours faithfully,

For Koni -Simariya 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)

**FORM – V**
[See Rule 14]

**Environmental Statement for the financial year ending the 31st March'2023 (FY: 2023-2024).**

**Koni-Simariya 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**<br>Unit Head<br>Koni-Simariya Limestone Mine,<br>M/s. J K Cement Limited,<br>437 Kh.Nos. of Villages-Koni, Boda &Vanbhai Total 307.6 Hact. Dist: Panna, Tehl : Simariya, |
| (ii). | Industry Category - Primary (STC Code) / Secondary (STC Code) | : | Read Large Scale |
| (iii). | Production Capacity Units | : | **Mining of Limestone-5.08** Million Ton per year<br>**Over Burden (OB)-1.030** Million Ton per year<br>**Soil -2.94** Million Ton per year. |
| (iv). | Year of establish | : | **03.05.2022** |
| (v). | Date of the Last Environmental Statement Submitted | : | **29.07.2023** |

## PART – B

Water & Raw Material Consumption and Limestone production

**A. Water consumption KL/Day**
**Over All Consumption**

(i) Process (Dust Suppression at Mines) :**39.9 KL/Day** (Total 14560 KL)
(ii) Cooling : N.A
(iii) Domestic : **1.11 KL/Day (** Total 405 KL **)**

**Consumption per unit of production**

| Name of Products | Process water consumption Per unit of product output **(KL/MT of Limestone)** | |
|---|---|---|
| | During the previous Financial year **(2022-23)** | During the current Financial year **(2023-24)** |
| Limestone | **0.00072** | **0.0040** |

**B. Raw material Consumption**

| (*) Name of Raw Materials | Name of Product | Consumption of Raw material Per unit of product output (**KL/MT of Limestone)** | |
|---|---|---|---|
| Description | | During the previous Financial year **(2022-23)** | During the current Financial year **(2023-24)** |
| Diesel | Limestone | **0.00099** | **0.00046** |
| 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). | | | |

**C. Raw material Consumption**

| (*) Name of Raw Materials / Description | Unit | During the previous Financial year **(2022-23)** | During the current Financial year **(2023-24)** |
|---|---|---|---|
| Diesel | Liters | **851922** | **1694007** |
| Lubricant Oil | Liters | **4263** | **15114** |
| Grease | KG | **1818** | **1929** |
| AFNO | KG | **0** | **0** |
| Slurry (Column, Prime, and base) | KG | **148781** | **575075** |
| Electrical Detonators | (In No's) | **294** | **1037** |
| Nonel Detonators | (In No's) | **57330** | **250036** |
| Detonating fuse | (in Mts) | **0** | **0** |
| 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. | | | |

**D. Total Material Production (in Ton)**

| Product | During the previous Financial year (2022-23) | During the current Financial year (2023-24) |
|---|---|---|
| Limestone | **852759.3** | **3646161** |
| Over Burden (OB) | **840039.2** | **0** |
| Soil | **108323.6** | **2339157** |

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

**E. Total Power Consumption (KWH/MT of Limestone)**

| During the previous Financial year **(2022-23)** | During the current Financial year (**2023-24)** |
|---|---|
| **1.14** | **1.31** |

**F. Total Power Consumption (KWH)**

| During the previous Financial year **(2022-23)** | During the current Financial year **(2023-24)** |
|---|---|
| **969113.180** | **1813739** |

## PART – C

**Pollution discharged to environment/unit of output**
**(Parameter as specified in the consent issued)**

| Pollutants | Quantity of pollutants Discharged (Tonne/day) | Concentration of pollutants in discharges (mass/volume) | Percentage of variation from prescribed standards with reasons |
|---|---|---|---|
| (a) Water | Waste water generated from the office toilets is treated into soak pit via septic tank. There is no waste water in mine. Mine's pit water is used for mining activities. | | |
| (b) Air | Air monitoring parameters as specified in consent and its percentage of variation from prescribed standards are enclosed as **Annexure-2**. | | |

## PART – D

**HAZARDOUS WASTES**
**[As specified under Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016]**

| Hazardous Wastes | | Total Quantity sold to recycler | |
|---|---|---|---|
| Description | | During the previous Financial year **(2022-23)** | During the current Financial year **(2023-24)** |
| (a) From Process | (a) Category 5.1 Used / Spent Oil | **0.0** | **0.0** |
| | (b) Category 5.2 Waste Residue Containing oil | **0.0** | **0.0** |
| | (c) Category 3.3 Sludge& Filters contaminated with oil | **0.0** | **0.0** |
| | (d) Category 33.1 Empty Barrels/containers/liners/contaminated with hazardous chemicals/wastes | **0.0** | **0.0** |
| (b) From Pollution Control Facilities | Nil | No hazardous waste is generated during mining activity. | |

## PART – E

**SOLID WASTES**

| Solid Wastes | Total Quantity | |
|---|---|---|
| | 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 | Over Burden: - 840039.2 MT<br>Top Soil: - 108323.6 MT | Over Burden: - Nil<br>Top Soil: - **2339157 MT** |
| *Solid wastes generated in the mine is only top soil, which is non- hazardous. | | |

## 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 containing oil | CTSDF/Sale to Recyclers authorized with SPCB |
| 3 | Category 3.3- Sludge & Filters contaminated with oil | CTSDF/Sale to Recyclers authorized with SPCB |
| 4 | Category 33.1-Empty Barrels/containers/liners/contaminated with hazardous chemicals/wastes | CTSDF/Sale to Recyclers authorized with SPCB |

**Solid waste:** No solid waste generated yet

## PART – G

I**mpact of the pollution abatement measures taken on conservation of natural resources.**

The company has taken all the possible steps for conservation of natural resources such advanced fuel efficient HEMM equipment's are deployed, rain water harvested in mining pits and used for dust suppression and for afforestation. Adequate green belt development and plantation is provided within and surrounding mining lease area.

Air-

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

The following measures is being 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 all the drill machines.
2- Regular water sprinkling is being done on haul road during operation.
3- Blasting parameters are optimize for proper fragmentation to reduce dust generation.
4- Plantation and development of Green Belt is done as per the approved mining plan.

Water:-

Being Mechanized Limestone mine it requires water mainly for Wet Drilling, Road Spraying and Green Belt Development. The source of water is borewell and the accumulated rainwater in the pit.

Noise:-

1- Geenbelt development for reducing noise.
2- PPEs are provided to all workers.

## PART – H

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

Company has spared adequate additional investment for green belt development and plantation since inception, year wise plantation detail as given below.

| M/s -J K Cement Limited, Koni- Simariya Limestone Mine Panna (M.P.) | | | | | | |
|---|---|---|---|---|---|---|
| Year wise Plantation details | | | | | | |
| S.No | Period | Area (in Hectare) | No. of Trees Planted | Survival No's | Survival Rate | Remarks |
| 1 | 2022-23 | 4.64 | 7328 | 6668 | 91.0% | |
| 2 | 2023-24 | 6.03 | 13428 | 12085 | 90.0% | |
| **Total** | | **10.67** | **20756** | **18753.68** | 90.5% | |

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 Koni-Simariya Limestone Mine:

Our Committed /EAC approved **CER total amount: Rs 863.7 Lacs as 1st & 2nd** year budget and we have spent approx. **938.69 Lakh.** Record is being maintained. Koni Simariya Mine operation start date is 03.05.2022 and all concerned activities will be completed within time. (CER expenditure is given below.)

| S.No. | Activities | Expenditure Up to March-2024 **(in Lakhs)** |
|---|---|---|
| 1 | Health (Health, Check-up, Camp, Sports etc.) | 131.53 |
| 2 | Education (Books, Bags, Stationary etc.) | 90.07 |
| 3 | Sanitation (Domestic water, Toilets etc.) | 9.39 |
| 5 | Infrastructure (Road, Community Centers, etc.) | 678.07 |

| | | |
|---|---|---|
| 6 | Other Local Social Need | 10.18 |
| 7 | Agricultural Development and Animal Husbandry | 19.45 |
| Total | | **938.69** |

## PART – I

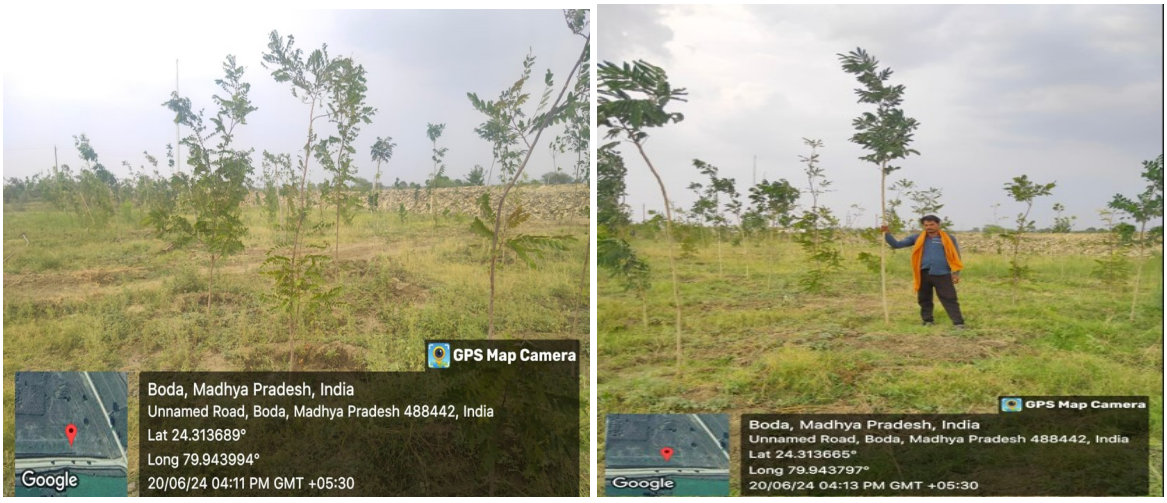
**Any other particulars for improving the quality of the environment.**

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

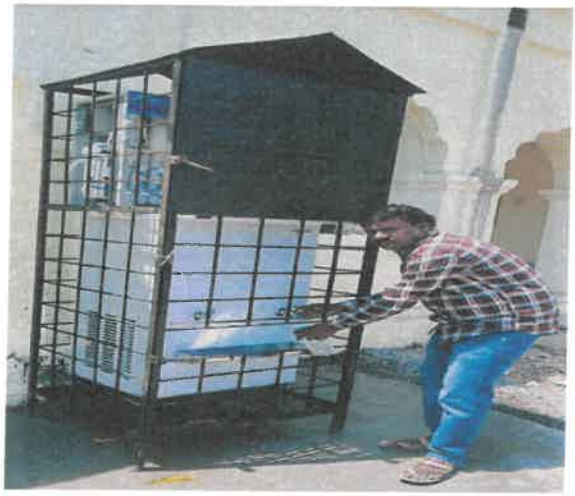
**Measures taken for Environmental protection and to conserve natural resources:**

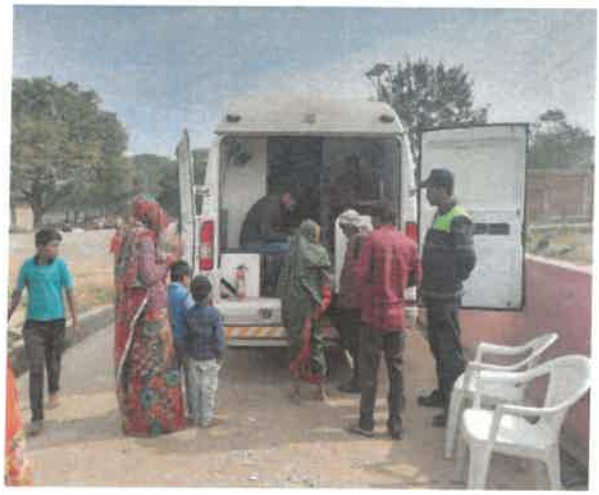
**1-** Sprinkling of water for dust suppression round the clock.
**2-** Roads are regularly maintained by deploying motor grader.
**3-** Wet drilling by water injection system.
**4-** Green Belt is being developed as mining plan.
**5-** Environment Monitoring is being done time to time through NABL accredited lab.
**6-** Development of thick green belt around the periphery of the mines.
**7-** Reclamation, Rehabilitation & Restoration by Plantation
**8-** Scheduled maintenance of all HEMM vehicles is being done regularly.
**9-** Use of non-electric initiation system in the blasting operation to reduce air blast & fly rock.
**10-** Daily monitoring of blast induced ground vibration by Seismograph.
**11-** Rain water harvesting in mines sumps.

**Photographs showing various Environment protection measures at Mines**




**Greenbelt Development along lease Boundary**





**For providing safe drinking water to patients and Community health centre ,Simaria**


**Renovation and E-Class setup in Govt. School of Koni**

**Name: Kapil Agrawal**
**Unit Head**
**(Koni-Simariya Limestone Mine)**
**M/s J K Cement Limited, Panna**

**Date: 10.09.2024**

**Annexure-1**

| Sr.No | Month | Mining of Limestone Production | Over Burden (OB) | Soil |
|---|---|---|---|---|
| | | (MT) | (MT) | (MT) |
| 1 | **Apr-23** | 252473 | 0 | 100762 |
| 2 | **May-23** | 314436 | 0 | 410530 |
| 3 | **Jun-23** | 237668 | 0 | 394459 |
| 4 | **Jul-23** | 220900 | 0 | 67607 |
| 5 | **Aug-23** | 239543 | 0 | 127570 |
| 6 | **Sep-23** | 403026 | 0 | 134268 |
| 7 | **Oct-23** | 447432 | 0 | 388101 |
| 8 | **Nov-23** | 375568 | 0 | 227125 |
| 9 | **Dec-23** | 388607 | 0 | 156806 |
| 10 | **Jan-24** | 272474 | 0 | 119317 |
| 11 | **Feb-24** | 310891 | 0 | 70501 |
| 12 | **Mar-24** | 183143 | 0 | 142112 |
| **Total** | | **3646161** | **0** | **2339157** |

**Annexure-2**

**M/s -J K Cement Limited, Koni- Simariya Limestone Mine Panna (M.P.)**
**AMBIENT AIR QUALITY AT MINE (CORE ZONE)**
**(Year 2023-24 )**

| Area | Description | Permissible Limit ($\mu g/m^3$) | Yearly Average ($\mu g/m3$) | % variation from limit |
|---|---|---|---|---|
| Near CAAQMS (Mine site) | $PM_{2.5}$ | 40 | 29.56 | -26.10 |
| | $PM_{10}$ | 60 | 56.15 | -6.41 |
| | $SO_2$ | 50 | 11.76 | -76.48 |
| | $NO_2$ | 40 | 16.20 | -59.51 |
| Near Crusher Area | $PM_{2.5}$ | 40 | 31.34 | -21.64 |
| | $PM_{10}$ | 60 | 55.00 | -8.33 |
| | $SO_2$ | 50 | 10.79 | -78.41 |
| | $NO_2$ | 40 | 15.55 | -61.12 |
| Near Mine office | $PM_{2.5}$ | 40 | 31.00 | -22.49 |
| | $PM_{10}$ | 60 | 54.47 | -9.21 |
| | $SO_2$ | 50 | 12.93 | -74.15 |
| | $NO_2$ | 40 | 15.80 | -60.50 |

**M/s - J K Cement Limited, Koni- Simariya Limestone Mine Panna (M.P.)**
**AMBIENT AIR QUALITY AT MINE (BUFFER ZONE)**
**(Year 2023-24 )**

| Area | Description | Permissible Limit ($\mu g/m^3$) | Yearly Average ($\mu g/m3$) | % variation from limit |
|---|---|---|---|---|
| Kolkaraiya Village | $PM_{2.5}$ | 40 | 26.94 | -32.66 |
| | $PM_{10}$ | 60 | 47.04 | -21.60 |
| | $SO_2$ | 50 | 12.27 | -75.47 |
| | $NO_2$ | 40 | 15.17 | -62.07 |
| Tighara Village | $PM_{2.5}$ | 40 | 28.01 | -29.98 |
| | $PM_{10}$ | 60 | 51.67 | -13.89 |
| | $SO_2$ | 50 | 10.09 | -79.82 |
| | $NO_2$ | 40 | 14.70 | -63.26 |
| Sotipura Village | $PM_{2.5}$ | 40 | 27.60 | -31.01 |
| | $PM_{10}$ | 60 | 47.55 | -20.74 |
| | $SO_2$ | 50 | 9.97 | -80.07 |
| | $NO_2$ | 40 | 14.11 | -64.72 |
| Semariya Villlage | $PM_{2.5}$ | 40 | 29.96 | -25.11 |
| | $PM_{10}$ | 60 | 48.25 | -19.58 |
| | $SO_2$ | 50 | 12.76 | -74.49 |
| | $NO_2$ | 40 | 16.93 | -57.68 |