

Through: Courier Service

JKCW/ENV/Env. Statement/Halki Mine/2024-25/77/10

Date: 20.09.2024

To

The Member Secretary,
Karnataka State Pollution Control Board,
49, 4th & 5th floor,
Parisara Bhavana, Church Street,
Bangalore - 560 001.

Dear Sir,

Sub: Submission of **Environmental Statement Report in "Form-V" FY 2023-24** of
Halki Limestone Mine of M/s JK Cement Ltd. located at Halki Village,
Mudhol Taluk, Bagalkot District, Karnataka-reg

Ref:-1 Notification No. Vide GSR 329 (E) dated 13.03.92 and GSR 386 (E) dated
22.04.1993.

Ref:-2 Vide Combined Consent Order AW-323791 dated 17.02.2021.

As mentioned in the above cited subject matter, we are here by submitting the
"Environmental Statement Report" FY 2023-24 in the prescribed format (Form V)
under Environment (Protection) Rules, 1986 pertaining to Halki Limestone Mine of
M/s J K Cement Ltd., located at Halki Village, Mudhol Taluk, Bagalkot District,
Karnataka

Kindly acknowledge the receipt of the same.

Yours faithfully

For Halki Limestone Mine, Halki (Karnataka)
(Unit: J.K. Cement Ltd.)



Prabhat Singh Parihar
(Unit Head)

Enc: as above

cc:

1. The Environmental Officer, Karnataka State Pollution Control Board, Sector No. 07,
by pass road, Navanagar, Bagalkot- 587 102

Corporate Office

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**JK SUPER
CEMENT**
BUILD SAFE

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

JK CEMENT
WallMaxX
White Cement Wall Putty



2. Additional Principal Chief Conservator of Forests (C), Ministry of Environment & Forest, Govt. of India, Regional office (Southern zone), Kendra Sedan, IVth Floor, E & F Wings, 17th Main Road, II Block, Koramangala, Bengaluru, Karnataka -560 034.
3. Scientist 'D' & Incharge, Central Pollution Control Board, 1st & 2nd Floors, Nisarga Bhavan, A-Block, Thimmaiah, Main Road, 7thD Cross, Shivanagar, Opp. Pushpanjali Theatre, Bengaluru, Karnataka 560 079



ENVIRONMENTAL STATEMENT

[FORM-V]



for
Halki Limestone Mine of JK Cement Works, Muddapur
Limestone Mining: 2 Million TPA
FOR THE
FINANCIAL YEAR
2023-2024
by



M/s. Halki Limestone Mine

Unit: JK Cement Ltd.

Halki Village, Mudhol Taluk, Bagalkot District, Karnataka-587122



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FORM - V

(See Rule 14) of Environment (Protection) Rules, 1986)

Environmental Statement for the Financial Year ending on 31st March 2024

M/s Halki Lime Stone Mine (Unit: J. K. Cement Limited)

PART - A

(i)	Name and address of the owner / occupier of the industry operation or process.	:	Mr. Prabhat Singh Parihar (Unit Head) Halki Lime Stone Mine (Unit: J. K. Cement Limited) Village-Halki, District: Bagalkot, Karnataka.
(ii)	Industry category Primary (STC Code) Secondary (SIC Code)	:	Red Category : :
(iii)	Production Capacity	:	2.0 Million TPA
(iv)	Year of Establishment	:	Year 2008
(v)	Date of Last Environment Statement submitted	:	07-09-2023

PART - B

Water and Raw Material Consumption

(i) Water Consumption:

Dust Suppression	:	22789 KL
Cooling	:	NIL
Domestic	:	175 KL

(ii) **Consumption per unit of production**

Name of the Product	Process Water Consumption (m ³) per unit (metric ton) of Product Output	
	During the Previous Financial Year (2022-23)	During the Financial Year (2023-24)
Limestone	0.013	0.014

(iii) **Raw Material Consumption.**

Name of the Raw Material	Consumption of Raw Material (metric ton) per unit (metric ton) of Output	
	During the Previous Financial Year (2022-23)	During the Financial Year (2023-24)
Diesel	0.00068	0.00060

PART – C

Pollution Discharged to Environment/unit of output
(Parameter 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	Waste water generated from the office toilets is discharged into soak pit via septic tank. There is no waste water in the mine. Mine's pit water is used for dust suppression in mine. Pit water testing report is as below in tabular form.		

Halki Mine's Pit Water Analysis Report

Pollutant	Unit	Concentrations of Pollutants in Discharges	Standards	Percentage of variation from prescribed standards with reasons
Colour	Hazen units	1.5	15	Within prescribed limits
Conductivity	µs/cms	2209.3	-	Within prescribed limits
Total Dissolved Solids	mg/L	1439.7	2000	Within prescribed limits
pH	-	7.3	NR	Within prescribed limits
Turbidity	NTU	1.3	5	Within prescribed limits
Phosphorous as P	mg/L	0.1	-	Within prescribed limits
Sodium as Na	mg/L	144.1	-	Within prescribed limits
Potassium as K	mg/L	9.5	-	Within prescribed limits
Calcium as Ca	mg/L	143.2	200	Within prescribed limits
Magnesium as Mg	mg/L	42.3	100	Within prescribed limits
Total Hardness as CaCO ₃	mg/L	532.0	600	Within prescribed limits
Chloride as Cl	mg/L	257.4	1000	Within prescribed limits
Sulphate as SO ₄	mg/L	100.7	400	Within prescribed limits
Fluoride as F	mg/L	0.8	1.5	Within prescribed limits
Nitrate Nitrogen as NO ₃	mg/L	3.9	NR	Within prescribed limits
Total Alkalinity as CaCO ₃	mg/L	238.3	600	Within prescribed limits
Total Iron as Fe	mg/L	BDL	NR	Within prescribed limits
Nickel as Ni	mg/L	BDL	NR	Within prescribed limits
Manganese as Mn	mg/L	BDL	0.5	Within prescribed limits
Copper as Cu	mg/L	0.1	1.5	Within prescribed limits
Zinc as Zn	mg/L	BDL	15	Within prescribed limits
Lead as Pb	mg/L	BDL	-	Within prescribed limits
Chromium as Cr	mg/L	BDL	-	Within prescribed limits
Mercury as Hg	mg/L	BDL	-	Within prescribed limits
NR*-No Relaxation				

(b)	Air	There is no point source emission in mine. Ambient air quality and fugitive emission monitoring data is shown below in tabular form.
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Ambient Air Quality			
Pollutant	Concentrations of Pollutants in Discharges (Mass/volume) $\mu\text{g}/\text{m}^3$	Annual Avg in $\mu\text{g}/\text{m}^3$	Percentage of variation from prescribed standards with reasons
Near Mine's Office			
PM ₁₀	54.1	60	Within Prescribed limits
PM _{2.5}	20.1	40	Within Prescribed limits
SO ₂	13.4	50	Within Prescribed limits
NO _x	15.5	40	Within Prescribed limits
North Boundary Side			
PM ₁₀	56.9	60	Within Prescribed limits
PM _{2.5}	22.1	40	Within Prescribed limits
SO ₂	13.8	50	Within Prescribed limits
NO _x	17.6	40	Within Prescribed limits
Halki Village			
PM ₁₀	57.2	60	Within Prescribed limits
PM _{2.5}	20.8	40	Within Prescribed limits
SO ₂	13.5	50	Within Prescribed limits
NO _x	17.6	40	Within Prescribed limits
Metgud Village			
PM ₁₀	56.6	60	Within Prescribed limits
PM _{2.5}	21.2	40	Within Prescribed limits
SO ₂	12.9	50	Within Prescribed limits
NO _x	14.9	40	Within Prescribed limits
Fugitive Emission Monitoring (SPM) in mg/m^3			
Drilling Area	0.99	1.2	Within Prescribed limits
Loading Area	0.86	1.2	Within Prescribed limits
Haulage Road	0.81	1.2	Within Prescribed limits
Waste Dumping Site	0.98	1.2	Within Prescribed limits
Service Road	0.92	1.2	Within Prescribed limits

PART – D

(As specified under Hazardous waste / Management and Handling rules, 1989, 2008, 2016 and amendments thereof)

Hazardous Waste	Total Quantity (KL)	
	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.

PART – E

Solid Wastes

Solid Waste		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)	(i) Qty. recycled or reused Within the unit.	N.A.	N.A.
	(ii) Sold	N.A.	N.A.
	(iii) Disposed: During the mining of limestone disposed of overburden (In MT)	<ul style="list-style-type: none"> ➤ Over burden generated - 93158 MT ➤ Over burden disposed / used in plantation – 93158 MT 	<ul style="list-style-type: none"> ➤ Over burden generated - 65850 MT ➤ Over burden disposed / used in plantation – 65850 MT

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 wastes:** No Hazardous waste is being generated due to mining operations.
- **Solid Wastes:** Except Overburden, no solid waste is being generated during mining operations and the same is being used for development of greenery.

PART – G

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

There is no impact on vegetation & water bodies in the surrounding areas due to mining activities, dust is suppressed at its generating sources. The following measures are taken to suppress the dust.

- 1- Periodical haul road maintenance and water sprinkling is being practiced for control of dust.
- 2- Wet drilling practiced and sharp drill bits used for drilling.
- 3- Induced ground vibration monitoring done regularly at the time of blasting operation.
- 4- Nonel system have been adopted for controlling of fly rock and induced ground vibration during blasting.
- 5- Dump slopes have been stabilized with plantation & green belt developed all along the lease boundary
- 6- Drainage systems have been made all along the embankments of broken-up area, the rain water diverted is collected into water recharging & harvesting pits, the water is used for operations of plant, dust suppression and plantation purpose.
- 7- Retaining walls are constructed and drainages have been made to control soil erosion at overburden dump bottom.
- 8- Asphalt & CC roads are paved from mines head to crusher hopper.

No discharge of rain water from the mines to outside lease area, rain water in the catchment area at mine lease is diverted through drainage system as per the natural gradient.

Noise is generated in the mine due to following mining activities:

- Excavation, drilling, blasting and operations of HEMM.
- Transportation and handling of material.

The results of noise monitoring are well below the permissible limits, the following measures are taken to reduce the noise level:

- Providing enclosures for noise sources to reduce dispersion of noise like cabin in HEMM.
- Proper maintenance and lubrication of machinery rotating parts.
- Use electric delay detonator on surface in place of detonating fuse.
- By covering the detonating fuse as well as detonators under drill cutting or the fine material.
- By providing earmuffs and earplugs to eligible miners.
- Use of Air Decking & sufficient column stemming in the blast holes.

PART – H

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

Plantation has been done on OB sites, road sides and on other parts of non-mineralized ML area. The top layer of the dump material and slopes are covered with top soil which is excellent property of water retention that supports good tree growth.

Green Belt development has been taken up in phased manner, during the FY 2023-24, we have planted 1348 no's of saplings in Halki mine. The total plantation covered from inception of plant to 31st March 2024 in Halki Mine is 39867 no's covering an area of 11.05 Ha.

PART – I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT.

- Regular water spraying is being done on haulage road and near loading places for effective dust suppression and thick plantation in and around the mine is being done.
- Regular and proper maintenance of noise generating machinery including the transport vehicles is being done to maintain noise levels and air quality is being regularly monitored.
- Delay detonators and shock tube initiation system is being used for blasting so as to reduce vibration and dust

- Sharp drill holes and drills with water flushing systems are being used to reduce dust generation.
- We are providing all personal protective equipment (PPEs) to all mine employees i.e. dust mask (respirator), ear plug & ear muff, safety goggles, etc. concern to them as additional measures of Air & Noise Pollution Control.
- We are having environmental laboratory for the monitoring of ambient air quality, water testing, noise monitoring etc.
- Industry has been certified for Standards ISO 9001, 14001, 45001 and 50001.
- Renewal energy / Green energy generation through solar lighting system.
- Fencing all along the plantation area for increasing survival rate of plantation.
- Water conservation through pipeline system & water sprinklers system.

World Environment Day 5th June 2024 is the biggest international day for the environment, led by the United Nations Environment Programme (UNEP), and held annually since 1972, it has grown to be the largest global platform for environmental outreach. It is celebrated by millions of people across the world.

JKCW, Muddapur celebrated World Environment Week from 5th to 10th June, various events like plantation drives and awareness programs were conducted across organization to create awareness, glimpses of the event are as follows:



Plantation drive on World Environment day

