



**UCWL** UDAIPUR CEMENT  
WORKS LIMITED

## **ENVIRONMENT STATEMENT**

(FORM V)

Udaipur Cement Works Limited

**Daroli Limestone Mine-2**

**YEAR 2021-22**



**Udaipur Cement Works Limited**

SHRIPATINAGAR, P.O. CFA: DABOK,  
DISTRICT – UDAIPUR (RAJASTHAN)-313021

Udaipur Cement Works Limited, Environmental Statement for the financial year ending on **31<sup>st</sup> March, 2022**

(See rule 14)

## Environmental statement for the financial year ending the 31<sup>st</sup> March 2022

### PART – A

1.	Name and address of the Owner/Occupier of the Industry, operation of the process.	:	<b>DAROLI LIMESTONE MINE-2</b> <b>M/s UDAIPUR CEMENT WORKS LIMITED,</b> SHRIPATINAGAR, P.O. CFA - 313021, DISTRICT – UDAIPUR (RAJASTHAN)
2.	Industry category	:	RED, LARGE
3.	Production Capacity	:	1.5600 MTPA
4.	Year of establishment	:	1982
5.	Date of the last environmental statement submitted	:	28 <sup>th</sup> September, 2021

MTPA: Million Tonnes Per Annum

### PART – B

#### Water and Raw Material Consumption

##### (I) Water consumption in m3/day.

Process	:	Nil
Cooling	:	204 m3 /day (Dust Suppression Haulage Road, Crusher)
Domestic	:	25 m3 /day
(Includes water used in both the mines)		

Name of products	Process Water consumption ** per unit of product output (Dust Suppression Haulage Road)	
	During the Previous financial year 2020-21	During the current financial year 2021-22
	(1)	(2)
Limestone	0.038 KL/Ton of Limestone	0.038 KL/Ton of Limestone

(\*\* Dust Suppression Haulage Road, Crusher & wet drilling)

##### (II) Raw Material consumption

S. No.	Name of raw material	Consumption of raw material per unit output (Per Tonne)	
		During the Previous financial year 2020-21	During the current financial year 2020-21
1.	Ammonium Nitrate (Kg/Ton of Limestone)	0.119	0.108
2	Nitro Mixture (Kg/Ton of Limestone)	0.029	Nil
3	Diesel (Liter/Ton of Limestone)	0.54	0.58

##### (IV) Production

S. No.	Name of Product	During the previous financial year 2020-21	During the current financial year 2021-22
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1	Limestone (MT)	180407	505199
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### PART – C

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

S. No	Pollutants	Quantity of Pollutants discharged (mass/day)	Quantity of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reason.
<b>a. Water</b>				
	Industrial	NIL	NIL	Zero Discharge
	Domestic	NIL	NIL	Zero Discharge
<b>b. Air</b>				
	(Stack emission) Particulate matter	<b>Avg. values for the year (21-22)</b>		
		<b>Stack Attached to</b>	<b>Quantity of Pollutants discharged (kg/day)</b>	<b>Quantity of Pollutants discharged (mg/Nm3)</b>
		Crusher Bag Filter	4.81	16.2
				Percentage of variation from prescribed standards with reason.
				- 46 % (Below Prescribed Standards)

*(Crusher is common for both the mines and is located in Daroli Mine 1 lease area)*

### PART - D

#### Hazardous Wastes

(As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016)

S. No.	Hazardous Waste	Total quantity	
		During the previous financial year 2020-21	During the current financial year 2021-22
a.	From Process	NIL	1.84 KL
b.	From pollution control facility	NIL	NIL

### PART E

#### Solid Waste

Sl. No.	Solid Waste	Total quantity (Tons)	
		During the Previous financial year 2020-21	During the current financial year 2021-22

a.	From Process (Face Reject)	Nil	13135
b.	From pollution control facility	Nil	Nil
c.	Quantity recycled or reutilized	Nil	Nil

## PART – F

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

### (i) Hazardous Waste:-

The Used Oil was generated in year 2021-22 was 1.84 KL due to maintenance of mining machinery and vehicles, other crushing machinery and miscellaneous mining equipment's.

The Used oil is stored in closed leak proof steel containers and kept on an impervious site at an isolated place, properly marked with a sign board having danger sign and warning text **"Hazardous waste – Unauthorized persons keep away"**, and away from the operational area and human activities & is sold to the authorized recyclers only.

### Bio Medical Waste Management-

The Bio-medical waste generated from OHC Centre, located in Shripati Nagar Colony are being segregated into colored bins & disposed through the authorized CBWDF I.e., M/s En- Vision. The transportation of BMW done by their own vehicle for final treatment and disposal.

S/N	BMW Quantity disposed during	:	2021-22
1	Category wise waste generated & sold to M/s Envision for disposal	:	Yellow Category:- 48.5 Kg
		:	Red Category:- 7.3 Kg
		:	White:- 0.65 Kg
		:	Blue Category:- 31.8 Kg
		:	General Solid Waste:- 50 kg

## PART – G

**Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.**

The following control measure are provided for the abatement of pollution and conservation of natural resources

### Air Pollution Control Measures

- ❖ All the mining machinery deployed at mine area is equipped with latest technology having less emission.
- ❖ Dust Extractor and wet drilling arrangement have been provided in all drill machines for the dust suppression during drilling operation.
- ❖ Installed cross belt analyzer for online quality checking.
- ❖ Unit has installed one of its lightweight structures based 6.00 kms long Covered Over Land Belt Conveyor from mines crusher to plant site that eliminates the need of transportation of limestone via trucks through roads, thereby saving fuel and thus mitigating associated carbon emissions.

- ❖ Provided 3 numbers of water tanker fitted with water sprinkling arrangement for the dust suppression at mine haul Road, operating face, loading points etc.
- ❖ Blasting operation carried out in daytime only.
- ❖ Rock breaker for breaking of oversize boulders instead of secondary blasting which eliminated its vibration noise and Fly rocks.
- ❖ Use of high-capacity dumpers for material handling in mining.
- ❖ Regular maintenance of HEMM is on time.
- ❖ To ensure vehicle emission within the limits, six monthly monitoring of the vehicle emission PUC of all HEMM is being done.
- ❖ Persons working in mines area provided dust mask as a protective respiratory device.
- ❖ Crusher hopper provided with water sprinkler system, and it is covered from side, to control the dust emission during unloading of limestone. The crushing point is installed in mining lease area, which is equipped with highly efficient Bag Filters ensuring the emission (PM) level below standards, as prescribed by the government and regulatory body.
- ❖ There are covered conveyor belts for transfer of material from one location to other, are equipped with bag filters.
- ❖ Bag filter provided at material transfer point and transportation of limestone through closed conveyor belt.
- ❖ Tree plantation in & around mines area.
- ❖ Regular ambient air quality monitoring is being carried out.

#### **Noise vibration & fly rock control measures**

The following measure are considered for noise vibration and Fly rocks

- ❖ The controlled blasting is being practiced by optimum explosive.
- ❖ Latest blasting technology resulting in reduction of noise level in ground vibration to great extent.
- ❖ Control blasting with proper spacing burden in steaming will be practiced.
- ❖ The blasting operation will be carried out only on daytime.
- ❖ The operator cabin is safeguarded with proper enclosures to reduce the noise level.
- ❖ Tree plantation around mine area to attenuate noise.
- ❖ Mining is practiced as per guideline Recommendation of DGMS.

#### **Water pollution control measures**

There is no wastewater generation from mining activity as the water is only required for spraying/ dust suppression purposes. An Effluent treatment plant with the capacity of 10 KLD is installed at mine workshop to treat the wastewater generate during washing of HEMM, the treated water is being recirculated and re-utilized for washing of mines machinery vehicles However, no wastewater is being discharged from mine premises and we are maintaining zero discharge

- ❖ Check Dam was prepared in the east of Manderia pit to rain harvest water and refill the ground water. Heavy inrush of rainwater is also stop which erodes the topsoil of nearby village area.
- ❖ As per CGWA Guideline, unit has installed digital water meter at Borewell to monitor the water abstraction.

- ❖ Effective Water sprinklers & dry fog system installed at crusher dump hopper and regular water sprinkling is done at truck haulage roads to prevent fugitive dust emissions occurring due to movement of vehicles.

As per CGWA Guideline, The UCWL has renewed the NOC for abstraction of 2525 KLD ground water from CGWA on 18/02/2022 & the same is valid till 21/04/2024, UCWL has installed 10 Nos of digital water flow meter at borewell to monitor the water abstraction along with telemetry service & Digital water level recorder (3 Nos).

UCWL has been taken of action for the recharge of ground water level. Most of the buildings (Guest house, Admin & Technical building, store) are connected to the harvesting pits by roof top rainwater harvesting system & construct one more harvesting structure near school building for recharge of rain water in the residential colony.

CGWA Compliance- UCWL always committed to meet environmental and conduct ground Water Audit by National Productive Council.

#### Award:-

**Daroli Limestone Mines (ML-2)** has been awarded in the following categories during 32<sup>nd</sup> Mines Environment and Mineral Conservation Week 2021-22 hosted by **Birla Cement works, Chittorgarh**:

S. No.	Prize Awarded	Category
1	<b>Second</b>	<b>Mineral Beneficiation</b>
2	<b>Second</b>	<b>Mineral Conservation</b>
3	<b>Third</b>	<b>Afforestation</b>



#### Development Activities



A Visual of Garland drain around the dumps to arrest silt and sediment flows.





A Visual of Garland drain around the dump yard



CAAQMS & Digital Display Board



A Visual of Digital Water meter, Digital water level recorder along with telemetry service.



Sewage Treatment Plant



Effluent Treatment Plant



Wet Drilling



Water Sprinkler



Water fogging System arrangement at Cone



Water Sprinkling system at Crusher hopper

	Crusher	
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## PART – H

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

- ❖ Green belt development and tree plantation is our ongoing process. In financial year 2021-22 about 3000 tree saplings were planted in mines lease 1 area. Plantation as per the provisions under the approved Mine Plan have been strictly adhered to and undertaken at designated locations.
- ❖ Up-gradation of conventional dust suppression system by atomized dust suppression system for conservation of water.

Furthermore, about Rs. 37.45 Lakh were invested towards Environment Protection and improvement up to 31st March, 2022 in Mines.

## PART – I

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

UCWL has undertaken various steps towards conservation of natural resources and energy through continuous improvement and various in-house modifications. Some of the major activities carried out are briefed as follows.

1. Full-fledged Environment management cell for Environmental monitoring, maintenance of pollution control equipment and green belt development.
2. Regular housekeeping of crusher and mines area is being done.
3. UCWL has well equipped environment monitoring laboratory with monitoring equipment's such as Respirable Dust (PM 10) Sampler, Gaseous sampling attachment, Fine particulate (PM 2.5) sampler, sound level meter, UV-VIS spectrophotometer, TDS-Conductivity meter, pH meter etc.
4. Awareness promotion through various environmental competitions, presentations, mails, tree plantation etc. on world environment day, Earth Day etc.
5. Mechanized Handling of material is done (i.e., Unloading, storage, loading and feeding).
6. Heavy Earth Moving Machines (HEMM) and Dumper operators are provided required PPE's like dust masks, ear plugs etc . HEMM and dumpers are having PUC certificates and periodically obtain the same.
7. Periodic Environmental monitoring in term of ambient air, Noise, & treated water quality & water level monitoring carried out by MoEF&CC approved laboratory.
8. Awareness among the workforce by way of active participation in 32nd Mines Environment & Mineral Conservation Week.
9. Installation of two stage crushing system for limestone crushing, to achieve lower wear rate

### **Accreditation**

The UCWL is ISO Certified organization & certified by Bureau Veritas under following standards.

- 1) ISO 9001:2015 for Quality Management System
- 2) ISO 14001:2015 for Environment Management
- 3) ISO 50001:2011 for Energy Management System
- 4) ISO 45001:2018 for Occupational Health & Safety Management System

# World Environment Day



This year on 05<sup>th</sup> June 2021, Udaipur Cement Works Limited actively celebrated 47<sup>th</sup> World Environment Day. The United Nation Declared the theme “Ecosystem Restoration - Reimagine, Recreate, Restore” for the year.

At beginning of the day, all UCWL employees and their family members took pledge for sustainable living habits followed by plantation in Mango Trees Garden at Plant Premises.

Various competitions were organized to Aware, Sensitize, Engage and Encourage our society and nearby community about importance of the Environment. Competitions such as Spot Quiz, Essay Writing, Extempore, Poster Competition etc. were organized Category wise & Age wise for MCS, workers, Home Makers and Children. All competitions were evaluated by Judges and participants and winners were awarded by Eco-Friendly Prizes.

UCWL conducted Technology Webinar Series - 2021 for all Units of JK Lakshmi Cement Ltd. and UCWL, Udaipur during 07<sup>th</sup> June - 15<sup>th</sup> June on the WED theme. Total 08 Eminent Speakers from different environment fields interacted and shared their knowledge and experience on the theme Ecosystem Restoration. Employees and their families participated enthusiastically and benefited from this knowledge sharing platform.

The programme was celebrated from 31<sup>st</sup> May 2021 to 15<sup>th</sup> June 2021.



## TECHNOLOGY WEBINAR Series 2021

DATE	TIME	SPEAKER
14	07:00 PM	Dr. V. Mahesh
15	07:00 PM	Dr. V. Mahesh
07	07:00 PM	Dr. V. Mahesh
12	07:00 PM	Dr. V. Mahesh
11	07:00 PM	Dr. V. Mahesh
10	07:00 PM	Dr. V. Mahesh
09	07:00 PM	Dr. V. Mahesh
08	07:00 PM	Dr. V. Mahesh

**CONTACT**  
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**WEBINAR SCHEDULE**  
03:30 PM - 04:30 PM

**DATE**  
07-Jun-2021  
08-Jun-2021  
09-Jun-2021  
10-Jun-2021  
11-Jun-2021  
12-Jun-2021  
13-Jun-2021  
14-Jun-2021  
15-Jun-2021

**WE INNOVATE. WE ENERGIZE.**



On the World Environment day let us reaffirm our environment (terrestrial and aquatic ecosystem) & protect our biodiversity We should evidently improve our ecosystem and accelerate progress towards the sustainable development goals.

SH. NAVEEN KUMAR SHARMA  
(Whole Time Director)

