

Ref: ACL/MM/ENV/ESR-LSCI/2021-22

Date: 28/09/2022

To.

The Member Secretary,
Rajasthan State Pollution Control Board
4, Institutional Area Jhalana Doongri
JAIPUR - 302004 (RAJ)

Sub.: Environmental Statement Report (Form-V) for Limestone Crusher and Auxiliaries plant situated at Limestone Crusher, Mine lease no 111 /2007 in favor of M/s Ambuja Cement Ltd. Near at Village Inana Tehsil: Nagaur District: Nagaur (Rajasthan) for the period of April-2021 to March-2022

Ref.: File No.: F (Tech) /Nagaur(Nagaur) /2700 (1)/2019-2020/3370-3371 , Order No. 2020-2021/ Kishangarh /11609, Dated 17/03/2021.

Dear Sir,

This has reference to the above subject matter and referred letter. In this regard, We are Submitting herewith the Environmental Statement Report as per Rules 14 of EPA ,1986 & amendment for Limestone Crusher and Auxiliaries plant of M/s Ambuja Cement Ltd, Unit marwar Mundwa, District. Nagaur(Raj) for the period of **April-2021 to March-2022** for your Kind reference & record.

Thanking you with regards,

Yours Faithfully

For Ambuja Cement Ltd. Unit: Marwar-Mundwa



Hamendra Sigh Rathore (Unit Head)

Encl. a/a Copy To:

- 1. The Deputy Director(\$) /Scientist –C, Ministry of Environment, Forest & Climate Change, Integrated Regional Office, Aranya Bhawan, Room No. A-209&218, Institutional Area, Jhalana Doogari, Jaipur (Rajasthan)-302004
- 2. The Regional Officer, RSPCB, 1st Floor, Sahkari Bhumi Vikas Bank Ltd, opposite Police Line, Nagaur- 341001.



# **Ambuja Cement**

# ENVIRONMENT STSTEMENT REPORT (FORM-V)

(FY 2021-2022)

For

Lime stone Crusher and Auxiliaries plant situated at, M.L.No 111/2007)

# Reported by:

M/s Ambuja Cement Ltd., Unit: Marwar-Mundwa,
Post & Tehsil: Mundwa, District: Rajasthan (Raj)

#### Introduction

Ambuja Cement Limited (ACL), formerly known as Gujarat Ambuja Cements Limited, is a major cement producing company in India. The Group's principal activity is to manufacture and market cement and clinker for both domestic and export markets. Now, Ambuja Cements Ltd., has become a part of the global conglomerate Lafarge-Holcim.

Ambuja Cements Limited (ACL) is having five integrated cement manufacturing plants, eight cement grinding units; and the first in the industry with a captive port and four bulk cement terminals along the west coast of India. Established in 1986, ACL is among country's 'Most Sustainable Companies' and is recognized for its best practices in environment management and corporate citizenship.

Ambuja cements Limited does lot of work on water management and being certified over Eight times Water Positive, Ambuja cements limited is also plastic negative, by co-processing plastic waste in its kilns, equivalent to around 2.5 times of total plastic used.

The company also generates 7.9% of its power needs from renewable resources. It has been ranked #4 in the globally recognized Dow Jones Sustainability Index (DJSI); All Ambuja Cement plants are ISO 14001 certified.

"FORM - V"

(See rule 14)

#### ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31 TMARCH 2022

#### PART - A

1.	Name & Address Of The Owner / Occupier Of The Industry Operation Or Process(As Per Factory Act)	Limestone Crusher and Auxiliaries plant situated at Mine lease no 111 /2007 of Ambuja Cements Ltd. Unit: Marwar Mundwa, Teshil : Nagaur District Nagaur (Raj.) Pin code: 341026.	
2.	Industry Category	Orange category	
	Primary:-(Stc Code)		
	Secondary:-( Sic Code)		
3.	Production Capacity: (Designed /	3.0 MTPA	
	Installed Capacity)		
4.	Year Of Establishment :	18.09.2020 (Production start on Sept-2021)	

5.	Date Of Last Environmental Statement	First Time
	Submitted	

#### PART - B

#### WATER & RAW MATERIAL CONSUMPTION

1.	WATER CONSUMPTION M <sup>3</sup> /day	
2.	Process	15899 M <sup>3</sup> (As mines is based on dry process
		technology) (Common for Mines ML-I , ML-II &
		crusher)
3.	Cooling	Not applicable
4.	Domestic	3700 M <sup>3</sup> (Common for Mines ML-I, ML-II & crusher)

	Process water consumption per unit of Lime stone output		
Name of products	During the previous financial year (2020-21)	During the current financial Year (2021-22)	
	(1)	(2)	
Lime Stone	Nil 0.00751 KL/MT of Lime stone		

#### (II) RAW MATERIAL CONSUMPTION

		Consumption of raw material per unit of output	
* Name of raw	Name of products	During the previous	During the current
materials		financial year	Financial year (%)
		(%)(2020-21)	(2021-22)
NA			

#### (III) POWER CONSUMPTION ( KWH/T OF LIME STONE )

During the previous financial year (2020-21)	During the current financial Year (2021-22)
Nil Nil	1.549 Kwh / MT of Lime stone

## (IV) TOTAL LIME STONE PRODUCTION:

Product	During the previous financial year (2020-21)	During the current financial Year (2021-22)
Lime stone	Nil	2114552 Tones

#### PART - C

## POLLUTION DISCHARGE TO ENVIRONMENT / UNIT OF OUTPUT

(Parameters as specified in the consent issued)

Pollutants	Quantity of pollution discharged (mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a)	No waste water generated from the crushing process. Waste water generated from the office toilets is disposed into soak pit via septic tank & waste water generated from mines workshop has some traces of oil & grease is being separated by passing the water through up flow filter & treated water is used reuse for vehicle washing /dust suppression.		
(b)	Air Please see Annexure-1.		
(c)	Water & Noise	Please see Annexure-2.	

#### PART - D

AS SPECIFIED UNDER HAZARDOUS WASTE & OTHER WASTE (MANAGEMENT & TRAN BOUNDARY MOVEMENT RULES 2016 & AMENDMENT RULE, 2019)

	Total Quantity	
Hazardous Wastes	During the previous financial year (MT)	During the current financial year (MT)
a) From Process	Nil	Nil
b) From Pollution control Facilities	Nil	Nil

#### PART – E SOLID WASTES

	Total Quantity	
Hazardous Wastes	During the previous financial year (MT)	During the current financial year (MT)
a) From Process	Nil	
b) From Pollution control Facilities		Nil
c) 1.Qty. recycled or reused	Nil	

2.Sold	Nil
3.Disposed (Over burden )	Nil

PART - F

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

#### **Batteries Wastes:**

As specified under Batteries (Management & Handling) Amendment Rules ,2010, We have purchased following new batteries of different categories is common for Cement Plant, WHRS, WTP,LS Crusher & Mines (ML-I & ML-II).

Sr.N o.	Number of New batteries of During different categories purchased following from manufacturer /importer/dealer or any other agency	During 1st Apr-2021 to 31th Mar 2022		
	Common for Cement Plant, WHRS, WTP, LS C	rusher & Mines (	ML-1 & ML-11).	
	Category	No.of Batteries	Approximate weight (in MT)	
	(I) Automotive			
1.	(a) Four wheeler			
	(b) Two wheeler			
	(ii) Industrial	50	NA	
	(a) UPS			
	(b) Motive Power			
	(c) stand by			
	(i) Others			
	Total	50	-	
2	Number of Used batteries of categories mentioned in SL.no.3 and Tonnage of scrap sent manufacturer /importer/ dealer/ registered recycler / or any other agency to whom the used batteries scrap was sent.: NIL			

#### **Bio-Medical Wastes:**

Bio medical waste generated is common for Cement Plant, WHRS, WTP,LS Crusher & Mines (ML-I & ML-II) & current Financial year under the Bio-Medical Waste (Management & Handling) Rules 2016 & amended on 2019, are as follows.

Bio medical Waste Quantity (Kg) as per coding	
During the previous financial year (FY 2020-21)	During the current financial year (FY 2021-
	22)

Yellow	Red	Blue	White	Yellow	Red	Blue	White
Nil	Nil	Nil	Nil	90.4	25.05	31.85	1.63

Above mentioned waste has been sent to E-Tech Projects Jailwell, CBWTF Bio Medical Treatment Facility, Bikaner (Raj) for disposal.

#### E-wastes:

	Total Quantity						
E- Wastes	During the previous financial year (MT)	During the current financial year (MT)					
a) From Process	Nil	Nil					
b) From Pollution control Facilities	Nil	Nil					
Others	Nil	Nil					

#### Solid Waste:

Solid waste generated from mines operation is over burden is handled by shovel & dumper combination from working face and dumped systematically at overburden dump yard.

#### PART - G

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

Fine mist water spraying system is installed for water spraying on haulage roads.

#### PART - H

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

- High efficient Bag filters installed at crusher outlet to control the fugitive emission generated during material transfer, unloading & crushing.
- Adequate Stack provided with all facilities for stack emission monitoring.
- Particulate matter monitoring by NABL accredited laboratory on quarterly basis.
- For corrective & preventive maintenance scheduled by PM Cell for better performance.

- Water spraying system (dry fog system) provided for dust suppression at unloading hopper.
- Crusher, vibratory screens is area fully covered/closed by metal sheet.
- Regular wetting of the ground within the premises.
- Ambient air quality & fugitive emission monitoring by by NABL accredited laboratory.
- Continuous Ambient Air quality monitoring system installed & data are being uploaded on CPCB & RSPCB portal.
- Crushed material transported by OLBC fully which is covered by metal sheet from crusher to plant.
- \* Bag filter installed at all material transfer point & covered by metal sheet.
- Crusher fully covered by metal sheet.
- Use of suitable and low noise equipments and regular maintenance are being carried out.
- Reduce the drop height of dusty material.
- Provide Personnel Protective Equipments (PPE's) i.e. dust masks & ear plugs to the workers.
- Green belt developed and it is work as barrier to Noise.

#### PART - I

#### ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT.

- 1. Monitoring of ambient air quality is being done regularly & the online continuous monitoring data is being transferred to CPCB & RSPCB site.
- 2. Maintenance of pollution control equipment is being checked in scheduled maintenance plan by PM cell.
- 3. Efficient Water spray system provided to suppress the dust at unloading (Limestone unloading hopper at crusher)
- 4. Bag filters installed on the discharge/transfer points & Conveyor belts are covered for handling of fine materials.
- 5. Personal protective equipment's (PPEs) provided to all mine employees i.e. dust mask, ear plug & ear muff, eye goggle etc.
- 6. We conduct environment awareness for all our stakeholders through meeting, training programs, world environment day celebrations etc.

Annexure-1

Ambient Air Quality Monitoring data for FY2021-22 ( in µg/M³ )

Month	Parameters	Near Mine Office (Upwind)	Near Ravana/Near Crusher (Down wind)	Drilling Operation (Down wind)	Loading Operation (Down wind)							
Apr-21 to Aug-21	Production Not Start											
	SPM	295.6	301.5	315.8	312.2							
	PM-10	42.1	44.6	48.6	50.6							
	PM2.5	23.4	24.5	26.3	27.5							
Sept-21	SOX	12.9	16.3	16.8	20.9							
-	NOX	20.1	21.4	21.2	25.5							
	со	650	785	725	850							
56	SPM	297.8	321.5	361.4	396							
	PM-10	57.9	59.9	61.4	60.1							
Oct-21	PM2.5	36.7	37.3	40	39.9							
Oct-21	SOX	14.5	17.2	15.5	16.5							
	NOX	23.2	22.7	22.6	24.1							
	CO	572	792.6	703	723							
	SPM	289.6	319.3	356.3	391.2							
	PM-10	56.8	60.8	61	58.8							
	PM2.5	37.2	38.3	39.1	41.2							
Nov-21	SOX	16.3	16.2	15.3	16.9							
	ИОХ	23.4	22.5	22.3	22.4							
	СО	621	688	796	786							
	SPM	301	324.8	362.1	371							
	PM-10	61.2	62.7	62.8	63.2							
D== 23	PM2.5	35.6	36.9	39.2	40.3							
Dec-21 —	\$OX	13.8	16.5	14.9	15.6							
	NOX	24.5	22.9	23.7	23.2							
	со	736.1	798.1	807.9	782							
	SPM	322	340	346.5	361							
	PM-10	54.2	55.6	55.8	57.2							
Jan-22	PM2.5	34.6	36.7	40	42.9							
.,\di1-22	SOX	14.8	15.8	18.2	16.5							
	NOX	21.2	20.7	22.3	22.7							
	со	535	590	640	556							
	SPM	301	324.8	362.1	371							
	PM-10	61.2	62.7	62.8	63.2							
Feb-22	PM2.5	35.6	36.9	39.2	40.3							
	SOX	13.8	16.5	14.9	15.6							
	NOX	24.5	22.9	23.7	23.2							

	со	736.1	798.1	807.9	782
	SPM	363.5	391.8	398	388
	PM-10	64.9	64.2	66.2	68.5
Mar-22	PM2.5	40.6	43.1	41.9	43.5
191G(-22	SOX	16.8	15.6	17.9	17.5
	NOX	22.5	21.4	23.1	22.2
	со	632.8	632	672	685

# Noise level Monitoring data for FY 2021-22 (in dBA)

	NOISE LEVEL MONITORIED VALUES (in dBA) of FY 2021-22														
LOCATION	Apr-21 to Aug-21	\$ep-21		Oct-21		Nov-21		Dec-21		Jan-22		Feb-22		Mar-22	
		DAY	NIGHT	DAY	NIGH T	DAY	NIGH T	DAY	NIGH T	DAY	NIGH T	DAY	NIGH	DAY	NIGHT
Near Mine Office (Upwind)	Production not start	63.8	55.8	64.8	56.9	66.3	55.2	68.2	60.5	65.9	57.3	66.8	56.5	67.9	56.8
Near Ravana /Near Crusher (Down wind)		66.9	53.1	67.6	54.6	68.4	54.9	69.4	58.3	68.4	57.9	69.2	65.2	71.2	57.5
Drilling Operation (Down wind)		67.2	54.5	70.5	53.1	69.8	50.1	70.5	55.6	71	54.5	70.2	53.8	73.8	52.7
Loading Operation (Down wind)		69.8	55.8	70.3	52.4	70.4	52.1	71.2	54.9	70.8	53.9	69.8	52.9	72.9	53.1
Ave	<b>J</b> ,	60.5	50.1	61.5	50.2	60.9	51.5	61.9	50.3	63.2	51.3	63.1	51.5	64.3	52.5

 $<sup>^{*}</sup>$  CAAQMS (Continuous ambient air quality monitoring system) installed & data uploading on RSPCB & CPCB portal regularly.



Ambuja Cements Ltd Unit: Marwar Mundwa