

Ref: ACL/MM/ENV/ESR-WTP/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 Water Treatment Plant (Capacity 3 MLD) situated at Matasukh by M/s Ambuja Cements Ltd. Unit: Marwar Mundwa, Teshil : Nagaur District Nagaur (Raj.) Pin code: 341026 for the period of April-2021 to March-2022.

Ref.: File No.: F(Tech)/Nagaur(Merta)/1(1)/2008-2009/2668-2669,Order No. 2020-2021/ Kishangarh/ 11393,Dated 10/02/2021.

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 Water Treatment Plant (Capacity 3 MLD) situated at Matasukh 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(S) /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

3 ML Water Treatment Plant (3 MLD)
at Matasukh

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 31STMARCH 2022

PART - A

| 1. | Name & Address Of The Owner / Occupier Of The Industry Operation Or Process(As Per Factory Act) | Water Treatment Plant (Capacity 3 MLD) situated at Matasukh by M/s Ambuja Cements Ltd. Unit: MarwarMundwa, Teshil : Nagaur District Nagaur (Raj.) Pin code: 341026 |
|----|---|--|
| 2. | Industry Category | Primary |
| | Primary:-(Stc Code) | Orange Category |
| | Secondary:-(Sic Code) | |
| 3. | Production Capacity:- | Water Treatment Plant: 3 MLD |
| | (Designed / Installed Capacity) | |
| | | |
| 4. | Year Of Establishment : | Mar/Apr-2021 |
| 5. | Date Of Last Environmental Statement | First Time |
| | Submitted | 8 |

PART - B

WATER & RAW MATERIAL CONSUMPTION

| 1. | WATER CONSUMPTION M ³ /day | | | | | |
|------------------|---|--|--|--|--|--|
| 2. | Process | Treated Brackish water & Maintained 7LD. | | | | |
| 3. | Cooling | | | | | |
| 4. | Domestic | | | | | |
| | Process water consumption per unit of products output | | | | | |
| Name of products | During the previous financial year (2020-21) | During the current financial Year (2021-22) | | | | |
| | (1) | (2) | | | | |
| Treated Water | NΔ | | | | | |

(II) RAW MATERIAL CONSUMPTION

| | Name of products | Consumption of raw material per unit of output | | | |
|--|------------------|--|--|--|--|
| * Name of raw materials | | During the previous Financial year (%) | During the current Financial year (%) | | |
| | | (2020-21) | (2021-22) | | |
| Treated Brackish water & Maintained ZLD. | | | | | |

(III) POWER CONSUMPTION (KWH/KL TREATED WATER)

| During the previous financial year (2020-21) | During the current financial Year (2021-22) |
|--|--|
| Nil | 653514 Kwh |

(IV) TOTAL TREATED WATER PRODUCTION:

| Product | During the previous financial year (2020-21) | During the current financial Year (2021-22) |
|---------------|--|--|
| TREATED WATER | Nil | 245417 m3 |

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) | Water | Treated Brackish water & Maintained ZLD. | |
| (b) | Air | Please see Annexure-1 & 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

| | То | 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 | Dust collected in the Bag filters are 100% recycled to the system | | | |
| c) 1.Qty. recycled or reused | Nil | 100% Reutilized with in the process | | |
| 2.Sold | Nil | Nil | | |
| 3.Disposed | Nil | Nil | | |

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 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, V | WTP,LS Crusher & | Mines (ML-I & ML-II). |
| | Category | No. of Batteries | Approximate weight (in MT) |
| | (I) Automotive | | |
| | (a) Four wheeler | | |
| 1. | (b) Two wheeler | | |
| | (ii) Industrial | 50 | NA |
| | (a) UPS | * | |
| | (b) Motive Power | | |
| E | (c) stand by | | |
| | (i) Others | | |
| 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 curre | ent financia | l year (FY 20 | 021-22) |
| Yellow | Red | Blue | White | Yellow | Red | Blue | White |
| Nil | Nit | 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: Nil

PART - G

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

- > WTP plant based on ZLD (Zero Liquid Discharge which is cost effective and eco-friendlily technology.
- > We have maintained Zero Ground water abstraction unit.
- The particulate matter (PM) collected in the pollution control equipment is recycled back in process and neutralizing the cost of operation of PCEs & hence no cost impact on production cost.

PART - H

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

- > The stack emissions from the process boiler stack are controlled by pollution control equipments like, Bag filters & BF installed at various material transfer points to control the fugitive emissions.
- Coal storage in covered storage shed to control the fugitive emissions.
- > Ambient air quality & noise level monitoring carried out regularly.
- > Stack emission of process boiler and DG set monitoring carried out when plant running.

PART - I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT.

- Monitoring of stack emission & ambient air quality is being done regularly & quarterly by NABL accredited laboratory.
- 2. Maintenance of pollution control equipment is being checked in scheduled maintenance plan by PM cell.
- 3. We are committed and maintaining Zero Liquid Discharge (ZLD) from our premises.
- 4. We conduct environment awareness for all our stakeholders through meeting, training programs, world environment day celebrations etc.
- 5. Green belt development is our ongoing process within core zone as well as buffer zone.

Annexure-1

Stack emission Monitoring data (PM Values in mg/Nm3) of FY 2021-22)

| Stack Name Parameters | | Unit | Monitored Avg. Value |
|------------------------------------|----------------|---------|----------------------|
| WTP Boiler Stack at Matasukh | PM | (mg/m3) | 17.4 |
| | PM | g/Kw-hr | 0.115 |
| DG SET 300KVA STACK at Matasukh | Nitrogen Oxide | g/Kw-hr | 1.405 |
| on text at Marasokii | HC | g/Kw-hr | 0.285 |
| | СО | g/Kw-hr | 1.1 |

Annexure-2
Ambient Air Quality Monitoring data for FY2021-22 (in µg/M³)

| LOCATION-1 - WTP MATASUKH | | Month - June 2021 | Month - Sept- 2021 | Month - Oct- 2021 | Month - Mar- 2022 |
|---------------------------|----------------------|-------------------|--------------------|-------------------|-------------------|
| S.No | Parameters | Observed value | Observed value | Observed value | Observed value |
| 1 | Ammonia | BDL | BDL | BDL | BDL |
| 2 | Carbon Monoxide | 330 | 280 | 220 | 350 |
| 3 | Lead | 0.16 | 0.13 | 0.1 | 0.14 |
| 4 | Nitrogen Oxide | 14.36 | 16.03 | 11.23 | 13.58 |
| 5 | Ozone | BDL | BDL | BDŁ | BDL |
| 6 | PM 2.5 | 31.47 | 30.4 | 23.45 | 31.47 |
| 7 | Sulphur Di oxide | 3.78 | 3.14 | 3.12 | 5.12 |
| 8 | PM 10 | 65.78 | 53.85 | 47.85 | 73.56 |
| 9 | Arsenic | BDL. | BDL | BDL | BDL |
| 10 | Nickel | 3.55 | 9.9 | 2.43 | 2.87 |
| 11 | Benzene | BDL | BDL | BÐL | BDL |
| 12 | Benzo - Alfa- Pyrene | BDL | BDL | BDL | BDL |
| | | LOCATION-2 - | WTP MATASUKH | | |
| 1 | Ammonia | BDL | BDL | BDL | BDL |
| 2 | Carbon Monoxide | 310 | 280 | 240 | 330 |
| 3 | Lead | 0.13 | 0.13 | 0.09 | 0.16 |
| 4 | Nitrogen Oxide | 13.8 | 16.03 | 11.45 | 14.26 |
| 5 | Ozone | BDL. | BDL | BDL | BDL |
| 6 | PM 2.5 | 33.56 | 30.4 | 21.7 | 35.28 |
| 7 | Sulphur Di oxide | 3.63 | 3.14 | 3.22 | 5.67 |
| 8 | PM 10 | 53.25 | 43.85 | 43.26 | 76.45 |
| 9 | Arsenic | 8DL | BDI. | BDL | BDL. |
| 10 | Nickel | 3.43 | 9.9 | 2.67 | 4.71 |
| 11 | Benzene | BDL | BDL | BDL | BDL |
| 12 | Benzo - Alfa- Pyrene | BDL. | BDL | BDL | BDL |



Ambuja Cements Ltd Unit: Marwar Mundwa