ADITYA BIRLA

UltraTech

UTCL/BCW/ENV/ESR/22-23/01

Date: - 01.08.2023

To,
Environmental Engineer
Regional Office,
Punjab Pollution Control Board
Bathinda.

Sub: - Environmental Statement Report of Bathinda Cement Works (A Unit of Ultratech Cement Limited) at village- Lehra Mohabbat , Tehsil- Rampura Phul, District- Bathinda (Punjab) for the period of 2022-23.

Ref: - (1) Consent to operate certificate No.CTOA/Renewal/BTI/2021/15363982
(2) Consent to operate certificate No.CTOW/Renewal/BTI/2021/15371620.
(3) Authorization No. HWM/renew/BTI/2021/15370111.

Dear Sir,

Kindly refer to above subject matter and reference letter. In this regards, we are submitting herewith the Environmental Statement Report of Bathinda Cement Works (A Unit of Ultratech Cement Limited) at village- Lehra Mohabbat, Tehsil- Rampura Phul, District- Bathinda (Punjab) for the period of 2022-23.

This is for your kind information.

Thanking you,

Yours faithfully,
For M/s UltraTech Cement Ltd.
Unit: Bathinda Cement Works

R.P. Nolkha
GUH & Vice President

Encl: Environmental Statement (Form V) for FY 2022-23

Copy to:

1. Dy. Director (S) Scientist-C, MoEF Regional Office (NZ), Bay No. 24-25, Sector 31-A, Chandigarh
2. The Member Secretory, PPCB, Nabha Road Patiala.
3. The Regional Director, CPCB Paryavaran Bhawan, Ground Floor, Sector-19B Madhya Marg, Chandigarh.
4. Sr. Environmental Engineer, Zonal office, Punjab Pollution Control Board, Street No. 12, Power House Road Bathinda (Punjab).

UltraTech CEMENT
The Engineer's Choice

Environmental Statement Report of
Bathinda Cement Works
(A Unit of Ultratech Cement Limited)
At village- Lehra Mohabbat,
Tehsil- Rampura Phul, District- Bathinda (Punjab)
From: April, 2022 to March, 2023

PART – A

1.	Name and address of the Owner / Occupier of the Industry operation or process	**Bathinda Cement Works** (A Unit of Ultratech Cement Limited) at village- Lehra Mohabbat, Tehsil- Rampura Phul, District- Bathinda (Punjab)
2.	Industry Category Primary (S.T.C. Code) Secondary (S.T.C. Code)	Red Category (17 category)
3.	Production Capacity	2.0 MTPA Cement
4.	Year of Establishment	2000
5.	Date of the last Environmental Statement Report submitted	22.09.2022

PART – B

WATER AND RAW MATERIAL CONSUMPTION

(I) WATER CONSUMPTION:

Process	:	N.A. (As plant is based on dry Process technology)
Cooling	:	10382 KL
Construction	:	Nil
Domestic	:	41406 KL
Plantation	:	12920 KL

Name of Product	Water Consumption per Unit of Product Output (Cement)	
	During Previous Financial Year	During Current Financial Year
Cement	0.0054 KL/MT	0.0073 KL/MT

(II) RAW MATERIAL CONSUMPTION: (CEMENT PLANT)

Name of Raw Material	Name of Product	Consumption of Raw Material Per Unit of Output (Cement)	
		During Previous Financial Year	During Financial Year
		(2021-22)	(2022-23)
1. Clinker	PPC Cement	0.6000	0.5968
2. Gypsum		0.0500	0.0533
3. Fly Ash		0.3500	0.3499

RAW MATERIAL CONSUMPTION: (D.G. SET)

Name of Raw Material	Name of Product	Consumption of Raw Material per unit of Output (Ltrs / KWH)	
		During Previous Financial year	During Current Financial year
Fuel/ Diesel	Power	D.G. not operated so far	

(III) POWER CONSUMPTION (KWH/T OF CEMENT):

During Previous Financial Year (2021-22)	During Current Financial Year (2022-23)
Cement Mill	Cement Mill
27.63 KWH/T	26.996 KWH/T

(IV) TOTAL CEMENT PRODUCTION (MT):

During Previous Financial Year	During Current Financial Year
Cement Mill (MT)	Cement Mill (MT)
1434538.3	1419277.08

(V) TOTAL D.G. POWER PRODUCTION (KWH):

During Previous Financial Year	During Current Financial Year
N.A	N.A

PART – C

DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT

Pollutants	Quantity of Pollutants Discharged	Concentration of Pollutants in Discharge (Mass/Value)	Percentage of variation from prescribed standard with reasons
(a)	Water	As the plant is being operated on dry process technology, no liquid effluent is generated from the Clinker Grinding Unit. The waste water generated from the office toilet and mess is treated by STP and used for plantation purpose	
(b)	Air	Please refer Annexure – 1, 2 & 3	

PART – D

HAZARDOUS WASTE

(As specified under Hazardous & Other Wastes (Management & Trans boundary Movement) Rules amended up to 2016)

Hazardous Waste	Total Quantity (Ton)	
	During Previous Financial Year	During Current Financial Year
a)From Process (Cement manufacturing (Grinding) is based on "Dry Process" No Hazardous waste is generated from the process except used oil and grease which is drained from Machinery / Equipments)	0.44	0.78
Category 5.1		
Category 5.2	0.34	0.47
(b) From Pollution Control Facilities	N.A.	N.A.

PART – E

SOLID WASTE

		Total Quantity	
		During Previous Financial Year	During Current Financial Year
(a)	From Process	N.A	Nil
(b)	From Pollution Control Facility	Dust collected in the Bag Houses and Bag Filters are recycled to the system.	
(c)	1) Quantity rejected or re-utilized within the unit	100%	100%
	2) Sold	Nil	Nil
	3) Disposed	Nil	Nil

PART – F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for the categories of wastes:

(I) E-Waste:-

E-Waste was not generated during year 2022-23.

(II) Used Oil:-

Used oil & grease (Category-5.1) was generated 0.78 ton and Category 5.2 was generated 0.47 ton during year 2022-23.

(III) Bio-Medical waste:-

Bio-medical waste not generated during year 2022-23

(IV) Battery waste:-

Battery waste was not generated during year 2022-23.

(V) Hazardous Waste Utilization:-

Cement manufacturing is based on "Dry Process". No Hazardous waste is generated from the process except used oil & grease.

(VI) Solid Wastes utilization: - We are utilizing the fly ash as raw material from the TPP. The month wise fly ash consumption are as under for FY 2022-23:

Month	Fly Ash Consumption (In Ton)
April, 22	35127.00
May, 22	23908.00
June, 22	35127.00
July, 22	24876.00
Aug, 22	32103.00
Sept, 22	26300.00
Oct, 22	21743.80
Nov, 22	27307.70
Dec, 22	37084.20
Jan, 23	34174.50
Feb, 23	37233.40
March, 23	42974.20
Total	377958.80

PART – G

IMPACT OF THE POLLUTION CONTROL MEASURES ON CONSERVATION OF NATURAL RESOURCES AND CONSEQUENTLY ON THE COST OF PRODUCTION

Bathinda Cement Works (A unit of Ultratech Cement Limited (Grinding Unit) is being operated on dry process technology, which is cost effective and environmentally clean technology. The advantage of dry process is also in fuel economy. The stack emissions from the plant are controlled by equipment like Bag Houses and Bag Filters installed at various material transfer points to clean the process and arrest the fugitive emissions. The particulate matter collected in the pollution control equipment is recycled in process and neutralizing the cost of operation of pollution control equipments and hence no cost impact on the production cost.

PART – H

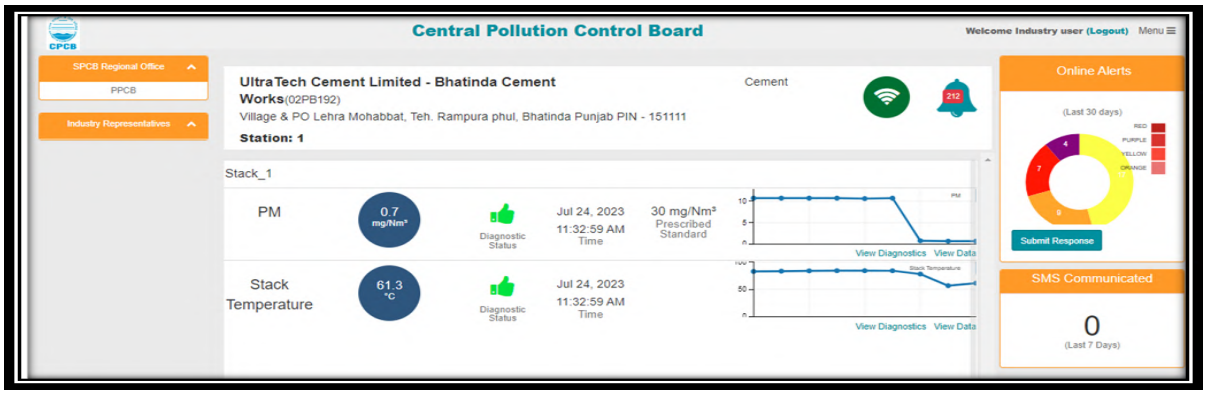
ADDITIONAL MEASURES / INVESTMENTS PROPOSAL FOR ENVIRONMENT PROTECTION INCLUDING ABATEMENT OF POLLUTION

1) We have been covered area under Green belt development and tree plantation more than 33% of the total plant area i.e. green belt covered area 16.66 ha out of total plant area 40.06 ha. Gap filling is going under process.

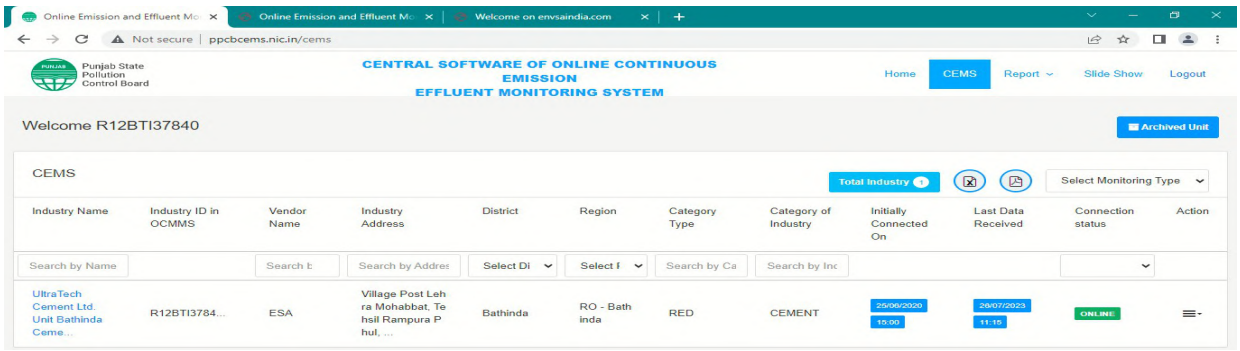
Plantation Photographs

2) Opacity meter installed for continuous stack emission monitoring and data transmitted online to server of CPCB & PPCB.

On CPCB Server:-



<u>On PPCB Server:-</u>



3) We have installed a solar plant of capacity 0.480 MW DC and 0.400 MW AC. Use the energy as renewal energy resources.

Photographs of Solar Plant

4) Year wise recurring expenditure on EMP (Environment Management Plan). Expenditure incurred for the year of period April, 2022 to March, 2023 are given below:-

S. No.	Heads	Cost in Lacs
1.	Horticulture	27.15
2.	Water tanker for dust suppression	2.28
3.	Environmental monitoring	6.6
4.	STP maintenance	1.25
5.	Env. Equipment Maintenance & AMC	1.99
6.	Env. Equipment Calibration	0.62
7.	Road Sweeping machine	1.18
8.	Tarpaulin Cost for Covered Raw Material	16.53
9.	Main bag filter bags and cage replacement & RP de dusting bag filter bags & cage replacement	8.78
Total		**66.38**

5) We have installed a STP plant of capacity-50 KLD.

Installed STP (50 KLD)

6) New VFD installed in silo 4 aeration blower 912RB2 & saved energy 2 KW/hr.

7) Optimization of the idle running of blower stopping 721BL1 and saved energy 3.9 KW/hr.
8) Mill Main Motor cooling fan operation interlocked with winding temperature and saved energy 0.019 KWh/ton of cement.
9) VSK Fan Impeller Replacement with high efficiency impeller and saved energy 0.296 KWh/ton of cement.
10) Grinding media optimization in Mill for major product PPC and saved energy 0.34 KWh/Ton of cement.
11) Plant Lighting Power Saving by Taking P20 in Line and saved energy 0.013 KWh/Ton of cement.
12) Reduction in frequency and duration of cement grade changeover and save energy during the operation is 0.010 KWh/Ton of cement.

PART – I

ANY OTHER PARTICULATES FOR IMPROVING THE QUALITY OF ENVIRONMENT.

1. We have full-fledged Environment Department separate cell for monitoring, maintenance of pollution control equipment and horticulture department for Green Belt development.
2. Monitoring of stack emission and ambient air and water quality is being done regularly.
3. Maintenance department is doing regular checking and scheduled maintenance of all the pollution control devices.
4. Civil and Personal & Administration departments taking care for of Housekeeping.
5. Horticulture Section is taking care of tree plantation and green belt development. We have been covered more than 33% of the plant area under plantation and greenbelt development.
6. Regular water sprinkling being carried out on regular.
7. We have also conducted Awareness Campaign among employees as well as our surrounding area on the "Ban of Single Use Plastic (SUP)" as per Office Memorandum F. No. IA3-22/8/2021-1A.III [150512] dated 18.07.2022 issued by the MoEF&CC. A report.

Activities Related to Plastic Waste Awareness Programe



Distribution of Jute Bags




On support of above, we are enclosing herewith following:-

Annexure-I : Ambient Air Quality Report (PM10 & PM2.5)
Annexure-II : Stack Emission Report
Annexure-III : Fugitive Emission Monitoring Data
Annexure-IV : Noise level monitoring data

ANNEXURE-I

AMBIENT AIR QUALITY (µg/m3) FOR YEAR 2022-23

Ambient Air Quality at Plant Boundary (in µg/m³)								
Location	Near Store		Near Clinker Tippler		Near Substation		Near STP	
Month	PM 10	PM 2.5	PM 10	PM 2.5	PM 10	PM 2.5	PM 10	PM 2.5
April,22	85	40	84	45	79	40	79	38
May,22	91	42	88	47	85	43	85	39
June, 22	93	44	90	49	87	45	87	41
July,22	70	35	66	34	70	37	63	32
Aug,22	70	35	64	33	69	36	62	31
Sept,22	72	36	66	34	70	37	64	32
Oct, 22	72	37	66	35	71	38	65	33
Nov,22	76	37	75	40	81	44	72	37
Dec, 22	81	40	81	43	85	47	77	39
Jan, 23	79	38	81	43	86	46	76	38
Feb,23	79	40	79	38	81	44	77	37
March,23	81	42	84	42	83	47	75	39
Average	79	39	77	40	79	42	74	36

ANNEXURE-II

STACK EMISSION LEVEL (mg/Nm³) FOR YEAR 2022-23

Sr. No.	Month	Pollution Control Measures	PM (mg/Nm3)
1.	April,22	Bag House	16.47
2.	May,22	Bag House	17.06
3.	June, 22	Bag House	18.04
4.	July,22	Bag House	17.89
5.	Aug,22	Bag House	14.48
6.	Sept,22	Bag House	14.59
7.	Oct, 22	Bag House	14.61
8.	Nov,22	Bag House	15.72
9.	Dec, 22	Bag House	17.62
10.	Jan, 23	Bag House	18.22
11.	Feb,23	Bag House	17.14
12.	March,23	Bag House	16.56
Average			**16.53**

ANNEXURE-III

Fugitive emission monitoring Results (01.04.2022 to 31.03.2023)

Month	Near Cement mill (ug/m3)	Near Gypsum Tippler (ug/m3)	Packing plant (ug/m3)
April,22	843.0	1042.0	1397.0
May,22	845.0	1045.0	1399.0
June, 22	846.0	1047.0	1401.0
July,22	845.0	1046.0	1399.0
Aug,22	844.0	1044.0	1397.0
Sept,22	845.0	1043.0	1399.0
Oct, 22	847.0	1045.0	1401.0
Nov,22	810.0	996.0	1352.0
Dec, 22	815.0	1005.0	1363.0
Jan, 23	746.0	942.0	1260.0
Feb,23	810.0	879.0	1223.0
March,23	810.0	861.0	1203.0
Average	826	1000	1350

ANNEXURE-IV

Ambient Noise Level monitoring Results (April, 2022 to March 2023)

Month	Near Clinker Tippler		Near Store Area		Near Sub-station		Near STP Plant	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
April,22	62.1	54.8	66.2	62.7	67.7	63.3	59.6	53.3
May,22	62.4	55.3	66.4	62.8	67.9	63.5	59.8	53.5
June, 22	63.5	56.9	67.5	62.1	66.1	65.2	59.8	55.4
July,22	62.8	55.6	66.4	61.5	65.4	64.6	58.2	54.8
Aug,22	61.6	55.1	63.5	59.2	64.8	58.7	57.1	51.2
Sept,22	61.7	55.6	63.4	59.3	65.1	58.8	57.3	51.3
Oct, 22	62.1	56.2	63.7	59.4	65.5	59.1	57.5	51.6
Nov,22	62.4	56.5	63.9	59.6	65.8	59.3	57.7	51.8
Dec, 22	62.8	56.9	64.3	59.2	66.3	59.8	58.0	52.3
Jan, 23	61.4	57.6	64.6	60.3	67.0	64.3	56.9	53.8
Feb,23	61.7	56.9	63.8	59.3	66.7	63.5	56.1	52.5
March,23	62.0	55.7	63.2	58.4	65.8	61.3	55.5	51.7
Average	62.21	56.09	64.74	60.32	66.18	61.78	57.79	52.77

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