

# MANGALAM CEMENT LTD.



Regd. A/D

MCL/Env. Audit / 2022-2023/108

Dt:14.09.2022

The Chief Environmental Officer, Circle: 04, U. P. Pollution Control Board, TC: 12V, Vibhuti Khand, Gomti Nagar, Lucknow, U.P. - 226010

Dear Sir,

#### Sub.: -Environmental Statement for the year 2021-2022

With reference to above subject, we are enclosing herewith an Environmental Statement Report of Aligarh Grinding Unit of M/s Mangalam Cement Ltd., Aligarh for the period from April-2021 to March-2022.

This is for your kind reference please. Kindly acknowledge the receipt at the earliest.

Thanking you,

Yours faithfully

For M/s Mangalam Cement Ltd., Aligarh

Mukesh Agarwal (Unit Head)

U.P. Pollution Control Board, J-1, Gyan Sarovar Colony, Ram Ghat Road, Aligarh, (U.P.)

Aligarh Grinding Unit : K-1, CDF Complex, Anoop Shahar Road, Chherat Gaon, Aligarh - 202122 (U.P.)

Central Marketing Office : 2nd Floor, Geejgarh Tower, Hawa Sadak, Jaipur-302006 (Raj.)

Regd. Office & Works : P.O - Aditya Nagar, Morak, Distt. Kota-326520 (Raj.)

Tel.: 07459-232812, Fax: 07459-232156, Email: marketing@mangalamqement.com

CIN: L26843RJ1979PLC001705
GSTIN: 09AABCM9602Q1Z2
WEBSITE: www.mangalamcement.com
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#### FORM-V

#### **ENVIRONMENTAL STATEMENT**

(See rule 14)

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

#### PART-A

1.	Name & address of the owner/ occupier of the industry/ operation or process	
2.	Industry Category Primary – (STC Code) Secondary – (STC Code)	Red Category
3.	Production capacity	Cement :- OPC-1.25 MTPA PPC-1.99 MTPA
4.	Year of establishment	2016
5.	Date of last environmental statement submitted	15.09.2021

PART -B

Water and Raw Material Consumption:

I. Water consumption in m<sup>3</sup>/day

Process: - NA (As plant is based on Dry process technology)

Cooling: - 62.26 M<sup>3</sup>/day

Domestic:-26.14 M3/day

Name of Products	Process water consumption per unit of products		
	During Previousfinancial Year (2020-2021)	During the current financial Year (2021-2022)	
1. Cement	0.144	0.079	

II. Raw material consumption (Cement Plant)

Name of raw materials*	Name of product	Consumption of raw	Consumption of raw material per unit of output		
materiais	product	During Previous financial year (2020-2021)	During Current financial year (2021-2022)		
1. Fly Ash	v Ach	0.281	0.279		
2. Gypsum	Cement	0.058	0.059		
3. Clinker		0.660	0.662		

<sup>\*</sup>Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

Raw Material Consumption (D.G. Set)

Kal	W Material Consumpti	1011 (0.0. 500)			
Name of raw		Name of	Consumption of raw material (Ltr)		
	materials*	product	During Previous financial year (2020-2021)	During Current financial year (2021-2022)	
	H. S. Diesel	Power	2810 (LTR)	3410 (LTR)	

iii) Power Consumption (KWh/T of Cement):-

During Current Financial Year		
32.343		

iv) Total Production (MT):-

Production	During Previous Financial Yea	During Current Financial Year
Cement	226598.38	288191.86

Total Power Generation (DG Set) (KWh)

Production	During Previous Financial Year	<b>During Current Financial Year</b>	
Power Generation	7747	10046	

#### PART-C

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

1		0 .:	Concentration	Percentageofvariation
	Parameter	Quantity of	ofPollutants in	from prescribed
Pollutants		Pollutants discharged(mass/	discharged(mass	
		day)	/volume)	reasons.

a) Water		nt is being operated voled, no liquid effluen		the cement plant.
b) Cement Mill	PM	0.0078 Ton / day	19.34 mg/Nm <sup>3</sup>	No any deviation

#### PART-D

#### HAZARDOUS WASTES

(As specified under Hazardous Wastes (M, H& Transboundary Movement Rules, 2016).

THE PERSON		Total C	Quantity	
Hazardous Wastes	During previous financial year (2020-2021)		During Current financial year (2021-2022)	
From Process (Cement Manufacturing is	We have Authorization for Hawaste Management & Hand Clinker Grinding Unit, D.G. se	dling for		dling for
based on "Dry Process" no Hazardous waste is	Total Quantity Generated from April 2020 to March 2021 (Ltrs.)	2310	Total Quantity Generated from April 2021 to March 2022 (Ltrs.)	NIL
generated form the	Old stock (Ltrs.)	NIL	Old stock (Ltrs.)	NIL
process except	Total Used Oil (Ltrs.)	2310	Total Used Oil (Ltrs.)	NIL
used oil which is drained from	Sold-out to registered recycler (Ltrs.)	2310	Sold-out to registered recycler (Ltrs.)	NIL
Machinery/ Equipment)	Balance Quantity (Ltrs.)	NIL	Balance Quantity (Ltrs.)	NIL
Empty Barrel- 33.1	NIL		Nil	
Processes Waste Sludge-23.1	NIL		NIL	
Cotton waste with oil-5.2	NIL		NIL	
Waste residue Containing oil -5.2	1 T		NIL	
2. From pollution control facilities	NA		NA	

#### PART-E

#### SOLID WASTE

Solid Wastes	Total Quantity (Kg)		
	During previous financial year (2020-2021)	During Current financial year (2021-2022)	
1. From Process	NIL	NIL	
2. From pollution control facilities	Dust Collected in the, bag house and bag filters are recy the system		
Quantity recycled or reutilised within the unit.	100 %	100 %	
ii) Solid	NIL	NIL	

iii) Disposed	NIL	NIL

#### PART - F

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

#### **Battery Waste:-**

As specified under Batteries (Management and Handling) Amendment Rules, 2010. We have purchased following new batteries of different categories for Cement plant Clinker Grinding Unit and DG Set -

	of new batteries of ourer / importer / deal			During 1 <sup>st</sup> April 2021 to 31 <sup>st</sup> March 2022.
for Cemen	nt Plant Clinker Grindi	ng unit and DO	Set	
	Category	i) No.	Of Batteries	ii) Approximate weight (In MT)
i)	Automotive			
a)	Four Wheeler		Nil	Nil
ii)	Industrial	Teens I		
a)	UPS	Mar Inc.	Nil	Nil
Total			Nil	Nil

and Tonn registered	of used batteries of ca age of scrap sent mar d recycler / or any ot scrap was sent.	nufacturer / de	ealer / importer /	March 2022.
for Ceme	nt Plant Clinker Grindi	ng unit and Do	Set	
	Category	iii) No.	Of Batteries	iv) Approximate weight (In MT)
i)	Automotive		Nil	
a)	Four Wheeler			
ii)	Industrial	Lalen	Nil	Nil
a)	UPS			
	Total		Nil	Nil

Used battery scrap was sent to CPCB authorized recycler

#### **Hazardous Waste:**

Cement manufacturing is based on "Dry Process". No Hazardous waste is generated from the process except used oil which is drained from Machineries / Equipments. The used oil & lead acid batteries are sold to CPCB authorized recyclers.

#### E- Waste:

E- Waste disposal for Cement plant Clinker Grinding Unit and DG Set, during financial year 2020 - 2021 and 2021-2022 under the E-Waste (Management) Rules 2016 & its amendments are as follows.

Total Quant	ity Disposed
During Previous Financial Year	During current Financial Year

	(2020-2021)	(2021-2022)
E-waste disposed	Nil	NIL

E-waste was sent to CPCB authorized recycler.

#### PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

M/s Mangalam Cement Limited 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. 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 equipment and hence no cost impact on the production cost.

#### PART - H

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

Green belt development and tree plantation is our on-going process. In the year 2021-2022 we have planted 2516 No's of native species and up to March 2021, in Clinker Grinding Unit and DG Set.

#### PART-I

#### MISCELLANEOUS:

#### Any other particulars in respect of environmental protection and abatement of pollution.

- 1. We have full-fledged Environment Department with three separate cells, for monitoring, maintenance of pollution control equipment and 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 Department is taking care of Housekeeping, water supply.
- Horticulture Department is taking care of tree plantation and green belt development.Every year we are doing tree plantation.

We are enclosing herewith following documents:-

Annexure - 1:- Stack Emission Monitoring Test Reports

Annexure - 2:- Ambient Air Quality (PM10, PM2.5, NOx and SO2)

Annexure - 3:- Ambient Noise Monitoring.

## Aligarh Grinding Unit (M/s Mangalam Cement Ltd.)

### Cement Mill Stack Monitoring Report 2021-2022

S. No.	Month	Measured Value (in mg/NM3)
Permissible Lim	it	30
1	Apr-21	20.4
2	May-21	20.2
3	Jun-21	19.6
4	Jul-21	19.5
5	Aug-21	18.8
6	Sep-21	18.9
7	Oct-21	19.3
8	Nov-21	19.1
9	Dec-21	18.0
10	Jan-22	18.9
11	Feb-22	19.7
12	Mar-22	19.7
	Average	19.3
	Min	18.0
	Max	20.4

# MANGALAM CEMENT LIMITED, (Aligarh Grinding UNIT), Dist: Aligarh (U.P.)

AMBIENT AIR QUALITY (All values in µg/m3)

Year, 2021-2

Location	monun	Limits	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Average	Minimum	Maximum
	PM 10	100	58.4	61.9	62.5	53.5	49.6	46.4	51.8	53.6	55.2	52.4	56.8	62.3	55.4	46.4	62.5
Ne	PM 2.5	60	28.8	29.8	31.7	25.7	23.3	22.9	26.4	28.5	26.1	27.5	29.5	32.1	27.7	22.9	32.1
Near Canteen	S02	80	6.5	6.5	7.2	5.3	6.4	6.9	7.5	8.2	7.3	6.5	8.1	7.7	7.0	5.3	8.2
en	NOx	80	13.9	13.6	14.2	13.2	13.8	13.7	14.6	15.3	14.3	13,1	15.6	13.8	14.1	13.1	15.6
	co	4000	496.0	462.7	486.3	450.2	428.0	439.2	454.3	462.7	482.1	504.9	527.0	522.4	476.3	428.0	527.0
	PM 10	100	50.9	61.0	58.4	52,4	46.6	45.9	48.5	52.0	54.8	50.7	64.5	57.3	53.6	45.9	64.5
Near	PM 2.5	60	24.7	28.1	30.4	26.6	22.0	23.0	25.1	27.1	25.7	23.4	31.5	28.4	26.3	22.0	31.5
Near CDF Building-I	S02	80	5.7	6.2	6.8	4.3	5.4	6.2	6.7	7.2	6.3	5.9	7.4	8.1	6.3	4.3	8.1
Iding-I	NOx	80	12.8	11.6	13.5	11.5	12.4	13.3	14.5	14.8	13.5	12.7	14.9	15.3	13.4	11.5	15.3
	8	4000	455.7	414.2	437.7	404.3	412.6	426.7	421.0	422.4	476.6	472.0	480.5	466.8	440.9	404.3	480.5
	PM 10	100	67.7	71.5	64.2	58.1	51.4	47.8	53.7	56.5	59.4	61.5	57.4	63,4	59.4	47.8	71.5
Near	PM 2.5	60	32.3	33.9	29.9	27.6	24.6	23.9	26.9	30.1	28.5	32.6	30.4	34.9	29.6	23.9	34.9
<b>Near Packing Plant</b>	S02	80	8.6	8.7	7.1	6.3	8.2	8.4	6.2	8,1	7.2	6.5 -	8,6	7.7	7.6	6.2	8.7
Plant	NOx	80	15.2	14.9	14.6	15,6	14.7	14.7	14.5	15.2	13.7	12.8	16.1	14.4	14.7	12.8	16.1
	co	4000	469.6	443.9	465.4	396.0	425.2	434.5	439.0	443.2	482.1	465.8	484.1	458,5	450.6	396.0	484.1
	PM 10	100	56.1	64.8	58.6	52.1	47.4	44.9	48,3	53.5	55.8	63.0	53.8	62.7	55.1	44.9	64.8
Near C	PM 2.5	60	27.0	29.2	26.0	25.1	23.5	22.1	24.0	28.9	26.8	33,4	29.5	34.6	27.5	22.1	34.6
Near CDF Building II	S02	80	7.0	7.0	6.3	4.9	7.3	7.5	6.5	5.3	6.8	7.5	6.4	7.9	6.7	4.9	7.9
ding II	NOx	80	13.7	13.3	12.9	13.3	14.0	13.8	13.3	12.9	13.1	14.6	13.8	14.9	13.6	12.9	14.9
	СО	4000	436.3	403.3	427.9	351.5	431.4	398.6	389.0	397.4	461.3	451.7	451.9	434.9	419.6	351.5	461.3

# MANGALAM CEMENT LIMITED, (Aligarh Grinding UNIT), Dist: Aligarh (U.P.)

# AMBIENT NOISE MONITORING REPORT

Year, 2021-22

Date					loise Level (i			
	Near Ca	anteen	Near Build	CALCULATION IN COLUMN TO SERVICE STATE OF THE PERSON SERVICE STATE SERVICE STATE OF THE PERSON SERVICE STATE SERVICE STATE SERVICE STATE SERVI	Near Packing Plant		Near CDF Building-II	
	Day	Night	Day	Night	Day	Night	Day	Night
Limits	75.0	70.0	75.0	70.0	75.0	70.0	75.0	70.0
Apr-21	67.0	61.4	65.3	59.2	69.1	62.5	64.9	59.6
May-21	67.7	62.8	67.8	62.9	69.4	64.3	67.3	61.59
Jun-21	65.4	61.4	65.5	61.7	68.7	64.1	64.7	59.7
Jul-21	68.1	64.6	66.1	63.0	69.2	65.4	67.2	64.3
Aug-21	67.9	62.6	66.6	63.3	69.2	64.9	67.2	63.6
Sep-21	64.8	57.8	63.4	58.2	66.7	60.7	64.5	59.4
Oct-21	64.1	57.5	62.7	57.8	68.2	62.0	64.4	59.1
Nov-21	64.0	57.5	62.8	57.8	67.7	62.4	64.0	58.9
Dec-21	63.2	58.5	60.4	55.7	66.4	61.4	63.4	58.8
Jan-22	64.1	59.8	63.9	59.6	67.3	62.5	65.4	61.6
Feb-22	64.3	59.8	64.0	58.8	66.5	61.7	64.1	59.5
Mar-22	65.1	61.5	64.0	59.7	67.9	63.2	65.3	61.0
Average	65.5	60.4	64.4	59.8	68.0	62.9	65.2	60.
Minimum	63.2	57.5	60.4	55.7	66.4	60.7	63.4	58.
Maximum	68.1	64.6	67.8	63.3	69.4	65.4	65.4	61.