

DCBL/OSPCB/003/2024-102
September 24, 2024.

To,
The Member Secretary
State Pollution Control Board, Odisha
Paribesh Bhawan,
A/118, Nilakantha Nagar,
Unit-VIII, Bhubaneswar-751 012

Sub: Submission of Environmental Statement (Form V) for the Financial Year ending 31st March 2024.

Dear Sir,

With reference to the above subject matter, we are herewith submitting the environmental statement in Form V (generated online) of M/s Dalmia Cement Bharat Limited (Line 1, 2 & CPP) at Rajgangpur, District – Sundargarh, Odisha for the financial year ending 31st March 2024.

This is for your kind information please.

Thanking you,

Yours sincerely,
For **Dalmia Cement Bharat Limited,**



Ashok Kumar Mishra
Head - Environment

Encl: Form V

CC: 1. The Regional Officer, OSPCB, Rourkela.
2. Addl. PCCF (C), Regional Office (Eastern Zone), MoEF&CC, Bhubaneswar.

"FORM - V"
(See Rule 14)

ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING 31st March 2024

PART - A

- (i) Name and address of the owner/ occupier of the industry operation or process. : Venkatesan Thyagarajan
Dalmia Cement Bharat Limited (formerly OCL India Ltd.)
Rajgangpur 770017
District - Sundargarh (ODISHA)
- (ii) Industry category
Primary - (STC Code) : Red A, Cement
Secondary - (SIC Code)
- (iii) Production capacity - Units : Clinker – 3.3 MTPA
Cement – 4.3 MTPA
WHRB – 11 MW
CPP – 2 X 27 MW
- (iv) Year of Establishment : 1951
- (v) Date of the last environmental Statement submitted : 23.09.2023

PART - B

Water and Raw Materials Consumption

(1) Water consumption m³/d.

Process: 0 m³/day
Cooling: 505 m³/day
Domestic: 382 m³/day

Nature of products	Process Water consumption per unit of product output	
	During the Previous Financial Year (2022-23)	During the current Financial Year (2023-24)
Cement	0	0
Clinker	0	0
Power	0.437	0.453

(2) Raw Material Consumption –

Name of Raw Material	Name of Products	Consumption of Raw Material per unit	
		During the Previous Financial Year (2022-23)	During the Current Financial Year (2023-24)
Limestone	Clinker	1.3484	1.3564
Ash	Clinker	0.0172	0.0169
Morrum & Red Mud	Clinker	0.0365	0.0400
Sandstone	Clinker	0.0020	0.0143
Slag	Clinker	0.0224	0.0195
Pet Coke	Clinker	0.0748	0.0769



Coal	Clinker	0.0000	0.0096
AFR	Clinker	0.0476	0.0453
Gypsum	Cement	0.0105	0.0105
Slag	Cement	0.3304	0.3451
Ash	Cement	0.2570	0.2398
Pet Coke	Cement	0.0030	0.0045
Coal	Cement	0.0098	0.0022
Additives	Cement	0.0001	0.0002
Coal	Power	0.0006	0.0002
Rice Husk and Others	Power	0.0006	0.0009

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

PART - C

Discharged to environment/unit of output specified if the consent issued:

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
Water	Effluent Discharge	Zero Effluent Discharge	Zero Effluent Discharge
Air	Kiln 1 PM – 62.99 Kg/Day	8.93 mg/Nm ³	70.23 % Lower
Air	Kiln 1 SO ₂ – 173.65 Kg/Day	22.10 mg/Nm ³	77.90 % Lower
Air	Kiln 1 NO _X – 2533.67 Kg/Day	339.98 mg/Nm ³	57.50 % Lower
Air	Cooler ESP L1 PM – 72.42 Kg/Day	17.90 mg/Nm ³	40.33 % Lower
Air	Coal Mill L1 PM – 19.81 Kg/Day	15.90 mg/Nm ³	47.00 % Lower
Air	Kiln 2 PM – 162.20 Kg/Day	10.82 mg/Nm ³	63.94 % Lower
Air	Kiln 2 SO ₂ – 430.05 Kg/Day	29.13 mg/Nm ³	70.87 % Lower
Air	Kiln 2 NO _X – 2788.82 Kg/Day	196.17 mg/Nm ³	75.48 % Lower
Air	Cooler ESP L2 PM – 68.96 Kg/Day	14.40 mg/Nm ³	52.00 % Lower
Air	Coal Mill L2 PM – 55.73 Kg/Day	18.10 mg/Nm ³	39.67 % Lower
Air	CVRM 1 PM – 53.34 Kg/Day	9.53 mg/Nm ³	68.22 % Lower
Air	CVRM 2 PM – 44.80 Kg/Day	8.96 mg/Nm ³	70.14 % Lower
Air	CVRM 3 PM – 110.29 Kg/Day	12.42 mg/Nm ³	58.61 % Lower
Air	CPP PM – 170.40 Kg/Day	23.47 mg/Nm ³	53.07 % Lower
Air	CPP SO ₂ – 2054.37 Kg/Day	393.73 mg/Nm ³	34.38 % Lower
Air	CPP NO _X – 1110.00 Kg/Day	240.95 mg/Nm ³	19.68 % Lower



PART - D

Hazardous Wastes

(As specified under Hazardous Wastes/Management and Trans-Boundary Rules 2016)

Hazardous Wastes	Total Quantity (kg)	
	During the Previous Financial Year (2022-23)	During the Current Financial Year (2023-24)
(a) From process	<ul style="list-style-type: none">• Used oil / Spent oil – 34.02 KL,• Waste / Residue Containing oil – 3.42 MT,• Empty Barrels / Containers / Liners Contaminated with Hazardous Chemicals / Wastes – 0 MT	<ul style="list-style-type: none">• Used oil /Spent oil – 25.57 MT• Waste / Residue Containing oil – 4.18 MT• Empty Barrels / Containers / Liners Contaminated with Hazardous Chemicals / Wastes – 0 MT
(b) From pollution control facilities	NA	NA

PART - E

Solid Wastes

	Total Quantity (In Ton)	
	During the Previous Financial Year: 2022-23	During the Current Financial Year: 2023-24
a) From process	Ash – 224798 T	Ash – 225802 T
b) From pollution control facility	100 % Recycled / Reutilized in the cement manufacturing	98.43 % Recycled / Reutilized in the cement manufacturing
c) (1) Quantity recycled or reutilized within the Unit.	Ash – 224798 T	Ash – 220555 T
d) Sold	Nil	Nil
e) Disposed	Nil	1719 T Disposed to authorized Fly Ash Brick Manufacturers.

PART - F

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

- No solid wastes generated from cement plant manufacturing process and the fly ash generated from Captive power plant is being utilized for captive cement manufacturing process, which is 98.43% utilisation of generated ash for FY 2023 - 24.
- Used oil (Category 5.1, as per Schedule-I) and Waste / Residue containing oil (Category 5.2 as per Schedule -1) is collected in drums & stored in designated HW storage sheds before being disposed to authorized recyclers / reprocessors.



PART - G

In respect of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

Water conservation:

The Quantity of Recycled Water in FY 2023-24 is 1643 m³/day which is used for Cooling, Dust Suppression, Vehicle Washing and green cover development as well as horticulture.

Energy Conservation:

1. Line-2 Pyro upgradation work done resulting in 7197727 Kwh saving.
2. Automation of 08 Nos. shell cooling fans with kiln shell temperature (17520 Kwh)
3. Level based drain Valve installed in place of timer-based drain valve in compressor air receiver (7117 Kwh)
4. Reduction of WSB Pressure during Boiler Operation (203 Kwh / day).
5. Optimisation of ESP Hopper heater (403 Kwh / day)
6. Optimising the Running hour of Conveying system (SAC) (1024 Kwh / day).
7. Reduction of Cooling water discharge pressure (495 Kwh / day)
8. Decreasing IAC header pressure and changing the minimum locking set point to about 5% (263 Kwh / day).

PART - H

Additional measures/investment proposed for environmental protection including abatement of pollution, prevention of pollution.

Environment Expenditure incurred:

- **Capital:** Rs. 130.441 Lakhs
- **Revenue:** Rs. 191.756 Lakhs

Additional Investment Proposed:

1. Revamping of STP in Line-2
2. Installation of New ETP at Line-1
3. Restoration work at Indraprastha Pond at CPP for Surface run off collection.

PART - I

Any other particulars for improving the quality of the environment.

1. Total 14251 saplings have been planted with a survival rate of more than 82%.
2. Truck Mounted mobile mist Cannon deployed on roads to control dust emission.
3. Mechanized wheel washing system installed at entry/exit point of plant premises.
4. Theme based World Environment Day celebration to build up awareness about various ways to impact life and environment among the employee as well as the community.

Remarks:

Dalmia Cement Bharat Limited is taking green initiatives in the field of energy conservation & resource management and is cleaning up legacy municipal solid wastes from various municipalities.



Dalmia Cement Bharat Limited, Rajgangpur

A. Raw Material Details:

Name of Raw Materials	Name of Products	Consumption of Raw Material (Metric Ton)	
		During the Previous FY 2022 - 23	During the Current FY 2023 - 24
Limestone	Clinker	1857617	3057241
Ash		23750	38054
Morrum & Red Mud		50312	90095
Sandstone		2790	32259
Slag		30889	44048
Pet coke		103083	173393
AFR		65582	102192
Coal		0	21654
Gypsum	Cement	34451	30945
Slag		1076849	1015922
Ash		837693	706046
Coal		31899	6548
Pet Coke		9860	13223
Additives		519	529
Washery Rejects	Power	216335	323225
Rice Husk & Others		204890	68652

B. Production Details:

Name of products	UOM	Production	
		During the Previous FY 2022-23	During the Current FY 2023-24
Clinker	Ton	1377691	2253961
Cement	Ton	3259171	2944016
Power			
CPP (2 X27 MW)	MWh	341728	359112
WHRS (11 MW)	MWh	40001	47386

