



emami* cement limited

Ref: ECL/BB/CECB/F 03/ 069

Date: 16.06.2018

To,
The Regional Officer (CWZ),
Ministry of Environment & Forest,
Ground Floor, New Secretarial Building, Civil Line
NAGPUR (MS)– 440 001. E-Mail:- apccfcentral-ngp-mef@gov.in

Sub:- Environment Statement Report (2017-18).

Ref:- Environmental Clearance issued by the MOEFCC, New Delhi vide letter no. F. No. J-11011/372/2007- IA II (I), dated: 31.10.2011 (GC No. xxii) and letter no J-11011/309/2013-IA II(I), dated: 08.09.2016 (GC No. xiii).

Dear Sir,

Please find enclosed herewith the Environment Statement Report (2017-18) for Plant and Mines in prescribed format (form-V) for financial year ending 31st March'2018 in compliance with the general condition No. xxii of EC letter issued by MOEFCC, New Delhi for our integrated Cement Plant at villages Risda, Dhandhani and Kukurdih, Baloda Bazar, Chhattisgarh.

Thanking you,

Yours faithfully,
For Emami Cement Ltd.

Authorized Signatory

Encl.: As above

CC:

1. The Member Secretary, Environment Conservation Board, Paryavas Bhawan, Sector-19, Naya **Raipur (C.G.) 492002.** E-Mail:- hocecb@gmail.com
2. The Regional Officer, Environment Conservation Board, Kabir Nagar, Commercial Complex Chhattisgarh Housing Board Colony, **RAIPUR – 492 099 (C.G.)** E-Mail:- rocecbraipur2014@gmail.com
3. The Zonal Office, Central Pollution Control Board, 3rd floor, Sahakar Bhawan North TT Nagar, **Bhopal (MP) 462016.** E-Mail:- cpcb.bhopal@gmail.com
4. Office Copy

ENVIRONMENTAL STATEMENT REPORT (FORM-V)

(See rule 14)

Environmental Statement Report for the financial year ending 31st March, 2018 (2017-18)

PART – A

i.	Name and address of the owner/occupier of the industry Operation or process.	M/s. Emami Cement Limited Village & Post: Risda, Suhela Road, Baloda Bazar- 493 332 (Chhattisgarh)	
ii.	Industry category Primary- (STC Code) Secondary – (STC Code)	Red Category	
iii.	Production capacity	Particular	Capacity
		Cement	2.50 MTPA
		Clinker	3.2 MTPA
		CPP	30 MW
		WHRB	09 MW
iv.	Year of establishment	<ul style="list-style-type: none"> • Cement Grinding- 2016 • Clinkerization Plant- 2016 • CPP- 2016 • WHRB- 2017 	
v.	Date of the last environmental statement submitted.	20.06.2017 vide letter No. BB/EC/CECB/F03/077	

PART – B

Water and Raw Material Consumption

A.	Industrial Water Consumption (m ³ /day)	1126
i.	Cooling and Process for Cement Plant (m ³ /day)	824 (269 days)
ii.	Cooling and Process for CPP (m ³ /day)	223 (306 days)
iii.	Cooling and Process for WHRB (m ³ /day)	79 (240 days)
B.	Domestic (m ³ /day)	134 (365 days)

S. No.	Name of the Products	Process water consumption per unit of products	
		During the previous financial year	During the current financial year 2017-18
1.	Clinker	0.063 KL/Ton	0.059 KL/Ton
2.	Cement	0.060 KL/Ton	0.015 KL/Ton
3.	Power Plant	1.134 KL/MW	0.45 KL/MW
4.	WHRB	Commissioned in March' 2017	0.39 KL/MW

ii) **Raw Material Consumption**

Name of the Raw materials	Name of the Products	Raw Material consumption per unit of products	
		During the previous financial year	During the current financial year 2017-18
Limestone	Cement	1.53	1.49
Iron Ore		0.4	0.33
Bauxite		-	0.001
Sand		0.9	-
Clinker		69.4	66.8
Gypsum		4.9	4.62
Fly Ash		23.8	23.7
Slag Blast Furnace		0.6	0.52

iii) **Power consumption (kWh)**

During the previous financial year	During the current financial year 2017-18
51.29 Lakhs	182.42 Lakhs

iv.) **Total Production (MT)**

Name of Product	During the previous financial year	During the current financial year
Clinker	5.98 Lakhs	21.32 Lakhs
Cement	6.35 Lakhs	19.22 Lakhs

PART - C

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

Pollutants	Quantity of Pollutants discharged (mass/day)	Conc. of Pollutants discharged (mass/volume)	Prescribed standards (Limit)
A. Air			
i. Stack			
1. Cement Mill	0.106 T/Day	14.3 mg/Nm ³	30 mg/Nm ³
2. Raw Mill & Kiln	0.178 T/Day	15.1 mg/Nm ³	30 mg/Nm ³
3. Coal Mill	0.042 T/Day	16.5 mg/Nm ³	30 mg/Nm ³
4. Clinker Cooler	0.145 T/Day	12.2 mg/Nm ³	30 mg/Nm ³
5. CPP	0.411 T/Day	17.1 mg/Nm ³	50 mg/Nm ³
B. Water			
1. Industrial process			
a. Cement Plant	Nil		
b. CPP (Dust Suppression)	8 M ³ /day	pH 7.00-8.00 BOD < 20 mg/ltr COD < 100 mg/ltr SS < 75 mg/ltr	pH 5.50- 9.0 BOD 30 mg/ltr COD 250 mg/ltr SS 100 mg/ltr
2. Domestic Waste (STP) Plantation	32 M ³ /day		

PART – D
Hazardous Wastes

HAZARDOUS WASTES

As specified under Hazardous Wastes (Management & Handling Rules, 1989)

S. No.	Hazardous Wastes from Cement Plant & CPP	Total Quantity (Kg)	
		During the previous financial year	During the current financial year
a.	From Process (Used Oil Cat.5.1)	2240	20460
b.	From Pollution Control Facilities	--	--

PART – E
SOLID WASTES

S. No.	Solid Wastes	Total Quantity (MT)	
		During the previous financial year	During the current financial year
a.	From Process	---	---
b.	From Pollution Control Facility Quantity recycled / reutilized as final Product.		
	1. RABH (Raw mill & Kiln)	28035	95934
	2. Coal Mill Bag House (Process)	28300	98324
	3. Cooler ESP	11953	42637
	4. Cement Mill Bag House (Process)	634721	1922180
c.	Quantity recycled or reutilized within the unit. (CPP Fly ash)	24595	66701

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.

i) Other Solid Waste (generated from the entire premises): (Year 2017-2018)

Description of waste	Qty. of waste generated during the year (MT)	Disposed (MT)	Accumulated quantity (as on 01.04.2018)	Disposal Method	Equipment / Facility Used
Fly Ash (CPP)	66821	66701	120	Manufacturing of PPC	
Fly Ash (Purchased)	389191.31	389185	6.31	Manufacturing of PPC	
Paper Waste / Cartons	-	-	-		
Metal Scrap	344.37	314.37	30	Shiv Shankar Steels & Ashoka Trade Link	
Torn PP Bags & other misc. Plastic Waste	38.75	36.75	2.0	Shri Ram Traders	
E-waste (Old computers, printers, circuit boards etc.)	-	-	-		
Spent Batteries	-	-	-		
Filter bags scrap	-	-	-		
Cotton waste/Cotton rags	-	-	-		
Wooden Scrap	54.18	50.18	4.0	Ashoka Trade Link	

PART – G

Impact of the Pollution Abatement Measures

M/s Emami Cement Limited is committed for **Environment excellence** through environmental friendly activities. Company wishes to conserve the Environment as well as to reduce the production cost by minimizing the waste and by optimizing the process. Efforts for achieving the above said goals and for minimizing the adverse effect on environment along with economic growth are as follows:

- Adequate initiatives have been taken for effective fugitive dust suppression.
- Intensive housekeeping has been maintained by M/s Emami Cement Ltd. to minimize any spillage, from which fugitive dust emission is usually generated. In this regard the pucca road construction is under progress.
- To avoid any unwanted noise pollution, the practice of well ventilation system and proper maintenance of noise barriers will be adopted. Apart from this all noisy areas within the plant and mines have been identified and caution boards will be displayed for general awareness, further nobody is allowed to enter in the noisy areas without earmuff / earplug.
- To control the dust emission effectively, the process materials and end products will be stored in concrete silos, Coal and gypsum is stored in covered sheds with concrete floor. Clinker is being stored in clinker silo to reduce the fugitive emission.
- In its endeavor to remain environment friendly, dedicated efforts is being made for developing Green Belt. This plantation not only meant for its aesthetic value but it also serves as an effective carbon -dioxide sink.
- Routine monitoring / measurement of fugitive emission, stack emission is done and water quality is tested on regular basis to evaluate the performance and for taking needful action.

PART – H

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

- Two STP is being installed of capacity of 100 KLD for treatment of the domestic waste water and the treated water is being use in plantation purpose and the generated sludge is being use as manure in plantation.
- The Green belt/plantation has been started during construction phase itself and 33% of the total plant area is developed as a Green belt area.
- 100% Fly ash Generated from CPP are utilized for the Manufacturing of PCC.

PART – I

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

1. The Green belt development have completed i.e. 62.22 ha.
2. Compliance of stipulated condition of Environmental Clearance is being done and report submitting regularly.
3. Roof Top Rain Water Harvesting System (02 Nos.) constructed inside the plant premises for ground water recharge.

ENVIRONMENTAL STATEMENT REPORT (FORM-V)

(See rule 14)

Environmental Statement Report for the financial year ending 31st March, 2018 (2017-18)

PART – A

i.	Name and address of the owner/occupier of the industry Operation or process.	M/s. Emami Cement Limited Village & Post: Risda, Suhela Road, Baloda Bazar- 493 332 (Chhattisgarh)	
ii.	Industry category Primary-(STC Code) Secondary – (STC Code)	Red Category	
iii.	Production capacity	Particular	Capacity
		Limestone	3.17 MTPA
iv.	Year of establishment	Mines Commercial Production start- 2016	
v.	Date of the last environmental statement submitted.	20.06.2017 vide letter No. BB/EC/CECB/F3/077	

PART – B

i) Water Consumption

i.	Industrial Water consumption in m ³ /day	31.2 (144 days)
ii	Domestic (Including Cement Plant and Mines) in m ³ /day	134 (365 days)

ii) Raw Material Consumption

Name of the Raw materials	Name of the Products	Raw Material consumption kg per tonne of products	
		During the previous financial year	During the current financial year 2017-18
Explosive	Limestone	0.41	0.28

iii) Power consumption (kWh)

During the previous financial year	During the current financial year 2017-18
17.78 Lakhs	45.33 Lakhs

iv.) **Total Limestone production (MT)**

During the previous financial year	During the current financial year
10.13 Lakhs	31.69 Lakhs

PART - C

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

Pollutants	Quantity of Pollutants discharged (mass/day)	Conc. of Pollutants discharged (mass/volume)	Prescribed standards (Limit)
(a) Air From Crusher Stack	0.029 T/day	19.4 mg/Nm ³	50 mg/Nm ³
(b) Water Industrial process	Nil		
a. LS Crusher (Dust suppression)	31.2 M ³ /day		
b. Automobile Workshop (Dust Suppression)	3 M ³ /day	pH 7.00-8.00	pH 5.50- 9.0
2. Domestic Waste (STP) (Used for Plantation)	2 M ³ /day	BOD < 20 mg/ltr COD < 100 mg/ltr SS < 75 mg/ltr	BOD 30 mg/ltr COD 250 mg/ltr SS 100 mg/ltr

PART - D
Hazardous Wastes

HAZARDOUS WASTES

As specified under Hazardous Wastes (Management & Handling Rules, 1989)

S. No.	Hazardous Wastes from Mines	Total Quantity (Kg)	
		During the previous financial year	During the current financial year
a.	From Process (Used Oil Cat. 5.1)	0150	10500
b.	From Pollution Control Facilities	--	--

**PART – E
SOLID WASTES**

S. No.	Solid Wastes	Total Quantity (MT)	
		During the previous financial year	During the current financial year
a.	From Process	20257	63397
b.	From Pollution Control Facility Crusher Bag House (Quantity recycled, reutilized as final Product)		
c.	Quantity recycled or reutilized within the unit.		
i.	Over burden	349487	1566343.5
ii.	Top Soil	428959	221252.78

Note:

Overburden material and the intercalated limestone, which gets thoroughly mixed upon blasting and from which recovery of usable limestone is very less or uneconomical, is separately dumped at the overburden dump-yard, but if there is proportionately more limestone that can be recovered, then it is subjected to screen, and limestone is recovered.

The overburden material generated during the process of stripping etc. is loaded into Dumpers, which carries it to the dump. These are regularly spread out with the help of Dozers, and more room is created for accommodating additional overburden.

Topsoil is separately scrapped with the help of Dozer. It is carried to a separate topsoil dump and temporarily stored to be utilized in social afforestation and horticulture. There is an effort to utilize the topsoil to the maximum possible extent. These will be utilized for future reclamation of the abandoned pit.

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.

i) Other Solid Waste (generated from the entire premises): (Year 2017-2018)

Description of waste	Qty. of waste generated during the year (MT)	Disposed (MT)	Accumulated quantity (as on 01.04.2017)	Disposal Method	Equipment / Facility Used
Fly Ash (CPP)	-	-	-		
Fly Ash (Purchased)	-	-	-		
Paper Waste / Cartons	-	-	-		
Metal Scrap	1.7	1.5	0.2	Shiv Shankar Steels & Ashoka Trade Link	
Torn PP Bags & other misc. Plastic Waste	-	-	-		
E-waste (Old computers, printers, circuit boards etc.)	-	-	-		
Spent Batteries	-	-	-		
Filter bags scrap	-	-	-		
Cotton waste/cotton rags	1.25	-	1.25		
Wooden Scrap	-	-	-		

PART – G

Impact of the Pollution Abatement Measures

M/s Emami Cement Limited is committed for **Environment excellence** through environmental friendly activities. Company wishes to conserve the Environment as well as to reduce the production cost by minimizing the waste and by optimizing the process. Efforts for achieving the above said goals and for minimizing the adverse effect on environment along with economic growth are as follows:

- Adequate initiatives have been taken for effective fugitive dust suppression.
- Intensive housekeeping has been maintained by M/s Emami Cement Ltd. to minimize any spillage, from which fugitive dust emission is usually generated.
- To avoid any unwanted noise pollution, the practice of well ventilation system and proper maintenance of noise barriers is being adopted. Apart from this all noisy areas within the plant and mines have been identified and caution boards will be displayed for general awareness, further nobody is allowed to enter in the noisy areas without earmuff / earplug.
- In its endeavor to remain environment friendly, dedicated efforts is being made for developing Green Belt. This plantation not only meant for its aesthetic value but it also serves as an effective carbon -dioxide sink.
- Routine monitoring / measurement of fugitive emission, stack emission is done and water quality is tested on regular basis to evaluate the performance and for taking needful action.
- In the process of limestone mining from the quarries, different types of waste viz. Over burden /Top soil and screen rejects are produced. These are systematically dumped at prescribed stockpiles thereby preventing air borne dust to spread. Significant amount of these wastes are efficiently used for construction/repairing road, civil construction, and other development/protection work at Mines and Factory.

PART – H

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

- Two STP is being installed of capacity of 100 KLD for treatment of the domestic waste water and the treated water will be used for plantation purpose and the generated sludge will be used as manure.
- The Green belt/plantation has been started since year 2013 (Before starting of Mining) and maximum available area will be developed as a Green belt area.

PART – I

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

1. The Green belt development has been started since year 2013.
2. Compliance to the stipulated condition in Environmental Clearance is being done and report submitted regularly.
3. Rain Water Harvooting Plite (02 Nos.) and Roof Top Rain Water I larvesting structures (01 No.) are made in the mine lease area.
4. Oil settling tanks has been constructed for treatment of vehicle washing waste water.

