

FORM – V

(See rule 14)

Environmental Statement for the financial year ending the 31st March 2017**PART – A**

1.	Name and address of the Owner/Occupier of the Industry, operation or process	:	STAR CEMENT LIMITED VILL+PO: LUMSHNONG, DIST: EAST JAINTIA HILLS MEGHALAYA – 793210
2.	Industry Category: Primary (STC Code); Secondary (SIC Code)	:	RED CATEGORY, LARGE
3.	Production Capacity	:	2400 TPD (CLINKER & CEMENT PRODUCTION PLANT)
4.	Year of Establishment	:	2005
5.	Date of the last environmental statement submitted	:	22.09.2016

PART – B**Water and Raw Material Consumption:****(I) Water Consumption (m³/day)**Process & Cooling : 24.75 m³/dayDomestic : 229.50 m³/day

Name of Products	Process water consumption per unit of product output	
	During the previous financial year (2015-16)	During the current financial year (2016-17)
	1	2
Cement	0.0284 KL/MT	0.0464 KL/MT

(II) Raw Material Consumption:

S. No.	Name of raw materials*	Name of Products	Consumption of raw material per unit of output	
			During the current financial year (2015-16) in MT	During the current financial year (2016-17) in MT
1.	Lime Stone	Cement	681292.00	774071.00
2.	Shale		72875.00	55350.00
3.	Mill Scale		279.00	46.00
4.	Sand Stone		Nil	32861.00
5.	Coal		31208.294	121803.193
6.	Gypsum		2014.219	945.38
7.	Fly Ash		13002.00	17995.00

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

PART – C

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

S. No.	Pollutants	Quantity of Pollutants discharge (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons.
a.	Water	N.A.	N.A.	There is no perennial Water course in the Lease or in nearby area.
b.	Air (Ambient Air Quality Monitoring & Stack Emission Monitoring)	Annexure - 1		Particulate matters value are well within the prescribed limits stipulated by concerned regulatory authorities.

PART – D

Hazardous Wastes:

(As specified under Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016 amended till date.

S. No.	Hazardous Waste	Total Quantity (Kg.)	
		During the previous financial year (2015-16)	During the current financial year (2016-17)
a.	From Process		
(i)	Used Oil*	4800 Ltrs.	4800 Ltrs.
(ii)	Used Grease*	3276 Kgs.	9464 Kgs.
b.	From Pollution Control facilities		

* All the quantity of used oil & used grease come out as reject from different gear application and bearings are sold to authorized recycler & internal use.

PART – E

Solid Wastes:

S. No.	Solid Waste	Total Quantity (Kg.)	
		During the previous financial year (2015-16)	During the current financial year (2016-17)
a.	From Process	Nil	Nil
b.	From Pollution Control facilities	Nil	Nil
c.	Quantity recycled or reutilized	Nil	Nil

PART – F

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

S. No.	Description of Hazardous Waste	Qty. of waste generated during the year	Disposal Method
1.	Used /Spent Oil	4800 Ltrs.	Sold to authorized Recycler & internal use. The hazardous waste annual return was already submitted at MSPCB.
2.	Used Grease	9464 Kgs.	

Other Solid Waste:

S. No.	Description of Waste	Qty. of waste generated during the year (MT)	Disposal Method
1	Tin Tapper Scrap	43.27	Sold to authorized vendor
2	Old & used Tyre Scrap	473 No.	
3	Old & used I.T. materials	1.15	
4	Old & used cut pieces bag scrap	48.83	
5	Iron Scrap	120.17	
6	HDPE Wrapper Scrap	7.55	
7	Alluminium Scrap	Nil	

PART – G

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

- The plant is equipped with Air Pollution Control devices such as RABH, ESP, Jet Pulse Filters etc. designed to control the emission (SPM) level below 30 mg/Nm³ from any of the stacks installed at our plant.
- Total 4 nos. of opacity monitor has already installed in Kiln & Raw Mill Stack, Cooler ESP Stack, Coal Mill Stack and Cement Mill Stack and real time data are being connectivity to Meghalaya State Pollution Control Board & Central Pollution Control Board.
- In addition, we are successfully managing the ambient SPM level below the prescribed levels by way of putting up Jet Pulse Filters at each of the transfer points, fully mechanized system for Fly Ash handling, covered belt conveyors, water sprinklers for raw materials and mostly paved surfaces for vehicular movement inside the plant premises.
- The large amount of dust collected in the above mentioned dust catchers. This dust is recycled to the system, so as to convert finally to the product. These ways the natural resources are conserved in the system.
- The Pollution abatement practices adopted by us save precious raw material/ product and greatly help in conserving valuable natural resources. Ultimately reducing the manufacturing cost.

PART – H

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

- Development of greenbelt in & around the plant & colony (total 7226 nos. species already planted) in different areas.
- Water tanker is used for spraying in the plant area as well as the nearby regularly for dust suppression.
- Mechanized cleaning of roads & floor area within the plant premises using road sweeper (mobile vacuum cleaner).
- Replacement of Conventional Fluorescent lamps with energy efficient T5 lamps for energy conservation.
- Suitable interlocks have been provided for Gear box & Girth Gear Cooling fans to avoid idle running of these fans.
- Installation of Variable Frequency Drives in Water Pumps & automation of plant water supply system, resulting in reduction of Power consumption of Plant water supply system.

PART – I

Any other particulars for improving the quality of the environment.

Environment Management System Improvement:

- Periodical review of EMS including compliance of environmental laws through periodic Management Review & Quality forums.
- Quarterly EHS inspection of all the sections through the plant premises.
- Awareness promotion through various environmental training, environmental competitions, presentations etc. on World Environment Day, Energy Conservation Day etc.
- Water sprinkling on the unpaved surface for dust suppression.
- Development of greenbelt in & around the plant & colony (Total 7226 nos. species already planted).The tree species planted are Chanpa, Gomari, jamun, Jack Fruit, khokon, Nahar, Rubber, Sita, Moha Neem, Dalim, Bipol, Shishoo, Ball Tree, Balhor, Banyan, Sonsom, Ashoka, Tita Chup, Bel Nimbu, Guava, Bottle Brush etc. Rate of survival 92%.
- Proper lubrication and housekeeping to avoid excessive noise generation.

Ambient Air Quality Monitoring Report

(Average Value)

Name of the Station	Respirable Suspended Particulate Matters ($\mu\text{g}/\text{m}^3$)		Gaseous Emission ($\mu\text{g}/\text{m}^3$)	
	PM ₁₀	PM _{2.5}	SO ₂	NO ₂
Near Guest House	55.81	34.68	6.54	9.82
Near Pump House	58.71	39.39	7.69	10.58
Near Security Gate # 2	57.14	29.11	7.19	10.29
Staff Quarters – 4	58.36	39.12	7.34	10.28

Stack Emission Monitoring Report

(Average Value)

Name of the Stack	Particulate Matters (in mg/Nm ³)
Primary Crusher – Bag Filter	15.73
Secondary Crusher – Bag Filter	16.85
Kiln & Raw Mill	20.85
Coal mill – Bag Filter	20.16
Cooler ESP	24.06
Cement Mill – Bag Filter	19.90
Packing plant – Bag Filter	17.28