

SKI\EHS\117 Date: 20.09.2018

To,

The District Environment Engineer, Tamil Nadu Pollution Control Board, Gummidipoondi, EPIP Building, Sipcot Industrial Park, Tiruvallur district, Tiruvallur-601 201.

Dear Sir,

Sub: Environmental Statement for the year 2017-2018

Please find attached herewith the Environmental Statement in Form-V for the year 2017-2018. We request you to kindly acknowledge receipt of the letter and confirm.

Thanking you,

Yours faithfully,

For SKI Carbon Black (India) Private Ltd.

(Unit: Hi-Tech Carbon, Gummidipoondi)

Rajan J

Senior Manager (P&A) & CSR

ADITYA BIRLA

Encl.: Form - 5

SKI Carbon Black (India) Private Limited

(Unit: Hi-Tech Carbon, Gummidipoondi)

K-16, Phase II, Sipcot Industrial Complex, P.O. Gummidipoondi, Dist. Thiruvallur - 601 201, Tamil Nadu, India T: +91 44 2798 9233 - 36 | F: +91 44 2798 9116 / 29 | Website: www.birlacarbon.com | CIN: U23201MH2013PTC241741

Environmental Statement for the financial year ending 31st March 2018

FORM - V

PART - A

(i)	Name and address of the owner/occupier of the Industry operation or process	SKI Carbon Black (India) Private Ltd. (Unit: Hi-Tech Carbon, Gummidipoondi) K-16, Phase-II, SIPCOT Industrial complex, Gummidipoondi - 601 201.
(ii)	Industry Category	Red – Code (1006)
(iii)	Production capacity – Units	174000 MT/Annum
(iv)	Year of establishment	1998
(v)	Date of the last environmental statement submitted	19.09.2017

PART - B

Water and Raw Material Consumption

(i) Water consumption m³/d

Process	1478.49		
Cooling	456.83		
Domestic	36		

Name of the Product	Process water consumption per unit of product output	
	During the previous financial	During the current financial
	year 16-17	year 17-18
	(1)	(2)
(1) Carbon Black	3.46 KL/MT	4.71 KL/MT
(2) Power	3.1 KL/MwH	3.2 KL/MwH

(ii) Raw material consumption

* Name of	Name	Consumption of Raw Material per unit of out	
Raw Materials	Of Product	During the previous	During the current
36.000300000000000000000000000000000000		Financial year 16-17	Financial year 17-18
1. CBFS	Carbon Black	1.758MT/MT	1.60 MT/MT
2. Fuel oil	Carbon Black	0.0053MT/MT	0.0048MT/MT
3. SKO	Carbon Black	0.00168MT/MT	0.0014MT/MT



Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

(1) Pollutants	Concentration of	Percentage of variation
2 2	Pollutant	from
		Prescribed standards with
		reasons
(a) Water	Zero Discharge	
TSS	12-16 mg/L	Nil, Within Norms
BOD	2-10 mg/L	Nil, Within Norms
(b) Air		
PM 2.5	45- 52 mg/m3	Nil, Within Norms
PM 10	60-80 mg/m3	Nil, Within Norms
Stack-		
a) Boiler/ Dryer, (SOx)	800 – 1100 ppm	Nil, Within Norms
b) Boiler/ Dryer, (NOx)	150 – 250 ppm	Nil, Within Norms
c) Boiler/ Dryer, (SPM)	25 -45 mg/Nm3	Nil, Within Norms

$\underline{PART} - \underline{D}$

Hazardous wastes

(as specified under Hazardous Wastes (Management and Handling) Rules, 2016)

Hazardous Wastes	Total Quantity (Kg)	
	During the current	During the current
	financial year (16-17)	financial year (17-18)
(a) From process	194.82 MT	98.05 MT
(b) from pollution control facilities	478.7 MT	282.51 MT

PART – E

Wastes

	Total Quantity (MT)	
	During the previous	During the current
	Financial year (15-16)	financial year (17-18)
(a) From process	5575.5 MT	3911.93 MT
(b) from pollution	NIL	Nil
control facilities (Approx.)		
(c) 1. Quantity recycled	4616 MT	3842 MT
Or re-utilized		
2. Sold	959.5 MT	69.93 MT
3. Disposed		



PART - F

Solid hazardous waste recovered from our effluent treatment plant is disposed through the common waste management site situated at Gummidipoondi. The floor sweepage is basically Carbon Black with impurities like dust etc. It is non-hazardous and it is sold as low-grade carbon black.

$\frac{PART-G}{Impact of Pollution Control Measures}$

A. The Pollution Control devices provided in the plant are process cum pollution control equipment such as Bag Filter, Purge Gas Filter, Dryer combustor and Boiler Combustor. Dryer combustor utilizes the offgases generated during the manufacture of Carbon Black to dry the wet pellets, thus saving the cost of fuel, which would have been incurred. Hence the cost of production is also reduced.

The utilization of off-gases in the boiler section to generate steam is beneficial in three ways-

- 1. There is no fuel requirement for running the boiler. The low BTU off-gases generated in the process are completely burnt to utilize its calorific value to run the boiler to generate high-pressure steam.
- 2. This high-pressure steam is used to generate sufficient power required for plant operation, thus saving the cost of power to reduce the cost of production.
- 3. The excess power generated is sold to Tamil Nadu Electricity Board to bring the revenue for the plant.
- B. Effluent Treatment Plant is in operation since commissioning to have approx. 100 % recycle of waste water after the treatment which has reduced water consumption for the process and there by conserving the natural resources and reducing cost of production.

All the above schemes save natural resources such as fuel, water & energy conservation.

<u>PART – H</u> Additional Measures / Investment made

The pollution control devices installed in the plant are sufficient to protect the environment and abate the pollution due to manufacture of carbon black. Since we have introduced for the first time in India High Temperature Technology with altogether different concept of utilization of total energy and no wastage at any stage of manufacture having enough built in provision at the design stage itself whereby 'Zero Pollution' is achieved.

Steam condensate recovery system is installed at the cost of Rs 5 lakhs and being recycled in the process. We have installed 2 ambient air quality monitoring stations at the cost of Rs 18 lakhs in the upstream and downstream areas of the plant to monitor PM 2.5 and PM 10. On line monitoring system for SOX, NOX have been installed for Boiler and Dryer stacks at the cost of Rs 65 lakhs. SPM monitor also installed for Boiler, Dryer stacks at the cost of 28 lakhs.

We are using battery operated Electrical forklifts in the warehouse which is environment friendly in many ways: significantly reduces the particulate matter emission, reduces the noise level compared to diesel operated forklifts and also reduces our dependence on fossil fuel thus conserving natural resources.

We have a well-planned rain water harvesting system with 16 numbers of recharge percolation pits to collect the surface area run-off water and roof water and also rain water harvesting ponds for collecting water from storm water drains.

We have installed recycling of scrubber water plant at the cost of 40 lakhs. We invested 81 lakhs for Energy reduction project. We have installed LED lights in office, plant areas at the cost of 35 lakhs. We are in process of installing clarifier sludge filter press, which will increase the water recovery and reduce the waste generation for an investment of 10 lakhs, we are planning to replace the existing (MEE) Multi effect evaporator with high efficiency MEE, with ATFD (Agitated Thin Film Dryer) for investment amounting to 11 Crores

<u>PART – I</u> Miscellaneous

- **A.** We have implemented **Quality Management Systems**, certification done by BSI Management systems complies with the requirement of **IATF 16949: 2016**, Validity up to 09/08/2021.
- **B.** We have implemented **Environmental Management System**, certification done by BSI Management system complies with the requirement of **ISO 14001: 2015**, Validity up to 24/05/2021.
- C. We have implemented Occupational Health & Safety Management system, certification done by BSI Management system complies with the requirement of OHSAS 18001: 2007, Validity up to 11/03/2021.
- **D.** We have implemented **Information Security Management System**, certification done by BSI Management system complies with the requirement of **ISO/IEC 27001:2013**, Validity up to 17/01/2021.
- E. We have implemented Social Accountability system, certification done by BSI Management system complies with the requirement of SA 8000: 2014, Validity up to 24/02/2021.
- F. We have implemented Energy Management system, certification done by TUV Nord Management system complies with the requirement of EN ISO 50001: 2011, Validity up to 09/02/2020.
- G. We have implemented Competence of chemical & Mechanical testing and calibration laboratories, certification done by National Accreditation Board of testing and calibration laboratories(NABL) complies with the requirement of ISO/IEC 17025:2005, Validity up to 07.12.2018.

