

BY REGD. POST

Member Secretary,
State Pollution Control Board, Odisha,
Paribesh Bhawan. A/118, Nilakanthanagar,
Unit-VIII. Bhubaneswar – 751 012.

TSI/J/E9.3/TMD/170
Dated: 11.05.2018

Dear Sir,

Sub: Env. Statement (Form-V) of 2016-17

Please find enclosed herewith is the Environmental Statement (Form V) duly filled up for the Financial year ended March 2018.

Thanking you,
Yours faithfully


11.5.18

(T M Dandapat)
Head (Environment Management)

Cc to: Regional Officer
State Pollution Control Board,
At/Po: Baniapat, College Road Keonjhar,
Dist: Keonjhar, (ODISHA)

✓ Cc to: Env File

FORM-V

Environmental statement for the financial year ending the 31st March 2018.

PART A

- i) Name and address of the owner/occupier of the industry, operation or process.
Mr. Sanjay Pattnaik,
TATA SPONGE IRON LIMITED
BILAIPADA, JODA, DIST.:- KEONJHAR, ORISSA 758 034.
- ii) Industry category: Primary
- iii) Production capacity ---- 4, 25,000 MT per annum.
- iv) Year of establishment. 1986
- v) Date of the last environmental statement submitted. – 13/05/2017

PART B

Water and Raw Material Consumption

- (i) Water consumption m³/d
Process----- NIL
Cooling----- 3488.28 KL/d
Domestic----- 1033 KL/d

Name of products	Process water consumption per unit of product output						
	During the previous financial year			During the current financial year			
	(1) (2016-17)			(2) (2017-18)			
(1)Sponge Iron	NIL			NIL			
(ii) Raw Material Consumption							
Name of raw materials	Name of products (Sponge Iron)	Consumption of raw material per unit of output.					
		During the previous financial year 2016-2017(MT/T)			During the current financial year 2017-2018(MT/T)		
1) Iron ore	----->	Kiln-I 1.743	Kiln-II 1.747	Kiln-III 1.710	Kiln-I 1.579	Kiln-II 1.573	Kiln-III 1.546
2) Coal ----	----->	0.908	0.906	0.929	0.903	0.901	0.896

PART C

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

Pollutants	Quantity of pollutants discharged (mass/day) (PM thru stack)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	NIL	NIL	NIL
(b) Air	0.89 MT/D	49.69 mg/Nm ³	within the norm

PART D

Hazardous wastes

[As specified under Hazardous Wastes (Management, Handling & Transboundary Movement Rules, 2008)]

Hazardous Wastes (Used Oil)	Total Quantity (Kg.)	
	During the previous financial year (2016-17)	During the current financial year (2017-18)
(a)From process	7.92 MT	9.49 MT
(b)From pollution control facilities	NIL	NIL

Sanjay Pattnaik

PART E
Solid Wastes

	Total Quantity	
	During the previous financial year (2016-17)	During the current financial year (2017-18)
(a) From process	63961.00 MT	71476.96 MT
(b) From pollution control facilities	117081.00 MT	117880.00 MT
© (1) Quantity recycled or re-utilised within the unit.	29488 MT	2046.11 MT*
(2) Sold	40437 MT	72099.60 MT
(3) Disposed (Land filing & brick making)	111117 MT	101380.00 MT

* Includes Brick and low lying area reclamation through ESP sludge. During 2017-18, 100% ESP Sludge has been utilized for brick making as well as land reclamation.

PART F

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

- a) Hazardous Wastes: -
During 2017-2018, 9.49 MT used Oil/used grease etc. was disposed to CPCB authorized recycler- M/s Ratna Industries, Jamunanaki, Dt. Sundergarh, Odisha.
During 2017-18, 16.5 Kg of DM water plant resin is used inside the Kiln as per guidelines of CPCB and authorization issued by SPCB, by end of March, 2018.
- b) Solid Wastes:
During 2017-18, approx. 39219.00 MT char has been sold to the entrepreneur those are having AFBC & CFBC power plant for industrial use. Besides, Back spillage, wet scraper and DE material of approx. 34,300.00 MT also being sold to the entrepreneur for use of coal bricketing (Domestic use) and use as activated carbon utilization. ESP generated dust (ESP sludge) is used for Brick manufacturing purpose. ESP sludge is also utilized for land development and reclamation of low lying areas. During the year 2017-18 about 96,631.64 MT char has been sold from existing old dump stock to the entrepreneur those are having AFBC & CFBC power plant for industrial use.

Following natural resources are separated before using in the process and fines portion (conservation of natural resource) is sold to private entrepreneurs for their use in plant.

Coal fines.

- Despatched to :- i) M/s. Maiur Elector Ceramic Pvt. Limited
ii) M/s. Sri Ganesh Metaliks Pvt. Limited

Total Quantity: 1929.76 MT

Iron Fines:-

- Despatched to i) M/s. TATA STEEL Limited
ii) M/s. Tata Metallic Limited

Total Quantity: 60114.54 MT



PART G

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

- Company is generating 26 MW power from waste heat
- Utilizing the ESP dust for Brick manufacturing by cold press method, thus saving coal, fire wood and top soil
- Tata Sponge is 'zero' water discharge plant. 100% of its waste water is recirculated for cooling and also utilized for brick making, dust suppression, plantation and cleaning purposes.
- STP is made at township and treated water is used for dust suppression at dump yard.
- Company has taken various measures for energy conservation and natural resource conservations
- Roof top rain water is conserved and recharged to the ground
- Rain water harvesting pond is made for ground re-charging.
- Bio-gas is generated from food waste and used for cooking at canteen.
- Installed 2 nos. of new Bio-gas unit from food waste at township for cooking at Guest house.
- 235 KW Solar Power generation facility at township premises
- Plantation 2500 nos. of saplings Bileipada village area & Railway siding area.
- Transforming waste dump yard to park (Shivalik) for recreation and picnic purpose.
- LED bulb distributed among the employees for power saving initiative.

Various improvements & modification resulted maintenance of environmental parameters within the norms

Development KPI tracker for monitoring the conservation of raw materials, Production and effective utilization of natural resources -IT based

Waste Management system- IT based

Maintenance of DE system

Maintenance of ESP system

Maintenance of dust suppression system

Maintenance of water recirculation system

House keeping

Tree plantation and maintenance

Waste management system

Water jacketing facility at char unloading points.

Mobile fogging m/c with water tank for plant and rly siding dust suppression.

Revamping of ESP-2

Water jacketing facility at AAQM-1 to protect dust nuisance from NH-215

Plastic waste collection and segregation from domestic waste in township.

- a) Total expenditure toward environmental measures: Rs.657.32 Lacs during 2017-18
- b) Cost/Ton of control measure is Rs 157.59.

PART H

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

- 1) Plantation of 2,500 trees at new boundary towards NH-520.
- 2) New road water sprinkling facility.
- 3) Tyre washing facility at material unloading points.
- 4) 100% ESP sludge utilization for brick making purpose only.
- 5) Upgradation of ETP (Effluent Treatment Plant)

PART I

Any other particulars for improving the quality of the environment.

During the last year the following developments were incorporated.

- a) Installation of 235 KW Solar Power generation systems at township premises.
- b) Plantation of 1000 (One thousand) trees at company premises.
- c) Online SO₂ monitoring system & data transmission system installed at all 3 Kiln stacks
- d) Concreting & maintaining of some major black topped roads inside plant premises.
- e) Water fogging system installed at new iron ore circuit.
- f) Utilization of spent resin in DRI Kiln.
