

**THE GAZETTE OF INDIA,
PART - II, SECTION 3, SUB-SECTION (1)
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS
NEW DELHI**

28TH APRIL, 1993

NOTIFICATION

G.S.R. 386 (E). In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely :-

1. (1) These rules may be called the Environment (Protection) Amendment Rules, 1993.
(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986;
 - (a) in rule 14,
 - (i) for the words 'audit report' where ever they occur, the word "statement" shall be substituted;
 - (ii) for the figures, letters and words "15th day of May" the words "thirtieth day of September" shall be substituted.
 - (b) In Appendix 'A' for Form - V, the following form shall be substituted, namely:-

FORM -V
(See Rule - 14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR 2016-2017

PART - A

- I) Name and address of the owner : **M/s. Sagardighi Thermal Power Project**
/ occupier of the industry **W.B.P.D.C.L.**
Operation or Process **Sagardighi, Dist. - Murshidabad,**
West Bengal
- II) Industry Category : Large (Power Plant), Red
- III) Date and Year of Establishment : Unit - I : 7th September 2008
Unit - II : 6th November 2008
Unit - III: 1st July 2016
Unit - IV: 20th December 2016
- IV) Date of last Environmental : 30th September 2016
Statement submitted
- V) Total production in the financial : 4843.612 MU
Year (2016-2017)

Production Detail:

Name of the Product	Installation Capacity (Unit wise)		Total production in Million Unit (MU)		No. of days of Production
			2015-16	2016-17	
Electricity	Unit I, II,III & IV	1600 MW	2712.279	4843.612	365 days

PART - B

WATER CONSUMPTION& RAW MATERIAL CONSUMPTION

1. **Water Consumption** : **35490 M³/day**
- D.M.Water** : **1958 M³/day**
- Domestic** : **2103 M³/day**
- Industrial Cooling** : **28764 M³/day**
- Service Water** : **2665 M³/day**

02. Process Water Consumption

Name of the Products	Process water (considering DM water only) consumption per million unit of product output	
	During the Previous Financial Audit Year (2015-2016)	During the Present Financial Audit Year (2016-2017)
Electricity	142.19 KL/MU	147.57KL/MU

03. Raw Material Consumption

Name of raw materials	Name of the product	Consumption of raw materials / unit of product output	
		2015-2016	2016-2017
Coal	Electricity	676.85 MT/MU	617.329 MT/MU
L.D.O.	Electricity	1.76 KL/MU	3.19 KL/MU

PART - C

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

(A). Water: Effluent load has been calculated based on the average of liquid effluent monitoring report as available.

Pollutants	Pollutant Concentration (mg/l)	Pollutant Load (kg/day)
pH	7.26	--
Oil & Grease	7.24	34.65
TSS	20.33	97.30
COD	40.0	191.44
BOD	7.6	36.37

This calculation is based on the average values of pollutant concentration of effluent flow (Overflowed off the guard pond outlet) of 4786 KL/day (Approx.).

(B) Air(Month of April 2016 to March 2017 {average})							
Sl. No.	Unit	Pollutant Conc. in mg / Nm ³			Quantity of Pollutants Discharged (load) in Kg/Day		
		PM	SO ₂	NO _x	PM	SO ₂	NO _x
1.	I	67.73	527.19	345.80	1840.87	14328.82	9398.71
2.	II	79.19	595.83	351.22	2108.43	15863.95	9351.22
3.	III	317.87	519.09	317.64	12599.09	20574.65	12589.98
Average Quantity of Gas Flow (NM ³ /Hr)							
1.	I	1132483.56					
2.	II	1109373.33					
3.	III	1651500.00					

PART - D
Hazardous Wastes

(as specified under Hazardous Wastes / Management and Handling Rules, 1989)

Hazardous Wastes		Total Quantity	
		During the previous financial year (2015-2016)	During the current financial year (2016-2017)
(a)	From process	4.62 KL	2.23 KL
(b)	From pollution control facilities	-----	-----

SgTPP authority has got the hazardous waste handling (storing & selling) authorization from W.B.P.C.B.vide Memo No.56/2S(HW)-2636/2010 Dated 10.05.2010 and valid up to 30.04.2015 and applied for renewal vide memo no. Sg.TPP/GMTC/ENV/108/3239, dtd. 10.04.2015 and vide memo no. Sg.TPP/GMTC/ENV/108/5484, dtd. 29.06.2016 and is under process.

PART - E
Solid Wastes

Source		Total Quantity (MT)	
		During the previous financial year	During the current financial year
		2015-2016	2016-2017
(a)	From process	Nil	Nil
(b)	From Pollution Control Facility	Fly Ash-6,26,423 MT Bottom Ash-1,56,606 MT	Fly Ash-8,99,040 MT Bottom Ash-2,24,761 MT

- *The quantity of ash generated, comprised of fly ash & bottom ash*

PART – F

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

Solid Waste	Total Quantity (2016-2017)	Characteristics of Dry fly ash		Remarks
1. Fly ash	8,99,040 MT	Physical Test		1. In general, most of the ash is disposed off in the form of slurry (ash is mixed with water in a slurry sump) and taken to the ash pond. 2. Ash Utilization of SgTPP for both wet and dry ash gradually increased. In this audit year utilization of ash was 68.63%.
		pH	8.5	
		Fineness	362 m ² /kg	
		Bulk Density	1.0460 gm/cc	
		Specific Gravity	2.04	
2. Bottom ash	2,24,761 MT	Chemical Test		
		Silicon (as SiO ₂)	62.14 %	
		Aluminum (as Al ₂ O ₃)	24.75 %	
		Iron (as Fe ₂ O ₃)	1.83%	
		Titanium (as TiO ₂)	0.92 %	
		Calcium (as CaO)	0.76 %	
		Magnesium (as MgO)	0.33 %	
		Sulphur (as SO ₃)	0.10 %	
		Loss on ignition	3.42 %	

PART-G

Impact of the pollution abatement measure taken on conservation of natural resource and on cost of production.

1. Fugitive dust suppression system has been installed in post track hopper area, in addition to existing one for minimizing dust hazard.
2. Dust Extraction system is provided at the crusher house, coal transfer points at CHP for abating dust pollution
3. Plant effluent water is stored in ash water pond. This stored water is reused for making ash slurry. This process leads to help a great extent for reducing of huge fresh water intake, thereby conserving water resource as well as energy.
4. Oil separator is equipped for recover oil from effluent water.
5. Special emphasis has been given on development and maintenance of green belt.
6. Special emphasis has been given to protect Air and Water of SgTPP. The respective air and water parameters are generally maintained well within the permissible limit.

PART - H

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

Approximate Expenditure for Environment Purpose in the year 2016-2017

1.	<i>Effluent Treatment</i>	:	<i>Rs. 40,00,000/-</i>
2.	<i>Plantation of air pollution control</i>	:	<i>Rs.6,00,000/-</i>
3.	<i>Penalty (on water cess amount)</i>	:	<i>Rs.0 /-</i>
4.	<i>Maintenance cost of ESP of Unit 1,2,3&4</i>	:	<i>Rs.80,00,000/-</i>
5.	<i>Environmental related monitoring cost (WBPCB & their recognized Labs.)</i>	:	<i>Rs.5,00,000/-</i>

PART - I

Any other particulars for improving the quality of the environment

Every year saplings are planted to created new greeneries and garden in plant premises and township.