Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2019

Unique Application Number	***Submitted Date***
MPCB-ENVIRONMENT_STATEMENT-0000019906	26-09-2019

PART A

Company Information

Company Name	***Application UAN number***	
GMR Warora Energy Ltd	00000027850	
Address		
PLOT NO B1 TO B7, MOHBALA MIDC GROWTH CENTER		
Plot no	***Taluka***	***Village***
PLOT NO B1 TO B7,	Warora	Warora
Capital Investment (In lakhs)	***Scale***	***City***
392694	Large	Warora
Pincode	***Person Name***	***Designation***
442907	Mr. Pramod Khandelwal	General Manager
Telephone Number	***Fax Number***	***Email***
+917176267070	+917176267070	pramod.khandelwal@gmrgroup.in
Region	***Industry Category***	***Industry Type***
SRO-Chandrapur	Red	R9 Power generation plant [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25MW]
Last Environmental statement submitted online	***Consent Number***	***Consent Issue Date***
yes	BO/CAC-Cell/UAN No 00000027850-18/CAC1803000697	14/03/2018
Consent Valid Upto	***Establishment Year***	***Date of last environment statement submitted***
31/08/2022		
Industry Category Primary (STC Code) & Secondary (STC Code)		

Product Information

Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
Electricity Generation	2 x 300	3895207	Mwh

By-product Information

By Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
NIL	NIL	NIL	

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for	Consent Quantity in m3/day	Actual Quantity in m3/day
Process	44448	19441
Cooling	3408	2160
Domestic	480	200
All others	0	0
Total	0	0

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	12436	664.7	CMD
Domestic effluent	384	6.47	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Electricity	1.99	2.04	Mwh

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Coal	2273682	2497395.677	MT/A

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Oil Consumption	25920	405.708	KL/A

Part-C

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

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
TDS	685.79	1031.72	0	2100	NA
TSS	10.94	16.45	0	100	NA
BOD	6.31	9.49	0	30	NA
COD	21.73	32.69	0	250	NA
Oil and Grease	ND	ND	0	10	NA

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
Particulate Matter	806	38.95	0	50	NA

SO2	15648	751.91	0	600	Na
NOx	4667	224.02	0	300	Na

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	21120	22880	Ltr/A
5.2 Wastes or residues containing oil	380	0	
35.4 Oil and grease skimming	6310	1600	
3.3 Sludge and filters contaminated with oil	109	148	Nos./Y
33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	2936	1052	Nos./Y

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Ash	759654	842910	Ton/Y

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	set/month

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	set/month

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.

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0		0

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	0	set/month	0

Part-G

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

Description	***Reduction in Water Consumption (M3/day)***	***Reduction in Fuel & Solvent Consumption (KL/day)***	***Reduction in Raw Material (Kg)***	***Reduction in Power Consumption (KWH)***	***Capital Investment(in Lacs)***	***Reduction in Maintenance(in Lacs)***
To provide CT make up by gravity without CT make up pump pumping	0	0	0	257180	0	0
Replacement of Existing conventional lightings with LED’s throughout the plant-Phase-II	0	0	0	1720357	0	0
Degassifier water usage through gravity to CT forebay	0	0	0	106537	0	0
Installation of VFD in AHP CCW Pump	0	0	0	82832.28	0	0
Installation of roof transparent sheet at AHP compressor house for daytime illumination	0	0	0	4380	0	0
Single Engine operation of Locomotives	0	37.05	0	0	0	0
Running of 1 no. of Air washer pump with 100% discharge open instead of 2 pumps with 50% discharge open	0	0	0	120888	0	0
Energy Saving opportunity in Mill-F LOP	0	0	0	87768	0	0
Utility Pump Operation Optimization	0	0	0	11547.6	0	0
FD fan servomechanism operating fork link modification for better control over blade pitch.	0	0	0	86052	0	0
Installation of Motion Sensor in Washrooms	0	0	0	1051.2	0	0
'Oil Consumption Optimization by improving operational phylosophy	0	117	0	0	0	0
CHP Operational Optimization	0	0	0	381400	0	0
'Optimization of CW/ACW Pump & CT Fan running hours	0	0	0	5886582	0	0
'Optimization of Pump & Fan output through VFD	0	0	0	2562600	0	0
'Optimization of ESP Power through Power Saver Mode	0	0	0	10423162	0	0
Reduction in Diesel Consumption in CHP by adopting best operating practices	0	21	0	0	0	0

Capacitor bank installation in 1. AHP LT MCC section-A & B 2. DM plant MCC section-A 3. CHP LT MCC bus section-A & B 4. Bunker LT MCC bus section-A 5. Stacker LT MCC bus section 6. WT LT MCC bus sec	0	0	0	1361213.9	0	0
Introduction of Water SCADA	869.35	0	0	0	0	0
Soot blower Operation Optimization	6.20	0	0	0	0	0
Optimization of DM Make-up in Boiler & Turbine	4.13	0	0	0	0	0
BFP Main Pump Pull up Ring size & seal line washer replacement	2.87	0	0	0	0	0
Condensate dumping for reduction in blow down hours	21.91	0	0	0	0	0
Reduction of Fire water header leakages by making it above ground	541.63	0	0	0	0	0
Replacement of RO water line to service line towards Raxa	84.51	0	0	0	0	0
Operational Improvement in RGSF	655.65	0	0	0	0	0
Efficient Utilization of Waste Water in Plant	92.44	0	0	0	0	0
Plant-wide Pressure Optimization of Service Water Line	18.75	0	0	0	0	0
Utilization of Rain water harvested from WTP area building roof tops as makeup in CW fore bay	36	0	0	0	0	0

Part-H

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

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	***Environmental Protection Measures***	***Capital Investment (Lacks)***
House Keeping in side the plant	NA	174
Ash Handling System	Operation and Maintenance Services	600
Maintenance of Green Belt	Plantation & Maintenance	140
Environmental Monitoring	Monitoring & Measurement	20

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	***Environmental Protection Measures***	***Capital Investment (Lacks)***
House Keeping in side the plant	NA	190
Ash Handling System	Operation and Maintenance Services	655
Maintenance of Green Belt	Plantation & Maintenance	153
Environmental Monitoring	Monitoring and Measurement	21

Part-I

Any other particulars for improving the quality of the environment.

Particulars

We are complying all the conditions mentioned in the EC, CTE and CTO at Our Site

Name & Designation

Pramod Khandelwal

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000019906

Submitted On:

26-09-2019