



Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2020

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000029416

Submitted Date

30-09-2020

PART A

Company Information

Company Name

GMR Warora Energy Ltd

Application UAN number

00000027850

Address

PLOT NO B1 TO B7, MOHBALA MIDC
GROWTH CENTER

Plot no

PLOT NO B1 TO B7

Taluka

Warora

Village

Warora

Capital Investment (In lakhs)

392694

Scale

Large

City

Warora

Pincode

442907

Person Name

Mr. Pramod Khandelwal

Designation

General Manager

Telephone Number

+917176267070

Fax Number

+917176267070

Email

Pramod.Khandelwal@gmrgroup.in

Region

SRO-Chandrapur

Industry Category

Red

Industry Type

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

yes

Consent Number

BO/CAC-Cell/UAN No
00000027850-18/CAC1803000697

Consent Issue Date

14/03/2018

Consent Valid Upto

31/08/2022

Establishment Year

Date of last environment statement submitted

Industry Category Primary (STC Code) & Secondary (STC Code)

Product Information

Product Name

Electricity Generation

Consent Quantity

2 x 300

Actual Quantity

4138790

UOM

Mwh

By-product Information

By Product Name

NIL

Consent Quantity

NIL

Actual Quantity

NIL

UOM

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	44448	21997
Domestic	3408	2372
All others	480	225
Total	0	0
	48336	24594

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	12436	643.81	CMD
Domestic Effluent	384	10.41	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	2.04	2.17	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	0.641	0.635	MT/MWH

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Oil Consumption	25920	735.917	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	Standard	Reason
	Quantity	Concentration	%variation		
TDS	573.38	890.6	0	2100	NA
TSS	9.08	14.1	0	100	NA
BOD	4.83	7.5	0	30	NA
COD	15.97	24.8	0	250	NA
O & G	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	Standard	Reason
	Quantity	Concentration	%variation		
Particulate Matter	1026.00	42.75	0	50	NA

SOx	23035.20	959.80	0	600	NA
NOx	6213.60	258.90	0	300	NA

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
3.3 Sludge and filters contaminated with oil	148	1.120	MT/A
5.1 Used or spent oil	22880	102.495	KL/A
5.2 Wastes or residues containing oil	0	1.187	MT/A
33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	1052	7.516	MT/A
35.3 Chemical sludge from waste water treatment	0	0.307	MT/A
35.4 Oil and grease skimming	1600	3.487	MT/A

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	842910	882429	MT/A

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)
Unit-1 Capital Overhauling	NA	NA	34572000	3135600.00	1042.00	NA
Ferric Chloride Tank Bypass discharge line required for gravity dosing	NA	NA	NA	5390	0.02	NA
Alternate Street Lights in Service after 11 PM inside PTS	NA	NA	NA	8820	0.20	NA
Provision of removable platform for LP Turbine Diaphragm area to minimize time of diaphragm replacement	NA	10	NA	NA	0.20	NA
Auto Operation of Lamps in CW pump house	NA	NA	NA	876	0.02	NA
CSU Screw Conveyor Bypass Modification Work	NA	NA	NA	2409	0.30	NA
Installation of Advanced Drift Eliminator in Cooling Tower	NA	NA	NA	8900	2.0	NA
Auto Closure of Valves during Black-out to avoid Diaphragm Rupture	NA	14	NA	NA	NA	NA
To provide CT make up by gravity without CT make up pump pumping	NA	NA	NA	416268	5.1	NA
Replacement of Existing conventional lightings with LED's throughout the plant-Phase-II	NA	NA	NA	3225190	18.6	NA
Degassifier water usage through gravity to CT forebay	NA	NA	NA	140770	2.6	NA
Installation of roof transparent sheet at AHP compressor house for daytime illumination	NA	NA	NA	4380	0.20	NA
Energy Saving opportunity in Mill-F LOP	NA	NA	NA	87766	NA	NA
Utility Pump Operation Optimization	NA	NA	NA	11548	NA	NA
Optimization of CW/ACW Pump & CT Fan running hours	NA	NA	NA	4177098	NA	NA
Optimization of Pump & Fan output through VFD	NA	NA	NA	2472930	NA	NA
Optimization of ESP Power through Power Saver Mode	NA	NA	NA	10311368	NA	NA

Reduction in Diesel Consumption in CHP by adopting best operating practices	NA	NA	27	NA	NA	NA
Optimization of DM Make-up in Boiler & Turbine	3.96	NA	NA	NA	NA	NA
Operational Improvement in RGSF	570.80	NA	NA	NA	NA	NA
Efficient Utilization of Waste Water in Plant	50.68	NA	NA	NA	NA	NA
Recycling of RO-2A & B reject to UF Storage Tank	86.30	NA	NA	NA	0.12	NA

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)
Efficient and smooth House Keeping in side the plant to take care of fugitive emission and proper waste segregation, collection and disposal	Housekeeping and waste Management	180
Efficient Ash Handling System	Proper Handling and utilization of ash by sending the same to cement plants	620
Maintenance of Green Belt	Proper maintenance of the green covering and plantation	150
Regular Environmental Monitoring	Monitoring & Measurement	21

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Efficient and smooth House Keeping in side the plant to take care of fugitive emission and proper waste segregation, collection and disposal	Housekeeping and waste Management	185
Efficient Ash Handling System	Proper Handling and utilization of ash by sending the same to cement plants	630
Maintenance of Green Belt	Proper maintenance of the green covering and plantation	160
Regular Environmental Monitoring	Monitoring & Measurement	23

Part-I

Any other particulars for improving the quality of the environment.

Particulars

We are complying with all the conditions of EC, CTE & CTO. Environment Protection measures are regularly undertaken for overall Environment management.

Name & Designation

Pramod Khandelwal, General Manager

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000029416

Submitted On:

