

CGPL/UMPP/ENV/GPCB/5659

01.09.2020

To, Member Secretary Gujarat Pollution Control Board Paryavaran Bhavan, Sector-10-A, Gandhinagar-382010

Dear Sir,

Sub : Environmental Statement for the financial year ending 31st March, 2015 for M/s Coastal Gujarat Power Limited, Tunda-Vandh, Taluka Mundra, District Kutch.

Ref. : Consent to Establish granted to us vide letter dated 17th July 2007 bearing no. PC/CCA-KUTCH-437/21029 for UMPP

Consent to operate granted to us vide letter dated 29th April 2013 bearing no. AWH-53647 for UMPP

With reference to the above subject and reference, Please find enclosed Environmental Statement in Form V prescribed under Rule 14 of the Environment (Protection) Rules 1986, for Coastal Gujarat Power Limited for the financial year ending 31st March 2020.

Thank you,

Yours faithfully, For Coastal Gujarat Power Limited

(Santosh Tripathi)

Group Head Environment

Copy to:

- The Director, Western Regional Office, Ministry of Environment & Forest, E-5, Arera colony, Link Road-3, Ravishankar Nagar, Bhopal-462016 (M.P.)
- Regional Officer, Gujarat Pollution Control Board, 215-216, Deendayal Port Trust Admin Building, Gandhidham.

Coastal Gujarat Power Limited

(A Tata Power Company)
Ultra Mega Power Project
Tunda Vandh Road, Tunda Village, Mundra, Kutch - 370435.
Tel.: 91 2838 661213



ENVIRONMENTAL STATEMENT -

FORM V

SUBMITTED BY

M/s COASTAL GUJARAT POWER LIMITED

(A TATA POWER COMPANY)



4150 MW (5X830MW)
ULTRA MEGA POWER PLANT,
MUNDRA, GUJARAT - 370 435

ARP'19 - MAR'20

FORM V (See Rule 14)

Environmental Statement for the Financial Year ending 31st March 2020

PART - A

(i) Name and address of the Owner/ Occupier of the Industry

Operation or Process

: Shri. A.N. Ramesh

CEO

Coastal Gujarat Power Limited,

Tunda Vandh Road, Tunda Village,

Mundra, Kutch 370-435

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

: Primary

(iii) Production Capacity

: 4150 MW

(iv) Year of Establishment

: 2006

(v) Date of last Environment Statement submitted

: 10.09.2019

PART - B

Water and Raw Material Consumption

(i) Water Consumption

| Water Consumption Cu. Mtr./Day | Sea Water |
|--------------------------------|---------------------------------|
| Process | 43504.00 m ³ /day |
| Cooling | 14704095.00 m ³ /day |
| Domestic | 27.00 m³/day |

| Name of Products | Process Water Consumption per unit of Product Output | | |
|---------------------|--|---|--|
| | During the financial year (2018-19) | During the current financial year (2019-20) | |
| Electricity | 0.41 MT/MWh | 0.50 MT/MWh | |

(ii) Raw Material Consumption

| Name of | Name of | Consumption of Raw Material per Unit of output | | |
|-----------------|-------------|--|---|--|
| Raw Material | Products | During the financial year (2018-19) | During the current financial year (2019-20) | |
| Coal | Electricity | 0.42 MT/MWh | 0.42 MT/MWh | |

PART - C

Pollutants discharged to Environment/Unit of Output (Parameters as specified in consent issued)

| Pollutants | Quantity of pollutants discharged (Mass/day) | Concentrations of pollutants in discharges (mass/volume) | Percentage of variation from prescribed standards with reasons |
|-----------------------------|---|---|--|
| (a) Water | Nil | | |
| (b) Air | | | |
| Particulate Matter (mg/Nm3) | Annexure 1 | | Nil |

PART - D

Hazardous Wastes

(As specified under Hazardous Wastes Management and Handling Rules 1989)

| Hazardous Wastes | Total Quantity | | |
|---------------------------------------|---|--|--|
| Tidzai dodo Tidotoo | During the financial year (2018-19) | During the current financial year (2019-20) | |
| (a)From Process | 21.89 MT of Used Oil 1.97 MT of Discarded Containers and 5.405 MT waste residue containing oil. | 15.91 MT of Used Oil 1.298 MT of Discarded Containers and 5.035 MT waste residue containing oil. 3.89 MT of Spent Ion Exchange Resin | |
| (b) From Pollution Control facilities | Not Applicable | Not Applicable | |

PART - E

Solid Waste

| | Total Quantity Generated (MT/Annum) | | |
|---|---|---|--|
| Solid Waste | During the current financial year (2018-19) | During the current financial year (2019-20) | |
| From Process (Ash) | 802671 MT | 712459 MT | |
| From Pollution Control facilities | Not Applicable | Not Applicable | |
| Quantity recycled or reutilized within the unit | - | - | |
| 2) Sold | 753640 MT | 803404 MT | |
| 3) Recycled/ Utilized | - | | |

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:

- During the financial year 2019-20, used oil of 15.91 MT and 1.298 MT discarded containers has been disposed through GPCB authorized recycler and waste residue containing oil of 5.035 MT & 3.89 MT of spent ion resin has been sent for incineration to GPCB authorized incinerator Agency
- During the financial year 2019-20, 803404 MT fly ash is utilized as per Fly Ash Notification.

PART - G

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

During the financial year 2019-20, the total cost incurred on environmental protection measures is enclosed as **Annexure 2**.

PART - H

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

- Hood conveyor belt of 1.3 km has been replaced with Pipe conveyor belt towards vandh village side to arrest the fugitive emission and is being maintained.
- Outfall channel, ash pond and guard pond constructed with impervious HDPE lining to prevent ground water contamination is being maintained
- Entire Treated water from ETP and STP is being used for plantation and green belt development.
- Dust suppression system viz. Dry fog system at junction tower, hood cover on coal conveyer, about 48 rainwater water sprinklers at coal stock yard installed to control fugitive dust emission from coal handling system.
- About 9m high wind barrier constructed with 3 tier plantations along the periphery near the coal stock yard to prevent fugitive emission-
- Approx. 33% of the plant's area has been covered under plantation & greenbelt.

- Regular Environment Monitoring is being done for Ambient Air Quality Emissions-Effluent and marine Ecology in accordance Environmental Management plan
- Integrated Waste Management initiative for solid waste management.

PART - I

Any other particulars for improving the quality of environment:

- Ambient air quality is being monitored for all twelve parameters at a total of 10 locations as per National Ambient Air Quality Standard.
- CGPL has implemented Integrated Management System and has been certified with ISO 9001, ISO 14001 and ISO 45001
- CGPL celebrated World Environment Day through digitalization platform due to Covid -19 situation and planted 2000 trees on environment day.
- 2500 saplings have been planted during this period.

For Coastal Gujarat Power Limited,

(Santosh Tripathi)

Group Head - Environment

Annexure 1

Stack Emission Monitoring

| Unit No. | U#10 | U#20 | U#30 | U#40 | U#50 |
|--|---------|---------|------------------|------------------|------------------|
| Parameter | PM | PM | PM | PM | PM |
| NOM | mg/ Nm3 | mg/ Nm3 | mg/ Nm3 | mg/ Nm3 | mg/ Nm3 |
| Limits as per CC&A | | | | | |
| Limit as per MOEF&CC Gazette Notification dated 07-12-2015 | 50 | 50 | 50 | 50 | 50 |
| Apr-19 | 38.1 | 40.9 | 36.2 | 38,6 | 38.1 |
| May-19 | 33.0 | 29.9 | 33.0 | 29.2 | 36.1 |
| Jun-19 | 34.6 | 30.0 | 35.8 | Unit Shutdown | Unit Shutdown |
| Jul-19 | 34.7 | 34.7 | 30.1 | Unit Shutdown | Unit Shutdown |
| Aug-19 | 38.0 | 35.0 | 28.0 | 32.3 | Unit Shutdown |
| Sep-19 | 38.0 | 33.8 | 32.9 | 30.5 | 26.4 |
| Oct-19 | 36.6 | 34.1 | 37.4 | 30.7 | 28.9 |
| Nov-19 | 33.9 | 38.1 | 40.2 | 32.9 | 29.7 |
| Dec-19 | 29.8 | 38.2 | 35.6 | 34.5 | 24.6 |
| Jan-20 | 34.9 | 37.0 | 32.7 | 34.4 | 26.1 |
| Feb-20 | 39.8 | 42.2 | 33.9 | 35.6 | 26.4 |
| Mar-20 | 36.6 | 32.9 | Unit Shutdown | 31.1 | 24.3 |

Annexure – 2

Expenditure for Environmental Protection Activities during FY 2019-20

| SR. NO | ACTIVITY | EXPENDITURE (IN LACS 23,44,504 | | |
|--------|----------------------------------|-----------------------------------|--|--|
| 1 | O&M Cost of ESP | | | |
| 4 | O&M Cost of ETP | 500,000 | | |
| 9 | O&M Cost of CEMS & EQMS | 1,20,0000 | | |
| 11 | New Environment Display Board | 1,10,0000 | | |
| 12 | Environment Day Celebration Cost | 2,00,000 | | |
| 13 | NRSA Study | 1,52,2000 | | |
| 14 | Environment Monitoring | 3,631,704 | | |
| 15 | GPCB Schedule 1 Audit | 5,50,000 | | |
| 16 | Waste Management other than Ash | 40,00,000 | | |
| Total | | 13303704 | | |