


MAHARASHTRA POLLUTION CONTROL BOARD

| | | |
|--|---|---------------------------------|
| Tel: 24010437/24020781/24014701 |  | Kalpataru Road (Sion - E) Bldg. |
| Fax: 24024068 / 24023516 | | Opp. Cine Planet Cinema |
| Website: http://mpcb.gov.in | | Near Sion Circle, Sion (E) |
| E-mail: apac@mpcb.gov.in | | Mumbai-400 022. |

Red/LSI

Consent No. BO/JD(APC)/EIC No.KP-11590-12/R/CC/(AC-2929) Date: 08/04/2013
 Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundary) Rules 2008 and Amendment Rules thereto. [To be referred as Water Act, Air Act and HW (M&H) Rules respectively].

CONSENT is hereby granted to

M/s Ratnagiri Gas & Power Pvt. Ltd.
 A/P. Anjenvel, Tal Guhagar,
 Dist - Ratnagiri. 415703

located in the area declared under the provisions of the Water Act, Air Act and Authorization under the provisions of HW(M, H & TM) Rules, subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

- The Consent to Operate is granted for a period up to: 31/08/2013.
- The Consent is valid for the manufacture of:

| Product | Maximum Quantity |
|-------------|--|
| Electricity | 2001.08 MW (Consists of 670 MW of Block-1, 668.54 MW each of Block-2 & Block-3) + 34 MW Frame-6B or Peaking Turbine. |

- CONDITIONS UNDER WATER ACT:

(i) The daily quantity of trade effluent from the factory shall not exceed 97.972 M³.

(ii) The daily quantity of sewage effluent from the factory shall not exceed 340 M³.

(iii) Trade Effluent:

Treatment: The applicant shall operate & maintain comprehensive treatment system consisting of primary / secondary and/or tertiary treatment as is warranted with reference to influent quality and operate and maintain the same continuously. The industrial effluent arising from various sections of Power Plant shall be given such treatment either collectively or individually as the site condition permits that the final quality of effluent shall meet following standards:

| S.N | Parameter | Maximum limit of concentration (mg/l except for pH and temperature) |
|-----|-------------------------|---|
| 1 | pH | 6.5-8.5 |
| 2 | Temperature | Not to exceed 7 °C higher than the intake water temperature. |
| 3 | Free Available chlorine | 0.5 |
| 4 | Suspended solids | 100.0 |
| 5 | Oil and Grease | 20.0 |
| 6 | Copper (Total) | 1.0 |
| 7 | Iron (Total) | 1.0 |
| 8 | Zinc | 1.0 |

| | | |
|----|------------------|-----|
| 9 | Chromium (Total) | 0.2 |
| 10 | Phosphate | 5.0 |

- (iv) **Trade Effluent Disposal:** The treated effluent shall be recycled to the maximum extent possible and excess shall be discharged into Dabhol Creek/ Sea at a point specified by CWPRS or NID or any other agency to be designated by MPCB or DOE implementation period.
- (v) **Sewage Effluent Treatment:** The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards.

| S.N | Parameter | Maximum limit of concentration (mg/l) |
|-----|-------------------|---------------------------------------|
| 1 | Suspended Solids | 100 |
| 2 | BOD 3 days @27 °C | 100 |

- (vi) **Sewage Effluent Disposal:** The treated domestic effluent (Color-free) shall be either used for plantation or mixed and discharged along with trade effluent into sea.

(vii) **Non-Hazardous Solid Wastes:**

| Type of Waste | Quantity | Disposal |
|---|-------------|--------------------|
| Solid combustible waste from township & plant | 500 kg/day | Incineration |
| Kitchen waste | 20 kg/day | Burial/ composting |
| Fused tubes/ broken glass material | 50 kg/day | Deep burial |
| MS scrap and other non-hazardous material | 2000 kg/day | Sale |
| Metal Scrap | 3 MT/ day | Sale |

(viii) **Other Conditions:**

- 1) The industry should monitor effluent quality regularly.
 - 2) Green belt afforestation shall be done to the extent possible in the open space available depending on the geography.
 - 3) The factory authorities shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants. The quarterly returns of the energy consumption shall be submitted to Board Office under intimation to respective Regional and Sub Regional Officer on each 10th of January, April, July & October.
 - 4) The firm shall provide continuous flow meter for the measurement of the flow of the effluent.
4. The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules there under:

The daily maximum water consumption for the following categories is as under:

| Sr No | Consumption | Quantity |
|-------|--|----------|
| 1 | Domestic | 600 CMD |
| 2 | Industrial Processing generating Biodegradable waste water | 987CMD |
| 3 | Industrial Processing generating Non-Biodegradable waste water | ---CMD |

| | | |
|---|-------------------------------|------------|
| 4 | Industrial Cooling/Boiler | 1159.575CM |
| 5 | Other uses like gardening Etc | 1000CM |

The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

5. CONDITIONS UNDER AIR ACT:

- (i) Gas turbine combustors shall be provided with Dry Low NOX burners to control NOX. Water injection shall be done while operating in Naphtha. The applicant shall operate and maintain these control systems continuously so as to achieve the level of pollutants from each stack to the following emission standards:

| S.N | Parameter | Maximum limit of Concentration |
|-------|---|--------------------------------|
| 1.0 | SPM | 150 mg/Nm ³ |
| 1.1 | SO ₂ | 195 MT/D |
| 2.0 | NOX | |
| 2.1 | Combined cycle WHRB Stacks 1A, 1B, 2A, 2B, 3A, 3B | |
| 2.1.1 | Natural Gas firing | 27 ppm (v/v) at 15% oxygen |
| 2.1.2 | Naphtha/Distillate Oil firing | 77 ppm (v/v) at 15% oxygen |
| 2.2 | Simple cycle (Peaking) Turbine (Frame-6B) Stack | |
| 2.2.1 | Natural Gas firing | 42 ppm (v/v) at 15% oxygen |
| 2.2.2 | Naphtha/Distillate Oil firing | 77 ppm (v/v) at 15% oxygen |

- (ii) Conditions for D.G. Set:

- i. Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically. The acoustic enclosure/acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. Suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 metres from acoustic enclosure /room and then average.
- ii. Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
- iii. A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
- iv. D.G. Set shall be operated only in case of power failure.

- (iii) The applicant shall observe the following fuel pattern:

| S.N | Type of Fuel used | Quantity, TPD |
|-----|-------------------|---------------|
| 1 | Naphtha | 9380 |
| 2 | Distillate Oil | 9750 |
| 3 | RLNG/Natural Gas | 8310 |

- (iv) The chimney(s) shall be of the following specifications:

| S.N | Chimney attached to | Height |
|-----|-------------------------------|----------------|
| 1 | Frame-6B or Peaking Turbine | 58 meters |
| 2 | HRS-1A, 1B, 2A, 2B, 3A and 3B | 98 meters each |

.4.

- (v) The applicant shall provide ports in the chimney/(s) and facilitates such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's

Staff The chimney(s) vents attached to various sources of emissions shall be designated by numbers such as S-1, S-2 etc. and these shall be painted/displayed to facilitate identification.

- (vi) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6 a.m and 10 p.m and night time is reckoned between 10 p.m. and 6 a.m.
- (vii) Other Conditions:
 - i. There shall not be any fugitive emissions.
 - ii. The firm shall carry out tree plantation along road side, around dumps or afforestation as per the proposal approved by Forests Department.
 - iii. The industry shall not cause any nuisance in surrounding area.
 - iv. The industry shall monitor stack emissions & ambient air quality regularly.
 - v. The applicant shall get sample of stack emissions collected and analyzed through its own laboratory or its own cost through Board's a laboratory every month for the parameters indicated below, and shall submit the report thereof to the Board under intimation to respective Regional Officer Air Pollution Control Officer Sub-Regional Officer. This shall be done by 10th of the succession month for SO₂ and NOx from Natural gas firing Particulate, SO₂ and NOx from Distillate Oil/Naptha Firing.
 - vi. The applicant shall install continuous ambient air and micrometeorological monitoring stations at location indicated by State Board to be set up and operate at its own cost to measure SO₂, NOx and particulate matter.
 - vii. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain safe environment in and around the factory premises.
 - viii. Factory authority shall install a separate meter showing the consumption of energy for operation of Air Pollution control Equipments. The quarterly returns of this consumption shall be submitted to Board under intimation to respective Regional Officer/Sub-regional Officer by 10th of every January, April, July, and October.

6. CONDITIONS UNDER HAZARDOUS WASTE (MANAGEMENT, HANDLING AND TRANSBOUNDARY MOVEMENT) RULES, 2008.

(i) The applicant shall handle hazardous wastes as specified below:

| S.N | Item No. of process generating HW as per Schedule-I | Type of waste | Maximum Quantity | Disposal |
|-----|---|---------------------------------|------------------|--|
| 1 | 5.1 | Used/Spent oil | 7.2 T/M | Through Authorized recyclers |
| 2 | 5.2 | Wastes/ residues containing oil | 6.0 T/M | Authorized vendors/ Incineration plant |
| 3 | 36.2 | Ash from incinerator | 150 kg/ M | Land fill |
| 4 | 33.3 | Discarded | 700 Nos/M | Sale to local |

| | | | containers/ barrels used for hazardous wastes/chemicals | | vendors |
|---|------------------------|--|--|------------------|-------------------------|
| 5 | Lead Acid batteries | | B4 | 8000 kg/ year | Registered recyclers |
| 6 | Electronic waste | | -- | 2000 kg/year | Registered recyclers |

(ii) The authorization is hereby granted to operate a facility for collection, storage, transport and disposal of hazardous waste.

7. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, inspectorate of factories and Local Body. In case of failure of pollution control equipments, the Production process connected to it shall be stopped.

8. General Conditions:

(i) The applicant shall bring minimum 33% of the available open land under tree coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available plot area, number of trees surviving as on 31st March of the year and the no. of trees planted by September end.

(ii) The applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the applicant and operate the same in case of power failure to maintain compliance with the terms and conditions of the consent. In the absence of the same, the applicant shall stop, reduce or otherwise control production to abide by terms & conditions of this consent regarding pollution levels.

(iii) The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent. The applicant shall not change or alter quantity, quality, the rate of discharge, temperature or mode of the effluent/ emissions or hazardous wastes or control equipments provided for without previous written permission of the Board.

(iv) The firm shall submit MPCB, the Environmental Statement Report for the financial year 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second amendment) Rules, 1992 before 30th September every year.

(v) The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained. The applicant shall also submit comparative statement of designed power and chemical consumption alongwith Environmental Statement.

(vi) Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes sewers down downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.

(vii) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous wastes to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.

(viii) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

(ix) The applicant shall maintain good house keeping and take adequate measures for control of pollution from all sources so as not to cause nuisance to surrounding area/ inhabitants.

9. The industry shall conduct minimum yearly check/ audits for tank farm leakages/ seepages duly certified by the competent authority and the same shall be submitted to the Board.

10. The industry shall take necessary preventive measures to stop overflow of cooling tower water in the environment by providing necessary arrangement including dykewalls, storage ponds etc.

11. The industry shall comply the orders/directions issued by Hon'ble High Court and Supreme Court, issued from time to time.

12. The industry shall also ensure that all the studies/surveys etc. carried out through external agencies are completed in time and necessary corrective measures are taken.

13. The applicant shall install online continuous monitoring system for stack emission analysis and same shall be directly connected to MPCB website <http://mpcb.gov.in> as well as to the respective Regional Office.

14. The applicant shall install continuous automatic ambient air & microclimate monitoring station at location indicated by State Board to be set up & operate at its own cost measure SO₂, NO_x & particulate matter within six months period. These CAAQMS shall also have necessary provision of networking to the Air Quality Monitoring network of MPCB.

15. The industry shall submit the Bank Guarantee of Rs.5/- Lakhs at Regional Office, Kolhapur within 15 days period towards operation and maintenance of pollution control system.

16. This consent is issued pursuant to the decision of Consent Appraisal Committee meeting of Board held on 19/03/2013.

17. The capital investment of the industry is Rs. 8644.74/- Crores.

(Rajeev Kumar Mital) IAS
Member Secretary

To,
M/s. Ratnagiri Gas & Power Pvt. Ltd., A/P- Anjenvel, Tal-Guhagar
Dist. Ratnagiri, .415 703.

Copy to:

1) Regional Officer, MPCB, Kolhapur. Sub Regional Officer, MPCB, Chiplun -
They are directed to ensure compliance of consent conditions & obtain B.G.G.
Rs. 5/- Lakhs from the industry.

2) Chief Accounts Officer, MPCB, Mumbai

Received consent fee as per below details:

| Amount | Cheque No | Date | Drawn on |
|-------------------|-----------|------------|---------------------|
| Rs. 1,72,89,494/- | 128390 | 05/11/2012 | State Bank of India |

The consent fee of Rs.10090000/- is balance with Board and which will be considered during the subsequent renewal of consent.