

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 24010437/24014701/24020781

Fax : 24024068/24023516

Website: <http://mpcb.gov.in>

E-Mail: apae@mpcb.gov.in



KALPATARU POINT, 3rd Floor,
Sion-Matunga Scheme Rd. No.8,
Opp. Sion Circle, Sion (East),
Mumbai-400 022.

RED/LSI

Consent No. BO/JD (APC)/EIC No. NM-2242-11R/CC-CAC-158 Date: 17.01.2012.

Consent to **Establish** under Section 25 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 & Trans Boundary Movement) Rules 2008.

[To be referred as Water Act, Air Act and H W (M, H & TM) Rules respectively].

CONSENT is hereby granted to

**M/s Maharashtra State Power Generation Co. Ltd.,
(Proposed Expansion Project),
Gas Turbine Power Station, Uran,
Dist:Raigad.**

located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of H W (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:

1. **The Consent to Establish is granted for a period up to – Commissioning of the Unit or 5 year which is earlier.**
2. **The Consent is valid for the manufacture of:-**

Sr. No.	Product	Maximum Quantity
1	Electricity Generation	1220 MW

3. CONDITIONS UNDER WATER (Prevention and Control of Pollution) ACT, 1974:

- (i) The quantity of trade effluent from the factory shall not exceed **1320.0 m³/day**.
- (ii) The quantity of sewage effluent from the factory shall not exceed **104 m³/day**.
- (iii) **Trade Effluent Treatment:** The applicant shall provide 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 so as to achieve the quality of the treated effluent to the following standards:

The industrial effluent arising from various sections of Power Plant shall be given such treatment either collective or individually as the site condition permits that the final quality of effluent shall have following character standards:

a) **Condenser Cooling Water:**

- 1) pH Between 6.5 to 8.5
- 2) Temperature Not to exceed 5 Degree C.
Higher than the intake water temperature.
- 3) Free available Chlorine Not to exceed 0.5 mg/l

b) **Boiler Blow down:**

- 1) Suspended Solids Not to exceed 100 mg/l.
- 2) Oil & Grease Not to exceed 20 mg/l.
- 3) Copper (Total) Not to exceed 1 mg/l.
- 4) Iron (Total) Not to exceed 1 mg/l.

:2:

c) **Cooling Tower Blow down:**

- | | | | | |
|----|-------------------------|---------------|-----|-------|
| 1) | Free available Chlorine | Not to exceed | 0.5 | mg/l. |
| 2) | Zinc | Not to exceed | 1 | mg/l. |
| 3) | Chromium (Total) | Not to exceed | 0.2 | mg/l. |
| 4) | Phosphate | Not to exceed | 5 | mg/l. |

d) **As Pond Effluent:**

- | | | | | |
|----|------------------|---------------|------------|-------|
| 1) | PH | Between | 6.5 to 8.5 | |
| 2) | Suspended Solids | Not to exceed | 100 | mg/l. |
| 5) | Oil & Grease | Not to exceed | 20 | mg/l. |

(iv) **Trade Effluent Disposal:** The treated effluent shall reuse / recycle up to maximum extent in the process remaining shall be used on land for irrigation/gardening only.

(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.

- | | | | | |
|-----|------------------|---------------|-----|-------|
| (1) | Suspended Solids | Not to exceed | 100 | mg/l. |
| (2) | BOD 3 days 27 C. | Not to exceed | 100 | mg/l. |

Sewage Effluent Disposal: The treated domestic effluent shall be soaked in a soak pit, which shall be got cleaned periodically. Overflow, if any, shall be used on land for gardening / plantation only.

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

Sr.No	Type of waste	Quantity	Treatment	Disposal
1	Cloth, Cotton waste for cleaning machine etc.	5.0 Kg/day	----	CHWTSDF

(vii) **Other conditions:**

- The industry should monitor effluent quality regularly.
- Green Belt a forestation shall be done up to 33% on available open space land.

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 water consumption for the following categories is as under:

- | | | | | |
|-------|-----------------------|------|---------|------|
| (i) | Domestic | ... | 130.0 | CMD. |
| (ii) | Industrial Process | ...} | 326.0 | CMD |
| (iii) | Cooling water Boiler, | ...} | 29280.0 | CMD |
| (iv) | Others | ... | --- | |

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 which is also available on MPCB website at <http://mpcb.gov.in/images/cessform1.pdf>

5. **CONDITIONS UNDER AIR (Prevention & Control of Pollution) ACT, 1981:**

(I) The applicant shall install a comprehensive control system consisting of control equipments as is warranted with reference to generation of Emission and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:

Standards for Emissions of Air Pollutants:

- | | | | | |
|-----|---------|---------------|-----|--------------------|
| (i) | SPM/TPM | Not to exceed | 150 | mg/Nm ³ |
|-----|---------|---------------|-----|--------------------|

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

Sr. No.	Type of Fuel	Quantity
1	Natural Gas	5 MMSCM/Day

(III) **The applicant shall erect the chimney(s) of the following specifications:-**

<u>Sr. No.</u>	<u>Chimney attached to</u>	<u>Height in Mtrs.</u>
i)	Gas Turbine Generator 4 Nos	40 (each)
ii)	Gas Turbine Generator Block 1 & 2	30 (each)
iii)	Heat Recovery Steam Generator (2 Nos.)	60 (each)
iv)	Heat Recovery Steam Generator 1 & 2	70 (each)
v)		

(III) **Control Equipment:**

1. Adequate fume extraction system followed by dust collector, provided to control air emissions.
2. There shall not be any secondary (fugitive) emissions

(V) The applicant shall provide ports in the chimney/(s) and facilities 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 emission 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. Day time 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:**

1. Continuous monitoring system shall be installed for monitoring Sulphur Dioxide & Suspended Particulate Matter and results submitted to the Board every fortnight. The results for continuous monitoring done on daily basis shall be submitted after every 15 days to Regional Officer, Raigad with a copy to Member Secretary, Mumbai. In the event of difficulty in providing the continuous monitoring system, monitoring shall be done daily and results be submitted as stated above.
2. There shall not be any fugitive emissions.
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 factory shall provide continuous flow meter for the measurement of the flow of the effluent.
5. The factory shall carry out tree plantation along road side, around dumps or compulsory a forestation as per the proposal approved by Forests Department,. The Tree plantation programme shall be taken up well in advance of the actual mining activity, so that green belt of special width and height is developed between mining area / road and surrounding area.
6. The industry shall not cause any nuisance in surrounding area.
- 7) The industry shall monitor stack emissions and ambient air quality regularly.

6. CONDITIONS UNDER HW (M &H) RULES, 1989 & AMENDMENT RULES, 2003:

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

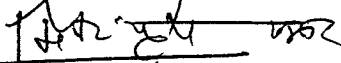
Sr. No.	Item No. of Process generating HW as per Schedule-I	Type of Waste	Quantity	Disposal
1	The industry shall not generate any hazardous waste			

(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 green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, no. of trees surviving as on 31st March of the year and 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 he 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 same, the applicant shall stop, reduce or otherwise, control production to abide by terms & conditions of this consent regarding pollution levels.
 - (iii) The firm shall submit MPCB, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as pre the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992 before 30th September every year.
 - (iv) 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 a comparative statement of designed power and chemical consumptions vis-a vis actual power and chemical consumption along with Environmental statement.
 - (v) 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- stream 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.
 - (vi) 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.
 - (vii) 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.
9. Applicant shall ensure to implement mitigation measures mentioned in Environment Management Plan.
10. **The applicant shall obtain consent to operate before starting of commercial production.** The applicant shall not change or alter quantity, quality, the rate of discharge, temperature or the mode of the effluent/ emissions or hazardous wastes or control equipments provided for without previous written permission of the Board.
11. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant.
12. This is issued pursuant to the decision of **Consent Appraisal Committee meeting** of the Board held on 05.12.2011.
13. The applicant shall comply with the condition stipulated in the Environmental Clearance granted by MoEF, GoI vide letter No. J-13012/26/2004-IA-II(T)) dated 23.06.2005 and J-13012/26/2004-IA-II(T). dated 18.10.2007.

14. Industry shall obtain CRZ Clearance from the competent authority.
15. This consent is issued with an overriding effect on earlier consent granted by the Board vide letter No. BO/RONM/E/CC-216 dated 01.12.2004.
13. **The Total Capital Investment of the project is Rs. 4575 Crores.[Earlier cost of the project Rs.3016 Crs + Additional cost Rs.1559 Crs]**

For and on Behalf of the
Maharashtra Pollution Control Board,



(Milind Mhaiskar, IAS)
Member Secretary

To,
**M/s Maharashtra State Power Generation Co. Ltd.,
(Proposed Expansion Project),
Gas Turbine Power Station, Uran,
Dist:Raigad.**

Copy to:

- 1) Regional Officer, Raigad / Sub Regional Officer, MPC Board, Talaja.
- 2) Chief Accounts Officer, MPC Board, Mumbai.

Received Consent fees as per revised Environment Department G.R. dated 25.08.2011 as below.

<u>Amount</u>	<u>D. D. No.</u>	<u>Date</u>	<u>Drawn on</u>
Rs. 15,59,000/-	313996	21.01.2011	Bank of Maharashtra
Rs. 100/-	511125	22-02-2011	Bank of Maharashtra
Rs. 15,59,000/-	586342	09.01.2012	Bank of Maharashtra
4) Cess Branch, MPC Board, Mumbai.		5) Master file.	