

MAHARASHTRA POLLUTION CONTROL BOARD

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Sion-Matunga Scheme Rd. No.8,
Opp. Sion Circle, Sion (East),
Mumbai-400 022.

RED/LSI

Date: 03/02/2012

Consent No. BO/JD(APC)/ EIC NO PN-10642-11 /R/CC-231

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 Movement) Rules, 2008.

[To be referred as Water Act, Air Act and HW (MH & TM) Rules respectively].

CONSENT is hereby granted to

M/s Thermax Ltd.,
Plot No. D-7, D-13 & D-1 Block,
MIDC Chinchwad, Pune-411 019.

located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of HW(MH&TM) Rules and amendments thereto 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 Operate is granted for a period up to – 28.02.2015.
2. The Consent is valid for the manufacture of -

Sr. No.	Product	Maximum Quantity
1.	Industrial Chiller	660 Nos./Year
2.	Industrial Boiler and Heater	5020 Nos./Year
3.	Aqueous Solution (Lithium Bromide)	600 MT/year

3. CONDITIONS UNDER WATER ACT:

- (i) The daily quantity of trade effluent from the factory shall not exceed **70.0 m³**.
- (ii) The daily quantity of sewage effluent from the factory shall not exceed **350.0 m³**.
- (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:

1)	pH	Between	5.5 to 9.0
2)	Suspended Solids	Not to exceed	100 mg/l.
3)	BOD 3 days 27°C	Not to exceed	100 mg/l.
4)	COD	Not to exceed	250 mg/l.
5)	Oil & Grease	Not to exceed	10 mg/l.
6)	TDS	Not to exceed	2100 mg/l.
7)	Chlorides	Not to exceed	600 mg/l.
8)	Sulphates	Not to exceed	1000 mg/l.
9)	Chromium	Not to exceed	0.1 mg/l.
10)	Iron (as Fe)	Not to exceed	3.0 mg/l.

- (iv) Trade Effluent Disposal: The metal bearing industrial effluent shall be segregated and reused back into process and remaining treated effluent shall use on land for gardening. There shall not be any discharge outside the factory premises. Industry shall provide necessary facilities to recycle the entire industrial effluent back into the process in six months.

(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.

(vi) **Sewage Effluent Disposal:** The treated domestic effluent shall be reused back into process and remaining treated effluent shall use on land for gardening. There shall not be any discharge outside the factory premises. Industry shall provide necessary facilities to recycle the entire industrial effluent back into the process in six months.

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

Sr.No.	Type of waste	Quantity	Treatment	Disposal
1.	Metal Scrap	2458.3 MT/Year	----	By sale to authorized party
2.	Wooden Scrap	392.2 MT/Year	----	By sale to authorized party
3.	Plastic Scrap	6.0 MT/yr	By sale to authorized party
4.	Paper Scrap	55 MT/yr	----	By sale to authorized party
5.	Garbage/Rubber/Fiber	275.5MT/yr	----	By sale to authorized party

(viii) **Other conditions:** The industry shall monitor effluent quality regularly.

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:

Domestic	500.0 CMD
Industrial processing generating Bio-Degradable waste water	100.0 CMD
Industrial processing generating Non-Bio-Degradable waste water	--- CMD
Industrial Boiler/Cooling etc.	150.0 CMD
Any other and gardening.	----- CMD

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) 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:

A) Control Equipment:

1) Adequate capacity of Bag filter/ Ventury Scrubber/dust collector/Fume extraction system provided to all sources of emission shall operate and maintain properly and continuously so as to achieve the following standards.

2) Industry shall provide secondary (fugitive) emissions control system for emission occurs during the process of loading of raw material as well as unloading the product i.e while powering.

B) Standards for Emissions of Air Pollutants:

(i)	SPM/TPM	Not to exceed	100 mg/Nm ³
(ii)	SO ₂	Not to exceed	934 Kg/Day.

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

<u>Sr.No.</u>	<u>Type of Fuel</u>	<u>Quantity</u>
1.	HSD	684 Lit/hr
2.	Furnace Oil	1007 Lit/hr
3.	LDO	349 Lit/hr
4.	LPG	1.5 MT/D

(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>
1.	Boiler (Plant 11),S4	50.5
2.	Energy Bldg DG Stack	12.0
3.	Chiller(Main Building),S1	30.0
4.	Chiller (EERC),S5	30.0
5.	S R. Furnace(S2 & S5)	30.0
6.	R&D Stack,S13	30.5
7.	DG sets (4x 500 KVA), S8,9,10	4.5*
8.	Catter PillarDG sets(1x725 KVA), S14	10.0*
9.	3000 TR Catter Piller 725 KVA,S16	2.3*
10.	DG set 625 KVA,S11	5.0*
11.	Tube Shed Boiler,S7	6.5*
12.	Diesel Air Compresscr	2.3*

(* Above roof top of the building in which it is installed)

(iv) Conditions for DG Sets: -

1. Noise from DG Sets shall be controlled by providing acoustic enclosure or by treating the room acoustically.
2. Applicant should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room shall be designed for minimum 25 dB(A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB(A) shall also be provided. The measurement of insertion loss shall be done at different points at 0.5 meters from acoustic enclosure/ room and then average.
3. The Applicant should make efforts to bring down noise level due to DG Set, outside the premises, with ambient noise level requirements by proper setting and control measures.
4. Installation of DG Set must be strictly in compliance with recommendations of DG set manufacturer;
5. A proper routine and preventive maintenance procedure for DG Set shall be set and followed in consultation with the DG manufacturers, which would help to prevent noise levels of DG Sets from deteriorating with use.
6. The DG set shall be operated only in case of power failure. The applicant shall make arrangement for regular electrical power.
7. The Applicant shall not cause any nuisance in the surrounding area due to operation of DG sets.
8. In case of problems, the D.G. set shall not be operated until it is set back to satisfactory position.

(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) The industry should not cause any nuisance in surrounding area.
- 2) The industry should monitor stack emissions and ambient air quality regularly.

6. CONDITIONS UNDER HAZARDOUS WASTE (MH &TM) RULES, 2008:

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

Sr. No.	Item No. of Process Generating H.W. as per Schedule-I	Type of Waste	Quantity	Disposal
1.	34.3	Chemical sludge from waste water treatment	20 m ³ /Yr.	CHWTSDF
2.	5.1	Used/spent oil	20 KL/Yr.	Authorised re-processor
3.	5.2	Waste/Residue containing Oil,oily cotton waste,oily saw dust & waste oil sludge	3000 kg/Yr.	CHWTSDF
4.	15.2	Discarded Asbestos	20 kg/day	
5.	21.1	Process waste, residues & sludges	2200 kg/Yr.	
6.	21.2	Filler Residue		
7.	33.3	Discarded Containers/barrels/liners contaminated with hazardous waste/chemicals	20 m ³ /Yr	Authorised re-processors or recycler

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

- a. 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.
- b. The unit has to display and maintain the data online outside the factory main gate in Marathi & English both on a 6'x4' display board in the manner and the report of

the compliance along with photograph shall be submitted to this office & concerned Regional Office/ Sub Regional Office.

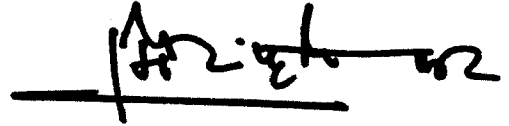
- c. It shall be ensured that the Hazardous waste is handled, managed & disposed of strictly in accordance with the **Rule 5 of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules 2008** and shown & submitted to the Board as & when asked for.

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 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.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) 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 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 the mode of the effluent/ emissions or hazardous wastes or control equipments provided for without previous written permission of the Board.

10. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant.
11. This is issued pursuant to the decision of Consent Appraisal Committee meeting of the Board held on 23 January, 2012.
12. The applicant shall provide separate full fledged Sewage Treatment Plant within Four month period.
13. You shall submit Bank Guarantee of Rs.5,00, 000/- in favor of Regional Officer Pune within 15 days for providing of sewage treatment plant within four month period. The Bank Guarantee shall be valid for one year.
14. The Total Capital investment of industry is Rs.121.67/- crore(Existing 108.07 Crs + Proposed 13.60).
15. This consent is issued in supersession of earlier consent vide No. BO/APAE/EIC/No. PN-5670-10/R/CC-95 date 15/02/2011.
16. You shall obtain the separate consent to establish for canteen/office building activity.



(Milind Mhaiskar IAS)
Member Secretary

To,
M/s Thermax Ltd.,
Plot No. D-7, D-13 & D-1 Block,
MIDC Chinchwad, Pune-411 019.

Copy to:

1) Regional Officer, MPCB, Pune 2) Sub-Regional Officer, MPCB, Pimpri Chinchwad, Pune.

they are directed to ensure the Compliance of consent conditions & obtain the B.G. Rs. 5 Lakh from the industry within 1 month.

3) Chief Accounts Officer, MPCB, Mumbai

Received Consent fee of -

<u>Amount</u>	<u>D.D.No.</u>	<u>Date</u>	<u>Drawn on</u>
Rs.5,40,350/-	210394	18.02.2010	Citi Bank
Rs.50,000/-	093566	03/11/2011	Citi Bank

4) Cess Branch, MPCB.