

# TAMIL NADU POLLUTION CONTROL BOARD

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TS33)20/11/06  
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TAMIL NADU POLLUTION CONTROL BOARD

CONSENT ORDER NO. : 3582

DATED : 17/11/2006

Proceedings No. : T16/TNPCB/34693/TVLR/D/2005/RL/W/06

DATED : 17/11/2006

Consent for Establishment under Section 25 of the WATER (Prevention and Control of Pollution) Act, 1974, as amended in 1988.

Sub : TNPC Board - Consent for establishment  
MESSERS CHENNAI WATER DESALINATION LIMITED,  
R.S.NO.1/3B,4B2,01/4A1(P), 330/1A2,  
KATTUPALLI VILLAGE,  
PONNERI TALUK,  
THIRUVALLUR DISTRICT.

for the establishment or take steps to establish the industry under Section 25 of the WATER (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act 53 of 1988).

Ref : 1.YOUR APPLICATION NO.10248 DT 6.10.05  
2.IR NO.JCEE/TNPCB/TLR/01.69/WMA/05 DT.19.10.05

Board Resolution No :

DATED : / /

Consent to establish or take steps to establish is hereby granted under Section 25 of the WATER (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act 53 of 1988) (hereinafter referred to as 'The Act') and the Rules and Orders made there under to THE DIRECTOR, M/S.CHENNAI WATER DESALINATION LIMITED, (hereinafter referred to as 'The Applicant') authorising him/her/them to establish or take steps to establish the industry in the site mentioned below:  
R.S.NO.1/3B,4B2,01/4A1(P), 330/1A2,  
KATTUPALLI VILLAGE,  
PONNERI TALUK,  
THIRUVALLUR DISTRICT.

This Consent to establish is valid for TWO years, or till the Industry obtains consent to operate under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 whichever is earlier.

To

THE DIRECTOR,  
M/S.CHENNAI WATER DESALINATION LIMITED,  
DOOR NO.9, PLOT NO.16,  
MANJULAI I MAIN ROAD,  
KALAINAGAL NAGAR, EKKATTUTHANGAL,  
CHENNAI-600097.

Copy to : The District Environmental Engineer, Tamil Nadu Pollution Control Board  
THIRUVALLUR

For information and necessary action,

Copy to : The Joint Chief Environmental Engineer, TNPCB,

Copy to : The Commissioner / Executive Officer,

KATTUPALLI PANCHAYAT UNION, PONNERI TALUK, THIRUVALLUR DISTRICT.

Spare :

*TS 33) 20/11/06*  
For CHAIRMAN,  
For SECRETARY  
TAMIL NADU POLLUTION CONTROL BOARD  
CHENNAI

# TAMIL NADU POLLUTION CONTROL BOARD

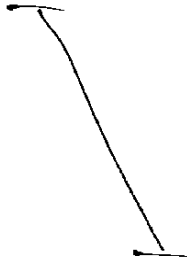
- 3 -

## SPECIAL CONDITIONS

1. Details of the products manufactured

SL.NO.	DESCRIPTION	QUANTITY/MONTH
(1)	(2)	(3)

1.	REVERSE OSMOSIS TREATED SEA WATER	100 MLB
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This consent to establish is valid for the manufacture of products and the rate of production mentioned above. Any change in rate of and the quantity or quality of the products has to be brought to the notice of the Board.

2. The unit shall install Effluent Treatment Plant as proposed, to ensure that the effluents to be discharged shall satisfy the standards prescribed by the Board for disposal of effluents into inland surface waters/public sewers/marine coastal areas/on land for irrigation, as indicated in the Annexure-I.

3. The unit shall install sewage treatment systems for the treatment of waste water arising out of the sanitary facility and waste water generated from canteen as proposed in the Annexure-I.

4. The unit shall construct effluent drains/cable drains/storm water drains separately and provide different colour, sign boards along with alignment of various drains as indicated in the site plan, furnished by the industry.

5. Each vessel/reactor should have its own catch pit for the collection of spills and each pump in the process section must be mounted on its own catch pit with the suction line of the pump connected to pit to empty it periodically/regularly/continuously.

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6. It has to be ensured by the unit that the floors with the expanded metal, slotted angle stool sinks, steel grates shall be built to the maximum possible to avoid floor washings.

7. If the plant layout demands that the vessels should be installed in upper floor, it shall provide suitable system to minimise spill/leakages and also to collect and drain the spillages into effluent drain leading to the Effluent Treatment Plant by providing suitable gradient to the properly lined bottom floor.

8. The unit shall construct tank or lagoon of adequate capacity with compatible impervious material for the storage of hazardous/solid wastes.

9. The unit shall ensure that the corrosion prone areas and construction material liable to atmospheric and process induced corrosion shall be given special attention for immediate replacement with least preventive maintenance.

10. The unit has to provide facilities separately outside the main production plant for carrying out detoxification operations if any.

11. In order to collect spills from a particular vessel before the spilled materials get a chance for contamination with spills from another vessel, the two vessels must be installed at sufficient distance to ensure that intercontamination cannot take place.

12. Flange joints in the pipelines should be avoided wherever possible.

13. The unit shall establish laboratory with adequate analytical equipments for analysing the trade effluent/sewage as well as samples of water collected from the wells nearby if any.

14. The unit shall construct compound wall around the boundary of the unit, to a height of metres from ground level.

15. The unit shall appoint an Environmental Engineer with experience of minimum three years in maintenance of waste water treatment plants, before commissioning, along with supporting staff, chemist, technician and operators.

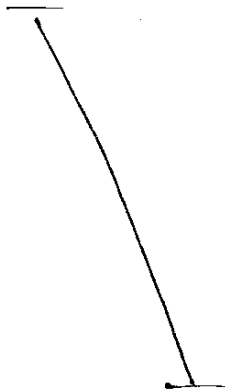
# TAMIL NADU POLLUTION CONTROL BOARD

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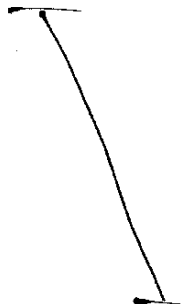
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## GENERAL CONDITIONS

16. Following location specific conditions must be satisfied :



17. The following process specific conditions must be satisfied :



1. The above consent to establish cannot be construed as consent to operate.
2. The industry shall make a request for grant of consent to operate atleast sixty days before the commissioning of trial production.
3. The applicant shall maintain good house keeping both within the factory and in the premises. All pipes, valves, sewers and drains shall be leak proof. Floor washings shall be admitted in to the effluent collection system only and shall not be allowed to find their way to storm water drains or open areas.
4. The unit has to provide sludge and silt traps and manholes along the effluent drains for periodical desiting and desludging operation.
5. All places of storage of solid/liquid material are to be dyked with bunding facilities and the flooring within the dyked and bunding area shall be lined with impervious materials depending upon the nature of the solid/liquid to be stored.
6. As the unit proposes to utilise the treated trade effluent on inland for irrigation, the land has to be made fit for irrigation in consultation with the agricultural scientist to avoid more percolation
7. Samples of water from the wells or any other nearby water sources have to be taken by the unit and get them analysed by the Board Laboratory to develop base line data to assess the existing water quality.
8. The unit shall provide separate power connection for the Effluent Treatment Plant and install separate energy meter for the Effluent Treatment Plant as well as for aerators if any.
9. The unit shall provide an alternate power source sufficient to operate all the facilities to be installed in Effluent Treatment Plant by the applicant.
10. The consent does not authorise or approve the construction of any physical structures or facilities, or the undertaking of any work in any natural water course.
11. Any change in the details furnished in the conditions has to be brought to the notice of the Board and got approved by the Board, before obtaining consent to operate under the said Act.
12. The unit has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances.
13. Consent to operate will not be issued unless the unit complied with the conditions of consent to establish, otherwise, the order of consent to establish already issued will be revoked with immediate effect.

(Continued in Annexure-I)

*[Signature]*  
23-11-06  
For CHAIRMAN  
For MEMBER-SECRETARY  
TAMIL NADU POLLUTION CONTROL BOARD  
CHENNAI

*[Signature]*  
23-11-06

*[Signature]*  
23-11-06  
For CHAIRMAN  
For MEMBER-SECRETARY  
TAMIL NADU POLLUTION CONTROL BOARD  
CHENNAI.

*[Signature]*  
23-11-06

**CONSENT FOR ESTABLISHMENT UNDER THE WATER (P&CP) ACT, 1974**

**AS AMENDED CONSENT ORDER WATER NO.3565 DATED: 17.11.2006**

**ANNEXURE-I**

**SEWAGE TREATMENT PLANT:**

Sl.No.	Name of the unit	Quantity	Dimension in 'm'
1.	Septic tank	4	4 x 6 M
2.	Soak pit	4	4 M dia. each

**TREATMENT PLANT:**

Sl.No.	Name of the unit	Quantity	Dimension in 'm'
1.	Neutralisation sump	3 Nos.	20 x 25 each

*K. Srinivasan*  
23.11.06  
for CHAIRMAN  
TNPC Board, CHENNAI-32.

*S.*  
23.11.06.



## TAMIL NADU POLLUTION CONTROL BOARD

### ANNEXURE I

1. The Proponent shall not carry out any other kind of works not envisaged in their proposals.
2. The unit shall ensure that the core plant activity of desalination shall be carried out outside the CRZ area as proposed.
3. The unit shall provide septic tank followed by soak pit for the treatment and disposal of sewage as proposed.
4. The unit shall discharge R.O. rejects back into the sea through uniform distribution system without any sudden increase in TDS concentration in the area.
5. The unit shall discharge the R.O. reject into sea at a distance of 500 m. inside the sea and at a depth 9 m. as proposed by NIO, GOA after the satisfying the standards prescribed by the Board.
6. The proposed intake and outfall activities in the sea shall not cause hindrance to the fishing activity, movement of boats etc.
7. The unit shall ensure that the process area shall be paved completely so that the process sea water shall not gain access on ground leading to ground water pollution.
8. The unit shall transport the construction material in covered trucks to minimize air borne particulars and spills.
9. The unit shall not transport the raw material during night hours and shall carryout water sprinkling at unpaved areas to minimize air borne particulate.
10. The product water shall be conveyed through buried line without causing any nuisance enroute.
11. The unit shall implement the EMP as envisaged in the REIA report.
12. The project activity shall not affect the coastal eco system including the marine flora and fauna.
13. The unit has to ensure that the equipment deployed for construction will have appropriate monitoring and control facilities.
14. The unit shall initiate water quality monitoring programme one week prior to commencement of construction activity

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## TAMIL NADU POLLUTION CONTROL BOARD

- and continue thought<sup>out</sup> the operation and furnish the Report of analysis to the Board regularly.
15. The unit shall explore shall possibilities of using sodium hydroxide instead of using dolomite for neutralization of product water to avoid generation of solid waste.
  16. The unit shall develop green belt in and around the premises.
  17. The unit shall not dump the construction wastes generated during construction of desalination plant into the back waters.
  18. The unit shall collect the oil wastes comprising of spills from pumps/compressors, storage areas, floor washings etc., in oil water separator and shall provide oil skimmer to separate the oil from the water and dispose the same with the concurrence of the Board.
  19. The unit shall collect and dispose the sludge generated from clariflorculator without allowing for leaching in a scientific manner with the concurrence of the Board.
  20. The unit shall identify suitable land and furnish action plan for secure landfill for the disposal of solid waste generated from the pre-treatment.
  21. The unit shall comply with the conditions imposed by MOEF, GOI in CRZ Clearance issued vide Lr.No.11-59/2005-1A-11, dt.26.10.2006.

*சென்னை*  
23-11-06

For Chairman.

*சென்னை*  
23-11-06

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# TAMIL NADU POLLUTION CONTROL BOARD

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By Registered Post with  
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To

TAMIL NADU POLLUTION CONTROL BOARD

CONSENT ORDER NO. : 3526

DATED : 17/11/2006

Proceedings No. : T16/TNPCB/34693/TVLR/D/2005/RL/A/06

DATED : 17/11/2006

Consent for Establishment under Section 21 of the AIR (Prevention and Control of Pollution) Act, 1981, as amended in 1987.

THE DIRECTOR,  
M/S. CHENNAI WATER DESALINATION LIMITED,  
DOOR NO.9, PLOT NO.16,  
MANJALAI MAIN ROAD,  
KALAZHAGAL NAGAR, EKKATTUTHANGAL,  
CHENNAI-600097.

Sub : TNPC Board - Consent for establishment  
MESSRS CHENNAI WATER DESALINATION LIMITED,  
R.S.NO.1/3B,4B2,01/4A1(P), 330/1&2,  
KATTUPALLI VILLAGE,  
POMMERI TALUK,  
THIRUVALLUR DISTRICT.

Copy to : The District Environmental Engineer, Tamil Nadu Pollution Control Board  
THIRUVALLUR

for the establishment or take steps to establish the industry under Section 21 of  
the AIR (Prevention and Control of Pollution) Act, 1981 as amended in 1987

For information and necessary action,

Ref : 1.YOUR APPLICATION NO.885 DT 6.10.05  
2.IR NO.WCEE/TNPCB/TLR/0169/W&A/05 DT.19.10.05

Copy to : The Joint Chief Environmental Engineer, TNPCB,

BOARD RESOLUTION NO :

DATE : / /

Consent to establish or take steps to establish is hereby granted under Section 21 of the  
AIR (Prevention and Control of Pollution) Act, 1981 as amended in 1987 and the Rules and Orders  
made there under to  
THE DIRECTOR,  
M/S. CHENNAI WATER DESALINATION LIMITED,

Copy to : The Commissioner / Executive Officer,  
KATTUPALLI PANCHAYAT UNION, POMMERI TALUK, THIRUVALLUR DISTRICT.

(hereinafter referred to as 'The Applicant') authorising him/~~her~~ them to establish or take  
steps to establish the industry in the site mentioned below:  
R.S.NO.1/3B,4B2,01/4A1(P), 330/1&2,  
KATTUPALLI VILLAGE,  
POMMERI TALUK,  
THIRUVALLUR DISTRICT.

Spare :

This Consent to establish is valid for TWO years, or till the Industry obtains  
consent to operate under Section 21 of the AIR (Prevention and Control of Pollution) Act, 1981  
as amended in 1987 whichever is earlier.

*For CHAIRMAN*  
*22-11-06*  
For CHAIRMAN,  
~~For MEMBER SECRETARY~~  
TAMIL NADU POLLUTION CONTROL BOARD  
CHENNAI

# TAMIL NADU POLLUTION CONTROL BOARD

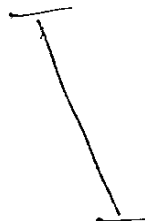
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## SPECIAL CONDITIONS

1. Details of the products manufactured

SL.NO.	DESCRIPTION	QUANTITY/MONTH
(1)	(2)	(3)

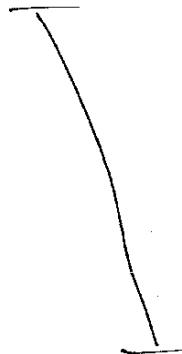
1. REVERSE OSMOSIS TREATED SEA WATER 100 MLD



This consent is to establish is valid for the manufacture of Products and the rate of production mentioned above. Any change in the quantity or quality of the products has to be brought to the notice of the Board.

2. The height of following chimneys/stacks shall not be less than the figures indicated below for the discharge of emissions.

Chimney/Stack Number	Description of Chimney / Stack	Point of discharge in Metre (Above ground level)
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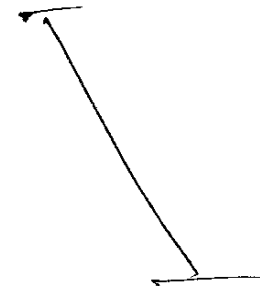


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3. The Unit shall install the following Air Pollution Control equipments / measures for the Control of emissions generated from the various sources of the plant.

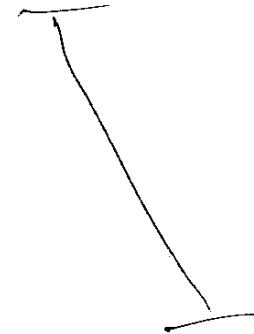
A. For suspended particulate emission

SL.NO.	SOURCE	DETAILS OF CONTROL OF EQUIPMENT
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B. For Gaseous Emission :

SL.NO.	SOURCE	DETAILS OF CONTROL OF EQUIPMENT
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# TAMIL NADU POLLUTION CONTROL BOARD

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C. For Fugitive Emissions :

SL.NO.	SOURCE	DETAILS OF CONTROL

4. The unit shall procure of Ambient Air Quality in respect of the parameters Number of equipments for Continuous monitoring
5. The unit shall procure monitoring for the and keep ready. Number of equipments for carrying out stacks Parameters
6. The unit shall provide on line / automatic continuous stack monitoring unit for the stacks mentioned below :

SL.NO.	SOURCE	STACK	PARAMETERS

- 6 -

7. The Unit shall provide sensors connected with the Alarm System for the following locations in the plant.

Sl. No.	Location of the Sensor	No. of Sensor	Parameters

8. The Unit shall provide port holes and sampling facilities for the following stacks as per the Central Pollution Control Board guidelines.

SL.NO.	SOURCE	STACK

# TAMIL NADU POLLUTION CONTROL BOARD

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9. The unit shall provide sufficient acoustic measures for the following equipment.


SL.NO.	SOURCE	TYPE OF MEASURES

10. The unit shall install separate energy meter for the operation of the following Air Pollution Control equipments.

SL.NO.	SOURCE	AIR POLLUTION CONTROL MEASURES

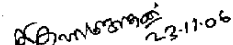
(Continued in Annexure-I)


  
 For CHAIRMAN.  
 For MEMBER SECRETARY  
 TAMIL NADU POLLUTION CONTROL BOARD  
 CHENNAI

  
 23-11-06

## GENERAL CONDITIONS

1. The above consent to establish cannot be construed as consent to operate.
2. The applicant shall make a request for grant of consent to operate atleast sixty days, before the commissioning of trial production.
3. The unit shall carryout Ambient Air Quality Survey atleast for seasons for the collection of baseline data, on the existing Ambient Air Quality level within the plant / outside the plant.
4. The applicant shall provide a meteorological station to collect the data on wind velocity, direction, temperature, rainfall etc.
5. The applicant shall prepare and submit a detailed Risk Assessment Report alongwith on site and off-site Emergency preparedness plan for within the premises of the plant as required under the Rules 13 and 14 of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1939 as amended.
6. The unit shall install KVA Capacity generator exclusively for the operation of Air Pollution Control measures in case of power failure.
7. The unit shall also establish laboratory for analysis of gaseous / particulate emissions.
8. Any change in the details furnished in the conditions has to be brought to the notice of the Board and got approved by the Board, before obtaining consent to operate under the said Act.
9. The unit has to comply with the provisions of Public Liability Insurance Act, 1951 to provide immediate relief in the event of any hazard to human beings / other living creatures/plants and properties while handling and storage of hazardous substances.
10. Consent to operate will not be issued unless the unit complied with the conditions of consent to establish, otherwise the order of consent to establish already issued will be revoked with immediate effect.

  
 For CHAIRMAN.  
 For MEMBER SECRETARY  
 TAMIL NADU POLLUTION CONTROL BOARD  
 CHENNAI

  
 23-11-06



## TAMIL NADU POLLUTION CONTROL BOARD

### ANNEXURE -I

1. The Proponent shall not carry out any other kind of works not envisaged in their proposals.
2. The unit shall ensure that the core plant activity of desalination shall be carried out outside the CRZ area as proposed.
3. The proposed intake and outfall activities in the sea shall not cause hindrance to the fishing activity, movement of boats etc.
4. The unit shall ensure that the process area shall be paved completely so that the process sea water shall not gain access on ground leading to ground water pollution.
5. The unit shall transport the construction material in covered trucks to minimize air borne particulars and spills.
6. The unit shall not transport the raw material during night hours and shall carryout water sprinkling at unpaved areas to minimize air borne particulate.
7. The product water shall be conveyed through buried line without causing any nuisance enroute.
8. The unit shall implement the EMP as envisaged in the REIA report.
9. The project activity shall not affect the coastal eco system including the marine flora and fauna.
10. The unit has to ensure that the equipment deployed for construction will have appropriate monitoring and control facilities.
11. The unit shall initiate water quality monitoring program one week prior to commencement of construction activity and continue thought the operation and furnish the Report of analysis to the Board regularly.
12. The unit has to ensure that the construction equipments deployed would be provided with suitable mufflers/enclosures so as to satisfy the Ambient Noise Level prescribed by the Board.
13. The unit shall explore possibilities of using sodium hydroxide instead of using dolomite for neutralization of product water to avoid generation of solid waste.

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## TAMIL NADU POLLUTION CONTROL BOARD

14. The unit shall develop green belt in and around the premises.
15. The unit shall ensure that the noise generated from construction activity and equipment shall satisfy the Ambient Noise Level standards prescribed by the Board.
16. The unit has to ensure that the pumps and blowers shall be mounted on rubber pads or any other noise absorbing materials so as to bring the noise level to satisfy the Ambient Noise Level standards prescribed by the Board.
17. The unit shall comply with the conditions imposed by MOEF, GOI in CRZ Clearance issued vide Lr.No.11-59/2005-1A-11, dt.26.10.2006.

*23-11-06*  
For Chairman,  
TNPC Board  
CHENNAI-32.

*23-11-06*

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

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