



10 FEB 2010



TAMILNADU POLLUTION CONTROL BOARD

CONSENT ORDER NO: 5209/DATED: 08.02.2010.

PROCEEDINGS NO: TNPCB / BMWM / AIR / 00038/KPM/2010.DATED:08.02.2010

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

Sub: **TNPCB – Biomedical waste management – Consent for establishment – M/s. Tamil Nadu Waste Management Ltd, Survey No: 29/3, Kinnar Village, Maduranthagam Taluk, Kancheepuram District. - for the establishment or take steps to establish the facility under the Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987.**

- Ref:
1. Your application no: Nil Dated. 16-12-2009.
 2. IR No:F SPR1242/RM/DEE/SPR/2009 Dt:29-12-2009.
 3. Inspection of the facility site on 20-01-2010.
 4. CCC Item no.94-23.

Consent to establish or take steps to establish is hereby granted under the Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987 (herein referred to as 'The Act') and the Rules and Orders made there under to

The Head- Operations,
M/s. Tamil Nadu Waste Management Ltd,

(herein after referred to as 'The Applicant') authorizing him to establish the facility in the site mentioned below:

Survey No: 29/3, Kinnar Village,
Maduranthagam Taluk,
Kancheepuram District.



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

Sd./-xxxxxx,
CHAIRMAN.

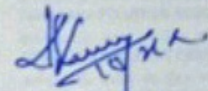
To

The Head-Operations,
M/s Tamil Nadu Waste Management Ltd,
323, Diamond dunelevel-V, Poonamallee High Road,
Chennai -600029.

Copy to :

1. The District Environmental Engineer,
Tamilnadu Pollution Control Board,
Sriperumbudur
2. BMS
3. Technical File.

//Forwarded By Order//


for CHAIRMAN.

M/s
10.2.2010

I.G. 9.2.2010.



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SPECIAL CONDITIONS

1. This consent for establishment is valid for establishing only the facility in the said site and no construction for any other activity in the said site shall be allowed.
2. The facility shall be established for purpose and quantity noted below

Sl No	Description	Quantity / month.
	Common facility undertaking collection, treatment and disposal of Bio medical waste.	
	a. Incinerable waste-Category 1,2,3,5,6.	90 T
	b. Autoclavable/disinfection waste-Category 4, 7.	10 T

This consent for establishment is valid for the description and quantity mentioned above. Any change in the above shall be brought to the notice of the Board by the facility.

3. The facility shall ensure that the noise generated from the construction activity of the facility satisfies the Ambient Noise Level standards prescribed by the Board. The ambient noise level shall not exceed 55 dB (A) during the day time (6am to 9pm) and shall not exceed 45 dB (A) during the night time (9pm to 6am).

4. The facility shall set up a vacuum type autoclave conforming to the following standards.

The medical wastes shall be subjected to a minimum of one pre vacuum pulse to purge the autoclave of all air. The waste shall also be subjected to the following:

- i. A temperature of not less than 145°C and a pressure of 35 psi for an autoclave residence time of not less than 30 minutes.
- ii. Medical waste shall not be considered properly treated unless the time, temperature and pressure indicator indicate that the required time, temperature and pressure were reached during the autoclave process. If for any reasons, time temperature or pressure indicates that the required temperature, pressure or residence time was not reached, the entire load of medical waste must be autoclaved again until the proper temperature, pressure and residence time were achieved.
- iii. Recording of operational parameters: Each autoclave shall have graphic or computer recording devices, which will automatically and continuously monitor and record dates, time of day, and load identification, number and operating parameters throughout the entire length of the autoclave cycles.



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iv. Validation test

Spore testing: The autoclave should completely and consistently kill the approved biological indicator at the maximum design capacity of each autoclave facility. Biological indicator for autoclave shall be *Bacillus stearothermophilus* spores using vials or spore strips, with at least 1×10^4 spores per millilitre.

v. Routine test: A chemical indicator/strips/tape that changes colour when a certain temperature is reached can be used to verify that a specific temperature has been achieved. It may be necessary to use more than one strip over the waste package at different location to ensure that the inner content of the package has been adequately autoclaved.

vi. Proper filters have to be provided for the autoclave so as to control odour nuisance, if any.

5. The facility shall provide fully equipped laboratory facility to monitor the air and water quality. In addition, the spore test has to be carried out in a reputed laboratory.

6. The incinerator shall be provided as per the CPCB guidelines issued in August 2003 conforming to the following standards

Operating standards for the incinerator

a. The combustion efficiency (CE) shall be at least 99.00%

b. The combustion efficiency is computed as follows:

$$CE = \frac{\% \text{ CO}_2}{\% \text{ CO}_2 + \% \text{ CO}} \times 100$$

c. The temperature of the primary chamber shall be $800 \pm 50^\circ \text{C}$ and the temperature of the secondary chamber shall be at least $1050 \pm 50^\circ \text{C}$, with minimum 3% oxygen in the stack gas.

d. Suitably designed pollution control devices should be installed / retrofitted with the incinerator to achieve the emission limits as stipulated below,

Parameters	Concentration mg/Nm ³ at (12% CO ₂ correction)
1 Particulate matter	150
2 Nitrogen Oxides	450
3 HCl	50
4 Minimum stack height shall be 30m above ground	
5 Volatile organic compound in ash shall be not more than 0.01%	



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- e. Online continuous recording type of monitoring system for the temperature control in primary and secondary chamber of the incinerator shall be provided.
 - f. Only low Sulphur fuel like LDO/LSHS/Diesel shall be used as fuel in the incinerator.
 - g. Sufficient stock of fuel has to be provided to maintain the required temperature in the primary and secondary chamber of the incinerator.
 - h. Plastic items and other items such as bandages, dressings etc., shall not be burnt in the incinerator on any account.
 - i. The facility shall provide feeding mechanism to the incinerator
 - j. The facility shall ensure that the incinerator is provided with graphic or computer recording devices which shall automatically and continuously monitor and record dates, time of day, batch sequential number and operating parameters such as temperature in both chambers. CO, CO₂ and O₂ in gaseous emission shall also be measured daily (atleast ½ hour at one minute interval). This may be complied within a period of six months.
7. The facility shall provide air pollution control measures such as dust collectors, mist eliminator and venturi type scrubbing system with stack of minimum 30 m height attached to the incinerator.
 8. Sufficient air supply must be ensured in the incinerator for complete combustion to avoid smoking due to incomplete combustion.
 9. Online continuous recording type monitoring shall be provided for monitoring parameters such as particulate matter, NO_x, HCL, in the incinerator stack gas.
 10. The facility shall provide adequate capacity of DG set before commencing the operation.
The facility shall provide stack of adequate height for the diesel generator set as per the Environment (Protection) Rules, 1986 and shall ensure that the emissions satisfy the Ambient Air Quality standards prescribed by the Board.
 11. The facility shall send the plastic and glass biomedical wastes to the respective recyclers authorised by the Board.
 12. An identification board of durable material and finish shall be displayed at the entrance to the facility as per the Central Pollution Control Board guidelines.
 13. The facility has to close the sides of the main building and the front side is to be closed with necessary minimum open space only.
 14. The facility shall provide adequate storage room for storing plastic and glass waste.



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15. The facility shall take requisite remedial measures in the event of any impact due to landfill on groundwater, soil and ambient air quality.
16. The facility shall furnish a performance guarantee deposit equivalent to 1% of the project cost to the Tamilnadu Pollution Control Board as a security in case of violation of the conditions of landfill.
17. The facility shall provide compound wall all around the premises so as to exclude storm water entering into the projects site. Also, the facility shall provide separate storm water drain inside the facility's premises for collection and disposal of the same separately and safely.
18. The facility shall follow good house keeping practices.
19. Green belt shall be developed inside and outside the premises of the facility with thick canopy of plantations.
20. The facility shall employ a qualified environmental engineer.
21. The facility shall maintain records of collection, reception, storage, transportation, treatment and disposal and or any form of handling biomedical waste in accordance with the rules and records shall be subject to inspection and verification by the Board at any time.
22. The facility shall take insurance policies under the Public Liabilities Insurance Act, 1991.
23. The facility shall submit an annual report to the Board in Form No. II by 31st January of every year to include information about the categories and quantities of biomedical waste handled during the preceding year.
24. The facility shall comply with the "Guidelines for design and construction of biomedical waste incinerator" and "Guidelines for common bio-medical waste treatment facility (CBWTF)" issued by Central Pollution Control Board in August 2003.
25. The facility shall apply for authorisation under the Biomedical Waste (Management and Handling) Rules, 1998 as amended before applying for the consent for operation.
26. The facility shall install incinerator and autoclave as per the specifications given in schedule V of the Bio medical Waste (Management and Handling) Rules, 1998.
27. The facility shall comply with the incinerator stack emissions as given in the Bio medical Waste (Management and Handling) Rules, 1998. Particulate matter-150mg/Nm³, NO_x-50mg/Nm³ and Volatile organic compounds in ash shall not be more than 0.01%.
28. The incinerator ash shall be collected and disposed in TSDF at Gummidipoondi with the authorisation under Hazardous Waste(MHTM) Rules,2008.



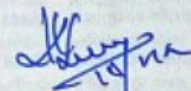
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GENERAL CONDITIONS

1. The above consent to establish cannot be construed as consent to operate.
2. The facility shall make a request for grant of consent to operate atleast sixty days before the commissioning.
3. The facility shall carryout Ambient Air Quality Survey atleast for THREE stations for atleast TWO seasons for the collection of baseline data, on the existing Ambient Air Quality within the plant / outside the plant.
4. The applicant shall make good house keeping both within the facility and in the premises.
5. 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.
6. Consent to operate will not be issued unless the facility complied with the conditions of consent to establish, otherwise, the order of consent to establish already issued will be revoked with immediate effect.

Sd./-xxxxxx,
CHAIRMAN.

//Forwarded By Order//


for CHAIRMAN.

10.2.2010

I.G. 9.2.2010.



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தமிழ்நாடு

POLLUTION PREVENTION PAYS

அகம் தூய்மை வாய்மைக்கு! புறம் தூய்மை வாழ்வுக்கு!