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TAMILNADU POLLUTION CONTROL BOARD

CONSENT ORDER NO. : 2750

DATED : 17/08/2004

Proceedings No. : TNPCC/AMM/A/3385/2004

DATED : 17/08/2004

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

Sub : TNPCC Board - Consent for establishment
MESSERS MEDICARE INCIN PRIVATE LIMITED
R.S.NO.10 OF THANGAYUR VILLAGE
SANGAGIRI TALUK
SALEM DISTRICT

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

Ref : 1. YOUR APPLICATION NO: 42300 DT. 30.01.2004
2. GO'S AUTHORTISATION NO: CMU-0008 DT. 2.7.2004

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. MEDICARE INCIN PRIVATE LIMITED

(hereinafter referred to as 'The Applicant') authorising him/her/then to establish or take
steps to establish the CDMT facility in the site mentioned below;
R.S.NO.10 OF THANGAYUR VILLAGE
SANGAGIRI TALUK
SALEM DISTRICT

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.

[Handwritten Signature]
2/9/04

For MEMBER SECRETARY
TAMIL NADU POLLUTION CONTROL BOARD
CHENNAI

To

THE DIRECTOR
M/S. MEDICARE IDIIM PRIVATE LIMITED
NO.14, KAVERI AVENUE
STATE BANK COLONY
SALEM - 4

Copy to : The District Environmental Engineer, Tamil Nadu Pollution Control Board
SALEM, ERODE, NAMAKKAL AND HOSUR

For information and necessary action,

Copy to : The Commissioner / Executive Officer,
SANGAGIRI PANCHAYAT UNION, SALEM DISTRICT

Spare :

SPECIAL CONDITIONS

1. Details of the products manufactured

Sl. No.	DESCRIPTION	QUANTITY/MONTH
(1)	(2)	(3)

THIS IS A COMMON FACILITY FOR THE COLLECTION, TRANSPORT, TREATMENT AND SCIENTIFIC DISPOSAL OF BIOMEDICAL WASTE. 45 T/MONTH

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

2. The height of following chimneys/stacks shall not be less that 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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- 1. STACK ATTACHED TO INCINERATOR 30 M
 - 2. STACK ATTACHED TO DIESEL GENERATOR SET MINIMUM 3 M HEIGHT
- OR
- RULES 1986 WHICHEVER IS HIGHER.
- AS PER ENVIRONMENT (PROTECTION)

5. The facility 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
1.	INCINERATOR	STACK WITH VENTURI SCRUBBER
2.	DIESEL GENERATOR SET	STACK

B. For Gaseous Emission :

SL.NO.	SOURCE	DETAILS OF CONTROL OF EQUIPMENT
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1. INCINERATOR → Stack with Venturi Scrubber
2. DIESEL GENERATOR SET → Stack

(PROTECTION)

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 facility shall provide on line / automatic continuous stack monitoring unit for the stacks mentioned below :

SL. NO.	SOURCE	STACK	PARAMETERS
1.	INCUBERATOR	ATTACHED TO INCUBERATOR	COSE PARAMETERS

1. INCUBERATOR

ATTACHED TO INCUBERATOR

COSE PARAMETERS

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7. The unit shall provide sensors connected with the Alaran System for the following locations in the plant.

SL. No.	Location of the Sensor	No. of Sensor	Parameters

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

SL. NO.	SOURCE	STACK
1.	INCUBERATOR	STACK ATTACHED TO INCUBERATOR

1. INCUBERATOR

STACK ATTACHED TO INCUBERATOR

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)

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 facility shall carryout Ambient Air Quality Survey atleast for three 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 facility shall install *adequate* KW capacity generator exclusively for the operation of Air Pollution Control measures in case of power failure.
6. The facility shall also establish laboratory for analysis of gaseous / particulate emissions.
7. 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.
8. Consent to operate will not be issued unless the facility compiled with the conditions of consent to establish, otherwise the order of consent to establish already issued will be revoked with immediate effect.

For MEMBER SECRETARY
TAMIL NADU POLLUTION CONTROL BOARD
CHENNAI

[Signature]
2/9/04
For MEMBER SECRETARY
TAMIL NADU POLLUTION CONTROL BOARD
CHENNAI

SPECIAL CONDITIONS

15. All the provisions of the Biomedical Waste (Management & Handling) Rules, 1998 as amended from time to time must be complied with.

16. The facility shall collect only segregated biomedical wastes from hospitals and other facilities generating biomedical wastes.

17. The facility should insist upon the biomedical waste generators adopting colour coding for the various wastes and to use the type of containers for disposal of biomedical waste as prescribed in schedule-II of the Biomedical Waste (Management & Handling) Rules, 1998 as amended and to maintain the label for biomedical waste containers/bags as prescribed in Schedule-III of the said Rules. However, the Tamilnad Pollution Control Board may issue supplementary instructions in this regard taking into account the various pollution problems associated with coloured plastic bags etc.

18. The segregated biomedical wastes shall be transported through a specially designed leak proof vehicle to the facility within 24 hours of generation. The containers used shall be labeled as prescribed in Schedule-IV of the said Rules.

19. The collected waste shall be weighed before being treated in the common facility.

20. All the biomedical wastes except anatomical wastes shall be autoclaved, shredded, compacted and land filled.

21. Anatomical wastes alone shall not be incinerated.

22. Standards for Incineration (Operating standards)

a. The combustion efficiency (CE) shall be at least 99.99%

b. The combustion efficiency is computed as follows.

$$CE = \frac{CO_2 + CO}{CO_2 + CO + CH_4 + H_2} \times 100$$

c. The temperature of the primary chamber shall be 800±50 Deg.C and the temperature of the secondary chamber shall be at least 1050 ±50 Deg.C with minimum 15 seconds in the hot zone.

d. Specially designed pollution control devices should be installed (equipped with the scrubber) 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%	

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.

23. A vacuum type autoclave shall be set up. The medical wastes shall be subjected to a minimum of one pre vacuum pulse to purge the autoclave of all air. The waste shall be subjected to the following:

i. A temperature of not less than 148 deg.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 load identification, number and operating parameters throughout the entire length of the autoclave cycles.

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 x ten to the power of 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.

24. 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.

25. Sufficient air supply must be ensured in the incinerator for complete combustion to avoid producing the toxic incomplete combustion.

26. Online continuous recording type monitoring shall be provided for monitoring parameters such as particulate matter, NOx, HCl, in the incinerator stack gas.

27. The facility shall ensure that the noise generated from the facility satisfies the Ambient Noise Level standards prescribed by the Board in the Consent order to be issued by the Board.

28. 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.

29. The facility has to maintain proper manifest for transport, collection and storage.

30. The facility shall have 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.

31. The facility shall employ a qualified environmental engineer.

32. The employees of the common biomedical waste facility as well as the employees engaged in the transport service shall be subject to regular health checkup.

33. A separate standing room has to be provided for preventing the radiant heat and to avoid uncomfortable working conditions to the operator.

34. The facility shall develop green belt covering a minimum of 25% of the project area. Once this is completed, the facility shall plant 500 trees every year outside the premises including road margins and other places identified by the local Panchayat.

35. The facility shall follow good house keeping practices.

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

37. The facility shall ensure that no odour nuisance is created during transportation of wastes, treatment of wastes and disposal of biomedical waste.

38. The facility shall take insurance policies under the Public Liabilities Insurance Act, 1991.

39. 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.

40. 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.

41. The facilitator shall carry out the emission monitoring test for parameters such as Particulate matter, HC, NO₂, CO₂, O₂ and combustion efficiency test as required under the rules and as per the CPCB guidelines.

42. The facilitator shall ensure that no black pockets/dead zones are formed inside the chambers of the incinerator.

43. The facility shall provide programmable logic control based control system as per the CPCB guidelines within a period of six months.

44. The possibility of providing heat recovery system/heat exchanger with the incinerator shall be explored.

45. 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 1/2 hour at one minute interval). This may be complied within a period of six months.


MEMBER SECRETARY
TNPB AND CHENNAI