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# TAMILNADU POLLUTION CONTROL BOARD

CONSENT ORDER NO. : 2750

DATED : 17/08/2004

Proceedings No. : TNPCB/MNUN/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: TMPC Doard - Consent for establishment MESSERS MEDICARE INCIK FRIVATE LIMITED R.S.MO.10 OF THANGAYUR VILLAGE SANGAGIRI TALUK SALEN DISTRICT

for the establishment or take steps to establish the facility under Section 20 of the AIR (Prevention and Control of Follution) Act, 1981 as amended in 1983

Ref: 1. YOUR APPLICATION NO: 423(4) DT. 30.01.2004 2. OD'S AUTHORISATION NO: LONG-OCKUB 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 THE DIRECTO:

M/S. MEDICARE INCIN PRIVATE LIMITED

(hereinafter referred to as 'The Applicant') authorising him/her/them to establish or take steps to establish the CBMUT facility in the site mentioned below; R.S.MO.10 OF THANGAYUR VILLAGE SANGAGIRI TALUK
SALEM DISTRICT

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

FOR MEMBER SECRETARY

TAMIL NADU POLLUTION CONTROL BOARD

CHEMMAI

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THE DIRECTOR
N/S. MEDICARE INCIN PRIMATE LIMITED
NO.14, KAVERI AVENUE
STATE BANK COLONY
SALER - 4

Copy to : The District Environmental Engineer, Tamil Madu Pollution Control Board SALEM , EKODE, MAMAKKAL AMD HOSUK

For information and necessary action,

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

Spare :

### SPECIAL CONDITIONS

<ol> <li>Details of the products manufa</li> </ol>	cture	manufac	products	the	of	Details	1.
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SL.WO.	DESCRIPTION	OLIANTITY/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.

 The height of following chinneys/stacks shall not be less that the figures indicated below for the discharge of emissions.

Chinney/Stack Number

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

1.

100

STACK ATTACHED TO INCINERATOR

2. STACK ATTACHED TO DIESEL GENERATOR SET OR 30 M MINIMUM 3 M HEIGHT

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RILES 1986 UNICHEVER IS HIGHER.

AS PER ENVIRONMENT (PROTECTION)

3. 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 DETAILS OF CONTROL SOURCE OF EQUIPMENT STACK WITH VENTURI SCRUBBER 1. INCINERATOR STACK 2. DIESEL GENERATOR SET 11: B. For Gaseous Emission : DETAILS OF CONTROL SOURCE SL.NO. OF EQUIPMENT 1107 (- 1. INCINERATOR -> Stack with certain Schucker
2. DIESEL GENERATOR SET > Stack.

[ (PROTECTION)

3. 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 DETAILS OF CONTROL SOURCE OF EQUIPMENT STACK WITH VENTURI SCRUBBER 1. INCINERATOR STACK 2. DIESEL GENERATOR SET 11: B. For Gaseous Emission : DETAILS OF CONTROL SOURCE SL.NO. OF EQUIPMENT 1107 (- 1. INCINERATOR -> Stack with certain Schucker
2. DIESEL GENERATOR SET > Stack.

[ (PROTECTION)

## TAMIL NADU POLLUTION CONTROL BOARD

C. For Fugitive E	-5-		7. The L locat	drit shall provide sensors co	- 0 - nnnected with the Alaman System for the following	- 1
SL.WO.	SOUTH(E \	DETAILS OF CONTROL	Sl. Mo.	Location of the Sensor	No.of Parameters Sensor	
				-		(1)
4. The unit shall of Ambient Rir 5. The unit shall monitoring for and keep ready	Quality in respect of the parameters  procure   Number of equipments for the Parameters	Commence of the Commence of th	- d na	Facility chall provide port	holes and sampling facilities for the following sta	cks as per the
6. The facility s stacks mention	chall <b>provide</b> on line / automatic continuous stack med below :	monitoring unit for the	5 8. The	Central Pollution Control Bo	holes and sampling facilities for the following sta pard guidelines.	
SL.MO. SO	URCE STACK	PARAMETERS	St.WO.	SOURCE	STACK	r (F
1. INCIMERATOR	ATTACHED IN THETHER	ATTR FOR PARAMETERS	1. INC	MERATOR	STACK ATTACHED TO INCINERATOR	

L.MO.	SOURCE		TYPE OF MEASURES
		1	
	190	/	
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			1
			- X-
i. The unit	shall install separate energ on (ontrol equipments.	yy meter for the operati	
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FOR MEMBER SECRETARY
TAMIL MADU PALLITION CONTROL GOARD
CHEMNAI

#### GENERAL CONDITIONS

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- 1. The above consent to establish cannot be construed as consent to operate.
- 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-stations for two seasons for the collection of baseline data, on the existing Ambient Air Quality level within the plant / outside the plant.
- The applicant shall provide a meteorological station to collect the data on wind velocity, direction, temperature, rainfall etc.

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- The facility shall install KVA (apacity 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
- 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.

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 SELECTARY
TAMIL MADU POLLUTION CONTROL BOARD
CHEMMAI

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#### SPECIAL CONDITIONS

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- 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 or the said Rules. However, the Tamilhad 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 on an inst be incinerated
- 32. Standards for Incineration Typesating standards
- a. The combustion efficiency | CE| shall be at least 99.00%
- b. The combustion efficiency is computed as follows:

- c. The temperature of the primary chamber shall be  $800\pm50$  Deg.C and the temperature of the secondary chamber shall be at least 1050  $\pm50$  Deg 2 with minimum 3% exygen in the Stack Bas.
- d. Suitably designed ; limits postrol devices should be installed/retrointed with the infinerator to achieve the emission limits as stipulated below.

PARAMETERS

Concentration mg/NM³ at (12% CO₂ correction)

1. Particulate matter

2. Nitrogen Oxides

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:
- 1. A temperature of not less than 145 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 inroughout the entire length of the autoclave cycles.

## iv. Validation test :

Spore testing: The autoclave should completely and consistently kill the approved biological indicato: 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 smaking me to incomplete combustion.
- 26. Online continuous recording type monitoring shall be provided formonitoring 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 1% 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.

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- 32. The employees of the common biomedical waste facility as well as the employees engaged in the transport section shall be subject to regular health checkup.
- 33 A separate manging room "..." be provided for preventing the radiant heat and to swill importable westing 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 50% 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 snall 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 CPCE quidelines.
- 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,  $CO_2$  and  $O_2$  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.

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### TAMIL NADU FOLLUTION CONTROL BOARD

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TAKILNADU POLLUTION COKIROL BOARD

COMSENT ORDER NO. : 2803

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Proceedings No. : TMPCR/DMUN/U/3385/2004

DESERT : 17/A/C/2004

Consent For Establishment under Section 25 of the WALER (Prevention and control of Pollution 6th 1974, as amended in 1988.

Sub: TMPC Board - Consent for establishment MESSEKS MEDICARE INCIM PRIVATE LIMITED R.S.RO.10 OF THRMCRYUR VILLACE SARGACIRE TALUK SALEM DISTRICT

for the establishment or take steps to establish the facility under Section 2000 the WATER (Prevention and Control of Fellution) Act. 1974 is amonded in 1988 (Central Act 53 of 1988).

Fef : 1. YOUR APPLICATION NO: 62318 DT. 30.01.2004 2. DO'S AUTHORISATION NO. DAW-MAND DT. 2.7.2004

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 5% of 1987) (Hereinafter referred to as 'The Act') and the Rules and Orders made there under to THE DIRECTOR

NAS. MEDICARE INCIN PRIVATE LIMITED

(hereinafter referred to as 'The Applicant') authorising him/her/them to establish or taker steps to establish the industry in the site mentioned helow;

R.S.MO.10 OF THANCAPUR VILLAGE

SMEGAGIRI TALM

SMLEM DISTRICT

This Consent to establish is valid for IVO years, or till the ladustry of consent to operate under Section 25 of the Water (Prevention and Control of Pollution) field IVM as amended in 1988 whichever is earlier.

FOR MEMDER SECRETARY

To

THE DIRECTOR

NUSS. NEDICARE INCIM PRIVATE LIMITED

NO.14. ENVEXI AVENUE

STATE DARK COLORY

SALER - 4

SALER - 4

Copy to : The District Environmental Engineer. David Made Pollution Control Board SALEN , ERODE MANARYSE AND HOSSES

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For information and accessary action,

Copy to : The Commissioner / Executive Officer,

SANGAGIRT PANCHAYAT UNION, SALEM DISTRICT

Spare :

### TAMIL NADU POLLUTION CONTROL BOARD

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#### SPECIAL CONDITIONS

#### 1. Details of the products manufactured

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- This consent to establish is valid for the manufacture of description and quantity mentioned above. Any change in the above has to be brought to the notice of the Board.
- 2. The facility 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 severs/marine coastal areas/on land for irrigation.
- 3. The facility shall install septic tank 1 dispersion trench for the treatment of waste water arising out of the sanitary facility.
- 4. The facility 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. It has to be ensured by the facility that the floors with the expanded metal, slotted angle stool sinks, steel grates shall be built to the maximum possible to avoid floor washings.

- 6. The facility 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.
- The facility has to provide facilities separately outside the main plant carrying out detoxification operations if any.

- 8. Flange joints in the pipelines should be avoided wherever possible.
- The facility 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.
  - 10. The facility shall construct compound wall around the boundary of the unit, to a height of metres from ground level.

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#### TAMIL NADU POLLUTION CONTROL BOARD

16. Following location specific conditions must be satisfied # 17. The following process specific conditions must be satisfied: 1 (Continued in Annexure-I) FOR MEMBER SECRETORY TAMIL MADU ROLLUTION CONTROL BOARD di

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-6-SEMERAL CONDITIONS

1. The above consent to establish cannot be construed as consent to operate.

- The facility 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 facility and in the premises. All pipes, values, 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 pen areas.
- The facility has to provide sludge and silt traps and manholes along the effluent drains for periodical desiting and desludging operation.
- All places of storage of solid/liquid material are to be dyhed with bunding facilities and the flooring within the dyhed and bunding area shall be lined with impervious materials depending upon the nature of the solid/liquid to be stored.
- Samples of water from the wells or any other nearby water sources have to be taken by the facility and get then analysed by the Board Laboratory to develop base line data to assess the existing water quality.
- The facility shall provide separate power connection for the Effluent Treatment Plant and insta separate energy meter for the Effluent Treatment Plant as well as for aerators if any.
- The unit shall provide an alternate power source sufficient to operate all the facilities to be installed in Effluent Treatment Plant by the applicant.
- 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.
- 10. 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.
- 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.

TAMIL MADU POLLUTION CONTROL DOARD

CHENNAI.

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CONSENT ORDER ESTABLISHMENT WATER NO2803

SPECIAL CONDITIONS

Page - 7

- 11. All the provisions of the Biomedical Waste (Management & Handling) Rules, 1998 as amended from time to time must be complied with.
- 12. The facility shall collect only segregated biomedical wastes from hospitals and other facilities generating biomedical wastes.
- 13. 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- to the Biomedical Waste (Management & Handling) Rules, 1998 as amended of the Biomedical Waste (Management & Handling) Rules, 1998 as amended and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays as and to maintain the label for biomedical waste containers/bays and to maintain the label for biomedical waste containers/bays and to maintain the label for biomedical waste conta
  - 14. 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.
  - 15. The collected waste shall be weighed before being treated in  $\mathsf{t}^{\mathsf{R}_{\pm}}$  common facility.
  - 16. All the biomedical wastes except anatomical wastes shall to autoclaved, shredded, compacted and land filled.
  - 17. Anatomical wastes alone can and must be incinerated.
  - 18. 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:
  - 1. A temperature of not less than 145 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.

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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 :

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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 of4 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.
- 19. The facility shall operate septic tank, soak pit arrangement for the treatment and disposal of sewage.
- 20. The facility shall operate effluent treatment for the treatment of trade effluent including effluent from scrubber and leachate if any so as to bring the quality of treated effluent to satisfy the inland surface water standards laid down by the Board.
- 21. The entire quantity of treated effluent shall be utilized on facility's own land for gardening and shall ensure that no effluent shall reach directly or indirectly any water source or adjacent private/public lands under any circumstances.
- 22. Biomedical wastewater if any generated shall be treated before disposal so as to destroy the pathogens.
- 23. Wastes subjected to land filling shall be compacted in thin layers using landfill compactors to achieve high density of the wastes. Wastes shall be covered immediately or at the end of each working day with minimum 10 cm of soil.
- 24. Minimum specifications for secured land filling shall consist of:
  - a. A primary leachate collection layer of 30 cm., thickness or more and coefficient of permeability in excess of 10-2 cm/sec.
  - b. A primary composite liner comprising of:
    - (i) a HDPE geomembrane of thickness 1.5 mm or more

- (ii) a compacted clay layer of thickness 45 cm. or more having a coefficient of permeability of 10-8 cm/sec or less.
  - c. A secondary leachate collection layer of thickness 30 cm or more and coefficient of permeability in excess of 10-8 cm/sec.
  - d. A secondary composite liner comprising of:
    - (i) a HDPE geomembrane of thickness 1.5 mm or more.
  - (ii) a compacted clay layer of thickness 45 cm., or more having coefficient of permeability of 10-8 cm/sec or less.
- 25. Prior to the commencement of monsoon season, an intermediate cover of 40-65 cm thickness of soil shall be placed on the landfill with proper compaction and grading to prevent infiltration during monsoon. Proper drainage berms shall be constructed to divert run-off away from the active cell of the landfill.
- 26. After completion of landfill, a final cover shall be designed to minimise infiltration or erosion. The final cover shall meet the following specifications, namely:
  - a. The final cover shall have barrier soil layer comprising of 60cms of clay or amended soil with permeability coefficient less than  $1 \times 10^{-7}$  cm/sec.
  - b. On top of the barrier soil layer, there shall be drainage layer of 15 cm.
  - o. On top of the drainage layer, there shall be a vegetative layer of 45 cm to support natural plant grown and to minimise erosion.
- 27. The facility has to maintain proper manifest for transport, collection and storage.
- 28. 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 safely.
- 29. 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.
- 30. The facility shall collect water samples from all the open/tube wells in a radius of 200m. all around the proposed site to generate a baseline data. Periodical samples once in three months shall be collected from all the open/tube wells in a radius of 200m. and the report of analysis must be sent to Board Office without fail.

- 31. The employees of the common biomedical waste facility as well as the employees engaged in the transport section shall be subject to regular, health check up.
- 32. The facility shall develop green belt covering a minimum of 25% of the project area. Once this completed, the facility shall plant 500 trees every year outside the premises including road margins and other places identified by the local panchayat.
- 33. The facility shall follow good house keeping practices.
- 34. Proper filters has to be provided for the autoclave so as to control odour nuisance, if any.
- 35. The facility shall take insurance policies under the Public Liabilities Insurance Act, 1991.
- 36. The facility shall submit an annual report to the Board in Form No.II by 31<sup>st</sup> January of every year to include information about the categories and quantities of biomedical waste handled during the precieding year.
- 37. 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.
- 38. The facility shall report about any accident that occurs at an institution or facility or any other site where biomedical waste is handled or during transportation of such waste in Form III to the prescribed authority forthwith, as per the said rules.
- 39. The facility has to install a standby diesel generator set of adequate capacity so as to utilise it when there is no power/low power.
- \$0. The secure landfill shall be used only for the safe disposal of autoclaved biomedical wastes, incinerated and treated chemical waste (Category 10 of Schedule I of the said rules).
- 41. The lines provided for the landfill shall posses adequate strength to prevent its failure due to condition of stress and strain arising due to waste disposal, compaction and during operation.
- 42. The lines shall also be chemically resistant to waste disposal within the secure landfill.
- 43. The facility shall provide lysimeter / monitoring borewells at strategic locations to monitor the groundwater quality and leak if any in the landfill.
- 44. Amy leak in the landfill shall be plugged without any delay.

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- 45. After closure of secure landfill, the facility shall be liable for post closure environmental monitoring of the landfill especially on its impact on landfill gas collection and treatment, leachate collection and treatment and groundwater monitoring and remediation in case of groundwater pollution by the leachate for a further period of 30 years from the date of closure of landfill facility.
- 46. The facility shall take requisite remedial measures in the event of any impact due to landfill on groundwater, soil and ambient air quality.
- 47. 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.

The facility shall comply with the CPCB guidelines for common biomedical waste treatment and disposal facility issued by CPCB in the month of August 2003.

> for MEMBER SECRETARY TNPC BOARD-CHENNAI

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