



# Chandigarh Pollution Control Committee

Ground Floor, Paryavaran Bhawan, Madhya Marg,  
Sector 19-B, Chandigarh

Consent No. CPCC/RSBWTF/1237/2019/158/3258

Dated: 31/01/19

Consent to operate under Section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and under Section 21 of Air (Prevention and Control of Pollution) Act, 1981, as amended (to be referred as Water Act and Air Act respectively).

Consent is granted to M/s Alliance Envirocare Company Pvt. Ltd., Plot No. 182/9, Industrial Area, Phase-I, Chandigarh located in the area declared under the provisions of the Water Act/Air Act subject to the following terms and conditions:-

1. The Consent to operate is valid upto 30.11.2023.
2. The Consent is valid for running a Bio-Medical Waste Treatment Facility for treatment of Incinerable & Non-Incinerable Bio-medical Waste generated in U.T. Chandigarh with proposed gross capital investment of Rs. 200.5 Lacs only.

Components	Maximum Quantity
Incinerable Bio-medical Waste	3000 Kg/day
Non-Incinerable Bio medical Waste	3000 Kg/day

3. The Consent to operate has been approved by CPCC from pollution angle and the unit shall obtain all other formal consents from other concerned departments like Electricity Department, Food & Safety Department, Estate Office and Fire Department etc. (if needed).
4. The unit shall comply with the condition imposed by SEIAA in the Environmental Clearance is required under EIA Notification.
5. The unit shall obtain prior permission from CPCC before expansion/modification/up-gradation of the process/plant/machinery
6. The authorized person of the unit shall intimate the CPCC before closing of the unit.
7. **Conditions under the Water Act:**

- (i) The daily quantity of trade effluent from the unit shall not exceed **1.8 KLD**
- (ii) The daily quantity of sewage from the unit shall not exceed **1.2 KLD**
- (iii) The daily quantity of water consumption shall not exceed **3.0 KLD**
- (iv) **Sewage/Effluent Treatment:**

The applicant shall maintain comprehensive treatment system as per the submitted drawings and shall treat trade effluent 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 before disposal:

Parameters	Permissible Limits
pH	Between 6.5 and 9.0
Suspended Solids	100 mg/l
BOD	30 mg/l
COD	250 mg/l
Oil & Grease	10 mg/l
Bio-assay test	90% survival of fish after 96 hours in 100% effluent

The effluent should meet the general standards as laid down in the Environmental Protection Rules, 1986, before disposal into the sewerage system

8. **Conditions under the Air Act:**

(i) The applicant shall provide the chimney/stack of the following specification:-

Chimney/stack attached to	Height of stack	Location
01 No. Incinerator (200 Kg/hour)	30 meter from the ground level	M/s Alliance Envirocare Company Pvt. Ltd., Plot No. 182/9, Industrial Area, Phase-I, Chandigarh
DG Set (160 KVA capacity)	2.0 meter from roof top	-do-
01 No. Baby Boiler (200 Kg. capacity)	11 meter from the ground level.	-do-

(ii) The applicant shall operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:-

**Air Standards:-**

S.No.	Stack attached to	Parameter	Permissible Limits
1.	DG Set	Particulate Matter (PM)	150 mg/Nm <sup>3</sup>

**Noise Standards (manufactured on or after the 1<sup>st</sup> January, 2015) :-**

The maximum permissible sound pressure level for new diesel generator (DG) sets with rated capacity upto 1000 KVA, manufactured on or after the 1<sup>st</sup> January, 2015 shall be **75 dB(A) at 1 meter from the enclosure surface.**

**Incinerator shall meet the following operating and emission standards:**

**A. Operating Standards:**

1. Combustion Efficiency (CE) shall be at least 99.00%
2. The Combustion Efficiency is computed as follows:-

$$C.E. = \frac{\%CO_2}{\%CO_2 + \%CO} \times 100$$

3. The temperature of the primary chamber shall be 800<sup>0</sup> C and the secondary chamber shall be minimum of 1050<sup>0</sup> C + or - 50<sup>0</sup> C.
4. The secondary chamber gas residence time shall be at least two seconds.

**B. Emission Standards:**

Parameters	Concentration
1. Particulate Matter (PM)	50 mg/Nm <sup>3</sup>
2. Nitrogen Oxides NO and NO <sub>2</sub> expressed as NO <sub>2</sub>	400 mg/Nm <sup>3</sup>
3. HCL	50 mg/Nm <sup>3</sup>
4. Total Dioxins & Furans	0.1 ngTEQ/NM <sup>3</sup> (at 11% O <sub>2</sub> )
5. Hg and its compounds	0.05 mg/Nm <sup>3</sup>

- Wastes to be incinerated shall not be chemically treated with any chlorinated disinfectants.

- Ash from incineration of biomedical waste shall be disposed of at common hazardous waste treatment and disposal facility. However, it may be disposed of in municipal landfill, if the toxic metals in incineration ash are within the regulatory quantities as defined under the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended from time to time.
- Only low sulphur fuel like Light Diesel Oil or Low Sulphur Heavy Stock or Diesel, Compressed Natural Gas, Liquefied Natural Gas or Liquefied Petroleum Gas shall be used as fuel in the incinerator.
- **The occupier or operator of a bio-medical waste treatment facility shall monitor the stack gaseous emissions (under optimum capacity of the incinerator) once in three months through a laboratory approved under Environment Protection Act, 1986 and a record of such analysis results shall be maintained and submitted to the prescribed authority i.e. CPCC. In case of dioxins and furans, monitoring should be done once in a year.**
- **The occupier or operator of the bio-medical waste treatment facility shall install Continuous Emission Monitoring System (CEMS) for the parameters as stipulated by CPCB in authorization and transmit the data real time to the servers at Chandigarh Pollution Control Committee and Central Pollution Control Board.**
- All monitored values shall be corrected to 11% Oxygen on dry basis.
- Incinerators (combustion chambers) shall be operated with such temperature, retention time and turbulence, as to achieve Total Organic Carbon content in the slag and bottom ashes less than 3% or their loss on ignition shall be less than 5% of the dry weight.
- The occupier or operator of Bio medical Waste Treatment Facility incinerator shall use combustion gas analyzer to measure CO<sub>2</sub>, CO and O<sub>2</sub>.

#### C. STANDARDS FOR AUTOCLAVING OF BIO-MEDICAL WASTE.

The autoclave should be dedicated for the purposes of disinfecting and treating bio-medical waste.

- (1) When operating a gravity flow autoclave, medical waste shall be subjected to:
  - (i) a temperature of not less than 121° C and pressure of 15 pounds per square inch (psi) for an autoclave residence time of not less than 60 minutes; or
  - (ii) a temperature of not less than 135° C and a pressure of 31 psi for an autoclave residence time of not less than 45 minutes; or
  - (iii) a temperature of not less than 149° C and a pressure of 52 psi for an autoclave residence time of not less than 30 minutes.
- (2) When operating a vacuum autoclave, medical waste shall be subjected to a minimum of three pre-vacuum pulse to purge the autoclave of all air. The air removed during the pre-vacuum, cycle should be decontaminated by means of HEPA and activated carbon filtration, steam treatment, or any other method to prevent release of pathogen. The waste shall be subjected to the following:
  - (i) a temperature of not less than 121°C and pressure of 15 psi per an autoclave residence time of not less than 45 minutes; or
  - (ii) a temperature of not less than 135°C and a pressure of 31 psi for an autoclave residence time of not less than 30 minutes;
- (3) Medical waste shall not be considered as properly treated unless the time, temperature and pressure indicators indicate that the required time, temperature and pressure were

reached during the autoclave process. If for any reasons, time temperature or pressure indicator 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.

- (4) **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 cycle.
- (5) **Validation test for autoclave:** The validation test shall use four biological indicator strips, one shall be used as a control and left at room temperature, and three shall be placed in the approximate center of three containers with the waste. Personal protective equipment (gloves, face mask and coveralls) shall be used when opening containers for the purpose of placing the biological indicators. At least one of the containers with a biological indicator should be placed in the most difficult location for steam to penetrate, generally the bottom center of the waste pile. The occupier or operator shall conduct this test three consecutive times to define the minimum operating conditions. The temperature, pressure and residence time at which all biological indicator vials or strips for three consecutive tests show complete inactivation of the spores shall define the minimum operating conditions for the autoclave. After determining the minimum temperature, pressure and residence time, the occupier or operator of a common biomedical waste treatment facility shall conduct this test once in three months and records in this regard shall be maintained.
- (6) **Routine Test:** A chemical indicator strip or 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 locations to ensure that the inner content of the package has been adequately autoclaved. The occupier or operator of a common bio medical waste treatment facility shall conduct this test during autoclaving of each batch and records in this regard shall be maintained.
- (7) **Spore testing:** The autoclave should completely and consistently kill the approved biological indicator at the maximum design capacity of each autoclave unit. Biological indicator for autoclave shall be *Geobacillusstearothermophilus* spores using vials or spore Strips; with at least  $1 \times 10^6$  spores. Under no circumstances will an autoclave have minimum operating parameters less than a residence time of 30 minutes, a temperature less than  $121^{\circ} \text{C}$  or a pressure less than 15 psi. The occupier or operator of a common bio medical waste treatment and disposal facility shall conduct this test at least once in every week and records in this regard shall be maintained.

#### D) SHREDDER

Shredding is a process by which waste are de-shaped or cut into smaller pieces so as to make the wastes unrecognizable. It helps in prevention of reuse of bio-medical waste and also acts as identifier that the wastes have been disinfected and are safe to dispose off. A shredder to be used for shredding bio-medical waste shall confirm to the following minimum requirements:

- (i) The shredder for bio-medical waste shall be of robust design with minimum maintenance requirement;
- (ii) The shredder should be properly designed and covered to avoid spillage and dust generation. It should be designed such that it has minimum manual handling;
- (iii) The hopper and cutting chamber of the shredder should be so designed to accommodate the waste bag full of bio-medical waste;
- (iv) The shredder blade should be highly resistant and should be able to shred waste sharps, syringes, scalpels, blades, plastics, catheters, intravenous sets/ bottles,

- blood bags, gloves, bandages etc. It should be able to handle/ shred wet waste, especially after microwave/ autoclave/hydroclave;
- (v) The shredder blade shall be of non-corrosive and hardened steel;
  - (vi) The shredder should be so designed and mounted so as not to generate dust, high noise & vibration;
  - (vii) If hopper lid or door of collection box is opened, the shredder should stop automatically for safety of operator;
  - (viii) In case of shock-loading (non-shreddable material in the hopper), there should be a mechanism to automatically stop the shredder to avoid any emergency/accident;
  - (ix) In case of overload or jamming, the shredder should have mechanism of reverse motion of shaft to avoid any emergency/accident;
  - (x) The motor shall be connected to the shredder shaft through a gear mechanism, to ensure low rpm and safety;
  - (xi) The unit shall be suitably designed for operator safety, mechanical as well as electrical;
  - (xii) The shredder should have low rotational speed (maximum 50 rpm). This will ensure better gripping and cutting of the bio-medical waste; Revised Guidelines for Common Bio-medical Waste Treatment Facilities 13
  - (xiii) The discharge height (from discharge point to ground level) shall be sufficient (minimum 3 feet) to accommodate the containers for collection of shredded material. This would avoid spillage of shredded material;
  - (xiv) The minimum capacity of the motor attached with the shredder shall be 3-KW for 50 Kg/hr, 5 KW for 100 kg/hr & 7.5 KW for 200 Kg/hr and shall be three phase induction motor. This will ensure efficient cutting of the bio-medical wastes as prescribed in the Bio-medical Waste Management Rules; and
  - (xv) The shredder also should be fitted with separate 'energy meter' for recording total energy consumed for operation of this equipment.
9. **Unit shall comply with the revised guidelines for Bio-medical Waste Incinerator issued by Central Pollution Control Board, Delhi.**
  10. The applicant shall take adequate measures for control of noise from its own sources so as to comply with the standards laid down under relevant Acts/Rules.
  11. Unit shall comply with the provisions of Bio-medical Waste Management Rules, 2016.
  12. **By granting consent to operate, CPCC is not making any commitment regarding providing bio-medical waste of any/all health care facilities to the unit i.e. M/s Alliance Envirocare Company Pvt. Ltd.**
  13. Unit shall make standby arrangement for treatment of incinerable/non-incinerable bio-medical waste in case of any failure of machinery/equipment.
  14. **Bio-medical Waste Treatment Facility may have agreement with any Health Care Facility of Chandigarh as per rates mutually agreed by both parties.**
  15. **In case of any dispute with respect to rates charged or any other matter, matter will be referred to District Level Task Force (Constituted by the Chandigarh Administration vide no. SA/ED/2011/146-155 dated 04.02.2011) for implementation and monitoring of Bio-medical Waste Rules in Chandigarh for final decision on the same. Decision will be binding on Bio-medical Waste Treatment Facility.**
  16. Applicant shall further get the samples of waste water/noise/emissions analyzed quarterly from the laboratory recognized by the CPCC/SPCB/CPCB/MoEF&CC under intimation to this office. Test report shall be sent to CPCC.
  17. The unit shall regularly submit the environmental statement in the prescribed form-V for the previous financial year not later than 30<sup>th</sup> of September every year to CPCC.
  18. This consent to operate is issued from pollution angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with the


conditions laid down in all other laws for the time-being in force, rests with the unit/project proponent.

19. That, notwithstanding anything provided here in above, Chandigarh Pollution Control Committee shall have power and reserves its right, as contained under section 27(2) of the Water Act and under section 21(6) of the Air Act to review anyone or all the conditions imposed here in above and make such variation as it deemed fit for the purpose of Air Act and Water Act.
20. Unit will install the CCTV camera (PTZ camera) at the appropriate location in the premises which should be connected with the server of Chandigarh Pollution Control Committee and Central Pollution Control Board.
21. The achievement of the adequacy and efficiency of the effluent treatment plant/pollution control devices/re-circulation system installed shall be the entire responsibilities of the unit.
22. The unit shall submit a yearly certificate to the effect that no addition/upgradation/modification/modernization has been carried out during the previous year otherwise the unit shall apply for the varied consent.
23. Any amendments/revisions made by MoEFF&CC and CPCB in the permissible limits for discharges shall be applicable to the unit from the date of such amendments/revisions.
24. Any upset conditions in the plant/plants of the unit, which is likely to result in increased effluent and/or results in violation of the standards lay down by the Board shall be reported to the CPCC immediately failing which any stoppage and upset conditions that come to the notice of CPCC and its officers, will be deemed to intentional violation of the conditions of consent.
25. The authorised outlet and mode of disposal shall not be changed without prior written permission of the Committee.
26. The unit shall provide the electromagnetic flow meters at the source of water supply, at inlet/outlet of effluent treatment plant within one month and shall maintain the record of daily reading and submit the same to CPCC by 5th of the following month.
27. The diversion or bye pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this consent is prohibited except:
  - (i) Where unavoidable to prevent loss of life or some property damage or
  - (ii) Where excessive storm drainage or run off would damage facilities necessary for compliance with terms and conditions of this consent. The applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.
28. Solids, Sludge, Filter backwash or other pollutant removed from or resulting from treatment or control of waste waters shall be disposed off in such a manner to prevent any pollutants from such materials from entering into natural water.
29. The unit shall make necessary and adequate arrangements to hold back the effluent in case of failure of re-circulation system/effluent treatment plant.
30. The unit shall ensure that its treatment capacity and quantity of bio-medical waste do not exceed the quantity mentioned in the consent and shall not carry out any expansion without the prior permission/NOC of the Committee.
31. Unit shall apply for renewal of consent in the prescribed form atleast 90 days before the date of expiry of this consent order.
32. The unit shall provide separate energy meter and water meter and maintain a proper record of its running electricity consumption, date and time of operation, break down if any and other related activities etc. in Logbook as per format enclosed at annexure-'A'.

#### **GENERAL CONDITIONS FOR CONSENT TO DISCHARGE - EFFLUENT/ EMISSIONS/ HAZARDOUS WASTE**

- a) Any upset conditions in operations/process in the premises, which may cause increased effluent or result in violation of standards prescribed in the Consent Order be reported to the Chandigarh Pollution Control Committee at the first instance.

- b) The applicant shall practice good housekeeping. All pipes/valves/drains/ conduits/sewers shall be kept leak proof. Floor washings from operation/ process area shall not be allowed to find their way in storm-water drains or open areas. The unit shall not throw any solid waste in open inside/outside its premises to the nuisance of the public or to be deterrent to the environment in any manner.
- c) The applicant shall go in for recycling/reuse of water as far as practicable to minimize the discharge of wastes into the environment and shall work to adopt clean technology to reduce the generation of environmental pollutants.
- d) The unit shall take necessary steps to ensure that noise pollution is not caused from its operations to the nuisance of the public or workers. The unit shall not burn any material on the road side and/or inside/outside its premises to the nuisance of the public or to be deterrent to the environment in any manner.
- e) **This consent stands cancelled if there will be any encroachment of Government land by the unit i.e. M/s Alliance Envirocare Company Pvt. Ltd..**
- f) The unit i.e. **M/s Alliance Envirocare Company Pvt. Ltd., Plot No. 182/9, Industrial Area, Phase-I, Chandigarh** shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made thereunder.

  
T.C. Nautiyal, IFS  
Member Secretary

Endst. No.CPCC/RSBWTF/1237/2019/

Dated :

A copy is forwarded to the Estate Officer, U.T., Chandigarh with the information that consent to the unit (**M/s Alliance Envirocare Company Pvt. Ltd., Plot No. 182/9, Industrial Area, Phase-I, Chandigarh**) has been granted from pollution angle only and you may check use/misuse and other aspects related to your department at your end and take action accordingly (if required).

-sd/-  
T.C. Nautiyal, IFS  
Member Secretary