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STATE POLLUTION CONTROL BOARD, ODISHA

A/118, Nilakanthanagar, Unit-VIII, Bhubaneswar 751012

Tel: 2562822/2560955, EPABX : 2561909/2562847

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FORM-IV [(See Rule 7 (5) & 8 (4))]

AUTHORISATION ORDER

No. 433 / SPCB/Authorization (Biomedical Waste) Date 05-07-16
IND-IV-BW-527 BY SPEED POST

Sub: Authorization under Biomedical Waste (Management & Handling) Rules, 1998 and Amendments thereof (March, June 2000) for operating a facility for collection, transportation, reception, storage, treatment and disposal.

The Chief Medical Officer of M/s. Port Trust Hospital, Paradip is hereby granted an authorization, to operate a facility for collection, reception, storage, transport, treatment and disposal of biomedical waste on the premises situated at /po: Paradip Port Trust, Dist: Jagatsinghpur, Odisha- 754 142.

The authorization shall be valid up to 31.03.2018.

An application shall be made by the Occupier / operator for renewal of authorization in Form-I before four months from the date of expiry of this authorization.

This authorization is subject to the conditions, standards & special conditions stated below.

(A) GENERAL CONDITIONS:

1. The authorization shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the prescribed authority, i.e., State Pollution Control Board, Odisha.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the biomedical wastes without obtaining prior permission of the State Pollution Control Board, Odisha.

4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. It is the duty of the authorized person to take prior permission of the State Pollution Control Board, Odisha to close down the facility.
6. When an accident occurs at any facility or any other site where biomedical waste is handled or during transportation of such waste, the authorized person shall report the accident in Form-III to the State Pollution Control Board forthwith [Rule-12].
7. If a container is transported from the premises where bio-medical waste is generated to any waste treatment facility outside the premises, the container shall, apart from the label prescribed in Schedule-III, also carry information prescribed in Schedule-IV.
8. Notwithstanding anything contained in the Motor Vehicles Act, 1988 or rules thereunder, untreated bio-medical waste shall be transported only in such vehicle as may be authorized for the purpose by the competent authority as specified by the Government.
9. No untreated biomedical waste shall be stored beyond a period of 48 hours: provided that if for any reason it becomes necessary to store the waste beyond such period the authorized person must take permission of the State Pollution Control Board, Odisha and take measures to ensure the waste does not adversely affect human health and the environment. [Rule 6(5)].
10. The biomedical waste disposal site shall be properly fenced and suitable notice with warning shall be displayed.
11. The biomedical waste disposal site shall be selected and developed in a manner so that ground, water surface water or ambient air shall not be adversely affected.
12. The State Pollution Control Board, Odisha reserves the right to modify, revoke or review the authorization granted.

(B) STANDARDS FOR TREATMENT AND DISPOSAL OF BIOMEDICAL WASTES

Standards for treatment and disposal of biomedical wastes shall be followed as per Schedule-V of the Rules.

(i) **Operating Standards and Emission standards (incinerator)**

Operating standard		Emission Standards	
Parameters	Operating Standards	Parameters	Permissible Limit Mg/Nm ³ at (12% CO ₂ correction)
Combustion efficiency	99%	Particulate matter	150
Temperature of primary chamber	800 ± 50°C	Nitrogen oxides	450
		HCl	50
Temperature of secondary chamber	1050 ± 50°C	stack height	30 m above ground.
		Volatile organic compounds in ash	Shall not be more than 0.01%

Note:

- Suitable designed pollution control devices should be installed/retrofitted with the incinerator to achieve the above emission limits, if any.
- Wastes to be incinerated shall not be chemically treated with any chlorinated disinfectants.
- Chlorinated plastics shall not be incinerated.
- Toxic metals in incineration ash shall be limited within the regulatory quantities as defined under the Hazardous Waste (Management and Handling) Rule, 1989.
- Only low sulphur fuel like L.D.O./L.S.H.S./Diesel shall be used as fuel in the incinerator.

(ii) **Standards for Microwaving.**

1. Microwave treatment shall not be used for cytotoxic, hazardous or radioactive wastes, contaminated animal carcasses, body parts and large metal items.
2. The microwave system shall comply with the efficacy test/routine tests and a performance guarantee may be provided by the supplier before operation of the unit.
3. The microwave should completely and consistently kill the bacteria and other pathogenic organisms that is ensured by approved biological indicator at the maximum design capacity of each microwave unit. Biological indicators for microwave shall be Bacillus Subtilis spores using vials or spore strips with at least 1x10⁴ spores per milliliter.

(iii) **Standards for Autoclaving**

The autoclave should be dedicated for the purpose of disinfecting and treating biomedical waste.

When operating a gravity flow autoclave, medical waste shall be subjected to the following standards.

TEMPERATURE (In degree centigrade)	PRESSURE (pounds per square inch)	RESIDENCE TIME (in minutes)
Not less than 121	15	Not less than 60
Not less than 135	31	Not less than 45
Not less than 149	52	Not less than 30

When operating a vacuum autoclave, medical waste shall be subject to minimum of one pre-vacuum pulse to purge the autoclave of all air.

The waste shall be subjected to the following:

TEMPERATURE (In degree centigrade)	PRESSURE (pounds per square inch)	RESIDENCE TIME (in minutes)
Not less than 121	15	Not less than 45
Not less than 135	31	Not less than 30

Medical waste shall not be considered 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 are achieved.

(iv) Standards for Liquid Waste

SL.NO.	PARAMETERS	PERMISSIBLE LIMIT
(i)	pH	6.5-9.0
(ii)	SS	100 mg/l
(iii)	Oil & Grease	10 mg/l
(iv)	BOD	30 mg/l
(v)	COD	250 mg/l
(vi)	Bio-assay test	90% survival of fish after 96 hours in 100% effluent.

The limits are applicable to those hospitals, which are either connected with sewers without terminal sewage treatment plant or not connected to public sewers. For discharge in to public sewers with terminal facilities, the general standards as notified under the Environment (Protection) Act, 1986 shall be applicable.



(v) **Standards for Deep Burial**

- (a) A pit or trench should be dug about 2 meters deep. It should be half filled with waste, then covered with lime within 50 cm of the surface before filling the rest of the pit with soil.
- (b) It must be ensured that animals do not have any access to burial sites.
- (c) On each occasion when wastes are added to the pit a layer of 10 cm of soil shall be added to cover the wastes.
- (d) Burial must be performed under close and dedicated supervision
- (e) The deep burial site should be relatively impermeable and no shallow well should be close to the site.
- (f) The pit should be distant from the habitation, and sited so as to ensure that no contamination occurs of any surface water or ground water. The area should not be prone to flooding or erosion.
- (g) The location of the deep burial site will be authorized by State Pollution Control Board, Odisha, Bhubaneswar.
- (h) The facilitator (authorized person) shall maintain a record of all pits for deep burial.

(C) **SPECIAL CONDITIONS:**

1. This authorization is issued for **64** no. of beds. For any increase in no of beds, the applicant shall obtain prior permission of the prescribed authority.
2. Biomedical wastes shall not be mixed with general wastes. Under no circumstances untreated biomedical waste shall be handed over to the Municipality/ NAC for disposal in landfill site.
3. Biomedical wastes shall be segregated in to coloured containers/ bags at the point of generation as per Schedule-II of the rules and shall be followed by proper quantification of different categories of waste. The containers shall be labeled with biohazard and cytotoxic symbol.
4. The occupier shall treat the segregated biomedical wastes in the manner described below or **shall ensure requisite treatment of segregated wastes at the common facility, authorized by State Pollution Control Board, Odisha.**

Waste Category No.	Waste Type	Treatment and Disposal Method
1.	Human Anatomical Waste	Incineration @/ Deep Burial*
2.	Animal Waste	Incineration @/ Deep Burial *
3.	Microbiology and Bio-Technology Waste	Local Autoclaving/ Micro-Waving/ Incineration @.
4.	Waste sharps	Disinfection (chemical treatment @@/ Autoclaving/ Microwaving and Mutilation/ Shredding ##
5.	Discarded Medicines and Cytotoxic drugs.	Incineration @/ Destruction and drugs disposal in secured landfills.
6.	Soiled Waste	Incineration @ Autoclaving/ Microwaving
7.	Solid Waste	Disinfection by chemical treatment @@ autoclaving/ Microwaving and Mutilation/ Shredding ##
8.	Liquid Waste	Disinfection by Chemical treatment @@ and discharge in to drains.
9.	Incineration Ash	Disposal in Municipal landfill.
10.	Chemical Waste	Chemical treatment @@ and discharge in to drains for liquids and secured landfill for solids.

@@ Chemicals treatment using at least 1% hypochlorite solution or any other equivalent chemical reagent. It must be ensured that chemical treatment ensures disinfection.

Mutilation/ shredding must be such so as to prevent unauthorized reuse.

@ There will be no chemical pretreatment before incineration. Chlorinated plastics shall not be incinerated.

* Deep burial shall be an option available only in towns with population less than five lakhs and in rural areas.

5. The treatment and disposal of biomedical waste shall be carried out in compliance to the standards specified in B (i, ii, iii, iv & v) of this authorization order.

6. The waste containing equal to or more than 50 ppm of mercury is treated as hazardous waste and it shall be disposed off as per the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.
7. The authorized person of the unit shall maintain records related to the generation, collection, reception, storage, transportation, treatment, disposal and /or any form of handling of Biomedical Waste and all records shall be subject to inspection and verification by the State Pollution Control Board, Odisha at any time.
8. The health care unit shall submit the statement regarding spillage and collection of mercury during the period January to December alongwith the annual report in Form-II by 31st of January of every year.
9. The waste containing equal to or more than 5 gm/kg of silver is treated as hazardous waste and it shall be disposed off as per the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.
10. The occupier will obey all the lawful instructions issued by the Board officers from time to time.
11. **The unit shall apply for renewal of authorization in Form-I before expiry of this authorization order enclosing all necessary documents and compliance to the conditions stipulated in this order.**

To

**The Chief Medical Officer,
M/s. Port Trust Hospital,
At/Po: Paradip Port Trust,
Dist: Jagatsinghpur, Odisha-754142**



MEMBER SECRETARY

State Pollution Control Board,
Odisha, Bhubaneswar

Memo No. _____ / Dated _____ /

Copy forwarded to the **Regional Officer**, SPC Board, Paradeep / Guard file
(Head Office) for needful.



ENV. SCIENTIST

State Pollution Control Board,
Odisha, Bhubaneswar