

Biomedical waste management rules 2016

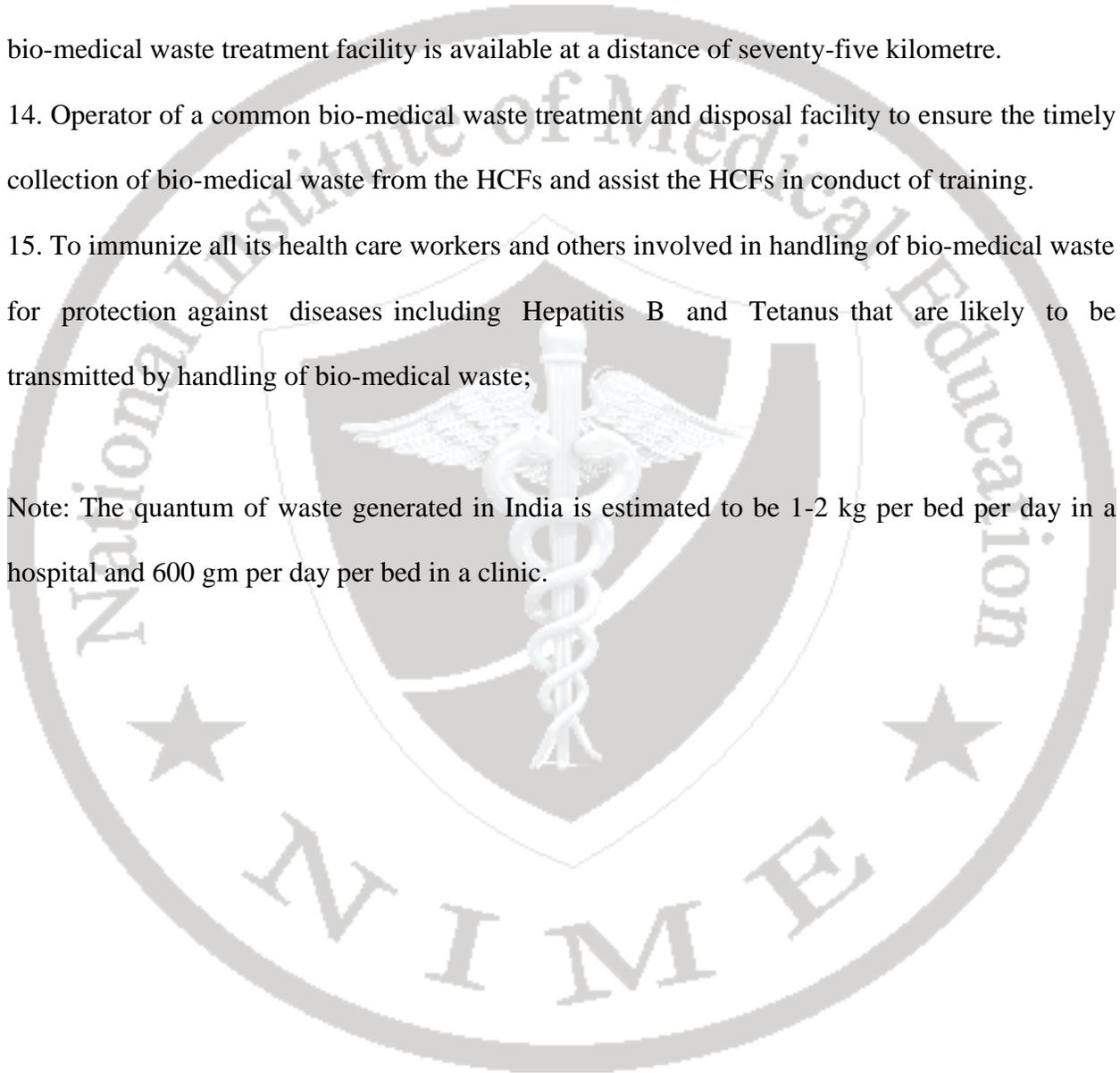
"The new bio-medical waste management rules will change the way country used to manage this waste earlier.

The salient features of BMW Management Rules, 2016 include:

1. The ambit of the rules has been expanded to include vaccination camps, blood donation camps, surgical camps or any other healthcare activity;
2. Phase-out the use of chlorinated plastic bags, gloves and blood bags within two years;
3. Pre-treatment of the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilization on-site in the manner as prescribed by WHO or NACO;
4. Provide training to all its health care workers and immunize all health workers regularly;
5. Establish a Bar-Code System for bags or containers containing bio-medical waste for disposal;
6. Report major accidents;
7. Existing incinerators to achieve the standards for retention time in secondary chamber and Dioxin and Furans within two years;
8. Bio-medical waste has been classified in to 4 categories instead 10 to improve the segregation of waste at source;
9. Procedure to get authorisation simplified. Automatic authorisation for bedded hospitals. The validity of authorisation synchronised with validity of consent orders for Bedded HCFs. One time Authorisation for Non-bedded HCFs;
10. The new rules prescribe more stringent standards for incinerator to reduce the emission of pollutants in environment;

11. Inclusion of emissions limits for Dioxin and furans;
12. State Government to provide land for setting up common bio-medical waste treatment and disposal facility;
13. No occupier shall establish on-site treatment and disposal facility, if a service of common bio-medical waste treatment facility is available at a distance of seventy-five kilometre.
14. Operator of a common bio-medical waste treatment and disposal facility to ensure the timely collection of bio-medical waste from the HCFs and assist the HCFs in conduct of training.
15. To immunize all its health care workers and others involved in handling of bio-medical waste for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste;

Note: The quantum of waste generated in India is estimated to be 1-2 kg per bed per day in a hospital and 600 gm per day per bed in a clinic.



Recent revision of category types:

(revised from PREVIOUS 10 Categories to **4 CATEGORIES**)

Category	Type of waste	Bag used	Treatment options
Yellow	1. Human anatomical 2. Animal anatomical 3. Soiled waste 4. Expired medicine 5. Chemical waste 6. Discarded linen or bedding 7. Microbiological waste	Yellow – NON chlorinated plastic bag	Incineration
Red	Contaminated waste (RECYLCLABLE)	Red colored – NON chlorinated plastic bag	Autoclave / microwave / incineration
White (translucent)	Waste sharps including metals	Puncture proof containers	Chemical / autoclave / shredding / landfill
Blue	Glass	Puncture proof containers	Chemical / autoclave / shredding / landfill

Features:

1. Chemical treatment using at least 1% hypochlorite solution or any other equivalent chemical reagent. It must be ensured that chemical solution has adequate strength to disinfect all the time during the chemical treatment.
2. There will be no chemical pretreatment before incineration. Chlorinated plastics/bags shall not be incinerated.
3. Disposal of bio-medical waste by deep burial shall be prohibited in Towns and Cities. Disposal by deep burial is permitted only in rural areas where there is no access to common bio-medical waste treatment facility,with prior approval from the prescribed authority. The deep burial facility shall be located as per provisions and guidelines issued by Central Pollution Control Board from time to time.
4. Liquid waste generated from laboratory, washing, cleaning, house keeping and disinfecting activities shall be treated along with other effluent generated from premises of the occupier or the facility operator so as to meet the discharge standards stipulated under these rules.

Good to remember...

STANDARDS FOR LIQUID WASTE

-The effluent generated or treated from the premises of occupier or operator of a common bio medical waste treatment facility, before discharge should conform to the following limits

PARAMETERS	PERMISSIBLE LIMITS
pH	6.5-9.0
Suspended solids	100 mg/l
Oil and grease	10 mg/l
BOD	30 mg/l
COD	250 mg/l
Bio-assay test	90% survival of fish after 96 hours in 100% effluent.