



ENVIS CENTRE, CHANDIGARH
NewsLetter
 P a r y a v a r a n P a t r a

Chandigarh
 State of Environment

Chandigarh Statistics



BIO-MEDICAL WASTE PRODUCING UNITS

Hospitals with treatment facility:	04
Health care Units with CBMWTF:	460
Govt. Dispensaries :	40
Hospitals & Nursing Homes :	49
Quantity of BMW generated per day:	1434 Kg
Total No. of operational Incinerators:	04

YEAR 2007



WORLD ENVIRONMENT DAY 2007 : A SPECIAL REPORT

The World Environment Day, was celebrated on June 5th with Climate Change as its theme for the year 2007. Each individual should ask himself:

What is climate change?

What I am doing to help tackling climate change?

What is stopping me to help tackling climate change?

Greenhouse gas emissions, a result of industrialization, vehicular pollution and are now far above their natural levels in the atmosphere.

Human activities that produce greenhouse gases are industrial processes, emissions from power plants and transport/vehicles. This effect has been made worse by cutting down trees and forests that help us by absorbing carbon dioxide. This increase in the quantity of greenhouse gases has raised the temperature of the earth, a phenomenon commonly known as global warming which affect climate change .



UT Administrator Gen(Retd.) S.F.Rodrigues presided over the celebrations at Nepli Inspection Hut.

For Private Circulation only

Index

» Chandigarh Statistics	: 1
» World Environment Day June 5	: 1
» Bio-Medical Waste (Introduction)	: 2
» Bio-Medical Waste (Notification)	: 3
» Bio-Medical Waste (Duties)	: 3
» Bio-Medical Waste (Categories)	: 3
» Bio-Medical Waste (Categories)	: 4

Paryavaran Patra

» Bio-Medical Waste (Chandigarh)	: 5
» Environment Through Our Eyes	: 6
» Feedback	: 7
» ENVIS CENTRE Team	: 8
» Tips	: 8
» Do's and Don'ts	: 8
» Useful Environmental Weblinks	: 8



ENVIS CENTRE
 Deptt. Of Environment
 Chandigarh

[VOLUME 2.1.0]

APRIL 2007 - JUNE 2007

E-mail : ch@envis.nic.in

Web : www.chandigarhenvis.gov.in

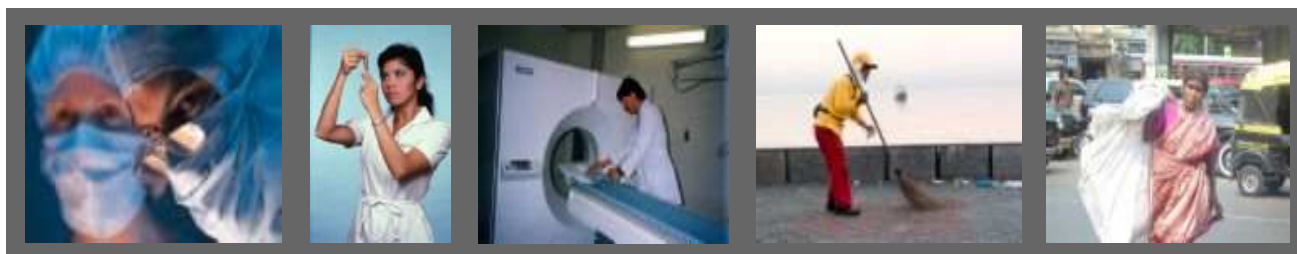


BIO-MEDICAL WASTE

Bio-Medical Waste is generated during the diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining thereto or in the production or testing of biologicals. It may include wastes like sharps, solid waste, disposables, anatomical waste, cultures, discarded medicines, chemical wastes etc. This waste is potentially hazardous, the main hazard being infection and may pose a serious threat to human health, if its management is indiscriminate and unscientific. It is also a reservoir of potentially harmful micro-organisms which can infect hospital patients, health care workers and general public.

WHO ARE AT MORE RISK ?

The doctors, nurses, technicians, washer men, sweepers, hospital visitors, patients, rag pickers and their relatives are exposed routinely to bio-medical waste and are at more risk from the many fatal infections due to indiscriminate management. There are many examples and ample evidences that indiscriminate management of Bio-Medical Waste could cause serious hazard to health and environment



REASONS FOR INDISCRIMINATE MANAGEMENT & HANDLING OF BIO-MEDICAL WASTE

- 1 Lack of Priority on Bio-Medical Waste Management and funds on the issue.
- 2 Lack of Managerial skill and training of Bio-Medical Waste Management
- 3 Lack of awareness among medical personal, patients, attendants and people at large
- 4 Lack of accountability of persons involved in the management of Bio-Medical Waste

Wastes from Health Care Activities



BIO-MEDICAL WASTE (MANAGEMENT & HANDLING) RULES 1998

The Govt. of India has notified BMW (Management & Handling) Rules, 1998, with a view to properly manage and stop indiscriminate disposal of hazardous waste/bio medical waste vide Notification SO No. 630 (E) dated July, 20, 1988. Govt of India in its amended notification dated No. SO 201(E) dated 6th, March, 2001, has authorized the Chandigarh Pollution Control Committee for the purpose of granting authorization for collection/reception/storage/treatment and disposal of bio-medical waste and to implement the aforesaid rules.



APPLICABLE TO

These rules are applicable to all institutions generating bio-medical waste which includes hospitals, nursing homes, clinics, dispensaries, veterinary hospitals, animal houses, research and pathological labs, blood banks etc. The occupiers of institutions providing treatment to less than 1000 patients per month are however exempted from taking authorization from CPCC.

DUTIES OF OCCUPIER

1. To take all steps to ensure that it is handled without any adverse effect to human health and environment.
2. To ensure requisite treatment of waste in accordance to Schedule 1.
3. To ensure that segregation into containers/bags at the point of generation is in accordance to Schedule 2, prior to its storage, transportation, and these containers are required to be labeled according to Schedule 2.

SEGREGATION, PACKAGING, TRANSPORTATION & STORAGE

- 1 Bio-Medical Waste not to be mixed with other waste.
- 2 Bio-Medical Waste to be segregated in accordance with Schedule II & stored in containers/bags and to be labeled (HuSchedule III).
- 3 Bio-Medical Waste when transported, is to comply with Schedule IV i.e. level for transport.
- 4 Untreated Bio-Medical Waste not to be stored beyond period of 48 hours.

CATEGORIES OF BIO-MEDICAL WASTE (SCHEDULE 1)

No. Waste class, description, and Treatment / Disposal systems

1 Human Anatomical Wastes

Human tissues, organs, waste body parts
*Incineration @/ deep burial**

2 Animal Wastes

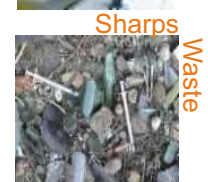
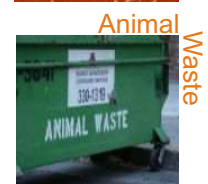
Wastes consisting of animal tissue, organs, body parts, carcasses, body fluid, blood and blood products, items contaminated with blood and fluids, wastes from surgery treatment and autopsy and wastes of experimental animals used in research, waste generated by veterinary hospitals, colleges, animal houses and livestock farms
*Incineration @/ deep burial**

3 Microbiology & Biotechnology Waste

Wastes from laboratory, culture stocks or specimens of micro-organisms, live or attenuated vaccines, human and animal cell culture used in research and infectious agents from research and industrial laboratories, wastes from production of biological dishes and devices used for transfer of cultures
Local Autoclaving / microwaving/incineration @

4 Waste Sharps

Needles, syringes, scalpels, blades, glass, etc that are capable of causing puncture and cuts. This includes both used and unused sharps
Disinfection using chemical treatment @@/ autoclaving/ microwaving and mutilation.shredding ##



CATEGORIES OF BIO-MEDICAL WASTE (SCHEDULE 1) CONTD.

No. Waste class, description, and Treatment / Disposal systems

5 Discarded Medicines

Wastes comprising of outdated, contaminated and discarded medicines.

Incineration @ or destruction and disposal in landfills

6 Soiled Wastes

Wastes generated from soiled cotton, dressings, plaster casts, linens, beddings, material contaminated with blood including the packaging materials.

Incineration @ autoclaving/microwaving

7 Solid Waste

(Wastes generated from disposable items other than the waste sharps such as tubings, catheters, intravenous sets etc.)

Disinfection by chemical treatment @@autoclaving/microwaving and mutilation/shredding ##

8 Liquid Waste

(waste generated from laboratory and washing, cleaning, house-keeping and disinfecting activities)

Disinfection by chemical treatment @@and discharge into drains.

9 Incineration Ash

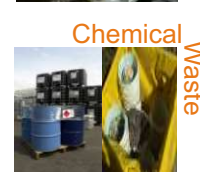
(ash from incineration of any bio-medical waste)

Disposal in municipal landfill

10 Chemical Waste

(chemicals used in production of biologicals, chemicals used in disinfection, as insecticides, etc.)

Chemical treatment @@and discharge into drains for liquids and secured landfill for solids



@@ Chemical 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 town with population less than five lakhs and in rural areas.

COLOUR CODING AND TYPE OF CONTAINER FOR BMW DISPOSAL (SCHEDULE2)

Colour	Yellow	Red	Blue/White/Translucent	Black
Type of Container	Plastic Bag	Disinfected container/plastic bag	Plastic bag/puncture proof container	Plastic bag
Waste Category	Human anatomical waste, Animal waste	Microbiology & biotechnology waste and Soiled waste	Microbiology & biotechnology waste, Soiled wastesharps and Solid waste	Discarded medicines & cytotoxic drugs, Incineration ash
Treatment Options	Incineration /Deep Burial	Autoclave/Microwave / Chemical Treatment	Autoclave/Microwave/ Chemical Treatment and destruction/shredding.	Disposal in secured landfill.

Autoclave



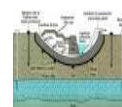
Incinerator



Chemical Treatment



Secure Landfill



Microwave



Shredder



Drain Discharge



Municipal Landfill

e-mail : ch@envi.nic.in • Web : www.chandigarhenvi.gov.in



MERCURY CONTROL

Waste containing equal to or more than 50 ppm of mercury is a hazardous waste hence all measures must be taken to ensure that the spilled mercury does not become part of biomedical wastes. The concerned generators of the wastes including the health care units are required to dispose the waste as per the norms.

BIO-MEDICAL WASTE MANAGEMENT IN CHANDIGARH

Chandigarh Pollution Control Committee (CPCC) is taking various steps to ensure that Bio Medical Waste generated from various Hospitals/Nursing Homes and other Health Care Units are disposed off in safe and scientific manner in order to prevent disease and infections.



Bio-Medical Waste

There are more than 460 health care units, which required to dispose off 10 categories of the waste as per BMW Rules, 1998. There are three hospitals having 500 or more beds, providing incinerator and chemical treatment and shredding facilities. Four incinerators are operational in Chandigarh. Out of which three are having APCD and one is in the process of installation of APCD. PGIMER, Govt. Medical College & Hospital, Sector 32 & Govt. Multi Specialty Hospital, Sector 16, Chandigarh has provided various facilities at the hospital for waste disposal like provision of needle destroyer and different coloured bins for collection of different kind of waste for segregation at source.

Small nursing homes and Indian Medical Association has engaged a service provider to transport their incinerable waste to PGI and this service provider collects the waste from point to point from each Nursing Home/Hospital/Clinic and Other Health Care Units to ensure proper handling and disposal of bio-medical waste in scientific manner, in compliance to the Bio-Medical Waste Rules, 1998. About 460 Health Care units are utilizing this facility, as installation of treatment facilities in small Nursing Homes is costly and not feasible. Forty nos. of Govt. Dispensaries and 13 nos. of Veterinary Dispensaries & Hospitals are also using the facility of service provider for transportation of their bio-medical waste to Govt. Hospital, Sector 16 for treatment. Around 80 units have obtained the authorization from CPCC under the Bio-Medical Waste Rules

PENALTY FOR CONTRAVENTION OF THE PROVISIONS OF THE BMW RULES MADE UNDER ENVIRONMENT PROTECTION ACT

U/s 5 of EPA, State Pollution Control Board/Cittee has power to give the closure, prohibition or regulation of any unit or process or Stoppage or regulation of the supply of electricity or water or any other service.

U/s 15 of EPA, whoever fails to comply with the provisions of this BMW Rules, shall, in respect of each such failure or contravention, be punishable with imprisonment for a term which may extend to five years with fine which may extend to one lakh rupees, or with both.

SOLUTION

Bio-Medical Waste Management programme cannot successfully be implemented without the willingness, devotion, self-motivation, cooperation and participation of all sections of employees of any health care establishment. If we want to protect our environment and health of community we must sensitise ourselves to this important issue not only in the interest of health managers but also in the interest of community.



Color Coded BMW containers

Thus it can very well be said that sensitising the generators of waste to properly segregate the waste at the source of generation is the "key" to the successful implementation of BMW rules 1998.



Till the doctors do not wake up to this problem, the ground reality will not improve in any way.

Source: MemberSecretary, CPCC Chandigarh.



ENVIRONMENT THROUGH OUR EYES

Healthcare units to manage better bio-medical waste treatment should take care following tips:

1. Inventorise bio-medical waste generation
2. Obtain authorisation from Chandigarh Pollution Control Committee
3. Place needle/syringe destroyer at required places
4. Segregate waste in the coloured containers at the source of waste generation
5. Place required coloured containers at the source of waste generation labeled with bio-hazard symbol
6. Generate awareness among hospital staff/doctors
7. Label bag with respective ward name in order to identify its source to track poor segregation
8. Reward the group with best segregation practice
9. Take special care of mercury spillage/breakage
10. Designate a place for temporary waste storage within the hospital
11. Impart requisite treatment to segregated waste/ hand over to CBWTF operator within 48 hours of waste generation
12. Avoid installing individual incinerator
13. Keep records of category wise waste generated/ transported/treated
14. Submit annual report to Chandigarh PCC by January 31 every year
15. Waste management committee comprising each of HODs/Nursing Suptd. and headed by Medical Suptd./Director

Source: Member Secretary, CPCC Chandigarh.

ANIMAL HUSBANDRY- INTRODUCTION

The Health & Veterinary care of livestock is the primary concern of the Animal Husbandry department, whose endeavourer is to ensure that the supply of milk and milk products, being the essential ingredients of good and nourishing food should come from healthy & disease free animals.

EXISTING VETERINARY FACILITIES

Sr. No	Name of the Institution	No
1	Veterinary Hospitals for Large animals at Hallo Majra, Mani Majra, Dhanas and Sector 38	4
2	Veterinary Hospitals for Pet animals Sector 22 Chandigarh	1
3	Artificial Insemination Centre at Govt. Veterinary Hospital Sector 38 along with ten Veterinary Sub-Centres at Burail, Behalana, Palsora, Maloya, Kaimbwala, Mani Majra, Khudda Lahora, Khudda Alisher, Kajehri and Daria.	11
4.	Bird Care Centre, Sector-38, Chandigarh	1



Livestock

SCOPE

While no significant increase in cattle is predicted, the population of dogs shall increase on the other hand. The Chandigarh Administration is in process to allot half-acre land at milk colony Dhanas to the Municipal Corporation, Chandigarh for setting up of dog pond for the housing stray dogs. Municipal Corporation, Chandigarh would conduct mass sterilization of stray dogs in Chandigarh under the Govt. of India's Animal Birth control (ABC) project.

Environmental issues will gain importance in the year to come. The focus will be on sustainable development of livestock.

The Animal Husbandry department has made necessary arrangements for the collection, treatment, disposal of bio-medical waste generated in Govt. veterinary institutions.

Rinderpest, a deadly cattle disease, has been eradicated from Chandigarh. A mechanism of emergency preparedness against emerging and exotic diseases shall be put in place.

Three gaushalas at Maloya, Sector-25 and Sector-45, Chandigarh are functioning in U.T. Chandigarh for Management of stray cattle roaming on city roads.

Source: Joint Director, Animal Husbandry, Chandigarh.





Response Centre Feedback Form



YES ! I WANT TO KNOW
ABOUT ENVIS CHANDIGARH
Chandigarhenvvis



Dear Information Seeker,

ENVIS CENTRE, Chandigarh furnishes you with the services to collect and disseminate information related to environment of Chandigarh. To share information with us you are requested to fill up the form given below.



Your feedback is valuable to us and will be highly appreciated

- Name _____
- Designation _____
- Department _____
- Address _____
_____ City _____
- State _____ Country _____ Pin | | | | | | | |
- Phone _____ Fax _____
- Email _____

Your views on scope of improvement :

Interest Area _____

I would like to have information on following :

e-mail : ch@envis.nic.in • Web : www.chandigarhenvvis.gov.in



At the End of...

ENVIS CENTRE TEAM

Mr. P.J.S. Dadhwal
(Project Coordinator)

Er. Arun Bansal
(Sr. Programme Officer)

Mr. Shiven Chaudhary
(Web Assistant)

Mr. Surinder Kumar
(Data Entry Operator)

TIPS TO STAY COOL THIS SUMMER & SAVE POWER

- ☀️ Prefer double-pane windows with “low-e” glass to normal window glass. The “e” stands for emissivity and keeps down air-conditioning costs.
- ☀️ Reduce the unshaded home's summer air-conditioning costs by 15% (plant shady trees near sunny windows).
- ☀️ Properly maintain lawn and roof drainage during rains, it avoids humidity.
- ☀️ Cool your home only till 24° or 25° C instead of the low 20's. Each degree below 26° C will noticeably increase your electricity use!
- ☀️ Keep refrigerators and freezers out of direct sunlight, and allow at least 5 cm all around-to allow heat to escape from the compressor and condensing coil.

SAVE WATER



Use collected rainwater to wash your car, preferably on the lawn so that the waste water rejuvenates the lawn grass and replenishes the ground water level too.

USEFUL ENVIRONMENTAL WEB LINKS

<http://www.cpcb.nic.in>
<http://www.naturestapestry.com>
<http://www.worldchanging.com>
<http://www.srparyavaran.com>
<http://www.living.oneindia.in>
<http://www.savesanghavi.com>

<http://www.pcra.org>
<http://www.keralaenergy.gov.in>
<http://www.bee-india.nic.in>
<http://www.tips4me.com>
<http://www.greenbusinesscentre.com>
<http://www.vigyanprasar.gov.in>

FROM :

ENVIS-CENTRE
Department of Environment
IInd Floor, Additonal Town Hall Building,
Sector :17-C, Chandigarh U.T.
Phone : 0172-3295436, 2700065
web : www.chandigarhenvis.gov.in
e-mail : ch@envis.nic.in

To,

Book Post

Note : While every care has been taken in compilation of the information available for this newsletter. However, readers must make thorough confirmation/enquiries at their own level before acting upon any data/information provided to the readers. Any discrepancy brought in the notice of ENVIS CENTRE, Chandigarh will be highly appreciated.

