STANDARD OPERATING PROCEDURES
FOR HEALTH CARE FACILITIES

The Biomedical Waste Handling Guide 2016

dpcc

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BIOMEDICAL WASTE DIVISION
DELHI POLLUTION CONTROL COMMITTEE
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CREDITS

"The world is under threat of growing population and waste generation from the society. Biomedical Waste management is an integral part of future sustainability. Since all health care facilities are a basic part of society, accordingly waste generation is inevitable.

In view of this current situation, the genesis of a novel concept has been introduced by the Biomedical Waste Division of the Delhi Pollution Control Committee for guiding the stakeholders to manage the Biomedical Waste in an effective way simultaneously an emphasis has been given for the treatment of waste water and its reuse for saving the future and conservation of natural resources."

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CONTENTS

Abbreviations

Ministry Of Environment, Forest And Climate Change	MoEFCC
Central Pollution Control Board	CPCB
Delhi Pollution Control Committee	DPCC
Biomedical Waste	BMW
Health Care Facility	HCF
Common Biomedical Waste Treatment Facility	CBWMTF
Directorate Of Health Services	DHS
Indian Medical Association	IMA

Know Your Customer	KYC
High Density Poly Ethylene	HDPE
Poly Propylene	PP
Poly Vinyl Chloride	PVC
Low Density Poly Ethylene	LDPE
Bureau of Indian Standards	BIS
American Society For Testing Materials	ASTM
Occupational Health And Safety	OH&S
Effluent Treatment Plant	ETP

CHAPTER 1

BIOMEDICAL WASTE MANAGEMENT RULES 2016

A. Definition of Biomedical Waste:

"Means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps, including the categories mentioned in Schedule 1 of the Biomedical Waste Handling Rules 2016."

The Biomedical Waste Management Rules, 2016 were notified on the 28th March, 2016. The process of adopting the rules have commenced, once implemented these rules will improve the way Biomedical waste is handled by all stakeholders:

1. Health Care Facilities (HCF) i.e. "The Occupiers",

2. Common Biomedical Waste Treatment Facilities (CBMWTF) "The Operators",

3. Monitoring Agencies like the Delhi Pollution Control Committee (DPCC) and Central Pollution Control Board (CPCB)

4. The Environment.

The Biomedical Waste Management Rules, 2016 are enclosed as Annexure 1.

B. Applicable To

All persons who generate, collect, receive, store, transport, treat, dispose, or handle Biomedical waste in any form including:

i. Hospitals,

ii. Nursing Homes,

iii. Clinics,

iv. Dispensaries,

v. Veterinary Institutions,

vi. Animal Houses,

vii. Pathological Laboratories,

viii. Blood Banks,

ix. Ayush Hospitals,

x. Clinical Establishments,

xi. Research or Educational Institutions,

xii. Health Camps,

xiii. Medical or Surgical Camps,

xiv. Vaccination Camps,

xv. Blood Donation Camps,

xvi. First Aid Rooms/ Medical Rooms,

xvii. Forensic Laboratories and Research Labs.

C. Not Applicable To

All those establishments who generate

i. Radioactive Waste,

ii. Hazardous Chemicals,

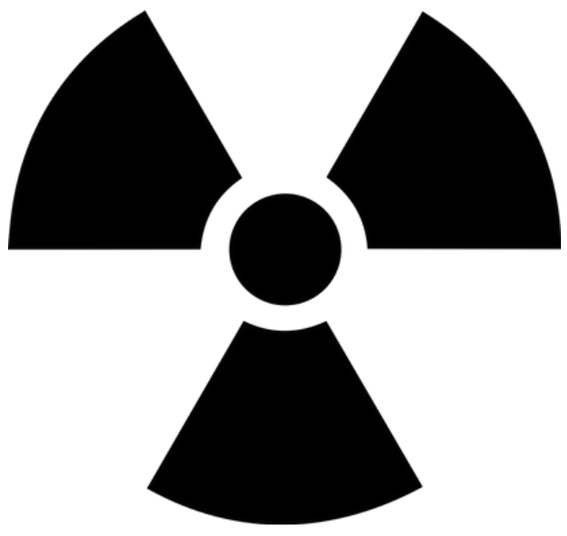
iii. Solid Waste,

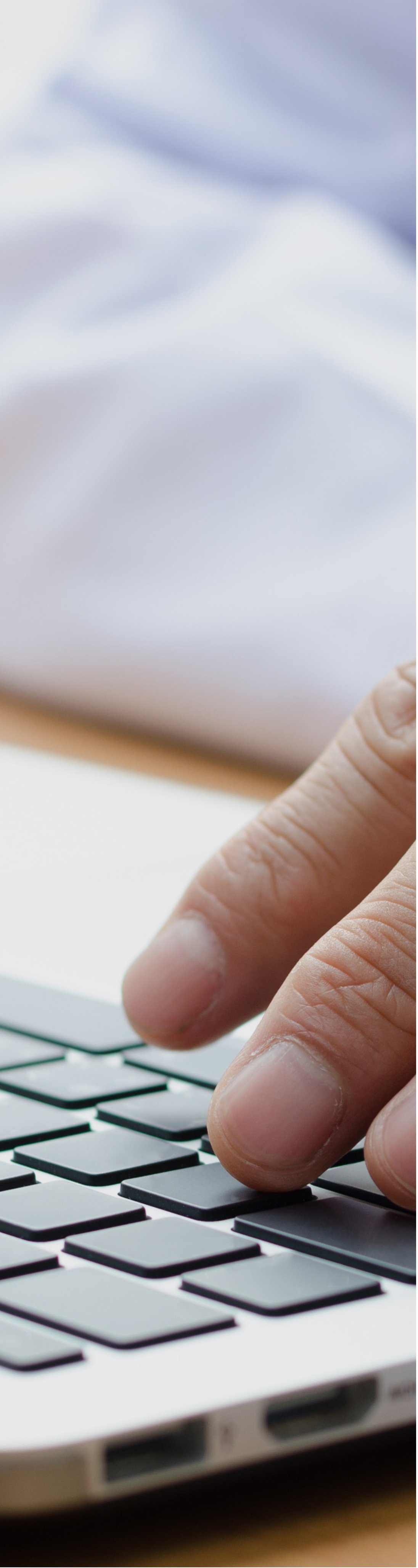
iv. Lead Acid Battery Waste,

v. Hazardous Waste,

vi. E-waste,

vii. Hazardous Micro Organisms.





CHAPTER 2

AUTHORISATION FROM PRESCRIBED AUTHORITY

"All health care facilities (as per Chapter 1B) that are generating and handling biomedical waste irrespective of the quantity need to procure:"

A. Authorisation from the DPCC

As a Generator of Biomedical Waste

i. Criteria:

1. Bedded: Authorisation for a period of 5 years
2. Non-Bedded: One Time Authorisation on submission of application, requisite documents along with a fee of Rs. 5,000/-.

ii. Process:

1. Online Application available on the DPCC website link http://www.dpcc.delhigovt.nic.in/bmw_fromII.pdf with all annexures.
2. Submission of Application in Form II along with all requisite enclosures through online mode.
3. Hard Copy of Application with requisite fee and all annexures need to be submitted at 6th Floor, ISBT Building, Kashmere Gate, Delhi - 110006

iii. Format

1. Form II: Enclosed in Annexure 2.

B. Consent under Air Act, 1981 and Water Act, 1974

i. Criteria:

1. Above 50 Beds: HCFs under this criteria are required to apply for consent.
2. Less than 50 Beds: HCFs under this criteria having laundry facility need to apply for consent.
3. Sewer Connection: HCFs not connected to a sewer need to apply for consent irrespective of bed strength.

ii. Process:

1. Online Application available on the DPCC website
link http://dpcc.delhigovt.nic.in/pdf/ORANGE_FORM_NEW_(1).pdf with all annexures.
2. Submission of Application in Form along with all requisite enclosures through online mode.
3. Hard Copy of Application with requisite fee and all annexures need to be submitted at 6th Floor, ISBT Building, Kashmere Gate, Delhi - 110006

iii. Format

1. Orange Category: Enclosed as Annexure 3.

C. Renewal of Authorisation

90 days before the expiry of the authorisation granted by the DPCC and consent under Air act and Water Act, each HCF must apply for renewal"

i. Criteria

1. Bedded HCF:
    a. Previous Authorisation Number;
    b. Date of Issue:
    c. Date of Expiry:
    d. Agreement Expiry Date with the Operator:
2. For Non-Bedded Applications: Not Applicable

ii. Process:

1. Online Application through DPCC website
2. Hard copy submission at DPCC office

iii. Format:

1. Authorisation: Form II of the BMW Rules, 2016 - enclosed as Annexure 2
2. Consent: Orange Category Form enclosed as Annexure 3

CHAPTER 3

REGISTRATION WITH THE OPERATOR

A. Registration with the Operator

i. Criteria:

1. For New Bedded Applications: Application must not have been filed with the DPCC.
2. For New Non-Bedded Applications: Application must not have been filed with the DPCC

ii. Process:

1. File Online Enquiry with Operator via their website
2. Complete Pre-Registration stage by providing HCFs Know Your Customer (KYC) details.
3. Complete Registration stage by executing "Waste Acceptance and Service Agreement" as per the BMW Rules 2016.
4. Submission of an agreement copy with the DPCC.

iii. Format:

1. Enquiry Form enclosed as Annexure 4
2. KYC Form enclosed as Annexure 5
3. Service Agreement enclosed as Annexure 6

B. Renewal of the Agreement

i. Criteria

1. Bedded Applications: Occupier to provide written status of the HCF as per preset format
2. Non-Bedded Applications: Occupier to provide status of the HCF as per preset format

ii. Process:

1. Intimation to the Operator via email about expiry of the agreement in a preset format
2. Operator to confirm "No Dues" via email to the Occupier in a preset format
3. Operator to send "Waste Acceptance and Service Agreement" for signing by the Occupier
4. Occupier to sign and return back the renewed agreement to the Operator 30 days before expiry of previous agreement.
5. Hard copy of the agreement to be submitted by the Operator with the DPCC.

iii. Format:

1. Status of HCF format enclosed as Annexure 7
2. Intimation on expiry of agreement format enclosed as Annexure 8
3. No dues email format as Annexure 9

CHAPTER 4

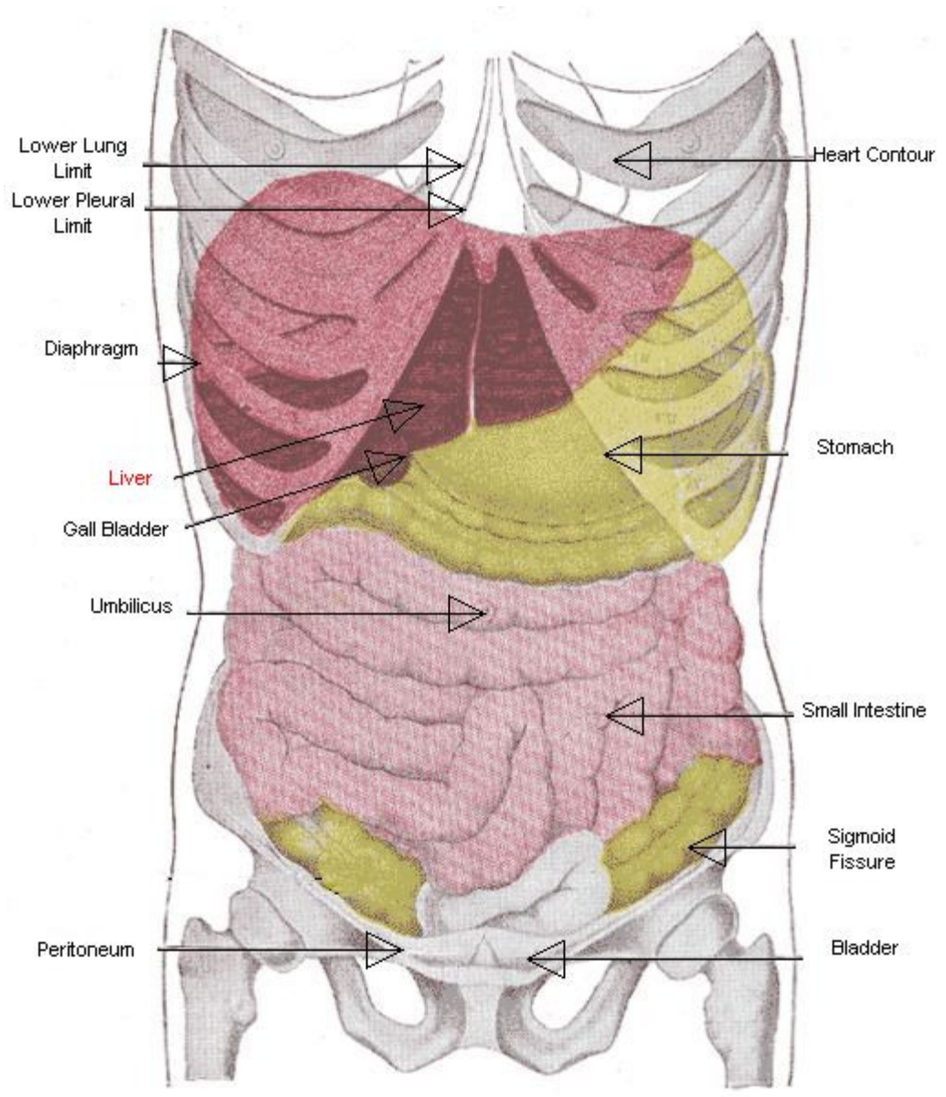
WASTE CATEGORIES & COLOUR CODING

Different types of Biomedical waste are generated from various departments like Operation Theatre, Intensive Care Unit (ICU), Wards, Pathology Labs and Collection Centers. The BMW Rules 2016 explain how to segregate particular types of waste as per the new color-coding structure. The new structure has been simplified to 4 Colours i.e. Yellow, Red, Blue, White. Some Sub Categories need specific treatment.

A. Yellow:

i. Anatomical Waste

Human or Animal tissues, organs, body parts, fetus, waste from experiments or testing.



ii. Soiled Waste

Materials soaked with blood or body fluid like cotton and swabs.

iii. Expired or Discarded Medicines

1. Pharmaceutical Waste like antibiotics, drugs, capsules, syrup contents without plastic or glass bottles.

2. Pharmaceuticals and material contaminated with cytotoxic drugs with their container either made of glass, plastic, ampoules, vials etc.

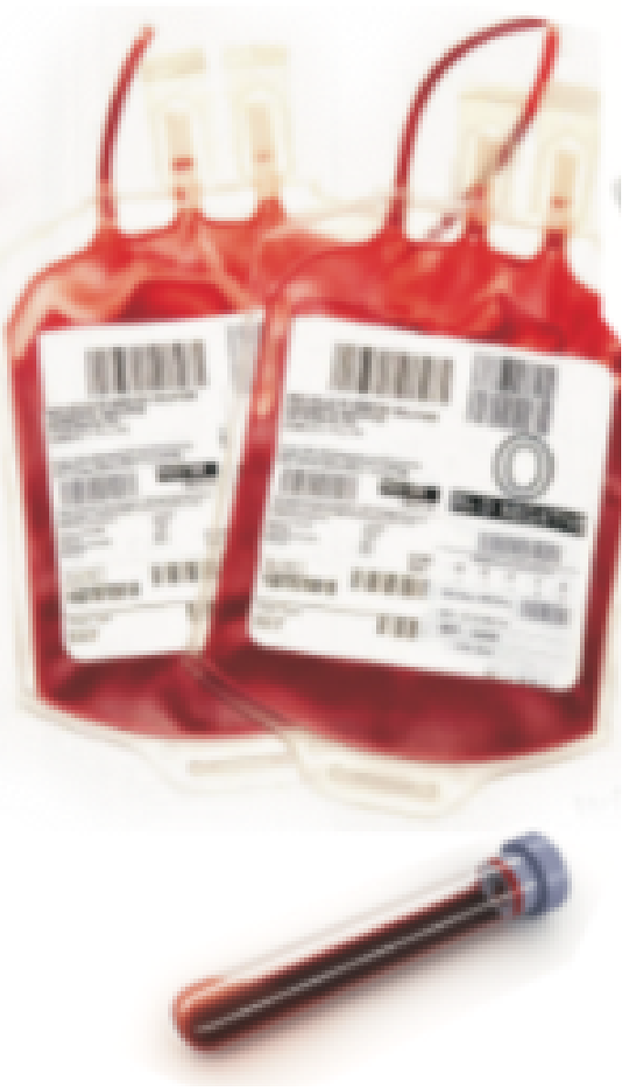
iv. Discarded Bedding and Linen

Contaminated with Blood or Body Fluid. Voluminous materials need to be cut to the size of the packaging material.

v. Waste Containing Blood

1. Blood Bags: Discarded Blood Bags or Blood bags with residual blood.

2. Blood Sample Tubes: Blood Vials/ Tubes containing blood.



vi. Chemical Waste

Chemicals used in any process or production or discarded or residual chemicals.

vii. Pathology, Biotechnology, Microbiology Waste

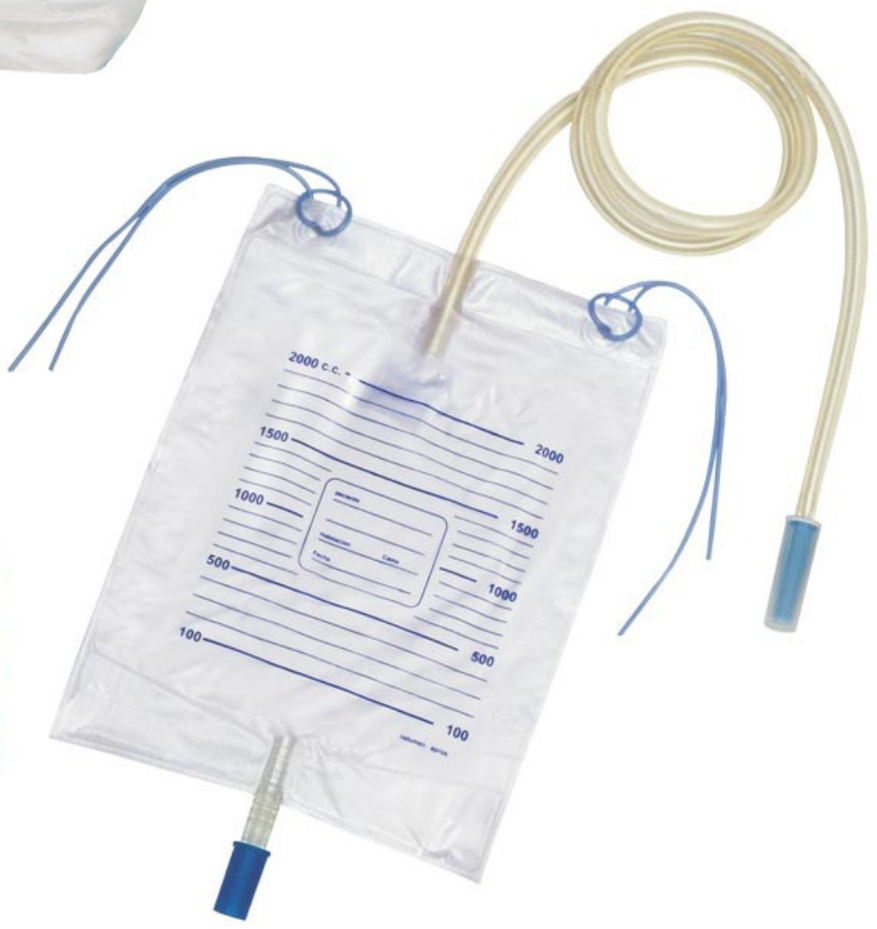
Blood Bags, laboratory cultures, stocks or specimens of microorganisms used in research, industrial laboratories.

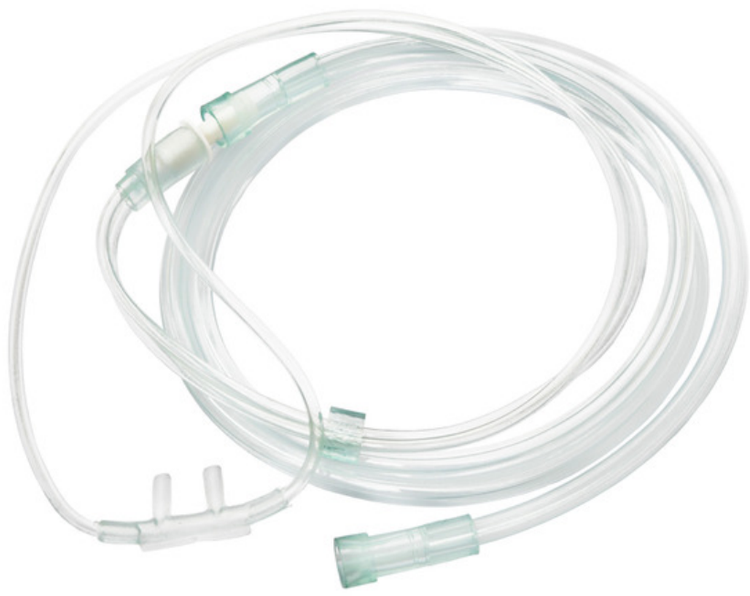
viii. Chemical Liquid Waste

Chemical Liquid waste generated like discarded formalin, infected secretions, aspirated body fluids and liquid from labs, floor wash will go into the in-house Effluent Treatment Plant and not the Yellow Bags

B. Red

Waste that has been contaminated but due to the nature of material, it can be sterilized and recycled. i.e. Plastics. These types of materials need to be placed in a Red Plastic Bag. Types of contaminated material may include





- i. Tubes and Pipes
- ii. Intravenous Bottles and sets
- iii. Catheters
- iv. Urine Bags,
- v. Plunger of the Syringe (after needle cutting)
- vi. Vaccutainers with their Needle Cut.
- vii. Gloves
- viii. Masks
- ix. Plastic Aprons
- x. Other Plastic Materials

C. Blue

Materials that may cause cuts and punctures need to be contained in a Cardboard box with blue marking.

These materials include:

i. Glassware: Broken and Discarded

1. Medicine vials
2. Ampoules
3. Glass Syrup Bottles (without liquid)
4. Microscope Slides

ii. Contaminated Metallic Body Implants: like

1. Dental Implants
2. Other Body Implants
3. Plates

D. White

Sharps including metals which may cause cuts and punctures need to be contained in a puncture proof, leak proof, tamper proof container:

i. Needle Hub Cutter:

Cutter which cuts the metal part of the syringe.

ii. Container:

Stores blades, scalpels, fixed needle syringes, Needles from vaccutainer and other discarded and contaminated metal items.

- **Human & Animal Anatomical Waste**
  (Tissues, Organs, Body Parts, Fetus etc.)
- **Soiled Waste**
  (Dressings, Plaster Casts, Cotton Swabs, Residual/Discarded Blood Bag & Comp.)
- **Expired or Discarded Medicine**
  (Antibiotic etc.)
- **Chemical Waste**
  (Discarded Reagents, Disinfectants)
- **Discarded Linen, Mattresses & Beddings**
- **Pre-Teated Microbiology, Biotechnology & Clinical Lab Waste**
  (Blood Bags, Vaccutainer, Cultures, Residual Toxins, Dishes & Devices, Microorganism spec.)

- **Contaminated Waste-Recyclable**
  (Tubings, Plastic Bottles, Intravenous tubes & sets, Catheters, Urine Bags, Syringes without needle and Gloves)

- **Waste Sharps Including Metals**
  (Needles, Syringes with fixed needles, Needles from needle tip cutter or Burner, Scalpels, Blades, Contaminated sharp objects)

- **Glassware**
  (Contaminated Broken/Discarded glass, Vials, Ampoules, Microscope Slides Empty Syrup Glass Bottles)
- **Metallic Body Implants**

- **Non-Infected / General Waste**
  (Daily use waste, plastic water bottles, Food waste, News papers and cardboards)

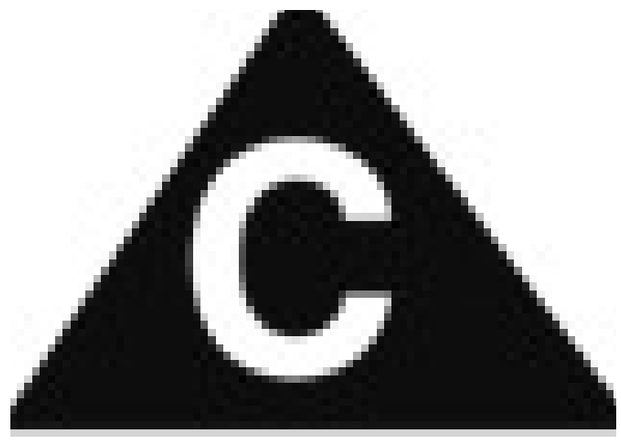
CHAPTER 5

WASTE STORAGE MATERIAL

"Biomedical waste needs to be stored in special type of containment materials stipulated for particular types of BMW types. As per the BMW Rules 2016, waste materials depending upon its potential hazardous characteristics have been allocated a specific colour category. The colour-coded storage materials are to be sourced by the Occupier need to be of a certain specific size, grade, design and have required properties as per the BMW Rules 2016, Biomedical Waste Handling Guidelines, Prevailing Plastic Waste Management Rules and be approved under the Bureau of Indian Standards (BIS)."

A. Markings and Symbols

Each product - bag, box, container and bin needs to be marked with various symbols to help the user to understand and avoid potential hazards. The followings markings with symbols need to be used as appropriate.

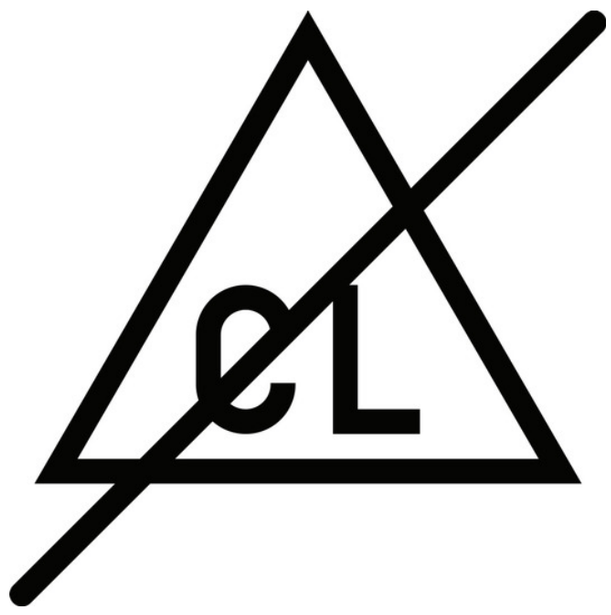


i. Biohazard

ii. Cytotoxic

iii. Danger

iv. Non Chlorinated



B. Yellow Plastic Bags

To be used for Incineration above 800 Degrees Celsius.

i. Size

1. Small – 14 x 18 inches
2. Medium – 18 x 22 inches
3. Large – 26 x 36 inches

It is advisable to use small bags

ii. Specifications

1. Non-Chlorinated in Nature i.e. Free of PVC
2. Made From 100% Virgin Plastic Granuals
3. Made of Low Density Poly Ethylene (LDPE) – SPI Resin ID Code 4
4. 50 Micron and above
5. Tamper Proof Sealing System
6. Conform to ASTM Standard D1922 and D1709 – Test Certificate to be attached
7. 50% Transparency Level
8. Yellow Master Batch Colour Shade - Enclosed as Annexure 10
9. Use of Black Printing Ink Colour without heavy metals
10. Double Seal to prevent bottom leakage.
11. Pre-Barcoded

iii. Design

1. Placing of Biohazard Symbol:
    a. Front
    b. Back

2. Placing of Label for Transporting the Bags
    a. Front

3. Max Level Line Indicator
    a. Front
    b. Back

4. Barcode Placing
    a. Back

C. Red Plastic Bags

To be used for Autoclave above 135 Degrees Celsius.

i. Size

1. Small – 14 x 18 inches
2. Medium – 18 x 22 inches
3. Large – 26 x 36 inches

ii. Specifications

1. Non-Chlorinated in Nature i.e. Free of PVC
2. Made From 100% Virgin Plastic Granuals
3. Made of Poly Propylene (PP) – SPI Resin ID Code 5
4. 50 Micron and above
5. Tamper Proof Sealing System
6. Conform to ASTM Standard D1922 and D1709 – Test Certificate to be attached
7. 50% Transparency Level
8. Red Master Batch Colour Shade - Enclosed in Annexure 11
9. Use of Black Printing Ink Colour without heavy metals
10. Double Seal to prevent bottom leakage.
11. Able to withstand a temperature of 135 Degrees under 31 psi with a resistance time of not less than 30 minutes.

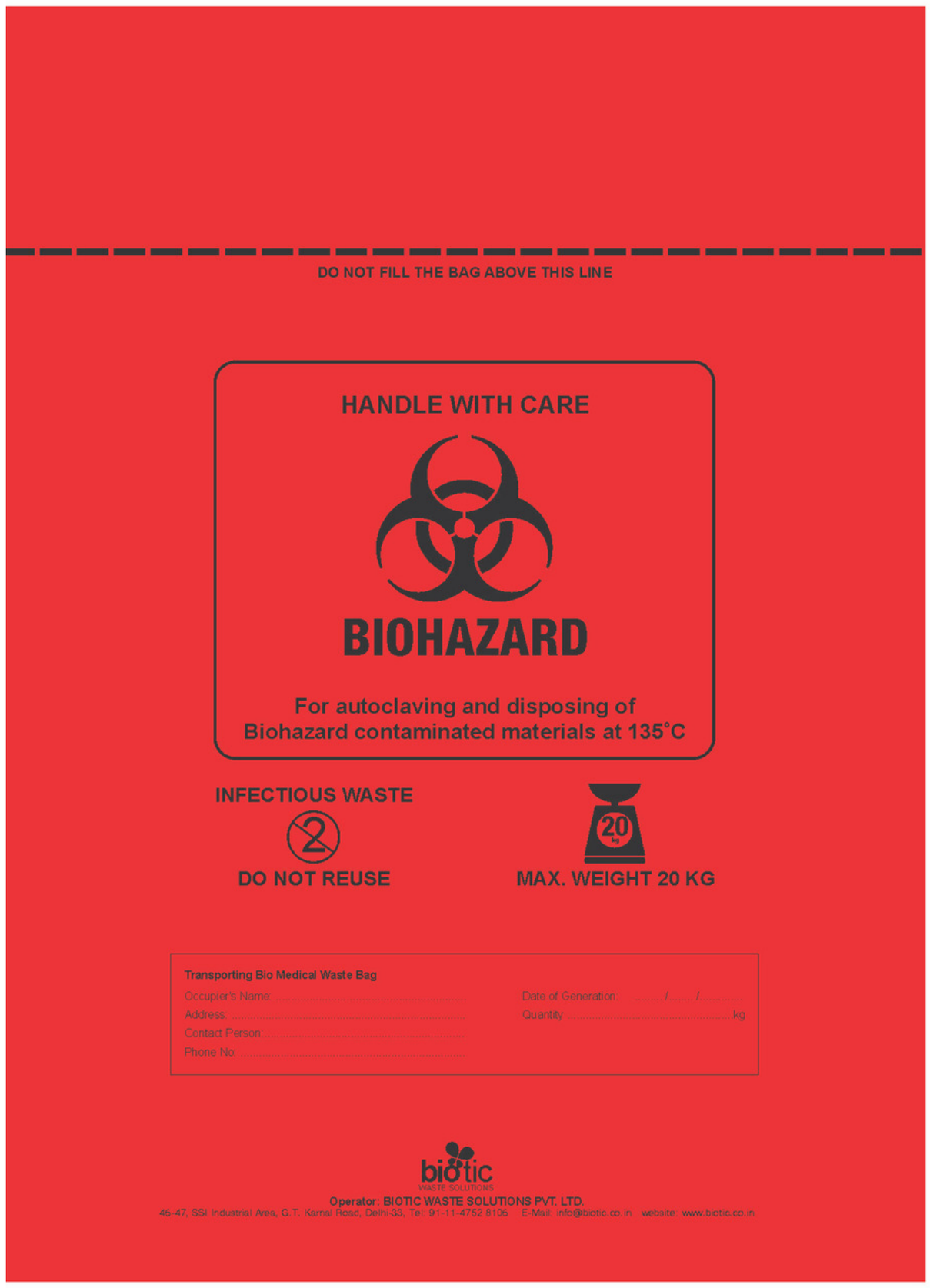
iii. Design

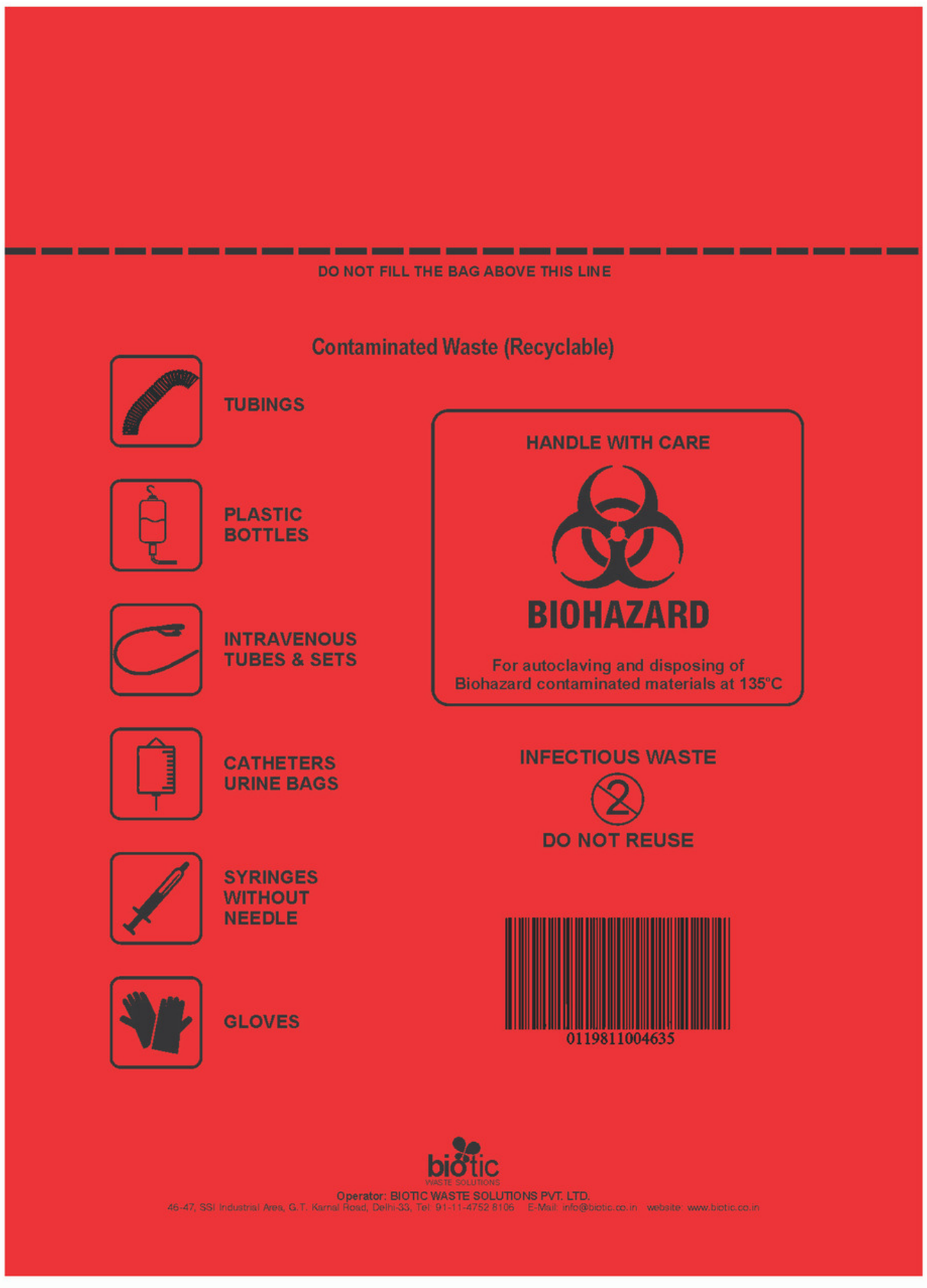
1. Placing of Biohazard Symbol:
    a. Front
    b. Back

2. Placing of Label for Transporting the Bags
    a. Front

3. Max Level Line Indicator
    a. Front
    b. Back

4. Barcode Placing
    a. Back





D. Blue Cardboard Box

To be used for Chemical disinfection with Detergent and Sodium Hypochlorite.

i. Size

1. One Size - 12 x 9.5 x 6.25 (inches)

ii. Specifications

1. Four Ply Cardboard Paper
2. 100% Virgin Pulp
3. Lamination lining on the inside to Prevent Soaking
4. Perforated Top Up Top
5. Single Tuck in bottom.
6. Final Pack Sealing – To be Sealed with Tape.
7. Blue Ink without heavy metals

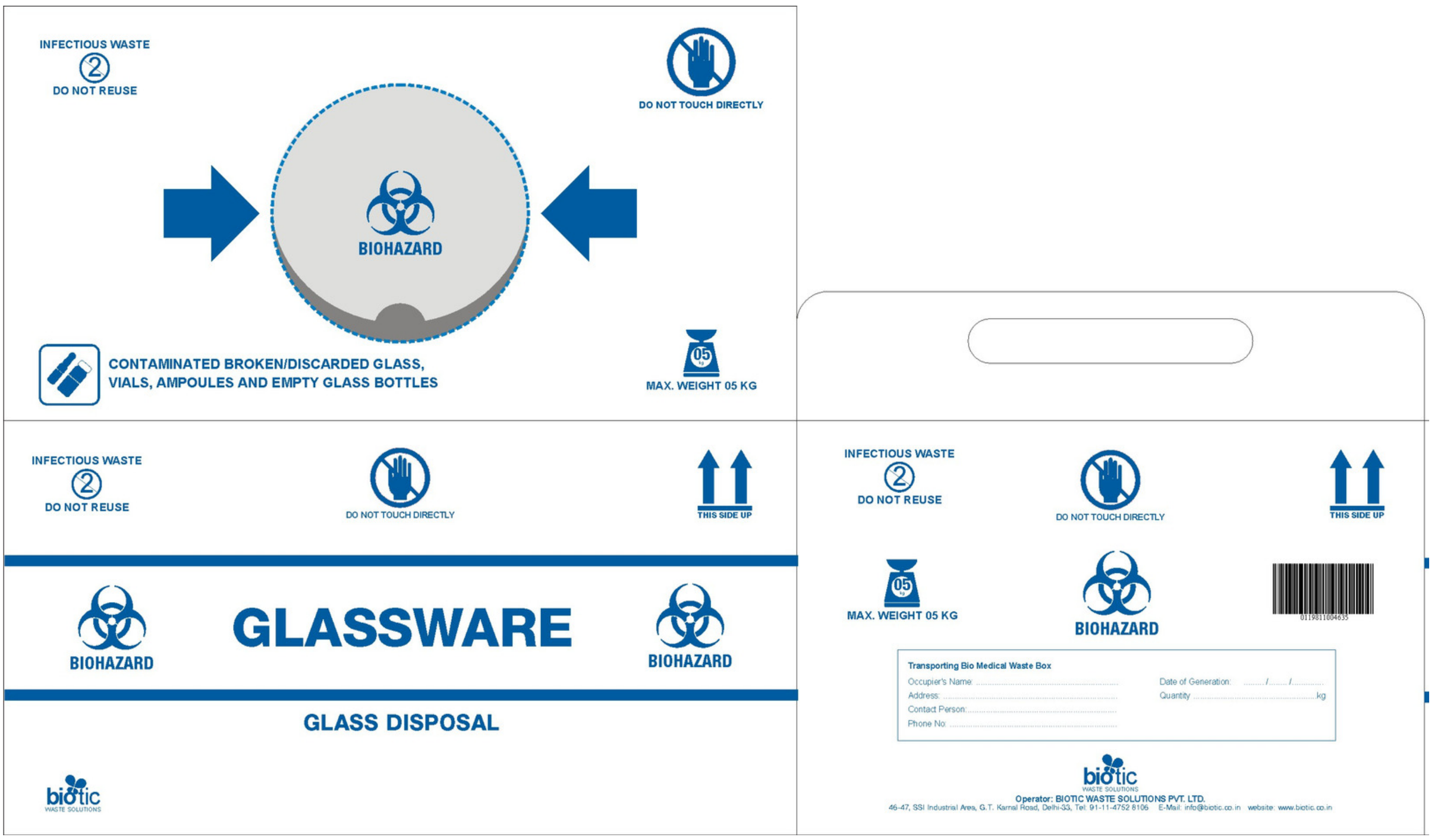
iii. Design

1. Placing of Biohazard Symbol:
    a. All Sides

2. Placing of Label for Transporting the Box
    a. One Side

3. Barcode Placing
    a. One Side

4. Other Safety Markings Size and Place
    a. All Sides



E. White Container

To be used for Autoclaving or Dry Heat Sterilization followed by shredding or mutilation or encapsulation.

i. Needle Hub Cutter

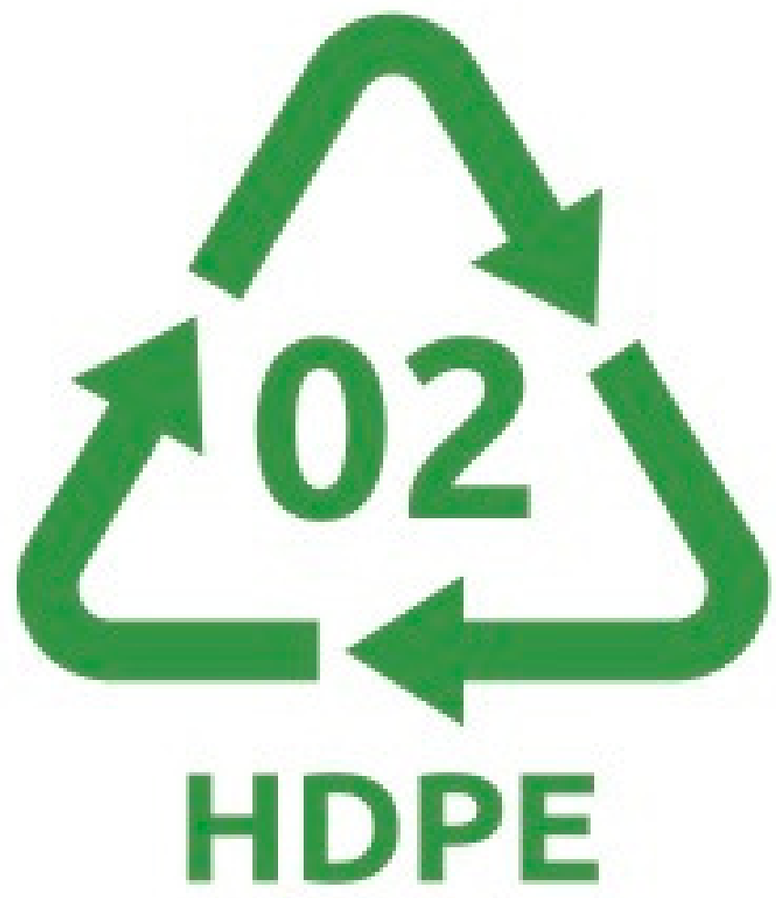
To be used to cut the hub of the syringe to dissever the needle from the plastic plunger.

1. Size

a. Small - 50 ml

b. Medium - 800 ml

2. Specification



a. Non-Chlorinated in Nature i.e. Free of PVC

b. Made From 100% Virgin Plastic Granuals

c. Made of High Density Poly Ethylene (HDPE) – SPI Resin ID Code 2

d. Puncture Proof, Tamper Proof, Leak Proof with Sealing System

e. Conform to ASTM Standard D1922 and D1709 – Test Certificate to be attached

f. 50% Transparency Level

g. Use of Black Printing Ink without heavy metals

h. Able to withstand a temperature of 135 Degrees under 31 psi with a resistance time of not less than 30 minutes

3. Design

a. Placing of Biohazard Symbol on

i. Front Side

ii. Back side

b. Placing of Label for Transporting the Container

i. Front Side

c. Barcode Placing

i. Front Side

d. Other Safety Markings Size and Place

i. Front Side

ii. Back Side

F. Needle Hub Cutter

To be used for other items that may cause prick, puncture or cuts other than Syringes where hub can be cut with needle hub cutter.

1. Size

a. Small - 3 L

b. Medium - 5 L

2. Specification

a. Non-Chlorinated in Nature i.e. Free of PVC

b. Made From 100% Virgin Plastic Granuals

c. Made of High Density Poly Ethylene (HDPE) – SPI Resin ID Code 2

d. Puncture Proof, Tamper Proof, Leak Proof with Sealing System

e. Confirm to ASTM Standard D1922 and D1709 – Test Certificate to be attached .

f. 50% Transparency Level

g. Use of Black Printing Ink Colour without heavy metals

h. Able to withstand a temperature of 135 Degrees under 31 psi with a resistance time of not less than 30 minutes

3. Design

a. Placing of Biohazard Symbol on

i. All Sides

b. Placing of Label for Transporting the Container

i. One Side

c. Barcode Size and Place

i. One Side

d. Other Safety Markings Size and Place

i. All Sides

G. Coloured Bins

To be used as secondary storage of waste materials with Plastic bag lining

i. Size

1. Small – 15 L
2. Medium - 60 L
3. Large – 120 L with Wheels
4. Extra Large – 660 L with Wheels

ii. Specifications

1. Non-Chlorinated in Nature i.e. Free of PVC
2. Made From 100% Virgin Plastic Granuals
3. Made of High Density Poly Ethylene (HDPE) – SPI Resin ID Code 2
4. Puncture Proof, Tamper Proof, Leak Proof with Sealing System
5. Confirm to ASTM Standard D1922 and D1709 – Test Certificate to be attached
6. 50% Transparency Level
7. Master Batch Colour Shade - Enclosed as Annexure 10 for Yellow and Annexure 11 for Red
8. Use of Black Printing Ink Colour without heavy metals

9. Able to withstand a temperature of 135 Degrees under 31 psi with a resistance time of not less than 30 minutes.

iii. Design

1. Placing of Biohazard Symbol on
    a. All Sides

2. Placing of Label on Container
    a. Not Required

3. Other Safety Markings Size and Place
    a. Front Side

15 L

60 L

660 L

120 L

SMALL

MEDIUM

LARGE

BIN FOR ISOLATED STORAGE SITE

CHAPTER 6

WASTE WATER GENERATION

Biomedical Waste Management Rules, 2016 are very clear towards channalising and the pretreatment of waste water generation i.e. treatment of Chemical Liquid Waste as per Schedule 1(f). Materials generated due to use of chemicals in production of biological and used or discarded disinfectants, discarded chemicals, infected secretions, body fluids, liquids from labs, culminating chemicals, tissue culture and spent wash from cleaning of floors, waste storage room etc. Quantity and Quality analysis is required to design the ideal treatment system. No direct discharge of waste water is permitted without treatment, and no mixing with domestic effluent in an Effluent Treatment Plant (ETP).

A. Quantification

The capacity of the effluent treatment system must be adequately designed in line with the quantum of the waste water generation. On a per bed basis, as per international standards waste water from health care facilities may vary from 300L to 1200L depending upon the type of services provided by the HCF. Reference (SULE et all 2010). Each facility must declare while submitting the Consent to Operate, under Water Act the approximate quantum of waste water generated through the intended health care activities.

B. Qualification

The Occupiers need to install a modern automated physio-chemical treatment ETP. The ETP needs to be repaired and maintained periodically, Spare parts need to be available incase of a breakdown. Adequate stock of all the chemicals required for the treatment needs to be available with the HCF. For proper monitoring, it is advised that the Occupier install an online effluent monitoring system with software integrated with the DPCC.

C. Pre-Treatment Process

The Occupier needs to separate the chemical liquid effluents from domestic effluents. The chemical liquid effluents need to be tested from an approved laboratory to ascertain the factual characteristics before deciding on the best treatment process. Pre-Treatment of this type of effluent through the best suggested method is required before mixing with into the Sewage Treatment Plant.

1400 ml
±5%
1200
1000
800
600
400
200

CHAPTER 7

WASTE COLLECTION, INTERNAL TRANSFER AND ISOLATED STORAGE AREA

Each health care facility needs to have dedicated spaces for the collection of BMW. Different types of BMW are generated in different department. It is important to use various sizes of containers depending upon the quantum of generation in that department. All the BMW needs to be transferred to an end point i.e. an isolated storage site. Small colour coded bags need to be transferred into one larger colour-coded bin. The Operator should have access to the Isolated Storage Site at all times. In case the Healthcare facility closes early, then a combination lock should be used to lock the entry to the storage site and the combination code is to be provided to the Operators representative so that the BMW is cleared on time.

A. Temporary Waste Storage Area

Waste materials generated at various levels need to be provided a temporary storage site. Following locations where Temporary Waste Storage Site should be allocated is the:

i. Locations

1. OPD/ Consultant Level
    a. Bed Level
    b. Examination Level

2. Ward Level
    a. Bed Level
    b. Nursing Station Level

3. Operation Theatre Level
    a. Bed Level
    b. Changing Room Level

4. Lab Level
    a. Phlebotomy Level
    b. Lab Equipment Level

ii. Markings and Symbols

The isolated storage site, needs to be marked with various symbols to avoid potential hazards.

a. Biohazard
b. Danger

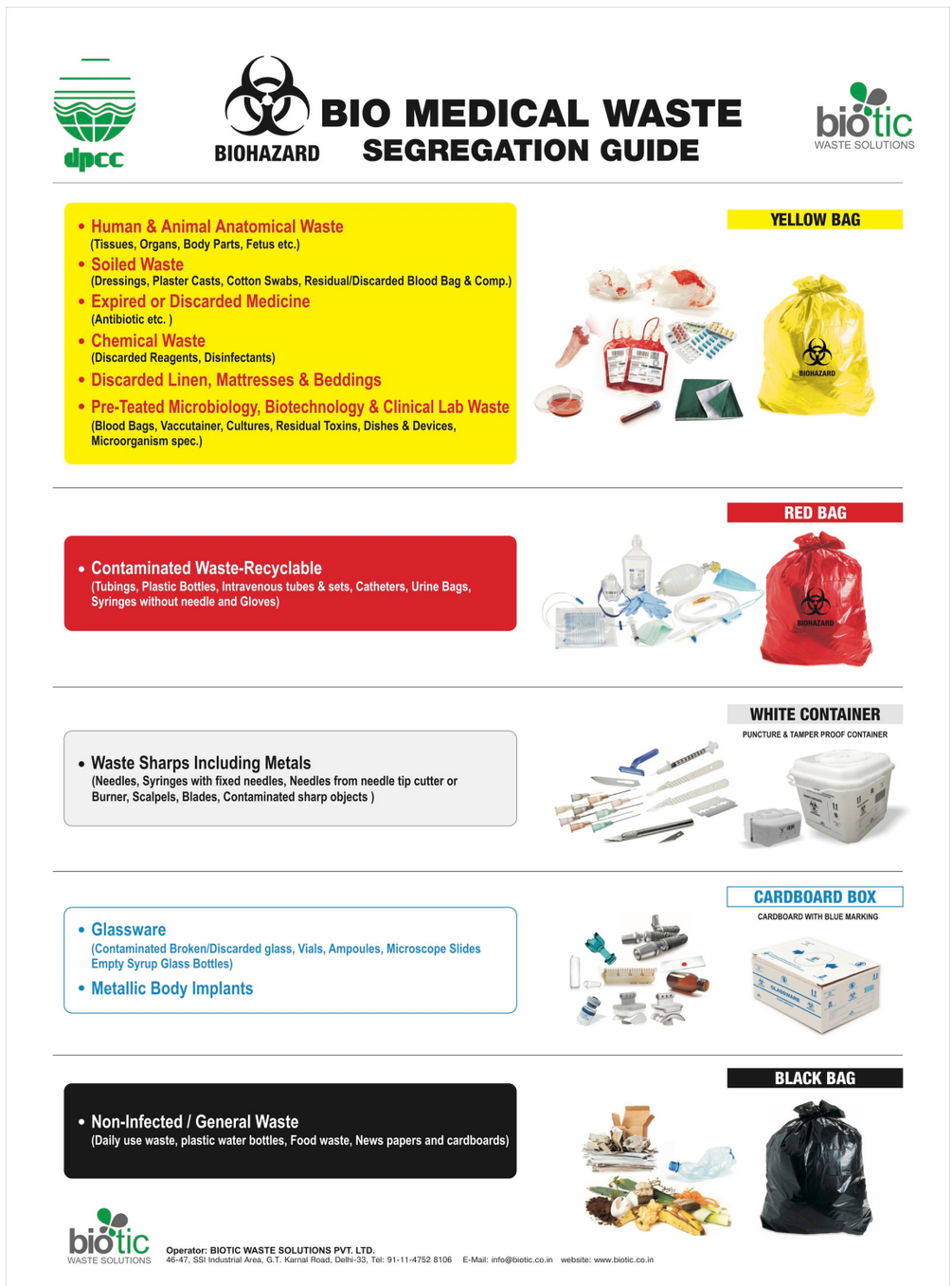
iii. Waste Segregation Chart

1. Chart Design:

The Biomedical waste segregation chart should have pictorial and textual description of the types of waste to make it easy for everyone to identify which container to put the waste.

a. Vertical

b. Horizontal



2. Chart Dimensions

a. Vertical

b. Horizontal

3. Chart Location:

Should be at eye Level

BIO MEDICAL WASTE SEGREGATION GUIDE

BIOHAZARD

YELLOW BAG

- **Human & Animal Anatomical Waste**
  (Tissues, Organs, Body Parts, Fetus etc.)
- **Soiled Waste**
  (Dressings, Plaster Casts, Cotton Swabs, Residual/Discarded Blood Bag & Comp.)
- **Expired or Discarded Medicine**
  (Antibiotic etc.)
- **Chemical Waste**
  (Discarded Reagents, Disinfectants)
- **Discarded Linen, Mattresses & Beddings**
- **Pre-Teated Microbiology, Biotechnology & Clinical Lab Waste**
  (Blood Bags, Vaccutainer, Cultures, Residual Toxins, Dishes & Devices, Microorganism spec.)

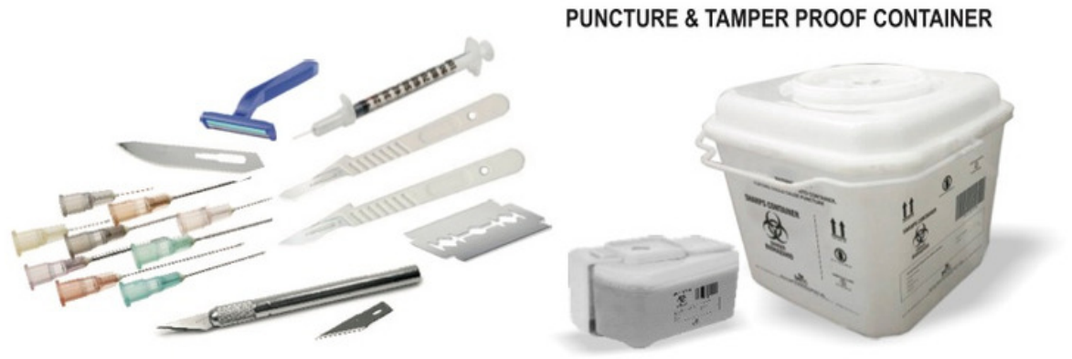
RED BAG

- **Contaminated Waste-Recyclable**
  (Tubings, Plastic Bottles, Intravenous tubes & sets, Catheters, Urine Bags, Syringes without needle and Gloves)

WHITE CONTAINER

PUNCTURE & TAMPER PROOF CONTAINER

- **Waste Sharps Including Metals**
  (Needles, Syringes with fixed needles, Needles from needle tip cutter or Burner, Scalpels, Blades, Contaminated sharp objects)



CARDBOARD BOX

CARDBOARD WITH BLUE MARKING

- **Glassware**
  (Contaminated Broken/Discarded glass, Vials, Ampoules, Microscope Slides Empty Syrup Glass Bottles)
- **Metallic Body Implants**

BLACK BAG

- **Non-Infected / General Waste**
  (Daily use waste, plastic water bottles, Food waste, News papers and cardboards)

Operator: BIOTIC WASTE SOLUTIONS PVT. LTD.
46-47, SSI Industrial Area, G.T. Karnal Road, Delhi-33, Tel: 91-11-4752 8106 E-Mail: info@biotic.co.in website: www.biotic.co.in

B. Internal Transfer of Waste

From Point of Generation to End Point/ Isolated Storage Site. The HCF worker needs to perform the following tasks.

i. Sealing of Waste Container

1. Bags – Seal the bag to make it tamper proof

2. Boxes – Seal the box with tape to ensure no spillage

3. Container – Seal the container by permanent, tamper proof sealing

ii. Labelling of the Waste

1. Fill out the required details as per Rules so that waste can be tracked back to the point of generation

LABEL FOR TRANSPORTING BIO-MEDICAL WASTE BAGS OR CONTAINERS

Day .....Month .....
Year .....
Date of generation .....

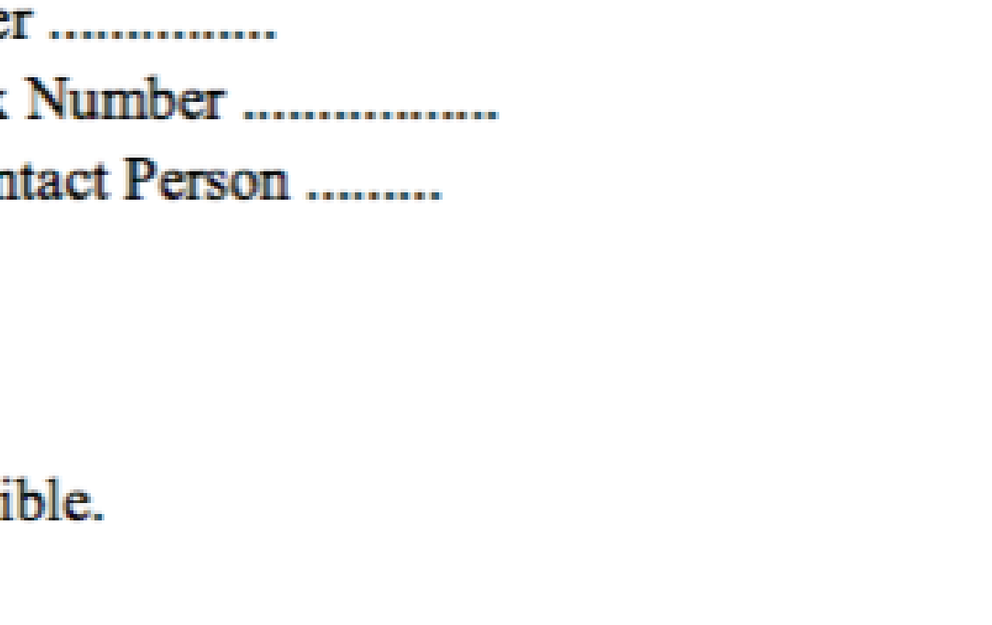
Waste category Number .....
Waste quantity……
Sender's Name and Address
Phone Number .....
Fax Number.....
Contact Person .....

Receiver's Name and Address:
Phone Number .....
Fax Number .....
Contact Person .....

In case of emergency please contact :
Name and Address :
Phone No.
Note :Label shall be non-washable and prominently visible.

iii. Replacing the Bag, Box and Container with another

As the filled bags are replaced, new bins need to be replaced with new bags. Adequate stock of items need to be maintained.



iv. Use of Personal Protective Equipment

1. Masks
2. Gloves
3. Heavy Duty Equipment for BMW workers
4. Gum Boots
5. Eye Goggles
6. Face Shield
7. Aprons
8. Hair Net/ Cap

v. Hygiene and Cleaning of the Transfer Equipment

1. Washing of the Bins with Detergent and Sodium Hypochlorite

2. Spent wash needs to flow into the ETP

C. End Point Level - Isolated Storage Site:

Transported waste from the point of generation needs to come to one point of collection called the end point/ isolated storage site.

i. Size of Room

Suggested: Calculated as per size of large/ extra large bins.

1. Non Bedded: 18 sq. ft.

2. Bedded
   a. 1-7 Beds: 18 sq. ft.
   b. 8-15 Beds: 27 sq. ft.
   c. 16-25 Beds: 36 sq. ft.
   d. 26-50 Beds: 45 sq. ft.
   e. 51-250 Beds: 54 sq. ft.
   f. 251-500 Beds: 63 sq. ft.
   g. Above 501 Beds: 72 sq. ft.

ii. Wash Water Collection Provision

Spent wash from potential leakage or from washing of bins with detergents need to be collected and diverted into the ETP

iii. Protection against insects, rodents and animals

The Isolated Storage Site needs to have provision for protections against insects, rodents, etc.

iv. Access control

The Isolated site should have access available at all times to the representatives of the Operator. In case the Occupiers site is closed for any purpose, the room should have a combination lock and the combination code is to be provided to the Operators representatives so that waste can be cleared timely.

v. Waste Segregation Chart

1. Chart Design
    a. Vertical
    b. Horizontal

2. Chart Dimensions
    a. Vertical
    b. Horizontal

3. Chart Location: Should be at Eye Level

CHAPTER 8

SPECIAL HANDLING OF BIOMEDICAL WASTE AT THE OCCUPIER LEVEL

The new BMW rules have introduced special procedures for the handling of specific types of BMW streams. These waste streams need to be channelized to the required destination. These include waste such as:

A. Biomedical waste which needs Pre-treatment prior to disposal:

The below waste needs to be collected and treated in an autoclave before being placed in a yellow bag before being handling over to the Operator.

i. Laboratory Waste

ii. Microbiology Waste

iii. Blood Samples, Blood Bags

B. Liquid Chemical Waste

This type of waste needs to be collected separately and not mixed with other biomedical waste as such because these materials are hazardous in nature. These materials need to be treated separately in a Hazardous Waste Treatment, Storage and Disposal Facility (TSDF). In case no TSDF is available, the Operator may store it on a chargeable basis.

i. Spent Reagents

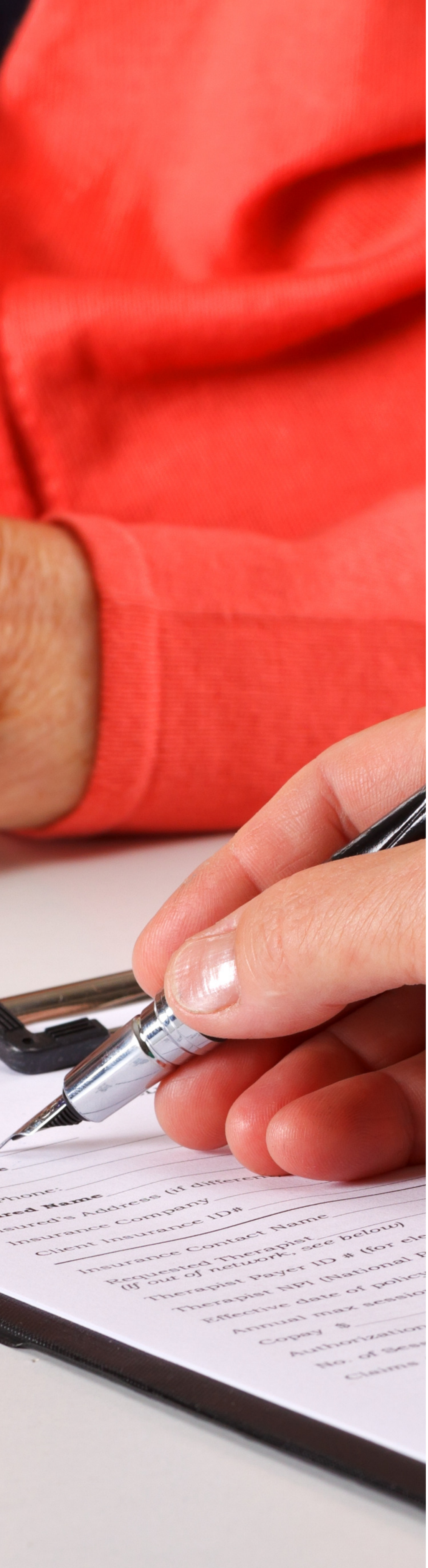
ii. Residual disinfectants and washing fluids.

C. Spent Wash

This type of waste streams cannot be collected in a bin, thus need to be diverted into the on-site Effluent Treatment Plant

i. Floor Wash
ii. Waste storage Room Effluents

CHAPTER 8 | SPECIAL HANDLING OF BIOMEDICAL WASTE AT THE OCCUPIER LEVEL



CHAPTER 9

HANDING OVER OF WASTE PROCEDURE BY THE OCCUPIER

The process of handing over of waste by the Occupier is extremely important. Multiple steps are required to be completed prior to handover.

A. Maintenance of Internal Treatment Records

i. Autoclave

ii. ETP

iii. STP

iv. Other equipment

B. Records of Waste Generated at All Levels

All Heath Care Facilities need to maintain and track the quantum of waste in both number of bags and kilograms for each type of waste category. A separate record register needs to be maintained at a cumulative level prior to handover i.e. the Isolated Storage Site. Records need to be maintained and updated as per a pre-set format on a daily basis. The records need to be signed-off by the Operators representatives at the time of handover of the biomedical waste.

i. Department or Ward Level

1. Record Format– Enclosed as Annexure 12

ii. End Point Level

1. Record Format– Enclosed as Annexure 13

C. Barcode Tracking System of the Biomedical Waste

A tracking system as per the rules is required to be implemented by the Occupier and the Operator. Installation of a Barcode tracking system has been mandated to ensure no pilfredge of waste happens from the point of generation upto final disposal. A barcode issuing terminal needs to be installed by the Occupier and barcode receiving terminal needs to be installed by the Operator. The Occupier can install a barcoding machine ideally integrated with a weighing machine loaded with the standardised software system. Alternatively the Occupier can purchase pre-barcoded bags, boxes, container and bins from manufacturers directly. Each bag, box, container and bin needs to be barcoded in the standard format so that the records can be matched with the Operators records to tally issue and receipt.

i. Color Types

1. Yellow
2. Yellow Cytotoxic (if applicable)
3. Red
4. Blue
5. White

ii. Number of Bags, Boxes and Container per Colour Type

Quantum needs to be maintained

1. Yellow
2. Yellow Cytotoxic (if applicable)
3. Red
4. Blue
5. White

iii. Weight of Waste Storage Items Per Colour Type

1. Record Format– Enclosed as Annexure 14

D. Authentication of Authorised Operators Representatives

It is extremely important to ensure that Biomedical waste is channelised to the correct collection agency. The Occupier should know the following details.

i. Representatives Details

1. Name
2. ID Card

ii. Vehicle Details

1. Type
2. Vehicle Number

CHAPTER 10

TAKING OVER OF WASTE PROCEDURE FROM THE END POINT BY THE OPERATOR

The process of taking over of waste by the Operator is equally important. Multiple procedures are required to be completed prior to handover.

A. Maintaining Records at the Operators Vehicle Level

Data in a pre specified record format needs to be maintained for each Occupier that needs to be filled out as and when waste is collected for each color category.

i. Record Format - Enclosed as Annexure 15

MONTH: DATE OF MONTH	TIME OF PICK UP	QUANTITY OF BIOMEDICAL WASTE COLLECTED (Kg)										SIGNATURE OF OPERATOR'S REPRESENTATIVE
		YELLOW BAGS		RED BAGS		BLUE BOX		WHITE CONTAINER		TOTAL		
		No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	
1												
2												
3												
4												
5												
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MONTH: DATE OF MONTH	TIME OF PICK UP	QUANTITY OF BIOMEDICAL WASTE COLLECTED (Kg)										SIGNATURE OF OPERATOR'S REPRESENTATIVE
		YELLOW BAGS		RED BAGS		BLUE BOX		WHITE CONTAINER		TOTAL		
		No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	
1												
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B. Pick up Time

The Operator needs to plan the scheduled pick up time from the occupiers premises as per the below criteria.

i. Location of the Health Care Facility:

ii. Accessibility of the Vehicle

iii. Total Quantum of waste generated at the Facility:

iv. Size of Vehicle

v. Suitable timing on the route or as per Route Chart

In case the Occupiers representative is not available at the time of pick up or in case of early closure timings, the Operators representative needs to have clear and unrestricted access to the isolated storage site. The isolated storage room needs to be under a combination lock and the combination code needs to be provided to the Operators representative.

CHAPTER 10 | TAKING OVER OF WASTE PROCEDURE FROM THE END POINT BY THE OPERATOR

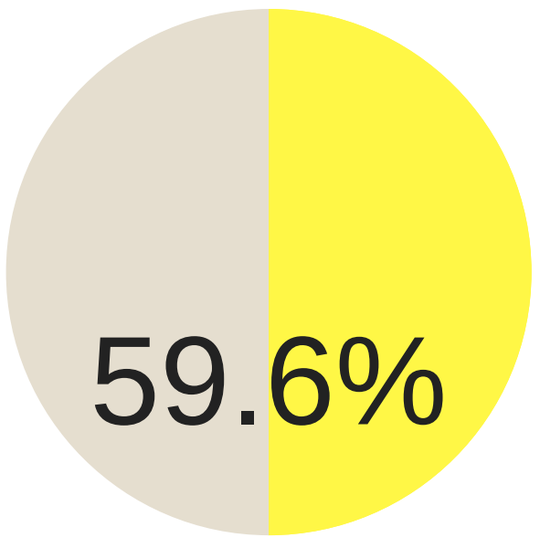
CHAPTER 11

ANALYSIS OF WASTE QUANTITIES GENERATED

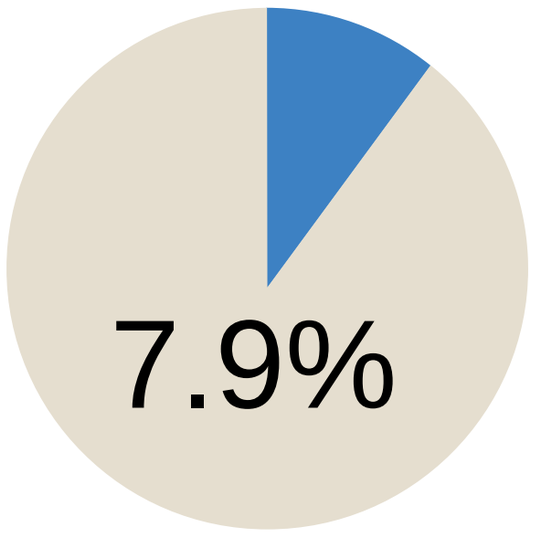
As per Chapter 9B, all Health Care Facilities need to record the quantum of waste generated as per Color Type. To ensure that the HCF is not generating excess quantum of biomedical waste and to confirm that no municipal waste is being mixed with biomedical waste, a benchmark has been notified by the Indian Medical Association (IMA) – extract enclosed as Annexure 16

A. Treatment Analysis by the Operator

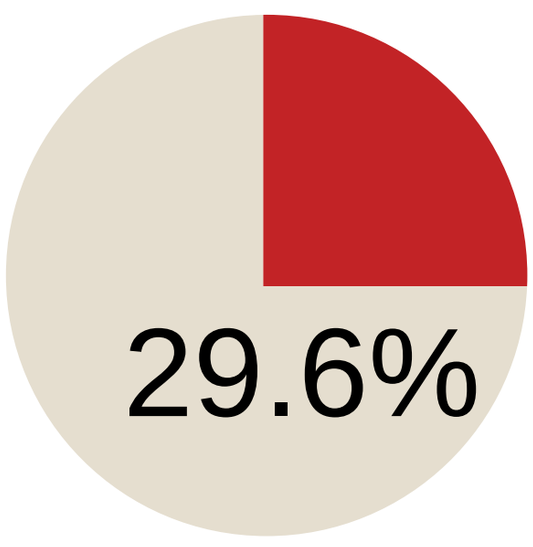
The Operators in Delhi conducted a study to ascertain the quantum of Biomedical Waste generated by Colour Type. As per the Analysis it is found that on an average: 10% +/-



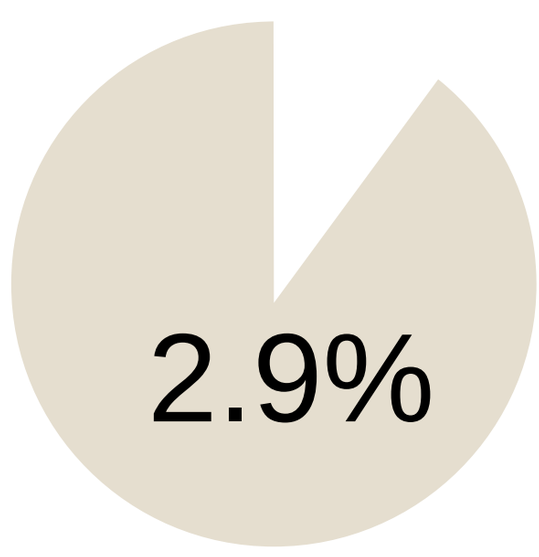
Incinerable



Glassware



Autoclavable



Sharps

B. Benchmark IMA Standard:

i. Daily - Grams per Bed:

1. Yellow - 149
2. Red - 74
3. Blue – 20
4. White – 07

Total = 250 Grams per bed per Day

ii. Monthly - Kg per Bed :

1. Yellow - 4.47
2. Red - 2.22
3. Blue – 0.59
4. White – 0.21

Total = 7.5 Kg per bed per Month

iii. Yearly - Kg per Bed:

1. Yellow - 53.68
2. Red - 26.68
3. Blue – 7.07
4. White – 2.57

Total = 90 Kg per bed per Year

C. Deviation Correction:

On the principle of "Polluter Pays" if the total quantum of waste calculated on a per bed per day / month basis is more than IMA standard, the total cost of treatment by the Operator will increase and eventually cost passed on to the Occupier. It is therefore suggested that the Occupier ensures proper segregation of waste as well as keep a track of the total quantum of biomedical waste is as per IMA standard. Occupier to also check on a periodical basis and ensure that no municipal waste is being mixed with Biomedical waste to keep service charges are within the waste limit.

D. Generation Analysis of Biomedical Waste:

The Operators in Delhi conducted an analysis on an average the quantum of waste collected by all the hospitals that have 100 beds or more and the quantum per bed per day / month. The analysis is enclosed as Annexure 17.

CHAPTER 12

DISPUTE REDRESSAL

"To ensure that the Operator is providing proper services it is imperative that the Occupier pays the service charge in full as per the invoice amount raised by the Operator. A disruption in pick up of waste due to payment related issues will be dealt very severely against both the Operator and Occupier."

A. Timely Payments

The Occupier must within the stipulated time as per the Waste services agreement i.e. 15 day period, pay the Operator in full by Cheque or RTGS/NEFT bank transfer. No Cash Payment will be allowed. In case of Non-Payment, the Operator will inform the Occupier in a preset format and send a:

i. Reminder Notice

If the payment is not received within first 15 days of raising the invoice, the Operator will give another 7 day grace period for payment.

ii. Final Reminder Notice

1. If the payment is not received within 7 day grace period, the Operator will give another 7 day grace period form the date of the Reminder Notice for payment against services.

2. An intimation letter will be sent to DPCC in a preset format for which DPCC may take appropriate action as required.

iii. Termination of Services Notice

On expiry of the 7 day grace from the Final Reminder Notice, if full payment has not been made, the Operator will send a Termination of Service Notice to the Occupier in a preset format with a copy to DPCC.

B. Action on Operator for Pick Up Related Violations

The Operator must within the stipulated time as per the Waste services agreement collect the waste generated by the Occupier. In case of Non-Collection the Occupier will inform the Operator in a preset format by sending a:

i. Reminder Notice

1. If the waste has not been picked up by the Operator within 24 hours of the notice.

ii. Final Reminder Notice

The Operator does not do collection after a reminder then, the Occupier will give a Final Reminder Notice and an intimation letter will be sent to DPCC in a preset format for which DPCC may take action as required.

C. Formats

1. Reminder Notice from Operator to Occupier - Enclosed as Annexure 18

2. Final Reminder Notice from Operator to Occupier Enclosed as Annexure 19

3. Termination Notice from Operator to Occupier Enclosed as Annexure 20

4. Reminder Notice from Occupier to Operator Enclosed as Annexure 21

5. Final Reminder Notice from Occupier to Operator Enclosed as Annexure 22

CHAPTER 13

PENAL PROVISIONS FOR NON-COMPLIANCE

All people handling Biomedical waste need to strictly follow the colour coding segregation rules. Improper segregation of waste may increase the chance for infection and cross contamination. The Occupier has the responsibility to train, guide and help the health care facility and workers to achieve 100% segregation of waste. In case of violation of the segregation rules by the health care facility, the Operator must inform the Management of the HCF and the DPCC regarding the same. The case where waste material is found in a wrong bag, box, container and bin:

A. At the Point of Generation

The Operator's representative must intimate the biomedical waste in-charge regarding improper segregation at the time of generation if any so that corrective action may be taken before waste leaves the HCF. Corrective action needs to be taken by the Occupiers representative immediately on intimation by the Operators representative.

B. At the Point of Collection

The Operator's representative must intimate the biomedical waste in-charge regarding improper segregation at the time of collection if any so that corrective action may be taken before waste leaves the HCF. Action needs to be taken by the Occupiers representative immediately on intimation by the Operators representative.

C. At the Point of Reception and Treatment

The Operator must intimate the biomedical waste in-charge, management personnel of the HCF and the DPCC regarding improper segregation at the time of reception at the Operators facility. Photographs of the waste and the Barcode number needs to be provided so that the Occupier can take preventive action and DPCC can take appropriate action under the BMW Rules 2016. Corrective action needs to be done prior to waste reception by the Operator facility so as to avoid penalty on HCF.

D. Penal Provisions as per Biomedical Waste Management Rules, 2016

Failure to comply with the provisions of the Rules, will attract penal action as per the provisions of Environment (Protection) Act, 1986, which includes imprisonment for a period of 5 years or a fine of Rs. 1 Lac or both.

E. Appeal Against Order passed by Prescribed Authority

Any person aggrieved by an order made by the prescribed authority under clause 16 of the BMW Rules 2016 may, within a period of 30 days from the date on which the order is communicated to him, prefer an appeal in Form V to the Secretary (Environment) of the State Government or Union territory administration.

Form V enclosed as Annexure 23.

CHAPTER 14

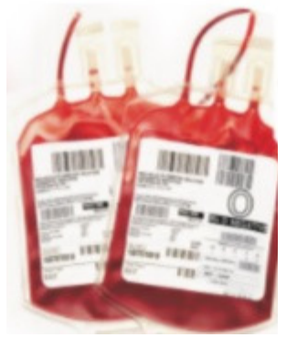
ENVIRONMENT FRIENDLY MATERIALS

The New Rules have called for the phasing out of materials containing Chlorine. Chlorine at the time of incineration release harmful gases causing immense environmental damage. Some of the items containing chlorine are as follows:

A. Products

Some chlorinated products which are used by HCFs are:

i. Blood Bags

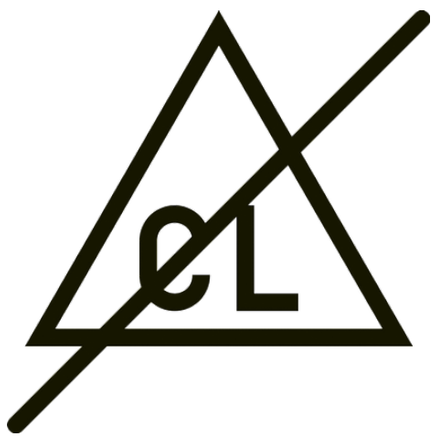


ii. Gloves

iii. Plastic Bags

B. Materials

The Materials that the HCF needs to look out for while purchasing non-chlorinated material should have the following markings:



i. Chlorine Free

ii. LDPE

iii. PP

iv. HDPE

v. PET

vi. BIS

vii. 100% Virgin

CHAPTER 15

TRAINING ON HANDLING BIOMEDICAL WASTE

On-Site and Off-site training needs to be provided to all individuals who come in contact with biomedical waste and to the people before their induction into the HCF. Periodical training needs to be imparted to all to keep them abreast above changes to the Rules, Guidelines and Standard Operating Procedures. A training video needs to be made by the Operators and the link circulated to the biomedical waste incharges and management personnel of the HCF. The HCF should on their audio visual network run the film so that all persons visiting the HCF are aware of biomedical waste and the segregation procedure. The list of the people who need mandatory training include:

A. Biomedical waste In-charges

B. Doctors

C. Nurses

D. Paramedics/ Technicians/ Allied Health Workers

E. Biomedical Waste Handling Workers

F. Management Personnel of the HCF

CHAPTER 16

OCCUPATIONAL HEALTH & SAFETY

Each Health Care Facility needs to follow OH&S rules and guidelines time to time. Handling of Chemicals and Materials depend upon the type of services in the HCF. Immunisation of the health care workers need to be undertaken as per their work profile. As a standard basic safety measures need to be incorporated in the training of the staff involved in biomedical waste management. This includes.

A. Work Zone Safety

i. Fire Safety Measures

ii. Electrical

B. Chemical Safety

i. Type of Chemicals

ii. Quantities Used

iii. Composition

1. Mercury

2. Sodium Hypo Chloride

C. Radioactive Material Safety

i. Disposal of Waste

D. Pathology/ Lab Reagents Disposal

i. Type of Reagents

ii. Chemical Composition

iii. Spent Reagent Containers

E. Immunisation of BMW Health Workers

i. Basic Immunisation

1. Tetanus,
2. Hepatitis B.

ii. Status of Health Records should be related to the type of activity

1. BMW Worker
   a. X-Ray Chest
   b. CBC
   c. Urine Routine
   d. Culture Profile

2. Nurse
   a. X-Ray Chest
   b. CBC
   c. Urine Routine

3. Lab Technician
   a. X-Ray Chest
   b. CBC
   c. Urine Routine

iii. Exposure Safety Measures & Precautions need to be maintained as per the chemical or equipment manufacturers guidelines.

iv. Use of Personal Protective Equipment

1. Masks

2. Gloves

3. Heavy Duty Equipment for BMW workers

4. Gum Boots

5. Eye Goggles

6. Face Shield

7. Aprons

8. Hair Net/ Cap

CHAPTER 17

ACCIDENT REPORTING

All Accidents and Incidents need to be reported by the Occupier and Operator in a pre-set format. Form I as per the Rules - enclosed as Annexure 24 will be used for accident reporting of the following:

a. Spillage from Bags

b. Accident of Vehicle

c. Fire

d. Blast

CHAPTER 18

OCCUPIERS CONTACT INFORMATION

"Due to the infectious nature of the waste it is important to have all the Occupiers contact details available with the Operator. Biomedical Waste Incharge and Management Personnel of the HCF are to be contacted in case of any emergency. The contact information need to be a part of the "Waste Acceptance and Service Agreement" under title "Contact Information" with the below details:

A. Contact Information

i. Management of the HCF

1. Name:
2. Designation:
3. Mobile:
4. Landline:
5. Email:

ii. BMW Incharge of the HCF

1. Name:
2. Designation:
3. Mobile:
4. Landline:
5. Email:

CHAPTER 19

OPERATORS CONTACT INFORMATION

In Delhi there are two Common Biomedical Waste Treatment Facilities providing services to all the clinical establishments generating Biomedical Waste. "Due to the infectious nature of the waste it is important that the Occupier keeps the contact details of the Operators Representatives, Managerial staff and Management in case of any emergency. The below contact information need to be a part of the “Waste Acceptance and Service Agreement" under title “Contact Information” with the below details:"

A. Contact Information

i. Management of the Operator

1. Name:
2. Designation:
3. Mobile:
4. Landline:
5. Email:

B. Operators

i. SMS WATER GRACE BMW PVT. LTD.

ADDRESS:

DELHI JAL BOARD, SEWAGE TREATMENT PLANT-NILOTHI, NEW DELHI-110041

CONTACT NO:

08744076001, 08744076032, 08744076042

EMAIL ID:

PRABAL.SINGH@SMSL.CO.IN,

PIYUSH.GAIROLA@SMSL.CO.IN,

WEBSITE:

WWW.SMSBMW.IN

DISTRICTS ALLOCATED BY DPCC:

WEST, SOUTH WEST, CENTRAL, EAST, NORTH EAST, SHAHADRA

ii. BIOTIC WASTE SOLUTIONS PVT. LTD.

ADDRESS:

46-47, SSI INDUSTRIAL AREA, GT KARNAL ROAD, NEW DELHI - 110033

CONTACT NO:

011-47528106, 07

EMAIL ID:

INFO@BIOTIC.CO.IN

WEBSITE:

WWW.BIOTIC.CO.IN

DISTRICTS ALLOCATED BY DPCC:

NORTH, NOTH WEST, NEW DELHI, SOUTH, SOUTH EAST

CHAPTER 18

ANNEXURES

Annexure 1: Biomedical Waste Rules, 2016

[Published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i)]

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 28th March, 2016

G.S.R. 343(E).-Whereas the Bio-Medical Waste (Management and Handling) Rules, 1998 was published *vide* notification number S.O. 630 (E) dated the 20th July, 1998, by the Government of India in the erstwhile Ministry of Environment and Forests, provided a regulatory frame work for management of bio-medical waste generated in the country;

And whereas, to implement these rules more effectively and to improve the collection, segregation, processing, treatment and disposal of these bio-medical wastes in an environmentally sound management thereby, reducing the bio- medical waste generation and its impact on the environment, the Central Government reviewed the existing rules;

And whereas, in exercise of the powers conferred by sections 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government published the draft rules in the Gazette vide number G.S.R. 450 (E), dated the 3rd June, 2015 inviting objections or suggestions from the public within sixty days from the date on which copies of the Gazette containing the said notification were made available to the public;

And whereas, the copies of the Gazette containing the said draft rules were made available to the public on the 3rd June, 2015;

And whereas, the objections or comments received within the specified period from the public in respect of the said draft rules have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by section 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), and in supersession of the Bio-Medical Waste (Management and Handling) Rules, 1998, except as respects things done or omitted to be done before such suppression, the Central Government hereby makes the following rules, namely:-

1. **Short title and commencement.-** (1) these rules may be called the Bio-Medical Waste Management Rules, 2016.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. **Application.-**

(1) These rules shall apply to all persons who generate, collect, receive, store, transport, treat, dispose, or handle bio medical waste in any form including hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories, blood banks, ayush

hospitals, clinical establishments, research or educational institutions, health camps, medical or surgical camps, vaccination camps, blood donation camps, first aid rooms of schools, forensic laboratories and research labs.

(2). These rules shall not apply to,-

(a) radioactive wastes as covered under the provisions of the Atomic Energy Act, 1962(33 of 1962) and the rules made there under;

(b) hazardous chemicals covered under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 made under the Act;

(c) solid wastes covered under the Municipal Solid Waste (Management and Handling) Rules, 2000 made under the Act;

(d) the lead acid batteries covered under the Batteries (Management and Handling) Rules, 2001 made under the Act;

(e) hazardous wastes covered under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 made under the Act;

(f) waste covered under the e-Waste (Management and Handling) Rules, 2011 made under the Act; and

(g) hazardous micro organisms, genetically engineered micro organisms and cells covered under the Manufacture, Use, Import, Export and Storage of Hazardous Microorganisms, Genetically Engineered Micro organisms or Cells Rules, 1989 made under the Act.

3. **Definitions.-** In these rules, unless the context otherwise requires, -

(a) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);

(b) "animal house" means a place where animals are reared or kept for the purpose of experiments or testing;

(c) "authorisation" means permission granted by the prescribed authority for the generation, collection, reception, storage, transportation, treatment, processing, disposal or any other form of handling of bio-medical waste in accordance with these rules and guidelines issued by the Central Government or Central Pollution Control Board as the case may be;

(d) "authorised person" means an occupier or operator authorised by the prescribed authority to generate, collect, receive, store, transport, treat, process, dispose or handle bio-medical waste in accordance with these rules and the guidelines issued by the Central Government or the Central Pollution Control Board, as the case may be;

(e) "biological" means any preparation made from organisms or micro-organisms or product of metabolism and biochemical reactions intended for use in the diagnosis, immunisation or the treatment of human beings or animals or in research activities pertaining thereto;

(f) "bio-medical waste" means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps, including the categories mentioned in Schedule I appended to these rules;

(g) "bio-medical waste treatment and disposal facility" means any facility wherein treatment, disposal of bio-medical waste or processes incidental to such treatment and disposal is carried out, and includes common bio-medical waste treatment facilities;

(h) "Form" means the Form appended to these rules;

(i) "handling" in relation to bio-medical waste includes the generation, sorting, segregation, collection, use, storage, packaging, loading, transportation, unloading, processing, treatment, destruction, conversion, or offering for sale, transfer, disposal of such waste;

(j) "health care facility" means a place where diagnosis, treatment or immunisation of human beings or animals is provided irrespective of type and size of health treatment system, and research activity pertaining thereto;

(k) "major accident" means accident occurring while handling of bio-medical waste having potential to affect large masses of public and includes toppling of the truck carrying bio-medical waste, accidental release of bio-medical waste in any water body but exclude accidents like needle prick injuries, mercury spills;

(l) "management" includes all steps required to ensure that bio- medical waste is managed in such a manner as to protect health and environment against any adverse effects due to handling of such waste;

(m) "occupier" means a person having administrative control over the institution and the premises generating bio-medical waste, which includes a hospital, nursing home, clinic, dispensary, veterinary institution, animal house, pathological laboratory, blood bank, health care facility and clinical establishment, irrespective of their system of medicine and by whatever name they are called;

(n) "operator of a common bio-medical waste treatment facility" means a person who owns or controls a Common Bio-medical Waste Treatment Facility (CBMWTF) for the collection, reception, storage, transport, treatment, disposal or any other form of handling of bio-medical waste;

(o) "prescribed authority" means the State Pollution Control Board in respect of a State and Pollution Control Committees in respect of an Union territory;

(p) "Schedule" means the Schedule appended to these rules.

4. **Duties of the Occupier.-** It shall be the duty of every occupier to-

(a) take all necessary steps to ensure that bio-medical waste is handled without any adverse effect to human health and the environment and in accordance with these rules;

(b) make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner as specified in Schedule I, to ensure that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed in these rules to the common bio-medical waste treatment facility or for the appropriate treatment and disposal, as the case may be, in the manner as prescribed in Schedule I;

(c) pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilisation on-site in the manner as prescribed by the World Health Organisation (WHO) or National AIDs Control Organisation (NACO) guidelines and then sent to the common bio-medical waste treatment facility for final disposal;

(d) phase out use of chlorinated plastic bags, gloves and blood bags within two years from the date of notification of these rules;

(e) dispose of solid waste other than bio-medical waste in accordance with the provisions of respective waste management rules made under the relevant laws and amended from time to time;

(f) not to give treated bio-medical waste with municipal solid waste;

(g) provide training to all its health care workers and others, involved in handling of bio medical waste at the time of induction and thereafter at least once every year and the details of training programmes conducted, number of personnel trained and number of personnel not undergone any training shall be provided in the Annual Report;

(h) immunise 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, in the manner as prescribed in the National Immunisation Policy or the guidelines of the Ministry of Health and Family Welfare issued from time to time;

(i) establish a Bar- Code System for bags or containers containing bio-medical waste to be sent out of the premises or place for any purpose within one year from the date of the notification of these rules;

(j) ensure segregation of liquid chemical waste at source and ensure pre-treatment or neutralisation prior to mixing with other effluent generated from health care facilities;

(k) ensure treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);

(l) ensure occupational safety of all its health care workers and others involved in handling of bio-medical waste by providing appropriate and adequate personal protective equipments;

(m) conduct health check up at the time of induction and at least once in a year for all its health care workers and others involved in handling of bio- medical waste and maintain the records for the same;

(n) maintain and update on day to day basis the bio-medical waste management register and display the monthly record on its website according to the bio-medical waste generated in terms of category and colour coding as specified in Schedule I;

(o) report major accidents including accidents caused by fire hazards, blasts during handling of bio-medical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I to the prescribed authority **and also** along with the annual report;

(p) make available the annual report on its web-site and all the health care facilities shall make own website within two years from the date of notification of these rules;

(q) inform the prescribed authority immediately in case the operator of a facility does not collect the bio-medical waste within the intended time or as per the agreed time;

(r) establish a system to review and monitor the activities related to bio-medical waste management, either through an existing committee or by forming a new committee and the Committee shall meet once in every six months and the record of the minutes of the meetings of this committee shall be submitted along with the annual report to the prescribed authority and the healthcare establishments having less than thirty beds shall designate a qualified person to review and monitor the activities relating to bio-medical waste management within that establishment and submit the annual report;

(s) maintain all record for operation of incineration, hydro or autoclaving etc., for a period of five years;

(t) existing incinerators to achieve the standards for treatment and disposal of bio-medical waste as specified in Schedule II for retention time in secondary chamber and Dioxin and Furans within two years from the date of this notification.

5. **Duties of the operator of a common bio-medical waste treatment and disposal facility.-**It shall be the duty of every operator to -

(a) take all necessary steps to ensure that the bio-medical waste collected from the occupier is transported, handled, stored, treated and disposed of, without any adverse effect to the human health and the environment, in accordance with these rules and guidelines issued by the Central Government or, as the case may be, the central pollution control board from time to time;

(b) ensure timely collection of bio-medical waste from the occupier as prescribed under these rules;

(c) establish bar coding and global positioning system for handling of bio- medical waste within one year;

(d) inform the prescribed authority immediately regarding the occupiers which are not handing over the segregated bio-medical waste in accordance with these rules;

(e) provide training for all its workers involved in handling of bio-medical waste at the time of induction and at least once a year thereafter;

(f) assist the occupier in training conducted by them for bio-medical waste management;

(g) undertake appropriate medical examination at the time of induction and at least once in a year and immunise all its workers involved in handling of bio-medical waste for protection against diseases, including Hepatitis B and Tetanus, that are likely to be transmitted while handling bio-medical waste and maintain the records for the same;

(h) ensure occupational safety of all its workers involved in handling of bio-medical waste by providing appropriate and adequate personal protective equipment;

(i) report major accidents including accidents caused by fire hazards, blasts during handling of bio-medical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I to the prescribed authority **and also** along with the annual report;

(i) maintain a log book for each of its treatment equipment according to weight of batch; categories of waste treated; time, date and duration of treatment cycle and total hours of operation;

(k) allow occupier , who are giving waste for treatment to the operator, to see whether the treatment is carried out as per the rules;

(l) shall display details of authorisation, treatment, annual report etc on its web-site;

(m) after ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated bio-medical wastes such as plastics and glass, shall be given to recyclers having valid consent or authorisation or registration from the respective State Pollution Control Board or Pollution Control Committee;

(n) supply non-chlorinated plastic coloured bags to the occupier on chargeable basis, if required;

(o) common bio-medical waste treatment facility shall ensure collection of biomedical waste on holidays also;

(p) maintain all record for operation of incineration, hydroor autoclaving for a period of five years; and

(q) upgrade existing incinerators to achieve the standards for retention time in secondary chamber and Dioxin and Furans within two years from the date of this notification.

6. **Duties of authorities.-**The Authority specified in column (2) of Schedule-III shall perform the duties as specified in column (3) thereof in accordance with the provisions of these rules.

7. Treatment and disposal.- (1) Bio-medical waste shall be treated and disposed of in accordance with Schedule I, and in compliance with the standards provided in Schedule-II by the health care facilities and common bio-medical waste treatment facility.

(2) Occupier shall hand over segregated waste as per the Schedule-I to common bio-medical waste treatment facility for treatment, processing and final disposal:

Provided that the lab and highly infectious bio-medical waste generated shall be pre-treated by equipment like autoclave or microwave.

(3) 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 kilometer.

(4) In cases where service of the common bio-medical waste treatment facility is not available, the Occupiers shall set up requisite biomedical waste treatment equipment like incinerator, autoclave or microwave, shredder prior to commencement of its operation, as per the authorisation given by the prescribed authority.

(5) Any person including an occupier or operator of a common bio medical waste treatment facility, intending to use new technologies for treatment of bio medical waste other than those listed in Schedule I shall request the Central Government for laying down the standards or operating parameters.

(6) On receipt of a request referred to in sub-rule (5), the Central Government may determine the standards and operating parameters for new technology which may be published in Gazette by the Central Government.

(7) Every operator of common bio-medical waste treatment facility shall set up requisite biomedical waste treatment equipments like incinerator, autoclave or microwave, shredder and effluent treatment plant as a part of treatment, prior to commencement of its operation.

(8) Every occupier shall phase out use of non-chlorinated plastic bags within two years from the date of publication of these rules and after two years from such publication of these rules, the chlorinated plastic bags shall not be used for storing and transporting of bio-medical waste and the occupier or operator of a common bio-medical waste treatment facility shall not dispose of such plastics by incineration and the bags used for storing and transporting biomedical waste shall be in compliance with the Bureau of Indian Standards. Till the Standards are published, the carry bags shall be as per the Plastic Waste Management Rules, 2011.

(9) After ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated bio-medical wastes such as plastics and glass shall be given to such recyclers having valid authorisation or registration from the respective prescribed authority.

(10) The Occupier or Operator of a common bio-medical waste treatment facility shall maintain a record of recyclable wastes referred to in sub-rule (9) which are auctioned or sold and the same shall be submitted to the prescribed authority as part of its annual report. The record shall be open for inspection by the prescribed authorities.

(11) The handling and disposal of all the mercury waste and lead waste shall be in accordance with the respective rules and regulations.

8. Segregation, packaging, transportation and storage.-(1) No untreated bio-medical waste shall be mixed with other wastes.

(2) The bio-medical waste shall be segregated into containers or bags at the point of generation in accordance with Schedule I prior to its storage, transportation, treatment and disposal.

(3) The containers or bags referred to in sub-rule (2) shall be labeled as specified in Schedule IV.

(4) Bar code and global positioning system shall be added by the Occupier and common bio-medical waste treatment facility in one year time.

(5) The operator of common bio-medical waste treatment facility shall transport the bio-medical waste from the premises of an occupier to any off-site bio-medical waste treatment facility only in the vehicles having label as provided in part 'A' of the Schedule IV along with necessary information as specified in part 'B' of the Schedule IV.

(6) The vehicles used for transportation of bio-medical waste shall comply with the conditions if any stipulated by the State Pollution Control Board or Pollution Control Committee in addition to the requirement contained in the Motor Vehicles Act, 1988 (59 of 1988), if any or the rules made there under for transportation of such infectious waste.

(7) Untreated human anatomical waste, animal anatomical waste, soiled waste and, biotechnology waste shall not be stored beyond a period of forty –eight hours:

Provided that in case for any reason it becomes necessary to store such waste beyond such a period, the occupier shall take appropriate measures to ensure that the waste does not adversely affect human health and the environment and inform the prescribed authority along with the reasons for doing so.

(8) Microbiology waste and all other clinical laboratory waste shall be pre-treated by sterilisation to Log 6 or disinfection to Log 4, as per the World Health Organisation guidelines before packing and sending to the common bio-medical waste treatment facility.

9. **Prescribed authority.-**(1) The prescribed authority for implementation of the provisions of these rules shall be the State Pollution Control Boards in respect of States and Pollution Control Committees in respect of Union territories.

(2) The prescribed authority for enforcement of the provisions of these rules in respect of all health care establishments including hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories and blood banks of the Armed Forces under the Ministry of Defence shall be the Director General, Armed Forces Medical Services, who shall function under the supervision and control of the Ministry of Defence.

(3) The prescribed authorities shall comply with the responsibilities as stipulated in Schedule III of these rules.

10. Procedure for authorisation.-Every occupier or operator handling bio-medical waste, irrespective of the quantity shall make an application in Form II to the prescribed authority i.e. State Pollution Control Board and Pollution Control Committee, as the case may be, for grant of authorisation and the prescribed authority shall grant the provisional authorisation in Form III and the validity of such authorisation for bedded health care facility and operator of a common facility shall be synchronised with the validity of the consents.

(1) The authorisation shall be one time for non-bedded occupiers and the authorisation in such cases shall be deemed to have been granted, if not objected by the prescribed authority within a period of ninety days from the date of receipt of duly completed application along with such necessary documents.

(2) In case of refusal of renewal, cancellation or suspension of the authorisation by the prescribed authority, the reasons shall be recorded in writing:

Provided that the prescribed authority shall give an opportunity of being heard to the applicant before such refusal of the authorisation.

(3) Every application for authorisation shall be disposed of by the prescribed authority within a period of ninety days from the date of receipt of duly completed application along with such necessary documents, failing which it shall be deemed that the authorisation is granted under these rules.

(4) In case of any change in the bio-medical waste generation, handling, treatment and disposal for which authorisation was earlier granted, the occupier or operator shall intimate to the prescribed authority about the change or variation in the activity and shall submit a fresh application in Form II for modification of the conditions of authorisation.

11. **Advisory Committee**.-(1) Every State Government or Union territory Administration shall constitute an Advisory Committee for the respective State or Union territory under the chairmanship of the respective health secretary to oversee the implementation of the rules in the respective state and to advice any improvements and the Advisory Committee shall include representatives from the Departments of Health, Environment, Urban Development, Animal Husbandry and Veterinary Sciences of that State Government or Union territory Administration, State Pollution Control Board or Pollution Control Committee, urban local bodies or local bodies or Municipal Corporation, representatives from Indian Medical Association, common bio-medical waste treatment facility and non-governmental organisation.

(2) Notwithstanding anything contained in sub-rule (1), the Ministry of Defence shall constitute the Advisory Committee (Defence) under the chairmanship of Director General of Health Services of Armed Forces consisting of representatives from the Ministry of Defence, Ministry of Environment, Forest and Climate Change, Central Pollution Control Board, Ministry of Health and Family Welfare, Armed Forces Medical College or Command Hospital.

(3) The Advisory Committee constituted under sub-rule (1) and (2) shall meet at least once in six months and review all matters related to implementation of the provisions of these rules in the State and Armed Forces Health Care Facilities, as the case may be.

(4) The Ministry of Health and Defence may co-opt representatives from the other Governmental and non-governmental organisations having expertise in the field of bio-medical waste management.

12. **Monitoring of implementation of the rules in health care facilities.-** (1) The Ministry of Environment, Forest and Climate Change shall review the implementation of the rules in the country once in a year through the State Health Secretaries and Chairmen or Member Secretary of State Pollution Control Boards and Central Pollution Control Board and the Ministry may also invite experts in the field of bio-medical waste management, if required.

(2) The Central Pollution Control Board shall monitor the implementation of these rules in respect of all the Armed Forces health care establishments under the Ministry of Defence.

(3) The Central Pollution Control Board along with one or more representatives of the Advisory Committee constituted under sub-rule (2) of rule 11, may inspect any Armed Forces health care establishments after prior intimation to the Director General Armed Forces Medical Services.

(4) Every State Government or Union territory Administration shall constitute District Level Monitoring Committee in the districts under the chairmanship of District Collector or District Magistrate or Deputy Commissioner or Additional District Magistrate to monitor the compliance of the provisions of these rules in the health care facilities generating bio-medical waste and in the common bio-medical waste treatment and disposal facilities, where the bio-medical waste is treated and disposed of.

(5) The District Level Monitoring Committee constituted under sub-rule (4) shall submit its report once in six months to the State Advisory Committee and a copy thereof shall also be forwarded to State Pollution Control Board or Pollution Control Committee concerned for taking further necessary action.

(6) The District Level Monitoring Committee shall comprise of District Medical Officer or District Health Officer, representatives from State Pollution Control Board or Pollution Control Committee, Public Health Engineering Department, local bodies or municipal corporation, Indian Medical Association, common bio-medical waste treatment facility and registered non-governmental organisations working in the field of bio-medical waste management and the Committee may co-opt other members and experts, if necessary and the District Medical Officer shall be the Member Secretary of this Committee.

13. **Annual report.-**(1) Every occupier or operator of common bio-medical waste treatment facility shall submit an annual report to the prescribed authority in Form-IV, on or before the 30th June of every year.

(2) The prescribed authority shall compile, review and analyse the information received and send this information to the Central Pollution Control Board on or before the 31st July of every year.

(3) The Central Pollution Control Board shall compile, review and analyse the information received and send this information, along with its comments or suggestions or observations to the Ministry of Environment, Forest and Climate Change on or before 31st August every year.

(4) The Annual Reports shall also be available online on the websites of Occupiers, State Pollution Control Boards and Central Pollution Control Board.

14. Maintenance of records.- (1) Every authorised person shall maintain records related to the generation, collection, reception, storage, transportation, treatment, disposal or any other form of handling of bio-medical waste, for a period of five years, in accordance with these rules and guidelines issued by the Central Government or the Central Pollution Control Board or the prescribed authority as the case may be.

(2) All records shall be subject to inspection and verification by the prescribed authority or the Ministry of Environment, Forest and Climate Change at any time.

15. **Accident reporting.-** (1) In case of any major accident at any institution or facility or any other site while handling bio-medical waste, the authorised person shall intimate immediately to the prescribed authority about such accident and forward a report within twenty-four hours in writing regarding the remedial steps taken in Form I.

(2) Information regarding all other accidents and remedial steps taken shall be provided in the annual report in accordance with rule 13 by the occupier.

16. **Appeal.-**(1) Any person aggrieved by an order made by the prescribed authority under these rules may, within a period of thirty days from the date on which the order is communicated to him, prefer an appeal in Form V to the Secretary (Environment) of the State Government or Union territory administration .

(2) Any person aggrieved by an order of the Director General Armed Forces Medical Services under these rules may, within thirty days from the date on which the order is communicated to him, prefer an appeal in Form V to the Secretary, Ministry of Environment, Forest and Climate Change.

(3) The authority referred to in sub-para (1) and (2) as the case may be, may entertain the appeal after the expiry of the said period of thirty days, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(4) The appeal shall be disposed of within a period of ninety days from the date of its filing.

17. **Site for common bio-medical waste treatment and disposal facility.-**(1) Without prejudice to rule 5 of these rules, the department in the business allocation of land assignment shall be responsible for providing suitable site for setting up of common biomedical waste treatment and disposal facility in the State Government or Union territory Administration.

(2) The selection of site for setting up of such facility shall be made in consultation with the prescribed authority, other stakeholders and in accordance with guidelines published by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board.

18. **Liability of the occupier, operator of a facility**.- (1) The occupier or an operator of a common bio-medical waste treatment facility shall be liable for all the damages caused to the environment or the public due to improper handling of bio- medical wastes.

(2) The occupier or operator of common bio-medical waste treatment facility shall be liable for action under section 5 and section 15 of the Act, in case of any violation.

Part -2

(1) All plastic bags shall be as per BIS standards as and when published, till then the prevailing Plastic Waste Management Rules shall be applicable.

(2) Chemical treatment using at least 10% Sodium Hypochlorite having 30% residual chlorine for twenty minutesor any other equivalent chemical reagent that should demonstrate $Log_{10}4$ reduction efficiency for microorganisms as given in Schedule- III.

(3) Mutilation or shredding must be to an extent to prevent unauthorized reuse.

(4) There will be no chemical pretreatment before incineration, except for microbiological, lab and highly infectious waste.

(5) Incineration ash (ash from incineration of any bio-medical waste) shall be disposed through hazardous waste treatment, storage and disposal facility, if toxic or hazardous constituents are present beyond the prescribed limits as given in the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 or as revised from time to time.

(6) Dead Fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time) can be considered as human anatomical waste. Such waste should be handed over to the operator of common bio-medical waste treatment and disposal facility in yellow bag with a copy of the official Medical Termination of Pregnancy certificate from the Obstetrician or the Medical Superintendent of hospital or healthcare establishment.

(7) Cytotoxic drug vials shall not be handed over to unauthorised person under any circumstances. These shall be sent back to the manufactures for necessary disposal at a single point. As a second option, these may be sent for incineration at common bio-medical waste treatment and disposal facility or TSDFs or plasma pyrolys is at temperature >1200 ^{0}C.

(8) Residual or discarded chemical wastes, used or discarded disinfectants and chemical sludge can be disposed at hazardous waste treatment, storage and disposal facility. In such case, the waste should be sent to hazardous waste treatment, storage and disposal facility through operator of common bio-medical waste treatment and disposal facility only.

(9) On-site pre-treatment of laboratory waste, microbiological waste, blood samples, blood bags should be disinfected or sterilized as per the Guidelines of World Health Organisation or National AIDS Control Organisation and then given to the common bio-medical waste treatment and disposal facility.

(10) Installation of in-house incinerator is not allowed. However in case there is no common biomedical facility nearby, the same may be installed by the occupier after taking authorisation from the State Pollution Control Board.

(11) Syringes should be either mutilated or needles should be cut and or stored in tamper proof, leak proof and puncture proof containers for sharps storage. Wherever the occupier is not linked to a disposal facility it shall be the responsibility of the occupier to sterilize and dispose in the manner prescribed.

(12) Bio-medical waste generated in households during healthcare activities shall be segregated as per these rules and handed over in separate bags or containers to municipal waste collectors. Urban Local Bodies shall have tie up with the common bio-medical waste treatment and disposal facility to pickup this waste from the Material Recovery Facility (MRF) or from the house hold directly, for final disposal in the manner as prescribed in this Schedule.

Annexure 2: Form II of the BMW Rules 2016

FORM - II

(See rule10)

APPLICATION FOR AUTHORISATION OR RENEWAL OF AUTHORISATION

(To be submitted by occupier of health care facility or common bio-medical waste treatment facility)

To

The Prescribed Authority
(Name of the State or UT Administration)
Address.

1. Particulars of Applicant:

(i) Name of the Applicant:
(In block letters & in full)

(ii) Name of the health care facility (HCF) or common bio-medical waste treatment facility (CBWTF) :

(iii) Address for correspondence:

(iv) Tele No., Fax No.:

(v) Email:

(vi) Website Address:

2. Activity for which authorisation is sought:

Activity	Please tick
Generation, segregation	
Collection,	
Storage	
packaging	
Reception	
Transportation	
Treatment or processing or conversion	
Recycling	
Disposal or destruction	
use	
offering for sale, transfer	
Any other form of handling	

3. Application for □ fresh or □ renewal of authorisation (please tick whatever is applicable):

(i) Applied for CTO/CTE Yes/No

(ii) In case of renewal previous authorisation number and date:

(iii) Status of Consents:

(a) under the Water (Prevention and Control of Pollution) Act, 1974

(b) under the Air (Prevention and Control of Pollution) Act, 1981:

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4. (i) Address of the health care facility (HCF) or common bio-medical waste treatment facility (CBWTF):

(ii) GPS coordinates of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF):

5. Details of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF):

(i) Number of beds of HCF:

(ii) Number of patients treated per month by HCF:

(iii) Number healthcare facilities covered by CBMWTF: _____

(iv) No of beds covered by CBMWTF: _____

(v) Installed treatment and disposal capacity of CBMWTF:_____ Kg per day

(vi) Quantity of biomedical waste treated or disposed by CBMWTF:_____ Kg/ day

(vii) Area or distance covered by CBMWTF:_____

(pl. attach map a map with GPS locations of CBMWTF and area of coverage)

(viii) Quantity of Biomedical waste handled, treated or disposed:

Category	Type of Waste	Quantity Generated or Collected, kg/day	Method of Treatment and Disposal (Refer Schedule-I)
(1)	(2)	(3)	(4)
Yellow	(a) Human Anatomical Waste:		
	(b)Animal Anatomical Waste :		
	(c) Soiled Waste:		
	(d) Expired or Discarded Medicines:		
	(e) Chemical Solid Waste:		
	(f) Chemical Liquid Waste :		
	(g) Discarded linen, mattresses, beddings contaminated with blood or body fluid.		
	(h) Microbiology, Biotechnology and other clinical laboratory waste:		
Red	Contaminated Waste (Recyclable)		
White (Translucent)	Waste sharps including Metals:		
Blue	Glassware:		
	Metallic Body Implants		

6. Brief description of arrangements for handling of biomedical waste (attach details):

(i) Mode of transportation (if any) of bio-medical waste:

(ii) Details of treatment equipment (please give details such as the number, type & capacity of each unit)

	No of units	Capacity of each unit
Incinerators :		
Plasma Pyrolysis:		
Autoclaves:		
Microwave:		
Hydroclave:		
Shredder:		
Needle tip cutter or destroyer		
Sharps encapsulation or concrete pit:		
Deep burial pits:		
Chemical disinfection:		
Any other treatment equipment:		

7. Contingency plan of common bio-medical waste treatment facility (CBWTF)(attach documents):

8. Details of directions or notices or legal actions if any during the period of earlier authorisation

9. Declaration

I do hereby declare that the statements made and information given above are true to the best of my knowledge and belief and that I have not concealed any information.

I do also hereby undertake to provide any further information sought by the prescribed authority in relation to these rules and to fulfill any conditions stipulated by the prescribed authority.

Date : Signature of the Applicant

Place : Designation of the Applicant

Annexure 3: Orange Category Form

DELHI POLLUTION CONTROL COMMITTEE
4 FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-06
visit us at : http://www.dpcc.delhigovt.nic.in/indexdup.php

FORM NO.: .....
Received by .....
Date of issue .....

Common Application for Consent
Under Water (Prevention and Control of Pollution) Act, 1974 and Under Air
(Prevention and Control of Pollution) Act, 1981, as amended

ORANGE

From : Dated :

M/s .....

.....

.....

To,

The Member Secretary,
Delhi Pollution Control Committee,
4 Floor, I.S.B.T. Building,
Kashmere Gate, Delhi – 110006.

Sir/Madam,

I/W e hereby apply for *

(i) Consent to Establish/Operate/Renewal of Consent under section 25 and 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended.

(ii) Consent to Establish/Operate/Renewal of Consent under section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended.

Part A : General

1. Name, designation office address with Telephone, : fax numbers, e-mail of the applicant/ occupier/Institution/Local Body

2. (a) Name and address of the industrial unit/Project/premises for which the application is made. (with telephone fax numbers and e-mail) :

(b) Manufacturing activity :

(c) Status of the Unit : Owned Premises / On Rent

(d) Name and address of the premises owner (with telephone and fax number) :

(e) Name & Designation of the person authorized to sign this application form (The original authorization except in case of individual proprietary concern to be enclosed) :

(f) Latitude/Longitude of the premises of the unit :

3. Names, residence address with telephone and fax number of Managing Director/Managing Partner and officer responsible for matters connected with pollution control :

4. (a) Are you registered as a small scale Industrial Unit : Yes / No

(b) If yes, give the number and date of registration :

5. Gross capital investment (in Rs.) of the u n i t without depreciation till date of application (cost of building, land, plant and machinery) (To be supported by an Affidavit and: Certificate form a Charted Accountant. For proposed unit(s), give estimated figure) :

6. (a) Location of the Unit : Industrial Area/ Non Industrial Area

(b) If situated in industrial Area, details of CETP Society membership thereof. : Yes / No

(c) Whether total effluent / sewage from the unit is discharged into conveyance system leading to : CETP Yes / No

(d) Whether a copy of certificate for connection for discharge of total effluent / sewage into : conveyance system is enclosed.

7. (a) Total plot area of the unit (in sq. meter) :
   (b) Built-up area of the unit (in sq. meter) :
   (c) Date of possession of the land.
   (d) Date of commissioning of construction :
   (e) Date of completion / proposed date of Completion of construction. :
   (f) Status of Environment Clearance, under EIA notification (if applicable) :
   (g) Sanctioned Power Load (in KW) (Details of Electricity meter number and name of the of the person be indicated) :

8. Month and Year of Commencement of Production

   (a) Proposed Unit :
   (b) Existing Unit :

9. (a) Number of workers :
   (b) Number of employees (including workers and office staff) :

10. List of products and by-products manufactured in tones/month, Kl/month or numbers/month (Give figure corresponding to maximum installed production capacity (Separate sheet may be enclosed) :

11. List of raw materials and process chemicals with annual consumption corresponding to above stated production figures, in tones/month or kl/month or numbers/month (Separate sheet may be enclosed) :

12. Description of process of manufacture for each of the products (showing input, output, quality and quantity of solid, liquid and gaseous wastes, if any from each unit process) :
    (To be supported by flow sheet and/or water balance sheet)

Part B : Waste Water Aspects

13. Water consumption for different uses (litres/day)

   (a) Domestic purpose :
   (b) Industrial cooling or boiler feeds :
   (c) Processing whereby water gets polluted and the pollutants are easily bio-degradable. :
   (d) Processing whereby water gets polluted and the pollutants are not easily bio-degradable and are toxic.
   (e) Others such as agriculture, Gardening etc. (specify)

14. Source of water supply

   (a) Municipal Authority
   (details of water meter and name of the Person be indicated) : .....**Litres/Day**
   (b) Ground Water
   (details of CGWA/DJB/DC permission / registration) : .....**Litres/Day**

15. Quantity of waste water (effluent) generated
   (i) **Domestic** :
   (ii) **Industrial/Trade Effluent**
   (a) Process :
   (b) Washings :
   (c) Cooling Water Blowdown :
   (d) Boiler Blowdown :
   (e) DM Plant/Softening Plant washings :
   (f) Other :
   Total Industrial/Trade Effluent (litres/day):

---

16. Present treatment of trade effluent
(Give : sizes/capacities of treatment units).
(A schematic diagram of the treatment scheme with inlet/outlet characteristics of each unit operation/process is to be provided. Include details of residue management systems (ETP sludges)

17. Mode of disposal of treated effluents, with Respective quantity, Litres/Day
   i. Into public sewer/open drain/land for : irrigation/ inland surface water.
   ii. Quantity of treated effluent Reused/Recycled, : (litres/day). Details of reuse / recycle in cooling / flushing / gardening / manufacturing
   iii. Provide a location map of disposal : arrangement clearly indicating the outlet(s) for sampling

18. (a) Quality of Untreated/treated effluents (Specify : pH, SS, BOD and specific pollutant relevant to the industry. Refer Schedule-I for industry specific standards and Schedule-VI for General effluent standards of Environment Protection Rules, 1986, as amended to date)
+ :
(b) Enclose a copy of the latest Report of Analysis from the laboratory approved by Delhi Pollution Control Committee. For proposed unit furnish expected characteristics of the Untreated/treated effluent.

Part – C : Air Emission Aspects

19. Details of Stack (Process & Fuel Stacks)
   (a) Stack number(s) :
   (b) Attached to :
   (c) Capacity :
   (d) Fuel Type :
   (e) Fuel Quantity (Kg/hr or lit/hr) :
   (f) Material of construction :
   (g) Shape (round/rectangular) :
   (h) Height,m (above ground level) :
   (i) Height, m (above roof level) :
   (j) Sampling facility provided : (Yes/ No)
   (k) Diameter/size, in meters :
   (l) Gas Quantity, Nm /hr. :
   (m) Gas temperature, C :
   (n) Exit gas velocity,m/sec. :
   (o) Control equipment :

20. Details of D.G. Set(s)

S.No	Capacity (in KVA)	Month & Year of installation of D.G. Set	Stack Height above Ground Level (in meters)	Stack Height above roof of the building where D.G. Set installed (in meters)	Acoustic enclosure installed (Yes/No)	Month & Year of installation of acoustic enclosure/ acoustic treatment	Noise Monitoring report submitted (Yes/No)	Noise Level within the limit (Yes/No)

21. Quality of treated flue gas emissions and process : emissions (Enclose a copy of the latest + report of analysis from the approved laboratory by Delhi Pollution Control Committee. For proposed units furnish the expected characteristics of the emissions).

Part – D: Hazardous Waste Aspects

22. (a) Whether the unit is generating hazardous waste as defined in the Hazardous Waste (Management and Handling) Rules, 1989, as amended.

(b) If so, the category No.

(c) Whether authorization granted, if yes, indicate the authorization no. and date:

23. Quantity of hazardous waste generated (kg/day) or (MT/month)

24. I/We further declare that the information furnished above is correct to the best of my/our knowledge.

25. I/We hereby submit that in case of any change from what is stated in this application in respect of raw material, products, process of manufacturing and treatment and/or disposal of effluent, emissions / hazardous waste etc.in quality and quantity; a fresh application for Consent/ Authorization is granted, no change shall be made.

26. I/We undertake to furnish any other information with one month of its being called by the committee.

27. I/We agree to submit to the Committee an application for renewal of consent/ authorisation in two months in advance before the date of the expiry of the Consent/ Authorization validity period.

28. I/We hereby declare that the provisions of Master Plan of Delhi shall not be violated at any stage.

29. I/We enclose herewith a **Demand Draft No. ..... Dated ..... Drawn on Bank ..... for Rs. .....**
(Rupees.....)

"Delhi Pollution Control Committee" as the fee of consent.

Signature.....

Name.....

Designation.....

Annexure 4: Operator Enquiry Form

Enquiry Form

1. Healthcare Establishment

Name Of Health Care Establishment / Occupier*

Establishment Type

Select

2. Address of Occupier

Address Line 1

Address Line 2

District *

Select

Area *

Select

State

DELHI

Pincode

3. Contact Details

Name *

Designation *

Select

Mobile Number *

+91

Landline Number

011

Email Id. *

4. Type*

Select

5. Category*

Select

Submit

Annexure 5: Know Your Customer (KYC)

KNOW YOUR CUSTOMER (KYC)

NAME OF HEALTHCARE ESTABLISHMENT/ OCCUPIER	_____
BRAND NAME	_____
DHS REGISTRATION NO.	_____
OCCUPIER REGISTERED WITH DPCC	_____
DPCC REGISTRATION NO.	_____
ADDRESS LINE 1	_____
ADDRESS LINE 2	_____
DISTRICT	_____
AREA	_____
STATE	**DELHI**
PIN CODE	_____
LATITUDE	_____
LONGITUDE	_____

BILLING ADDRESS IF SAME AS PICK UP ADDRESS	**CHECK YES**_____	or	**CHECK NO**_____
ADDRESS LINE 1	_____		
ADDRESS LINE 2	_____		
DISTRICT	_____		
AREA	_____		
STATE	_____		
PIN CODE	_____		

NAME	_____
DESIGNATION	_____
MOBILE NO. 1	_____
MOBILE NO. 2	_____
LANDLINE NO.	_____
EMAIL	_____

BIOMEDICAL WASTE INCHARGE (IF SAME AS ABOVE)	**CHECK YES**_____	or	**CHECK NO**_____
NAME OF BIO-MEDICAL WASTE INCHARGE	_____		
DESIGNATION	_____		
MOBILE NO. 1	_____		
MOBILE NO. 2	_____		
LANDLINE NO.	_____		
EMAIL	_____		

Annexure 6: Service Agreement

THIS SERVICE AGREEMENT (the "**Agreement**") is made on this _____ day of _____ 2016 by and between: (auto generate date)

BIOTIC WASTE SOLUTIONS PVT. LTD., a company incorporated under the provisions of the Companies Act, 1956 having its operating office at **46-47, S.S.I Industrial Area, G.T Karnal Road, Delhi-110033** acting through its authorized representative **Shri Rahul Kumar**, duly authorized vide board resolution dated 1st September, 2016 (hereinafter referred to as the "**Operator**", which expression shall unless repugnant to the context or meaning thereof include its/their business associates, successors, administrators, heirs, permitted assigns, authorized and legal representatives) of the **FIRST PART**;

AND

_____**(as selected)**., having its operating office at _____**(as selected)** acting through its authorized representative Mr./ Mrs./ Ms./ Dr. _____**(as selected)**, duly authorized (hereinafter referred to as the "**Occupier**", which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, heirs, permitted assigns, authorized and legal representatives) of the **OTHER PART**;

The Operator and the Occupier are hereinafter collectively referred to as the "**Parties**" and individually as a "**Party**".

WHEREAS:

(A) The Operator is engaged in the business of Operating a Common Bio-Medical Waste Treatment and Disposal Facility for the reception, transportation, treatment and disposal of bio-medical waste after collection of the same from all Occupiers of bio-medical waste as per the Bio-Medical Waste Management Rules, 2016 by way of entering into exclusive service agreements such as the one being entered into.

(B) The Operator has been authorized by the Delhi Pollution Control Committee (DPCC) under Rule 10 of the Bio-Medical Waste Management Rules, 2016 for operating a facility for the Collection, Reception, Transportation, Treatment and Disposal of Bio-Medical waste.

(C) The Occupier is an establishment generating bio-medical waste within the ambit of the definition of an "Occupier" provided under clause 3 (m) of the Bio-Medical Waste Management Rules, 2016.

(D) The Bio-Medical Waste Management Rules, 2016 are applied to all persons such who

generate, collect, receive, store, transport, treat, dispose or handle Bio-Medical Waste in any form including hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses pathological laboratories, blood banks, ayush hospitals, clinical establishments, research or educational institutions, health camps, medical or surgical camps, vaccination camps, blood donation camps, first aid rooms, forensic laboratories and research labs. The Occupier for the purpose of this agreement has classified themselves as _____(as selected).

(E) The Occupier in compliance of the Bio-Medical Waste Management Rules, 2016 desires to engage the Operator for rendering services towards disposal of their Bio-Medical Waste (except liquid bio-medical waste) for which the Operator is an authorized facility under DPCC.

(F) The Parties seek to enter into this Agreement to record the terms and conditions on which the Operator shall provide such services to the Occupier and other understandings in connection therewith.

NOW THEREFORE, IN CONSIDERATION OF THE PREMISES AND MUTUAL PROMISES AND REPRESENTATIONS CONTAINED HEREIN, AND OTHER GOOD AND VALUABLE CONSIDERATION, THE SUFFICIENCY OF WHICH IS HEREBY ACKNOWLEDGED, THE PARTIES HERETO DO MUTUALLY COVENANT, STIPULATE AND AGREE AS FOLLOWS:

1. DEFINITIONS & INTERPRETATION

1.1 Definitions

Capitalized terms used in this Agreement shall have the meanings set out below:

a) "**Agreement**" means this Agreement and the Schedules/Annexures appended hereto, which Schedules/Annexures are by this reference incorporated herein, and may be amended, supplemented or modified from time to time by written agreement between the Parties.

b) "**Applicable Law**" shall mean any statute, law, regulation, ordinance, rule, judgment, order, decree, by-law, approval from the concerned authority, government resolution, directive, guideline, policy, requirement, or other governmental restriction or any similar form of decision of, or determination by, or any interpretation or adjudication, having the force of law of any of the foregoing, by any concerned authority having jurisdiction over the matter in question;

c) "**Applicable Permits**" shall mean all permits, clearances, authorizations, consents, licenses, lease, ruling, exemption, filing, agreements, or approvals, any valid waiver, variance, franchise, order of or from any Governmental Instrumentality, court or other body having jurisdiction over the subject matter in question, and in connection with the Services to be performed hereunder as may be in effect from time to time;

d) "**Business Day**" shall mean a day on which Occupier is open for business;

e) **"Bio-Medical Waste"/ "(BMW)"** shall mean any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps;

f) **"Collection End Point"** shall mean a safe and ventilated place, which is designated by both the parties in mutual agreement for the collection of Bio-Medical Waste from the premises of the Occupier;

g) **"Color Coded bags"** shall mean according to the specifications mentioned in Schedule I to this Agreement, pursuant to the specifications mentioned in Schedule I [Rule 4(b) and 8(2)] of the Bio-Medical Waste Management Rules, 2016.

h) "**Force Majeure Event**" shall mean an act of God which is beyond human intervention;

i) **"Handling"** in relation to Bio-Medical Waste includes the generation, sorting, segregation, collection, use, storage, packaging, loading, transportation, unloading, processing, treatment, destruction, conversion, or offering for sale, transfer, disposal of such waste;

j) **"Labels"** shall mean the labeling according to the specifications mentioned in Schedule I to this Agreement, pursuant to the specifications mentioned in Schedule IV [Rule 8(3) and (5)] of the Bio-Medical Waste Rules, 2016.

k) **"Major Accident"** shall mean an accident occurring while handling of bio-medical waste having potential to affect large masses of public and includes toppling of the truck carrying bio-medical waste, accidental release of bio-medical waste in any water body but excludes accidents like needle prick injuries, mercury spills;

l) "**Person**" shall be construed to include:

(i) an individual, firm, partnership, trust, joint venture, company, corporation, body corporate, unincorporated body, association, organization, any government, or state or any agency of a government or state, or any local or municipal authority or other governmental body (whether or not in each case having separate legal personality);

(ii) in relation to a Person, that Person's successors in title and assigns or transferees permitted in accordance with the terms of this Agreement; and

(iii) references to a Person's representatives shall be to its officers, employees, legal or other professional advisers, sub-contractors, agents, attorneys and other duly authorized representatives;

m) **"Prescribed authority"** shall mean the Delhi Pollution Control Committee (DPCC);

n) **"Rules"** shall mean the Bio-Medical Waste Management Rules, 2016;

1.2 Interpretation

(a) The annexures and schedules form an integral part of this Agreement. However in case of any inconsistency between the main agreement and annexures/schedules

hereto, the provisions of the main agreement shall have effect, unless agreed otherwise.

(b) References in the singular shall include references in the plural and *vice-versa*.

(c) The headings are inserted for convenience and are to be ignored for the purposes of construction.

(d) The words "include" and "including" are to be construed without limitation.

(e) Whenever provision is made for giving of notice, approval or consent by any Person, unless otherwise specified, such notice, approval or consent shall be in writing and the words 'notify' and 'approve' shall be construed accordingly.

(f) The terms "hereof", "herein", "hereby", "hereto" and derivative or similar words refer to this entire Agreement or specified Clauses of this Agreement, as the case may be;

(g) Time is of the essence in the performance of the Parties' respective obligations. If any time period specified herein is extended, such extended time shall also be of the essence;

(h) Reference to any legislation or law or to any provision thereof shall include references to any such law as it may, after the date hereof, from time to time, be amended, supplemented or re-enacted, and any reference to statutory provision shall include any subordinate legislation made from time to time under that provision;

(i) Provisions including the word 'agree', "agreed" or "agreement" require the agreement to be recorded in writing; and

(j) Wherever "/" separator is used, it shall construe the meaning of "either" or "both".

2. PURPOSE OF THIS AGREEMENT

2.1 The Occupier desires to engage the Operator in compliance of the Bio-Medical Waste Management Rules, 2016 for services relating to the disposal of their Bio-Medical Waste (except liquid Bio-Medical Waste) in accordance with the terms and conditions stated herein. The Operator accepts its engagement and undertakes to provide all services as stated in this Agreement **("Services")** including the collection, reception, transportation, treatment and disposal of Bio-Medical Waste in lieu of the Consideration as stated herein.

3. RIGHTS AND RESPONSIBILITIES OF THE PARTIES

3.1 Rights and Responsibilities of the Operator

3.1.1 *Maintaining proper Records and Log Books*

(a) The Operator will collect BMW on every business day and the Occupier will ensure that the Daily BMW Collection Sheet is maintained on a daily basis in acknowledgment of the BMW handed over to the Operator's collection representative.

(b) The Operator will maintain a record of collection and treatment of BMW on monthly basis and compiled report of the Occupier. The same will be provided / made available only after clearing all dues/ service charges.

3.1.2 *Collection and Disposal of Bio-Medical Waste from the Occupier*

(a) The Operator shall ensure the timely collection as per its route scheduling of BMW from the Occupier in accordance with clause 3.2.2 (b) of this Agreement.

(b) The Occupier shall establish bar coding/ tracking system in compliance of the BMW Rules, 2016 for handling and tracking of BMW bags/bins/boxes/containers as applicable at an additional cost to the Occupier.

(c) The Operator shall undertake treatment of the biomedical waste as per the prescribed rules and guidelines time to time.

3.1.3 *Supply of Color Coded bags, boxes and containers.*

(a) The Operator shall provide the following Color Coded material as per the specifications of the BMW Rules, 2016 and guidelines prescribed time to time by the concerned authorities to the Occupier on a chargeable basis:

S.No.	PARTICULAR	COLOUR	Specifications
(i)	Bags	Yellow	LDPE, 50micron
		Red	PP, 50 micron
		Black	PP/LDPE, 50micron
(ii)	Boxes- Glass Disposal	White (With Blue Marking)	Cardboard - 3 Ply
(iii)	Containers – Sharp Container	White (Transparent)	5 L
	– Sharp Hub Cutter	White (Transparent)	800 ml

(b) The material as mentioned in clause 3.1.3 (a) above shall be equipped with a barcode tracking system, be non-chlorinated and as per the Plastic Waste Management Rules 2011, in accordance with the specifications as mentioned in Schedule I to this Agreement.

3.1.4 *Site Visit of the Common Bio-Medical Waste Treatment Facility (CBWTF)*

(a) The Operator shall allow the Occupier who has a valid Service Contract for treatment with the Operator, to visit the facility of the Operator for gaining information, knowledge and training of the treatment and disposal process of BMW.

(b) Such visit shall be arranged after the Occupier gives adequate notice of 7 days for visiting the Operator's facility and getting valid consent regarding the availability of the staff at the Operator's facility at that time.

3.1.5 *General*

(a) The Operator endeavors to assist the Occupier in every way possible way for the proper bio-medical waste management and compliances.

(b) The Operator has the right to conduct site inspections at the Occupiers facility especially at the end points to ensure proper segregation of bio-medical waste.

(c) The Operator will assist in training by providing training material / segregation charts and bio-hazard stickers on chargeable basis to ensure proper segregation of waste.

(d) Notwithstanding anything contained in this Agreement, the Operator reserves the right to inform the Prescribed Authority immediately in case the Occupier fails to hand over properly segregated BMW or in case the Occupier fails to provide bar-coded bags, boxes, bins and containers in accordance with the Bio-Medical Waste Management Rules, 2016.

(e) The Occupier's responsibility will cease once the segregated BMW, duly packed, labeled/ tagged/ bar-coded and signed, in the specified bags, boxes, containers by the Operator has been handed over to the Operator's representative. It is specifically agreed and understood that compliance of the Bio-Medical Waste Management Rules 2016 during transportation and disposal of BMW shall be the exclusive responsibility of the Operator.

(f) The Vehicles used for transportation of BMW by the Operator shall comply with the conditions as laid down in Rule 8(6) of the Bio-Medical Waste Management Rules, 2016.

3.2 **Rights and Responsibilities of the Occupier**

The Occupier shall provide a copy of valid authorization issued by the DPCC or copy of latest receipt of application submitted in DPCC for authorization to the Operator under BMW rules 2016

3.2.1 Maintaining Record books

(a) The Occupier shall be mandatorily required to maintain a bio-medical waste management register (Record book) as per Rule 4 (n) of the Bio-Medical Waste Management Rules, 2016. It

shall be the duty of the Occupier to ensure that a representative of the Operator signs this Record Book in acknowledgment of the BMW collected on a daily basis.

(b) The Occupier's representative/staff shall also be responsible for signing the Daily BMW Collection Sheet maintained by the Operator on a daily basis in acknowledgment of BMW handed over to the Operator's representative to ensure and complete the compliance under clause 3.1.5 (e) of this agreement.

(c) The Occupier shall display monthly details of bio-medical waste and annual report according to the bio-medical waste generated in terms of category and color-coding as specified under the Rules on its website and submit the same to the DPCC in compliance of the BMW rules 2016. The Occupier on a chargeable basis can avail the services of the Operators web portal for displaying their information on a monthly basis.

3.2.2 *Proper Segregation of Bio Medical Waste*

(a) The Bio-Medical waste generated by the Occupier shall be segregated into containers or bags at the point of generation in accordance with Schedule I to the Rules prior to its storage, transportation, treatment and disposal.

(b) The Occupier shall arrange the collection, and ensure proper segregation of BMW generated from its various departments and wards, as per Bio-Medical Waste Management Rules, 2016. The Occupier shall also ensure that all the BMW i.e. incinerable and autoclavable waste (including plastic waste), Sharps and Glass is handed over to the Operator.

(c) The Occupier shall pack the segregated BMW as per Rules, in Color-Coded bags as per Schedule I, Label and bar-code/ tag the said bags as per Schedule IV of the BMW Rules, 2016 and keep them ready for collection by the Operator's staff, at the Collection End Point during 7:00 a.m. to 10:00 p.m. or any other time which may be mutually agreed upon between the Parties as per the route plan. The Operators representative will only collect the waste that he has access to at the end point. The representative will not wait for the internal staff to bring the waste to the end point. The Occupier on a chargeable basis can avail the services of the Operators sealable color-coded bags, bins, boxes and containers.

(d) The Occupier shall establish a uniform/ specified bar-code system for tracking the bags, bins, boxes or containers containing bio-medical waste to be sent out of their premises. All the bags, boxes and containers must be bar-coded before stored at the end point for the collection by the Operator. The Occupier on a chargeable basis can avail the services of the Operators Bar-code waste tracking system. Non-barcoded and Non-Traceable bags will not be collected by the Operator and its representatives.

3.2.3. *Pre-disposal of Bio Medical Waste generated*

(a) The Occupier shall make a provision within its premises for a safe, ventilated and secured location for storage of segregated BMW in Color Coded Bags or containers in the manner as specified in Schedule I and ensure no secondary handling, pilferage or inadvertent scattering or spillage of the BMW to be disposed.

(b) The Occupier shall ensure that the BMW is stored at the Collection End Point in consonance with clause 3.2.3. (a) above; and is handed over directly to the Operator in the manner as prescribed under these Rules for appropriate treatment and disposal, as the case may be, in the manner as prescribed under Schedule I to this Agreement.

(c) The Occupier, if applicable, shall pre-treat the laboratory waste, microbiological waste, blood bags and other highly infectious BMW through disinfection or sterilization on-site in the manner as prescribed by the World Health Organization (WHO) or National AIDS Control Organization (NACO) guidelines and then pack them in Color Coded Bags, Labeled, seal/ tag, signed and tagged for final disposal by the Operator.

(d) The Occupier shall ensure that no general waste i.e. municipal waste is handed over along with the bio-medical waste to the Operator for disposal; or conversely, no BMW is treated / mixed/ disposed with municipal solid waste. In case of improper waste segregation and mixing of general waste with biomedical waste, the Operator has a right to impose a penalty on the Occupier and intimate the same to the prescribed authorities to the tune of Rs. 1000/- (Rupees One Thousand) per incident.

3.3 **Common Responsibilities of both OCCUPIER and OPERATOR**

(a) Both Parties will depute one nodal officer in charge of all communications regarding BMW.

(b) It shall be the duty of both the Occupier to take all necessary steps to ensure that Bio-Medical Waste is handled without any adverse effect to human health and the environment and in accordance with the Bio-Medical Waste Management Rules, 2016 till it is handed over to the Operator and duly signed in the record register/ bar-coding system.

(c) Both the parties shall ensure that there is no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the BMW from such Collection End Point shall be directly transported to the Operator's facility for appropriate treatment and disposal according to the Rules.

(d) Both the Parties shall provide adequate training for all their workers involved in handling of BMW at the time of induction and at least once a year thereafter.

(e) Both the Parties shall undertake appropriate medical examination for all their workers involved in handling of BMW at the time of induction and at least once a year thereafter. The

Parties shall also be responsible for the immunization of all such workers involved in handling of BMW for protection against diseases, including but not limited to Hepatitis B and Tetanus, that are likely to be transmitted while handling of BMW. The Parties shall also maintain records of all the above noted examinations and immunization drives.

(f) Both the Parties shall ensure the occupational safety of all its workers involved in handling of BMW by providing appropriate and adequate personal protective equipment.

(g) Both the Parties shall report all major accidents including accidents caused by fire hazards, blasts during handling of the bio-medical waste and the remedial action taken and the records relevant thereto to the prescribed authority in accordance with Rule 15 of the Bio Medical Waste Management Rules, 2016

4. CONSIDERATION AND MODE OF PAYMENT

4.1 Consideration

(a) In consideration of the Services rendered by the Operator under this Agreement, the Occupier shall pay consideration to the Operator as provided hereunder ("**Consideration**").

(b) Registration Charges Rs. _____ (If applicable)

(c) Security Deposit Rs. _____ (if applicable)

Service Charges

(d) The Operator will charge the Occupier being a _____ (basis selection category) a Minimum Charges of **Rs.** _____/- **(Rupees** _____ **only)** per month (If applicable)

(e) Number of Beds _____ (if applicable) of,

(f) Bio Medical Waste limit of _____ **Kg** per month (If applicable).

(g) Extra Bio Medical Waste collected shall be charged **@ Rs.** _____/- per Kg (If applicable)

Supply of Consumables Charges

(h) The Operator will charge the Occupier for waste packaging material under this Agreement, the Occupier shall pay the consideration to the Operator as provided hereunder (As applicable).

(i) Yellow Biohazard Plastic LDPE Bags for Rs. _____ per piece/per pack (As applicable)

(j) Yellow Cytotoxic Plastic LDPE Bags for Rs. _____ per piece/per pack (As applicable)

(k) Red Biohazard Plastic PP bags for Rs. _____ per piece/per pack (As applicable)

(l) Blue Biohazard Glass Disposal Cardboard Box for Rs. _____ per piece/per pack (As applicable)

(m) White Biohazard Sharp Container for Rs. _____ per piece/per pack (As applicable)

(n) White Biohazard Sharp Hub Cutter with Container for Rs. __ per piece/per pack (As applicable)

(o) Black Garbage Bag for Rs. _____ per piece/per pack (As applicable)

Software Charges – Barcoding and Data Management

(p) The Operator will charge the Occupier for software charges under this Agreement, the Occupier shall pay the consideration to the Operator as provided hereunder (As applicable).

(q) Software Charges for Rs. _____ per month/ per year / one time (As applicable).

(r) A Username and Password will be provided by the Operator to the Occupier, where the Occupier can download his data from Biotic's Website – www.biotic.co.in:

Username:_____ (Auto generate – and auto fill Customer ID)

Password: _____ (Auto generate)

(s) Taxes, such as Contract Sales Tax, Service Tax etc. if applicable, shall be payable by the Occupier.

(t) The Service charges may increase during the tenure of this Agreement due to extraneous increase in price of fuel, raw material cost, data warehousing cost, labor cost or any other commodity related to the services rendered under this Agreement.

4.2 Mode of Payment

(a) All payments are to be made though Cheque/ Demand Draft/ NEFT/ RTGS only. No Cash Payments will be accepted in lieu of monthly charges.

(b) In lieu of the Services rendered by the Operator pursuant to this Agreement, the Occupier has to pay the Service charges_____(as per billing supply selected), for the Consumable Supply charges _____ (as per billing supply selected) and Software Charges _____(as per billing supply selected) the consideration as mentioned under clause 4.1 to this Agreement within 7 days of the receipt of the bills.

(c) In case the Occupier fails to make payment within the stipulated time as mentioned in clause 4.2 (b), a late fee @ 2% for the month in which the payment is due, would be charged by the Operator.

(d) In case, any payment made through cheque is rejected by bank due to reasons on part of Occupier, a cheque bounce fee of Rs. 500/- (Rupees Five Hundred) shall be charged from the Occupier.

(e) In case of non-payment within 45 days of issue of bill, the agreement will be suspended and services shall be stopped from the 60th days of issuance of bill. It is the duty of both parties to submit information in writing to DPCC regarding suspension and termination of services. After termination it is the sole responsibility of the Occupier to handle the BMW in compliance with the rules 2016. A letter for restoration/ revocation of termination of agreement will be issued only after clearing the payments/ dues, restoration administrative expenses/ charges of Rs. 1500/- and submission of PDC fro the remaining agreement period. In case of cheque, clearing date will be considered and services will be provided form the next day of issue of letter of restoration/ revocation of termination of agreement.

5. FORCE MAJEURE

Neither Party shall be held liable for failure to perform any of its obligations under this Agreement (except for monetary payments due hereunder) to the extent such failure is due to circumstances or causes beyond such Party's reasonable control in natural catastrophes, act of God, insurgencies, embargoes, acts of civil or military authorities, strikes, fire, flooding, or earthquakes or other similar natural disasters ("**force majeure**"). Financial capacity and market fluctuations are specifically not a case of force majeure. In case of force majeure, (i) the non-performing Party's time for delivery or other performance will be extended for a period equal to the duration of the delay caused thereby and (ii) the non-performing Party shall promptly notify the other and the Parties shall discuss the measures that should be taken. The non-performing Party shall use commercially reasonable efforts to enable it to continue to carry out its contractual obligations. The other Party may terminate this contract without further liabilities to the non-performing Party if the force majeure continues for more than six (6) weeks. The affected Party shall report the other Party about the event of Force majeure within five days of its occurrence.

6. REPRESENTATION AND WARRANTIES:

6.1 Each of the Parties hereby represents, warrants and undertakes to the other Party that:

i) It has the full power and authority to enter into, execute and deliver this Agreement and any other deeds, documents or agreements contemplated hereunder or pursuant hereto.

ii) The execution and delivery of this Agreement and the performance of the Services contemplated herein has been duly authorised by its directors/ shareholders (as

required under applicable law) and all necessary corporate or other action of the Party; the execution, delivery and performance of this Agreement by such Party and the consummation of the transaction contemplated hereunder shall not conflict with or result in any breach or violation of any of the terms and conditions of, or constitute (or with notice or lapse of time or both will constitute) a default under, any instrument, contract or other agreement to which it is a party or by which it is bound.

iii) For the avoidance of doubt, the representations and warranties mentioned in this Agreement shall continue to be in force and effect till the completion of the Agreement and during the dispute resolution, if any sought for.

6.2 OCCUPIER represents and warrants to the OPERATOR that:

i) The Occupier undertakes to deliver to the Operator's representative/staff only the segregated Bio-Medical Waste generated on a daily basis by it and shall be liable for all the damage caused to the environment or the public due to improper handling of bio-medical waste.

ii) The Occupier warrants that all bags/boxes/containers at the Collection End Point shall be duly labeled, bar-coded, sealed and be in Color Coded bags as per the specifications contained in Schedule I to this Agreement, signed and tagged.

iii) The Occupier undertakes that General Waste i.e. (MUNICIPAL WASTE) IS NOT TO BE PUT INTO THE COLOR CODED BAGS. For any violation of the BMW Rules in this regard the Occupier shall be exclusively responsible.

iv) The Occupier shall be solely responsible for compliance of Bio-Medical Waste Management Rules, 2016 in respect of their liquid bio-medical waste and for the BMW not handed over to the Operator.

v) The execution and performance of this Agreement shall not violate, conflict with or result in a breach of or default under Applicable Laws or any of the constitutional documents of the Occupier.

vi) The Occupier undertakes that all information in relation to the services rendered under this Agreement which would be material to the Operator for the purposes of entering into this Agreement, and consummating the transaction contemplated herein, has been made available and disclosed to the Operator and continues to be, true, complete and accurate in all respects and not misleading in any manner.

7. TERM/TERMINATION CLAUSE

7.1 Term

(a) Unless terminated earlier as per clause 7.2 (a) & (b) herein, the term of this Agreement shall be for a period of 1 (one) year (as selected) commencing from_____ and terminating on _____ (as selected).

(b) This term can be further extended to a period of 12 (Twelve) months if there is mutual consent and agreement in writing between the parties.

7.2 Termination

(a) That notwithstanding the aforesaid term or regardless of any other reason, if either of the Parties wishes to discontinue the Agreement, there has to be an advance written notice of 90 (ninety) days served upon the other party.

(b) Notwithstanding the aforesaid term, the requirement of giving 90 (ninety) days advance written notice to the other party shall not be applicable in the event of the occurrence of the contingencies specified hereunder below and in such cases the Services shall be terminated/suspended forthwith:

(i) The Operator shall be at liberty to terminate this Agreement and discontinue the Services under this Agreement in the event the Occupier fails to pay the consideration including service charges within the stipulated time as provided under clause 4.2(b) of this Agreement for two consecutive months.

(ii) The Operator shall be at liberty to terminate this Agreement and discontinue Services to the Occupier in the event of the Occupier handing over un-segregated Bio-Medical waste for disposal.

(iii) The Occupier shall be at liberty to discontinue the Services of the Operator in the event the Occupier has wound up operations and has closed the premises. Intimation of closure needs to be provided 90 days in advance.

8. EXCLUSIVITY AND THIRD PARTY RIGHTS

Neither party shall transfer nor assign the right granted under this Agreement without the prior intimation to and permission of the other party without obtaining a written undertaking by the proposed assignee/transferee agreeing to assume all of the withdrawing party's obligations under this Agreement and to abide by all the obligations and covenants contained herein.

9. DISPUTE RESOLUTION

9.1 Amicable Resolution

In the event of any dispute, disagreement, complaint or difference between the Parties, in respect of or concerning or connected with the interpretation or implementation or arising out of this Agreement or any Clause or provision hereof, or relating to the termination hereof (a "**Dispute**"), then such Dispute shall in the first instance be resolved amicably by both the parties.

In the event that the Parties are unable to mutually resolve the Dispute within 15 (Fifteen) Business Days of the Dispute being raised before either of the Parties referred to it, the same shall be referred to arbitration as stated below.

9.2 Arbitration

(a) If any disputes or differences between the Parties are not resolved under Clause 9.1 above within the time period mentioned therein, then the same shall be referred to and finally resolved by arbitration of a sole arbitrator in accordance with the Indian Arbitration Act, 1996 for the time being in force. The Operator shall have the sole discretion and responsibility of appointing the arbitrator with in a period of 60 days. The language of the arbitration shall be English.

(b) The Parties will continue to perform their respective obligations under the Agreement during the arbitration proceedings.

(c) The seat and venue of arbitration shall be at New Delhi and the local laws of New Delhi shall be applicable.

(d) The arbitration shall be sole and exclusive remedy between the Parties regarding the dispute referred to arbitration and any claims, counterclaims issues or accountings presented to the arbitrators in connection with such dispute.

(e) The Parties hereby undertake to implement the directions contained in the award without delay. The costs and expenses of arbitration shall be paid as may be determined by the arbitrator.

10. MISCELLANEOUS

10.1 Delay not Waiver

It is understood and agreed that any delay, waiver or omission by either Party to exercise any right or power arising from any breach or default by the other in any of the terms, provisions or covenants of this Agreement shall not be construed to be a waiver by such Party of any

subsequent breach or default of the same or other terms, provisions or covenants on the part of the other Party.

10.2 Governing Law

This Agreement shall in all respects be governed by and construed in accordance with the laws of India, including with respect to all matters of construction, interpretation, validity and performance, without giving effect to any choice of law rules thereof.

10.3 Severability

In the event that any of the provisions, or portions or applications thereof, of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the Operator and the Occupier shall mutually agree upon a reasonable adjustment in such provisions of this Agreement with a view toward effecting the purpose of such provisions of this Agreement, and the validity and enforceability of the remaining provisions, or portions or applications thereof, shall not be affected thereby.

10.4 Notice

a) Any notice or other communication required to be sent under this Agreement shall be sent or delivered to the receiving Party at the address set forth below, or at such other address of the concerned Party as such Party may from time to time designate in writing as a notice as required hereunder by giving to the other Party not less than 10 (ten) Business Days prior written notice.

b) Any notice, request, demand or other communication shall be in writing and delivered by hand against receipt, or sent by registered mail acknowledgement due, telefax, email or by a recognized courier services.

c) Any notice required or permitted to be given by the Parties hereunder shall be in writing and unless otherwise specified in this Agreement all notices referred in this Agreement or other communications shall be deemed to have been duly given or served at the date and time of:

(i) Delivery or of first refusal of delivery, if sent by registered mail, recognized courier service or delivered by hand;

(ii) Either the date sent (if sent during the receiving party's normal business hours) or next succeeding business day, if sent by telefax

d) Unless otherwise notified in accordance with this Clause 10.4 (a), all notices referred to in this Agreement shall be addressed to:

e) Notices sent through an email (mentioned in the agreement) will be treated as served.

	MONITORING AGENCY	OPERATOR	OCCUPIER
KIND ATTENTION		Mr. Vikas Ghallot	
DESIGNATION	BMW CELL	Managing Director	
NAME OF INSTITUTION	DELHI POLLUTION CONTROL COMMITTEE (DPCC)	BIOTIC WASTE SOLUTIONS PVT. LTD.	
ADDRESS	4TH FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI - 110006	46, SSI Industrial Area, GTK Road, Delhi-110033.	
TELEPHONE NO.		011-47528106	
EMAIL ID		info@biotic.co.in	

Any change in the above shall be notified immediately to the other Party in accordance with this Clause 10.4 (a).

10.5 Delivery

All notices under Clause 10.4 hereof shall be treated as delivered in person to the Party above mentioned if sent by email or shall be sent *via* registered mail with a return receipt requested in a securely sealed envelope or shall be sent by fax and shall be effective when received at the address specified first above. The Parties hereto, by like notice in writing, may designate, from time to time, other address or office to which notices may be given pursuant to this Agreement.

10.6 Clause Headings

The Clause headings herein have been inserted for convenience of reference only and shall not in any manner affect the construction; meaning or effect of anything herein contained nor govern the rights and liabilities of the Parties hereto.

10.7 Prior Agreement

No oral agreement exists between the Parties. This Agreement supersedes any and all written or oral agreements, proposals, negotiations, understandings and representations pertaining to the subject matter hereof, prior to the date of this Agreement.

10.8 Amendments

No amendments, supplements, waiver or modifications of the terms of this Agreement shall be valid unless evidenced in writing and signed by a duly authorized representative of each of the Parties hereto.

10.9 Conflicting Provisions

In the event of any conflict, variation or inconsistency between any provision of this Agreement pursuant to being amended, modified or supplemented from time to time, and any other provision of this Agreement, the amended provision of this Agreement shall prevail.

10.10 Duty to Mitigate

In the event of a termination of this Agreement pursuant to Clause 7, the defaulting party shall endeavor to exercise all reasonable efforts to mitigate or limit any damage, cost or expense to the other party.

10.11 Costs

Each Party shall be responsible for and shall bear all the expenses incurred by it in preparing, negotiating and executing this Agreement.

10.12 Language Protocol

Except as otherwise specifically indicated in this Agreement, all notices, manuals, design documents and other writings and communication required pursuant to this Agreement shall be in the English language.

10.13 Agreement Not a Partnership

Nothing in this Agreement is intended to create, nor shall it be construed as creating, a partnership.

IN WITNESS WHEREOF, the Parties hereto, intending to be legally bound, have caused this Agreement to be executed by setting the hand and seal of their duly authorized officers the day and year first above written.

Authorized Signatory	**Authorized Signatory**
(OCCUPIER)	**(OPERATOR)**
_____**(As selected)**	**BIOTIC WASTE SOLUTIONS PVT. LTD.**
Name:-_ _____	Name:-_____
Designation:- _____	Designation:-_____
Phone:- _____	Phone:-_____
Mobile No.:- _____	Mobile No.:-_____
Email:- _____	Email:- info@biotic.co.in
Website:- _____	Website:- www.biotic.co.in
(as selected)	

Annexure 7: Status of Health Care Facility

1. Name of Health Care Facility

2. DPCC Authorisation Number:

3. Date of Issue:

4. Date of Validity:

5. Number of Beds Declared in Previous Year:

6. Number of Beds Declared in Current Year:

Annexure 8: Intimation of Expiry of Agreement

Date: DD/MM/YY

To The Operator

Name of Operator

Address of Operator

Subject: Expiry of Agreement

Dear Sir,

This is to inform you that our Health Care Facility with ID no. ..... is being serviced by your company for the collection, transportation, treatment and disposal of Biomedical Waste generated by our facility.

This email is to inform you that the Waste Acceptance and Service Agreement between both our entities is expiring on date dd/mm/yy.

We request you to initiate the re-newal process

Regards

Biomedical Waste Incharge

Name

Address

Annexure 9: No Dues Email

Date: DD/MM/YY

To The Occupier

Name of The Occupier

Address of The Occupier

Subject: No Dues Conformation

Dear Sir,

This is to inform you that your Health Care Facility with ID no. ..... is being serviced by our company for the collection, transportation, treatment and disposal of Biomedical Waste generated by our facility.

This email is to inform you that your HCF has the an amount of Rs. ..... as outstanding.

Waste Acceptance and Service Agreement between both our entities is expiring on date dd/mm/yy. If an amount is outstanding, we request you to deposit the amount so that we can initiate the renewal process.

Regards

Relationship Manager

Name

Address

Annexure 10: Yellow Bag Master Batch Colour Shade

L* a* b*, RGB and HLC Values

Choose Range: Pantone® Coated

Choose colour: Hexachrome Yellow C

Click the colour for close alternatives

Reference: Hexachrome Yellow C

Range: Pantone C

L	a	b
89.24	-0.6	91.29

H	L	C
90	89	91

CMYK: 0; 13; 100; 0

sRGB: 255; 222; 0

Hex: #FFDE00

LRV: Approx. 75
Light Reflectance Value

Annexure 11: Red Bag Master Batch Colour Shade

L* a* b*, RGB and HLC Values

Choose Range: Pantone® Coated

Choose colour: Red 032 C

Click the colour for close alternatives

Reference: Red 032 C

Range: Pantone C

L	a	b
55.26	72.14	43.46

H	L	C
31	55	84

CMYK: 0; 79; 74; 4

sRGB: 246; 52; 63

Hex: #F6343F

LRV: Approx. 23
Light Reflectance Value

Annexure 12: Record Format - Point of Generation/ Ward Level

MONTH: DATE OF MONTH	TIME OF PICK UP	QUANTITY OF BIOMEDICAL WASTE COLLECTED (Kg)									
		YELLOW BAGS		RED BAGS		BLUE BOX		WHITE CONTAINER		TOTAL	
		No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)
1											
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Annexure 13: Record Format - End Point Level

MONTH: DATE OF MONTH	TIME OF PICK UP	QUANTITY OF BIOMEDICAL WASTE COLLECTED (Kg)										SIGNATURE OF OPERATOR'S REPRESENTATIVE
		YELLOW BAGS		RED BAGS		BLUE BOX		WHITE CONTAINER		TOTAL		
		No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	
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Annexure 14: Record Format - Weight and Number of Bags per Colour Type

MONTH: DATE OF MONTH	TIME OF PICK UP	QUANTITY OF BIOMEDICAL WASTE COLLECTED (Kg)										SIGNATURE OF OPERATOR'S REPRESENTATIVE
		YELLOW BAGS		RED BAGS		BLUE BOX		WHITE CONTAINER		TOTAL		
		No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	
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Annexure 15: Record Format - Operator Representative - Pick up Vehicle

MONTH: DATE OF MONTH	TIME OF PICK UP	QUANTITY OF BIOMEDICAL WASTE COLLECTED (Kg)										SIGNATURE OF OCCUPIERS REPRESENTATIVE
		YELLOW BAGS		RED BAGS		BLUE BOX		WHITE CONTAINER		TOTAL		
		No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	No.	Wt (Kg)	
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Annexure 16: Indian Medical Association Standard

http://www.ima-india.org/ima/left-side-bar.php?scid=243

Implementation of Swasth Bharat Abhiyan in Health Sector

IMA plans to have hospitals free of bio-medical wastes through a common facility

Situation analysis

- Per bed bio medical wastes: 250 grams per day
- Total Bed strength in the country: 28.89 Lakhs (Central Bureau of Health Intelligence)
- Total bio medical waste generated per day in country: 7.22 Laks Kilograms
- Existing facilities for managing BMWs in a professional manner:
  - Only a few states have proper bio medical waste management systems, even those states total beds are not covered, for example in Delhi only about 50% of the beds are covered properly.

Why and How?

To reduce hospital acquired infection, for clean hospital environment and prevention of multi drug resistant organisms, scientific bio medical waste disposal is essential

The process begins at the bed side of the patient where the waste has to be categorised and segregated in different containers at nursing station. Here the needles are burnt and mutilated. These are send to common collection point of the Health Care Institution. From there it is transferred for final disposal at the plant.

All these process goes a long way in universal precautions against infectious diseases and hospital acquired infections.

Annexure 17: Analysis of Waste Quantities Generated by HCFs with 100 beds and more

No of Beds	NAME	Incinerable Waste (KG)	Autoclavable Waste (KG)	Sharp Waste Kg	Total (Kg)	KG Per Bed Per Month	Grams Per Bed Per Day
100	BRAHM SHAKTI HOSPITAL	393	559	214	1166	11.7	0.389
100	Babu Jagjivan Ram memorial Hospital	1270	N/A	427	1697	17.0	0.566
100	Nehru Homeopathic Medical College (DHS)	23.2	11.3	4.6	39	0.4	0.013
100	ACTION CANCER HOSPITAL	588.4	1574.66	1809.55	3973	39.7	1.324
100	B.M. GUPTA HOSPITAL PVT. LTD.	185	243	83	511	5.1	0.170
100	COMPOSITE HOSPITAL CRPF	10.9	9.8	NA	21	0.2	0.007
100	DEEPAK MEMORIAL HOSPITAL	516	94	90	700	7.0	0.233
100	JEEWAN HOSPITAL & NURSING HOME	215	335	193	743	7.4	0.248
100	M/S DELHI HEART & LUNG INSTITUTE	222	269	98	589	5.9	0.196
100	SHRI RAM SINGH HOSPITAL & HEART INSTITUTE	8	122	12	142	1.4	0.047
100	ARUNA ASAF ALI HOSPITAL	427	631	96	1154	11.5	0.385
100	ACHARYA BHIKSHU HOSPITAL	456	488	254	1198	12.0	0.399
100	DELHI STATE CANCER (GTB HOSPITAL)	NA	1397	530	1927	19.3	0.642
100	DELHI STATE CANCER INSTITUTE	9.5	8.5	NA	18	0.2	0.006
100	GURU GOBIND SINGH HOSPITAL	270.5	934.5	33.5	1239	12.4	0.413
102	M.G.S HOSPITAL	109	112	67	288	2.8	0.094
102	N.K.S. HOSPITAL (A UNIT OF BRAM HEALTHCARE PVT. LTD.)	145.5	657.5	289	1092	10.7	0.357
102	RLKC HOSPITAL METRO HEART INSTITUTE	239	328	221	788	7.7	0.258
103	ROCKLAND HOSPITALS	350	376	195	921	8.9	0.298
105	BHAGWATI HOSPITAL	324	217	129	670	6.4	0.213
105	SANTOM HOSPITAL & DIALYSIS CENTRE	187	274	241	702	6.7	0.223
106	Pushpawati Singhania Research Institute	835	1370	645	2850	26.9	0.896
109	ESI Hospital	1038	360	427	1824	16.7	0.558
110	Rockland Hospital Ltd.	583	496	258	1337	12.2	0.405
110	VENKATESHWAR HOSPITAL	28.521	36.111	6.467	71	0.6	0.022
116	Jeewan Hospital & Nursing Home Pvt.Ltd.	221	175	86	482	4.2	0.139
116	KALRA HOSPITAL SRCNC PVT. LTD.	266	655	265	1186	10.2	0.341
120	KUKREJA HOSPITAL & HEART CENTRE PVT LTD	115.5	115	141.5	372	3.1	0.103
120	M/S CONNER INSTITUTE OF HEALTH CARE & RESEARCH CENTRE PVT. LTD.	1098	1189	784.4	3071	25.6	0.853
120	RAO TULA RAM HOSPITAL	769	NA	148	917	7.6	0.255
128	VALLABH BHAI PATEL CHEST INSTITUTE	262	229	163	654	5.1	0.170
130	PRIMUS SUPER SPECIALITY HOSPITAL	1038	1575	550	3163	24.3	0.811
140	SHANTI MUKAND HOSPITAL	208	183	129	520	3.7	0.124
145	Indian Spinal Injuries Centre	1846	2757.2	694	5297	36.5	1.218
150	CHARAK PALIKA HOSPITAL	171	497.5	766	1434	9.6	0.319
150	PALIKA MATERNITY HOSPITAL	475	225	231	931	6.2	0.207
150	Max Super Speciality Hospital	3500	5875	3150	12525	83.5	2.783
150	FORTIS FLT. LT. RAJAN DHALL HOSPITAL	1228	4058	1542	6828	45.5	1.517
150	DHS MAHARISHI BALMIKI HOSPITAL	618	435.3	244.5	1298	8.7	0.288
153	SANT PARMANAND HOSPITAL	1142	834	162	2138	14.0	0.466
155	METRO HOSPITAL & CANCER INSTITUTE	1191.1	335.49	243.4	1770	11.4	0.381
170	SAROJ SUPER SPECIALITY HOSPITAL	826	1679	450	2955	17.4	0.579
170	PARK HOSPITAL	286	224	129	639	3.8	0.125
188	INSTITUTE OF LIVER & BILIARY SCIENCES	4350	6500	190	11040	58.7	1.957
200	SUNDERLAL JAIN HOSPITAL	214	443	226	883	4.4	0.147
200	Satyawadi Raja Harish Chandra Hospital	841	640	96	1577	7.9	0.263
200	Deep Chand Bandhu Goverement Hospital	370.6	1015	205	1591	8.0	0.265
200	DHARAMSHILA HOSPITAL & RESEARCH CENTRE	473	725	535	1733	8.7	0.289
200	SRI BALAJI ACTION MEDICAL INSTITUTE	2094.66	3976.4	3389.45	9461	47.3	1.577
200	TIRATH RAM SHAH CHARITABLE HOSPITAL	217	253	212	682	3.4	0.114
200	DR. HEDGEVAR HOSPITAL	1154	1936	153	3243	16.2	0.541
200	JAG PARVESH CHANDRA HOSPITAL	1522	2010	337.5	3870	19.3	0.645
200	LAL BAHADUR SHASTRI HOSPITAL	1070	NA	NA	1070	5.4	0.178
210	MATA CHANAN DEVI HOSPITAL	797.7	2680.6	853	4331	20.6	0.688
210	A&U TIBHIA COLLEGE	73	90	NA	163	0.8	0.026
210	CH. BRAHAM PRAKASH AYURVED CHARAK SANSTHAN	13.7	11.2	NA	25	0.1	0.004
211	Max Super Speciality Hospital (East Block)	3010	6800	1710	11520	54.6	1.820
212	GURU NANAK EYE CENTRE	108.4	322.7	22	453	2.1	0.071
214	Max Smart Hospital	2500	6910	250	9660	45.1	1.505
221	CHACHA NEHRU HOSPITAL	425.2	2998.9	141.8	3566	16.1	0.538
227	Maharishi Valmiki Infectious Diseases Hospital	20.95	435.8	22.5	479	2.1	0.070
230	CENTRAL JAIL HOSPITAL	18.5	53.3	0.5	72	0.3	0.010
242	JAIPUR GOLDEN HOSPITAL	2275	4550	1375	8200	33.9	1.129
250	Bhagwan Mahaver Hospital	16.2	8.4	3.6	28	0.1	0.004
262	FORTIS HOSPITAL	2410	4575	1450	8435	32.2	1.073
300	E. S. I. HOSPITAL, Okhla	984	804	330	2118	7.1	0.235
300	Sanajay Gandhi Memorial Hospital	1259	N/A	297	1556	5.2	0.173
300	ESIC HOSPITAL (JHILMIL)	69.5	522.85	844.1	1436	4.8	0.160
300	JANAKPURI SUPER SPECIALITY HOSPITAL	9.5	7.5	NA	17	0.1	0.002
302	RAJIV GANDHI CANCER INSTITUTE	2671	2216	599	5486	18.2	0.606
310	ESCORT HEART INSTITUTE & RESEARCH CENTRE	10100	3050	2400	15550	50.2	1.672
320	Max Super Speciality Hospital (WESTBlock)	3750	7750	2750	14250	44.5	1.484
332	HOLY FAMILY HOSPITAL	1172	4166	332	5670	17.1	0.569
336	IHBAS HOSPITAL	265	547	132	944	2.8	0.094
343	Jamia Hamdard (Deemed University)	1648	3308	964	5920	17.3	0.575
370	SWAMI DAYANAND HOSPITAL (EDMC)	5817	5175	1158	12150	32.8	1.095
374	MOOLCHAND HOSPITAL	742	764	348	1854	5.0	0.165
380	BALAJI MEDICAL & DIAGNOSTIC RESEARCH CENTRE	3779	4756	2764	11299	29.7	0.991
392	NORTHERN RAILWAY	2232	1168	806	4206	10.7	0.358
400	BLK SUPER SPECIALITY HOSPITAL	9848.38	10103.2	3268.9	23220	58.1	1.935
400	MAHARAJA AGRASEN HOSPITAL (PAN NO.AAATM1408N)	2772.5	5235.5	1032.5	9041	22.6	0.753
450	KASTURBA GANDHI HOSPITAL	1300	NA	292	1592	3.5	0.118
476	National Institute of Tuberculosis & Respiratory Diseases	353	1402	147	1902	4.0	0.133
495	Batra Hospital & Medical Research	1487	1432	827	3746	7.6	0.252
500	Baba Saheb Ambedkar Hospital	2374	N/A	183	2557	5.1	0.170
595	ST. STEPHEN'S HOSPITAL	93	3817	6607	10517	17.7	0.589
600	ESIC HOSPITAL (BASAI DARAPUR)	1885	2023	1162	5070	8.5	0.282
629	G B PANT HOSPITAL	5742	9296	NA	15038	23.9	0.797
640	DEEN DAYAL UPADHYAY HOSPITAL	1543	4133	NA	5676	8.9	0.296
650	RAJIV GANDHI CANCER INSTITUTE	81	512	55	648	1.0	0.033
675	SIR GANGA RAM HOSPITAL	13574.1	18105	293.2	31972	47.4	1.579
750	INDRAPRASTHA MEDICAL CORPORATION LTD.	8950	12100	6625	27675	36.9	1.230
980	HINDU RAO HOSPITAL	4100	2115	285	6500	6.6	0.221
1155	R.B.TB	102	522	311	935	0.8	0.027
1247	LADY HARDINGE MEDICAL COLLEGE & SMT. S.K. HOSPITAL	5925	8375	1950	16250	13.0	0.434
1420	DR. RAM MANOHAR LOHIA HOSPITAL	8550	14150	3105	25805	18.2	0.606
1500	GTB HOSPITAL	14148	10508	1004	25660	17.1	0.570
1526	VMMC & SAFDARJANG HOSPITAL	19491	NA	29275	48766	32.0	1.065
1528	LOK NAYAK JAI PRAKASH HOSPITAL	8403	9414	927	18744	12.3	0.409
2176	AIIMS	28528	15481	20289	64298	29.5	0.985

Annexure 18: Reminder Notice from Operator to Occupier

Date: DD/MM/YY
To The Occupier
Name of Occupier
Address of Occupier

Subject: Payment Not Made - Reminder Notice

Dear Sir,

This is to inform you that your Health Care Facility with ID no. ..... is being serviced by our company for the collection, transportation, treatment and disposal of Biomedical Waste generated by our facility.

This email is to inform you that your payment of Rs. ..... is outstanding.

We request you to pay within 7 days from the date of this letter to enjoyed continued services.

Regards

Relationship Manager
Name

Annexure 19: Final Reminder Notice from Operator to Occupier

Date: DD/MM/YY
To The Occupier
Name of Occupier
Address of Occupier

Subject: Payment Not Made - Final Reminder Notice

Dear Sir,

This is to inform you that your Health Care Facility with ID no. ..... is being serviced by our company for the collection, transportation, treatment and disposal of Biomedical Waste generated by our facility.

This email is to inform you that your payment of Rs. ..... is still outstanding.

This letter is in continuation to our previous letter dated dd/mm/yy. We request you to finally pay within 7 days from the date of this letter to enjoyed continued services. A copy of this letter has been sent to the Delhi Pollution Control Committee (DPCC).

Regards

Relationship Manager
Name

Annexure 20: Termination Notice from Operator to Occupier

Date: DD/MM/YY

To The Occupier

Name of Occupier

Address of Occupier

Subject: Payment Not Made - Termination Notice

Dear Sir,

This is to inform you that your Health Care Facility with ID no. ..... is being serviced by our company for the collection, transportation, treatment and disposal of Biomedical Waste generated by our facility.

This email is to inform you that your payment of Rs. ..... is still outstanding.

This letter is in continuation to our previous letter dated dd/mm/yy and dd/mm/yy. This letter is to inform you that we are terminating services to your Health Care Facility from this day onwards. A copy of this letter has been sent to the Delhi Pollution Control Committee (DPCC) for intimation and appropriate action.

Regards

Relationship Manager

Name

Annexure 21: Reminder Notice from Occupier to Operator

Date: DD/MM/YY
To The Operator
Name of Operator
Address of Operator

Subject: Collection of BMW - Reminder Notice

Dear Sir,

This is to inform you that our Health Care Facility with ID no. ..... is being serviced by your company for the collection, transportation, treatment and disposal of Biomedical Waste generated by our facility.

This email is to inform you that your waste was not collected from our premises.

We request you to collect within a day from the date of this letter.

Regards

Biomedical Waste Incharge
Name
Address

Annexure 22: Final Reminder Notice from Occupier to Operator

Date: DD/MM/YY
To The Operator
Name of Operator
Address of Operator

Subject: Collection of BMW - Reminder Notice

Dear Sir,

This is to inform you that our Health Care Facility with ID no. ..... is being serviced by your company for the collection, transportation, treatment and disposal of Biomedical Waste generated by our facility.

This email is to inform you that your waste was not collected from our premises.

We request you to collect it immediately. A copy of this letter has been forwarded to the Delhi Pollution Control Committee for intimation and appropriate action.

Regards

Biomedical Waste Incharge
Name
Address

Annexure 23: Appeal under Form V

FORM –V

(See rule 16)

Application for filing appeal against order passed by the prescribed authority

1. Name and address of the person applying for appeal :

2. Number, date of order and address of the authority which passed the order, against which appeal is being made (certified copy of order to be attached):

3. Ground on which the appeal is being made:

4. List of enclosures other than the order referred in para 2 against which appeal is being filed:

Signature ……..

Date : Name and Address……..

Annexure 24: Accident Reporting

FORM – I

[(See rule 4(o), 5(i) and 15 (2)]

ACCIDENT REPORTING

1. Date and time of accident :

2. Type of Accident :

3. Sequence of events leading to accident :

4. Has the Authority been informed immediately :

5. The type of waste involved in accident :

6. Assessment of the effects of the accidents on human health and the environment:

7. Emergency measures taken :

8. Steps taken to alleviate the effects of accidents :

9. Steps taken to prevent the recurrence of such an accident :

10. Does you facility has an Emergency Control policy? If yes give details:

Date : ..... Signature .....

Place: ..... Designation .....

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