Biological and Regulated Medical Waste Disposal Policy

I. Biological Waste
II. Regulated Medical Waste

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Biological and Regulated Medical Waste Disposal Policy

I. Biological Waste: Waste generated from processes related to the basic sciences (e.g., Biology, Chemistry, Physics) and that do NOT involve research pertaining directly to the diagnosis, treatment or immunization of humans or animals (i.e., biomedical research).

Biological waste can be classified into 2 categories:

- Items generated from processes involving biohazardous and/or infectious agents, including pathogenic bacteria, viruses, biological toxins, human cell lines, blood and body fluids, all human and animal cell cultures. All of these materials will be collected and disposed of as regulated medical waste (see Section II).
- Items generated from processes involving non-biohazardous and/or non-infectious materials, including non-infectious human, animal, plant and insect agents and environmental organisms. This includes work with recombinant DNA/synthetic nucleic acid work at Biosafety Level 1 (BSL1). Some of these materials are NOT required to be collected and disposed of as regulated medical waste (see Section I.B.).

A) All Laboratories

Registration Reminder: Experiments involving ANY of the following materials must be registered with, reviewed and approved by the Rutgers Institutional Biological Safety Committee (IBC) prior to starting work.

(a) recombinant or synthetic nucleic acid molecules,
(b) genetically engineered organisms,
(c) genetically engineered plants,
(d) non-human primates (NHPs) or NHP tissue/cells,
(e) human cell culture (including established human cell lines),
(f) human materials, tissue/organs,
(g) pathogenic microorganisms (including BSL1),
(h) human blood or blood products, or
(i) other potentially infectious material (OPIM) from humans or NHPs

All registration submissions for these experiments must be made electronically by utilizing the Biosafety Protocol Management System accessed through logging into http://myrehs.rutgers.edu. Paper registration and renewal/amendment documents are no longer accepted.

B) Biosafety Level 1 (BSL1) Laboratories

BSL1 applies to work with agents that pose a minimal potential threat to laboratory workers and the environment and do not consistently cause disease in healthy adults. For plant research, BSL1 refers to work with transgenic plants in which there is no evidence that the modified organism would be able to spread in the environment and, if accidentally released, would not pose an environmental risk.
BSL 1: Solids

All solid waste items which are potentially contaminated with microorganisms, tissue culture, cell culture, recombinant or synthetic nucleic acid molecules, genetically engineered organisms, or genetically engineered plants regulated by the CDC/NIH or USDA/APHIS at Biosafety Level 1 (BSL1) must first be chemically disinfected or autoclaved in accordance to their approved biosafety protocol if disposing in regular solid waste (trash). If disposing in regular trash, only clear autoclave bags are permitted to be used (no biohazard symbol). If untreated, BSL1 waste must be collected in the RMW box - untreated BSL1 waste must NOT be disposed of in the regular trash!

Contact biosafety@aps.rutgers.edu with any issues regarding your Facility’s autoclave.

Remember: Red, orange and even clear autoclave bags with biohazard symbols (regardless of claim that symbol will ‘disappear when autoclaved) must NOT be used for autoclaving BSL1 waste that will be disposed in regular trash receptacles or dumpsters. These bags or any biohazard labeled items found in regular trash must be reported immediately to biosafety@aps.rutgers.edu.

For laboratories performing both BSL1 and BSL2 activities, all BSL1 solid waste must be overclassified and disposed of as RMW in the RMW box. BSL2 items must be handled as outlined in the BSL2 section below.

Autoclave Procedures for BSL1 Waste

(a) The clear autoclave bag should be filled to two-thirds of its capacity. Autoclaves must be validated according to the REHS policy on autoclave validation (see RU Biosafety Guidelines, Appendix G).

(b) After the bag is 2/3 full, it should be loosely taped closed and labeled with the investigator’s name.

(c) Autoclave tape should be affixed to the exterior of the bag to ensure the waste has reached the proper temperature. Laboratory staff must periodically challenge autoclaves using biological indicators such as spore strips to ensure that biological waste is being appropriately disinfected. Please refer to the REHS policy on autoclave validation.

(d) Waste is autoclaved using appropriate cycle parameters.

(e) After autoclaving, waste is disposed in building dumpster by laboratory staff or by arrangement with housekeeping staff.
BSL-1: Liquids

BSL1 contaminated liquid waste must be autoclaved or chemically disinfected (with appropriate disinfectant) prior to drain disposal of the liquid. Any use of chemical disinfectant must allow for the appropriate contact time of the disinfectant before drain disposal. Contact REHS at biosafety@aps.rutgers.edu for information regarding which disinfectants are appropriate for your BSL1 materials.

BSL-1: Sharps

BSL1 contaminated sharps, such as syringes (with and without needles), scalpels and blades, including glass Pasteur must be disposed of in an appropriate Sharps Container.

Note: Glass Pasteur pipettes NOT used for biohazardous and/or infectious materials or for rDNA work, slides and cover slips used with FIXED materials may be disposed in the Laboratory Glassware box (lined with clear plastic bag).

C) Biosafety Level 2 (BSL2) Laboratories

Applies to work with agents associated with human disease, pathogenic or infectious organisms that pose a moderate hazard to healthy adults. For plant researchers, BSL2 is assigned to work with transgenic plants which, if released outside the greenhouse, could be viable in the surrounding environment but would have a negligible impact or could be readily managed. BSL2 also applies to transgenic research where the entire genome of an indigenous infectious agent or plant pathogen which is either indigenous to the area and potentially harmful to the environment, but are manageable, or are exotic but have no potential for causing serious harm to managed or natural ecosystem.

BSL 2: Solids

All solid waste items which are potentially contaminated with microorganisms, tissue culture, cell culture, recombinant or synthetic nucleic acid molecules, genetically engineered organisms or genetically engineered plants which are regulated by the CDC/NIH or USDA/APHIS at Biosafety Level 2 (BSL2) must be autoclaved or chemically disinfected in accordance with their approved protocol and placed into the Regulated Medical Waste stream as Overclassified Medical Waste as outlined below. The following autoclave procedures should be followed when processing biological waste generated in BSL2 laboratories. Note: The color of the autoclave bags used for BSL2 waste is unimportant since the waste is packaged in the Regulated Medical Waste (RMW) boxes for ultimate disposal.

Autoclave Procedures for BSL2 Waste

(a) The orange, red or clear autoclave bag should be filled to two-thirds of its capacity.
(b) After the bag is 2/3 full, it should be loosely taped closed and labeled with the
investigator’s name.
(c) Autoclave tape should be affixed to the exterior of the bag to ensure the waste has
reached the proper temperature.
(d) Laboratory staff must periodically challenge autoclaves using biological indicators
such as spore strips to ensure that biological waste is being appropriately
disinfected. See RU Biosafety Guidelines, Appendix G.
(e) Autoclave waste using appropriate cycle parameters for waste.
(f) After autoclaving, waste is labeled with an inner container label (supplied by
REHS) and disposed in cardboard RMW box located by the autoclave(s). When
the RMW box is full, seal the liner bag, close the bin or seal the box with tape, and
affix an outer container label to the outer box.

BSL2: Liquids

All BSL2 liquid waste must be autoclaved or chemically disinfected (with
appropriate disinfectant and contact time) prior to drain disposal of the
liquid. Contact REHS at biosafety@aps.rutgers.edu for information
regarding which disinfectants are appropriate for your BSL2 materials.

BSL2: Sharps

BSL2 contaminated sharps, such as syringes (with and without needles), scalpels and
blades, including glass Pasteur pipettes, microscope slides and cover slips must be
disposed of in an appropriate Sharps Container. If these materials are used in a mixed
BSL1/BSL2 laboratory, they need to be over-classified into a sharps container.

A) Biosafety Level 3 (BSL3) Laboratories

Applies to work with indigenous or exotic agents that may cause serious or lethal
disease via aerosol transmission. For plant research, this applies to plant pathogens, or
other organisms that have a recognized potential for significant detrimental impact on
the environment. This category also applies to non-genetically engineered plant research
that involves exotic infectious agents capable of causing serious environmental harm.

BSL3: Solids, Liquids, Sharps

BSL3 laboratories treat all liquid and solid waste as outlined in a reviewed and
approved Standard Operating Procedures (SOPs). These SOPs are in accordance with
approved IBC protocols and outline specific procedures for waste disposal. All waste
(liquid, solid and sharps) is autoclaved out of the facility in autoclave bags. After
autoclaving, inner container labels are affixed to the bag, and the bag is then placed in
cardboard regulated medical waste containers. Laboratory staff are to then seal the
container and affix an outer container label to the outside. All BSL3 autoclaves are
challenged with biological indicators monthly. Select agent facilities must challenge
their autoclaves weekly with biological indicators. All autoclave challenges with biological indicators are to be performed as outlined in approved standard operating procedures and/or IBC protocols.

**B) Animal Facilities**

Animal carcasses, body organs and bedding from animals that had been exposed to an agent that can cause disease in humans must be disposed of according to the procedures outlined in the IBC and/or IACUC protocols. All such materials must be autoclaved and then collected in regulated medical waste, unless otherwise approved by REHS. Animal carcasses, body parts and bedding from animals exposed to pharmaceutical compounds must also be collected as regulated medical waste. Exceptions to this would be animals exposed to hazardous chemicals, which materials required disposal through REHS. For any questions, contact REHS at biosafety@aps.rutgers.edu.

**C) Clinical Areas**

Clinical areas may generate different waste streams than research laboratories. These areas generate regular trash, dirty linens, sharps, body fluids, other potentially infectious material, and other materials generated during patient treatment. Any liquid waste generated over 20cc should be referred to REHS for disposal instructions. Solid waste that must be disposed of as regulated medical waste includes tubing, gloves, paper gowns, paper linens, and clean up debris that is visibly contaminated with blood or potentially infectious human fluids. Fecal smear cards must also be collected as solid regulated medical waste. Solid waste must be disposed and packaged as outlined in Section II - Regulated Medical Waste.

**D) Non-Biological Laboratories**

Laboratories not performing biological related research may generate different waste streams than BSL1, BSL 2, or BSL 3 research laboratories. These laboratories may generate sharps (Class 4 RMW) and Unused Sharps (Class 7 RMW). Any sharps waste generated must be referred to REHS for disposal instructions. All needles, syringes without needles, razors and scalpels must be placed in an approved Sharps Container and disposed as RMW, even if they have not been in contact with any biological or infectious material. Other materials such as glass pipets, Pasteur Pipets may be placed into broken glass if they were not used in conjunction with recombinant materials, pathogens or animals. Any sharps waste contaminated with chemicals and/or radiological material must still be placed in a separate approved Sharps Container and referred to REHS for disposal in accordance with the respective Hazardous Waste Disposal Policy and/or Radiological Waste Disposal Policy.
II. Regulated Medical Waste (RMW)

The following instructions apply to generators of Regulated Medical Waste (RMW). At Rutgers University, RMW generators may be engaged in health care delivery, athletics or biomedical research. Rutgers University employees who are reasonably anticipated to come into contact with human blood or blood products must adhere to the Rutgers University Bloodborne Pathogen (BBP) program. Contact REHS at 848-445-2550 or visit http://rehs.rutgers.edu for BBP program details.

All laboratories and clinical areas generating RMW must attend a RMW Training Session provided by REHS. The requirements for RMW disposal are included in REHS laboratory, biosafety and clinical health and safety trainings. If you plan to generate RMW please contact REHS at biosafety@aps.rutgers.edu or log into http://myrehs.rutgers.edu to register for a course or complete an online training module, as applicable. Sessions may also be scheduled and provided as needed to individuals, groups, departments, clinical personnel or laboratories.

The following procedures for the proper processing, transportation, and ultimate disposal of RMW are taken from the Comprehensive Regulated Medical Waste Management Act (N.J.S.A. 13:1E-48) and the NJDEP Solid and Hazardous Waste Rules subchapter 3A: Regulated Medical Wastes (N.J.A.C. 7:26-3A).

A) Definition of RMW

The Regulated Medical Wastes subchapter 3A (N.J.A.C. 7:26-3A.6) defines RMW as solid waste that meets both the process definition and the classification definitions listed below.

1) Process Definition: RMW is any solid waste generated from one of the following processes: the diagnosis, treatment or immunization of humans or animals; research pertaining to the diagnosis, treatment or immunization of humans or animals (i.e., biomedical research); or the production or testing of biologicals.

2) Classification Definition: To be considered as RMW, items that are included in the above process definition must also belong to one of the following classes of regulated medical waste.
## Classes of Regulated Medical Waste

<table>
<thead>
<tr>
<th>Class</th>
<th>Waste Type</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>Cultures and Stocks</td>
<td>Cultures and stocks of infectious agents and associated biologicals; cultures from medical or pathological labs; cultures and stocks of infectious agents from research labs; wastes from the production of biologicals; discarded live and attenuated vaccines; culture dishes and devices used to transfer, mix, or inoculate cultures.</td>
</tr>
<tr>
<td>Class 2</td>
<td>Pathological Wastes</td>
<td>Human pathological wastes including tissues, organs, and other body parts and fluids that are removed during surgery or autopsy or other medical procedures; specimens of body fluids and their containers.</td>
</tr>
<tr>
<td>Class 3</td>
<td>Human Blood &amp; Body Products</td>
<td>Liquid waste human blood; items saturated, dripping or caked with human blood (including serum, plasma and other blood components) which were used or intended for use in either patient care, testing and laboratory analysis, or the development of pharmaceuticals. Intravenous bags, soft plastic pipettes and plastic blood vials are also included in this category.</td>
</tr>
<tr>
<td>Class 4</td>
<td>Sharps</td>
<td>Sharps that were used in animal or human patient care or treatment in medical research or industrial laboratories. Includes hypodermic needles, all syringes to which a needle can be attached (with or without the needle), Pasteur pipettes, scalpel blades, blood vials, carpules, needles with attached tubing, and broken or unbroken glassware (slides and coverslips) that were in contact with infectious agents.</td>
</tr>
<tr>
<td>Class 5</td>
<td>Animal Waste</td>
<td>Contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research, production of biologicals, or testing of pharmaceuticals.</td>
</tr>
<tr>
<td>Class 6</td>
<td>Isolation Waste</td>
<td>Biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans or animals that are isolated to protect others from certain highly communicable diseases.</td>
</tr>
<tr>
<td>Class 7</td>
<td>Unused Sharps</td>
<td>Unused, discarded sharps that were intended to be used. Includes hypodermic needles, suture needles, syringes and scalpel blades.</td>
</tr>
</tbody>
</table>
B) Overclassified Regulated Medical Waste (RMW)

Overclassified RMW is material that does not meet the strict definition of RMW listed in part A, above. Overclassified RMW materials resemble RMW but are generated from activities that do not meet both the “process” definition and the “classification” definition of RMW. Examples of overclassified RMW include materials generated in teaching laboratories (while research laboratories are covered in the process definition, teaching laboratories are not). Overclassified RMW must be packaged and labeled in the same manner as RMW and is collected by the RMW vendor.

Some activities may meet the process definition but generate wastes that do not belong in any of the seven specific classes. In such cases, contact REHS at biosafety@aps.rutgers.edu for guidance on whether the waste should be packaged and labeled as overclassified RMW.

C) RMW In Process

All solid waste containers for RMW collection must be closed when not in use. Laboratories and clinics may have small rigid, leakproof, bag-lined containers with lids and biohazard labels near work areas or on bench tops to collect RMW as it is being generated.

For laboratories, the preferred method of collection for solid RMW at the lab bench is a small, red bag or a rigid container lined with a small red bag that can be closed (either by tying the bag or lid covering the container). Small bench top containers must be emptied into the larger RMW box either when full or not in use. Remember that BSL2 and higher solid RMW must be autoclaved or chemically disinfected prior to being placed in the large RMW box, unless otherwise approved by REHS.

For clinical areas, the solid RMW does not need to be autoclaved or chemically disinfected. Small/temporary containers may be used in areas where the RMW box would not be appropriate (e.g., patient exam room). When temporary containers are full, the bags must be pulled out by lab or clinic personnel, closed/sealed, labeled with an inner container label and placed in a RMW bin/box. The RMW box is then closed/sealed and labeled with an outer container label.

D) Segregation of RMW

As RMW is generated it must be segregated into the following three categories: sharps (both class 4 and class 7), fluids (greater than 20cc), and other RMW(solid). Collect solid and sharps RMW in separate inner containers appropriate for that waste stream. These inner containers will ultimately be closed and placed into the outer container which is the RMW box/bin. Liquid RMW greater than 20cc must be chemically disinfected for the appropriate contact time, and then drain disposed,
unless otherwise approved by REHS. Needles, Pasteur pipettes, glass cover slips, scalpel blades and syringes must be collected in a sharps container; culture transfer devices, blood soaked items, and other paper or cloth related items must be collected in autoclave bags or red RMW liner bags. Do not chop, bend, break or otherwise destroy hypodermic needles or syringes before discarding them into the sharps container.

E) Treatment of RMW

Generally, it is not necessary to treat RMW or overclassified RMW before placing it in the outer container (RMW box) for ultimate disposal. However, Rutgers University policy requires that laboratories working with human pathogens regulated by the CDC or NIH at Biosafety Level 2 or higher autoclave or chemically disinfect their waste prior to placing the waste into RMW boxes for collection by the RMW vendor. After autoclaving or chemical disinfection, this waste material is considered overclassified RMW.

F) Storage of RMW

Outer containers must be stored in a secure area protected from the elements, high temperatures, vandalism, insects and rodents. Unauthorized personnel must be denied access to this designated storage area. REHS recommends that RMW boxes/bins are not stored in common areas, e.g. accessible autoclave rooms, hallways. If RMW is stored in a common area the location must be secured, e.g. locked, and the door appropriately labeled. When storing containers, be sure that their labels face outward so that they can be easily seen. Containers must also be sealed securely to prevent spillage, putrescence or the leaking of vapors. Liquids (e.g. blood) must be put into containers that are packaged with a sufficient amount of surrounding absorbent material to absorbent leakage. Volumes of liquid may not exceed 20cc per individual container.

G) Limitations on Storage of RMW

NJDEP Solid and Hazardous Waste Rules subchapter 3A: Regulated Medical Wastes (N.J.A.C. 7:26-3A) allows RMW to be stored on site for up to one year. In order to comply with this subchapter, RMW generators must dispose of RMW containers on a yearly basis, even if RMW containers are not full. REHS recommends frequent disposal of RMW boxes/bins.

H) Packaging, Labeling and Marking Requirements

1) Packaging: The generator must package all RMW before the RMW vendor can remove it. The RMW vendor will not package your waste. The RMW bin/ box must be lined with a red bag before any waste can be placed inside. All needles, syringes, scalpels and any sharp objects must be packaged in an appropriate puncture- resistant sharps container. Unbroken as well as broken glass must be packaged to prevent puncture of the outer RMW container. All other items may be
packaged in *autoclave* bags or other appropriate inner containers. These items must then be packaged in an appropriate medical waste box/bin before removal. Boxes/bins used for the first shipment of RMW can be obtained by contacting REHS at 848-445-2550. Replacement boxes for use with future disposal of RMW will be available from the waste vendor upon arrival or subsequent pickups. If bins are used, new bins will be supplied to the laboratory. Only the outer containers supplied by REHS or the vendor may be used to package RMW.

2) *Labeling and Marking:* Generators shall mark each package of RMW according to the following labeling and marking requirements before it can be transported off-site by the RMW vendor. The outermost surface of each RMW box/bin prepared for shipment shall be labeled with a biohazard label (most times preprinted on the outer container) and also with a special water resistant identification label called “Medical Waste Outer Container Label.” The Medical Waste Outer Container Label is available from REHS and provides the following information: campus, building and room where waste was generated. If these labels are unavailable, the required information may be written directly on the outside of the box/bin. Only indelible or waterproof ink or permanent marker may be used to complete this label, or to label the box. If there is not a biohazard label preprinted on the container, a label must be affixed prior to disposal. In addition to the requirements above, the generator must label inner containers including sharps containers and fluid containers. Each inner container shall be labeled only with a special water resistant identification label called “Medical Waste Inner Container Label.” The Medical Waste Inner Container Label is available from REHS and provides the following information: campus, building, room, phone number and contact person name for the location where the waste was generated.

Note that all containers, both inner and outer, must be marked with the required information. Labels may be obtained by contacting REHS at biosafety@aps.rutgers.edu.

1) **Tracking Form for RMW**

The NJ Medical Waste Tracking Form (Appendix 1) is used to ensure proper transportation of RMW to an appropriate disposal site. Rutgers University has arranged with the RMW vendor to supply the four-copy RMW Tracking Form. The RMW vendor will fill out the tracking form. The generator must check Items 1 through 14 on the tracking form for purposes of verifying the accuracy of the information listed. After a thorough review of items 1 through 14, the generator must then sign Item 15 of the tracking form. After the RMW transporter has also signed in Item 16, Copy 4 (goldenrod sheet) of the tracking form will be given to the generator.

After the RMW is received by the disposal facility, a disposal facility representative will sign in Item 22. Copy 1 (white sheet) will be mailed back to REHS. Copy 4 (goldenrod sheet) of the tracking form must be kept by the generator or building contact representing the generator at the generation site for at least three years from the date the waste was accepted by the RMW transporter. The destination facility will send
Copy 1 to REHS within 15 days of receipt of the tracking form from the RMW hauler, if Copy 1 is sent to you inadvertently please forward Copy 1 to REHS.

J) RMW Inspections

Periodically, the New Jersey Department of Environmental Protection inspects RMW compliance at Rutgers University facilities. The inspector may visit health centers and other clinical areas, laboratories, or athletic training areas. If any inspector visits without a REHS representative, please contact REHS immediately and wait for the REHS representative to arrive before beginning any opening conference with the inspector. REHS is the designated university representative.

K) Scheduling a RMW Pickup

The RMW vendor makes regularly scheduled pick-ups of RMW boxes. Most buildings and campuses have weekly pick-ups, but the frequency varies based on the volume of waste generated at each pick-up location. Additional pick-up requests and one-time pick-ups must be requested online at http://rehs.rutgers.edu. It is important that all requirements be completed prior to a pickup (e.g. labeling of the inner and outer container and sealing the box). Note: The RMW vendor will not pick up the waste without a representative of the RMW generator (e.g., a lab member or building contact representing the generator) being present to sign the RMW tracking form.

L) Supplies

REHS will provide the following upon an initial request: RMW boxes, RMW liner bags (red bags), and RMW labels (inner and outer). After the first set of supplies are delivered to the area, REHS can assist laboratories and clinical areas with acquisition of supplies from the RMW vendor. It is the responsibility of individual laboratories to purchase sharps containers, autoclave bags, autoclave indicator tape, and packing tape from appropriate laboratory supply vendors.
M) Definitions

1) “Biologicals” means preparations made from living organisms and their products; includes vaccines and cultures intended to be used for diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.

2) Blood Products” means any product derived from human blood, including blood plasma, platelets, red or white blood corpuscles; and other derived licensed products including interferon, etc.

3) “Generator” means any person, by site, whose act or process produces regulated medical waste as defined in N.J.A.C. 7:26-3A.6, or whose act first causes a regulated medical waste to become subject to regulation.

4) “Infectious agent” means any organism (such as a virus or bacteria) that is capable of being communicated by invasion and multiplication in body tissues and capable of causing disease or adverse health impacts in humans.

5) “Inner container” means any container (sharps container, autoclave bag, 5-gallon bucket) that would collect RMW and would ultimately be placed into a properly lined outer container. This container must be labeled with the “inner container label.”

6) “Inner container label” means the label available from REHS which states the campus, building, room, phone number and contact person name for the location where the RMW was generated.

7) “Laboratory” means any research, analytical, or clinical facility that performs health care related analysis or service. This includes medical, pathological, pharmaceutical, research, commercial and industrial laboratories.

8) “Medical waste” means any solid waste that is generated in the diagnosis, treatment, or immunization of human beings or animals; in research pertaining thereto; in the testing of biologicals; or in home self-care.

9) “Outer container” means the cardboard box that is supplied by the RMW vendor or REHS to collect inner containers of RMW. This outer container must be lined with a red RMW bag prior to placing any inner containers into the box. This box also must be labeled with the “outer container label.”

10) “Outer container label” means the label available from REHS which states the campus, building and room where RMW was generated.

11) “Regular trash” means non-regulated, non-contaminated waste. This waste will not be transferred off site to a dedicated waste facility, but will be co-mingled with regular waste streams.

12) “Transporter” means a person engaged in the off-site transportation of regulated medical waste by air, rail, highway, or water.
Appendix 1

Regulated Medical Waste Tracking Form
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Generator's Name and Mailing Address</td>
</tr>
<tr>
<td>2.</td>
<td>Tracking Form Number</td>
</tr>
<tr>
<td>3.</td>
<td>Telephone Number</td>
</tr>
<tr>
<td>4.</td>
<td>State Permit or ID No.</td>
</tr>
<tr>
<td>5.</td>
<td>Transporter's Name and Mailing Address</td>
</tr>
<tr>
<td>6.</td>
<td>Telephone Number</td>
</tr>
<tr>
<td>7.</td>
<td>State Transporter Permit or ID No.</td>
</tr>
<tr>
<td>8.</td>
<td>Destination Facility Name and Address</td>
</tr>
<tr>
<td>9.</td>
<td>Telephone Number</td>
</tr>
<tr>
<td>10.</td>
<td>New Jersey Waste Description</td>
</tr>
<tr>
<td>11.</td>
<td>Regulated Medical Waste, 6.2, UN 2911, PG II (Unheated)</td>
</tr>
<tr>
<td>13.</td>
<td>Total Weight</td>
</tr>
<tr>
<td>14.</td>
<td>Additional Information</td>
</tr>
<tr>
<td>15.</td>
<td>Generator's Certification per 49 CFR 172.204(e)</td>
</tr>
<tr>
<td>16.</td>
<td>Transporter 1 (Certification of Receipt of RMW as described in Items 11, 12, &amp; 13)</td>
</tr>
<tr>
<td>17.</td>
<td>Transporter 2 or Intermediate Handler (Name and Address)</td>
</tr>
<tr>
<td>18.</td>
<td>Telephone Number</td>
</tr>
<tr>
<td>19.</td>
<td>State Transporter Permit or ID No.</td>
</tr>
<tr>
<td>20.</td>
<td>Transporter 2 or Intermediate Handler (Certification of Receipt of RMW as described in Items 11, 12, &amp; 13)</td>
</tr>
<tr>
<td>21.</td>
<td>New Tracking Form Number (for consolidated or remanufactured RMW)</td>
</tr>
<tr>
<td>22.</td>
<td>Destination Facility (Certification of Receipt of RMW as described in Items 11, 12, &amp; 13)</td>
</tr>
<tr>
<td>23.</td>
<td>Discrepancy Box (any discrepancies should be noted by item number and initial)</td>
</tr>
<tr>
<td>24.</td>
<td>Emergency Telephone Numbers (24 hours a day):</td>
</tr>
<tr>
<td></td>
<td>National Response Center: 1-800-426-6602</td>
</tr>
<tr>
<td></td>
<td>US Department of Transportation: 1-800-426-6602</td>
</tr>
<tr>
<td></td>
<td>Center for Disease Control: 1-800-252-7172</td>
</tr>
</tbody>
</table>

(Instructions Overleaf)
Appendix 2

Flowchart for Packaging Regulated Medical Waste
PACKAGING RMW FOR DISPOSAL (for Laboratories)

The generator **must** package all RMW properly before the RMW is removed!

- **Is RMW Generated?**
  - No → Follow Applicable Disposal Policy
  - Yes → **Is RMW Generated Mixed with Radiological or Chemical Waste?**
    - No → Autoclave or Chemically Disinfect Waste
    - Yes → **Is BSL-2/2+ Waste Disinfected or Inactivated?**
      - No → Are Containers and/or Bags Sealed?
        - Yes → Place Sharps Container and RMW bags in a lined RMW Box provided for Disposal. Label with a “Medical Waste Inner Container Label.”
        - No → Ensure Lids and bags are closed/sealed
      - Yes → Seal the Bag, Place a “Medical Waste Inner Container Label” on the Outside of the Bag at the top seal, Tape the Box Closed, and Place a “Medical Waste Outer Container Label” on the Outside of the Box

- **Request Disposal by submitting the On-Line Biological and Medical Waste Disposal Request Form at** [http://rehs.rutgers.edu/](http://rehs.rutgers.edu/)

- **RMW Red Liner Bag**
- **Medical Waste Inner Container Label**
- **Medical Waste Outer Container Label**
- **RMW Shipping Box**
PACKAGING RMW FOR DISPOSAL (for Clinical Areas)

The generator **must** package all RMW properly before the RMW is removed!

<table>
<thead>
<tr>
<th>Flowchart Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Is RMW Generated?</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

- Place Sharps Container and RMW bags in a lined RMW Box provided for Disposal, Label with a “Medical Waste Inner Container Label”.
- Request Disposal by submitting the On-Line Biological and Medical Waste Disposal Request Form at [http://rehs.rutgers.edu/](http://rehs.rutgers.edu/).
Appendix 3
Laboratory Waste & Clinical Waste Management Guide
Regulated Medical Waste Disposal Guide for Laboratories

<table>
<thead>
<tr>
<th>CLEAR BAG</th>
<th>GLASS BOX</th>
<th>SHARPS CONTAINER</th>
<th>REGULATED MEDICAL WASTE (RMW) BIN or BOX</th>
<th>OTHER MEDICAL WASTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image](CLEAR BAG)</td>
<td>![Image](GLASS BOX)</td>
<td>![Image](SHARPS CONTAINER)</td>
<td>![Image](Hazardous Waste)</td>
<td>![Image](Other Medical Waste)</td>
</tr>
</tbody>
</table>

**General Trash**
- paper and plastic packaging, wrappers
- small amounts of **non-hazardous** solid waste (i.e., sugars, salts, amino acids, enzymes, etc.)
- other **non-contaminated** solids (e.g., paper towels, bench paper, gloves)
- alkaline batteries

**Non-contaminated Glassware**
- **Non-contaminated** broken and intact glassware
- empty, rinsed* chemical reagent bottles (deface the label and remove the lid first)
  - Glass boxes must be lined with a clear, thick plastic bag
- When the container is ¾ full, the entire box must be removed by Physical Plant/Facilities Custodians
- The laboratory is responsible for providing a new box and liner.

**Used and Unused Sharps**
- Including, but not limited to:
  - needles (including those with attached tubing or filters)
  - syringes – with or without needle (don’t remove, bend or recap the needles!)
  - razors/scalpels
  - Pasteur pipettes
  - blood vials (animal or human)
  - slides/cover slips

**Liquids**
- After disinfection*, the following liquids can be drain disposed:
  - mammalian cell culture
  - Blood and body fluids from humans and other animals
  - bacterial/viral/fungal cultures
  - *Allow for the appropriate contact time for the chosen disinfectant.
  - Drain disposal is prohibited in BSL3 laboratories and if hazardous chemicals or radioactive waste is present!

**Solids**
- Solid waste contaminated with:
  - cultures/stocks of bacteria, viruses or fungi
  - Live and attenuated vaccines/viruses (vials must be placed into a sharps containers)
  - human/non-human primate cells, blood, body fluid, tissues, and other source materials
  - recombinant/synthetic DNA materials
- Includes contaminated plasticware, serological pipets, pipet tips, tubes (i.e., Eppendorf, conicals), gloves, pathological waste (without fixative), and specimen bags with biohazard labels

**Mixed Waste**
- Please contact REHS for instructions on the disposal of mixed waste.
  - Biological & Chemical
  - Biological & Radiological
  - Chemical & Radiological

**BSL2 and higher infectious, recombinant DNA and synthetic DNA waste must be autoclaved or chemically disinfected - before disposal!**

**All RMW containers should have a biohazard warning label on the container and the lid.**
- RMW Bins or Boxes must be lined with red plastic bags and CLOSED when you are not actively adding waste.
- Once 2/3 full, staff MUST seal bags with tape and label with a REHS provided “Inner Container Label”
- A REHS provided “Outer Container Label” must be placed on the sealed box

**Biological and Medical Waste Disposal can be requested**
Online at [http://rehs.rutgers.edu](http://rehs.rutgers.edu) (848) 445-2550

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*Rinsate must be collected and disposed of as hazardous waste through REHS.*
## Regulated Medical Waste Disposal Table
### Research Laboratories

<table>
<thead>
<tr>
<th>Items</th>
<th>Biohazardous/Infectious (includes human/non-human primate materials, toxins, microorganisms)</th>
<th>Recombinant DNA or Synthetic Nucleic Acid (r/sNA) (includes plant materials)</th>
<th>Other Biological (non-biomedical research, non r/sNA, non-biohazardous/infectious)</th>
<th>Chemical</th>
</tr>
</thead>
</table>
| **Sharps:** | Syringes with and without needles  
(For your safety do not remove needles from syringes)  
Unused sharps  
Scalpel blades  
Needles  
Glass blood vials  
(empty/residual only) | Red Sharps Container into Regulated Medical Waste (RMW) box | | Red Sharps Container with Hazardous Waste label and disposed of as hazardous chemical waste:  
| **Glass material:** | Pasteur pipettes  
Serological pipettes  
Flasks  
Plates  
Microscope slides/cover slips  
Glass vials with agar slant  
Broken or intact glassware | Red Sharps Container into RMW box | Broken Glassware Container (lined with clear plastic bag – not overfilled) | Follow REHS guidance for collection and disposal as hazardous chemical waste:  
| **Disposable Non-Sharps:** | Serological pipettes  
Micropipette tips  
Petri dishes with/without agar  
Gloves, disposable gowns  
Bench paper and towels  
Paper materials | Note: Mixed BSL-1/BSL-2 labs must follow the disposal guidance for BSL-2 wastes!  
**BSL1:**  
- Autoclave in Clear autoclave bag and dispose in regular trash, OR:  
- Disinfect for appropriate contact time (e.g., 1:10 dilution of bleach for 15 minutes), then drain dispose, OR;  
- Place directly into RMW box  
**BSL2:**  
- Autoclave or disinfect for appropriate contact time (e.g., 1:10 dilution of bleach for 15 minutes) and place into RMW  
**Biological/Plant toxins:** follow guidance provided by biosafety@aps.rutgers.edu | Dispose in regular laboratory trash.  
**Note:** MUST be disposed of as BSL-1 or BSL-2 wastes, as appropriate, if biohazardous/infectious/and/or r/sNA materials are being generated within the same laboratory space | Follow REHS guidance for collection and disposal as hazardous chemical waste:  
| **Liquid Waste:** | Liquid media and cultures aspirated or decanted from flasks and dishes  
*Note:* No standing liquids allowed in biomedical waste box. | Disinfect for appropriate contact time  
(e.g., 1:10 dilution of household bleach for 15 minutes), then drain dispose.  
*-------- OR --------*  
Autoclave, then drain dispose.  
*Note:* Contact REHS at biosafety@aps.rutgers.edu for tubes/containers with more than residual amounts of blood, serum, plasma | Follow REHS guidance for collection and disposal as hazardous chemical waste:  
| **Mixed Wastes:** | Hazardous chemicals and/or Radioisotopes mixed with biohazardous/infectious materials | Contact REHS before generating such waste.  
848-445-2550 | | |
<table>
<thead>
<tr>
<th>CLEAR BAG</th>
<th>CLEAR BAG</th>
<th>YELLOW WASTE CONTAINERS</th>
<th>SHARPS CONTAINER</th>
<th>REGULATED MEDICAL WASTE (RMW) BOX</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Trash</td>
<td>Dirty Linens</td>
<td>Solids and Sharps Used with Chemo Administration</td>
<td>Used and Unused Sharps (full containers placed into RMW box)</td>
<td>Liquids</td>
</tr>
<tr>
<td>- Paper and plastic packaging, wrappers&lt;br&gt;- Non-contaminated (NO visible blood); paper liners and gowns, disposal gloves&lt;br&gt;- Empty urine specimen cups&lt;br&gt;- Plastic trays/holders from sterile procedures trays (e.g., bone marrow, lumbar puncture biopsy trays).&lt;br&gt;Remember: ALWAYS check trays for presence of sharps prior to disposal!</td>
<td>- Each clinical site is responsible for arranging used linen collection, as needed.&lt;br&gt;- All used linen, even linen contaminated with visible blood, must be placed in an appropriate collection receptacle while storing prior to laundering.</td>
<td>- Syringes/needles&lt;br&gt;- I.V. Bags/Tubing&lt;br&gt;- Gloves&lt;br&gt;- Paper gowns&lt;br&gt;- Paper liniers&lt;br&gt;Including, but not limited to:&lt;br&gt;- Syringes with and without needles (do not bend or recap!)&lt;br&gt;- Biopsy needles&lt;br&gt;- Unused sharps&lt;br&gt;- Scalpel blades&lt;br&gt;- Needles&lt;br&gt;- Scissors/Tweezers (metal)&lt;br&gt;- Wires&lt;br&gt;- Glass blood vials (empty/residual only)&lt;br&gt;- Empty medication vials</td>
<td>- Urine specimen cups: Drain dispose urine. Empty cups in regular trash&lt;br&gt;- Blood vials/tubes: Place in rigid, screw-top container. Dispose container in biomedical waste box.&lt;br&gt;</td>
<td>- ≥20cc liquids&lt;br&gt;- Tubing&lt;br&gt;- Gloves&lt;br&gt;- Paper gowns&lt;br&gt;- Paper liniers&lt;br&gt;- Blood/body fluid clean up debris&lt;br&gt;Note: ‘red-bag’ waste collected in alternate receptacles in patient rooms must be handled by clinical personnel only! NO liquids permitted in biomedical waste box!</td>
</tr>
</tbody>
</table>

All RMW containers should have a biohazard warning label on the container and the lid. RMW Bins or Boxes must be lined with red plastic bags and CLOSED when you are not actively adding waste. When 2/3 full, staff MUST seal the bags with tape and label bags with a REHS provided “Inner Container Label” A REHS provided “Outer Container Label” must be placed on the sealed box. Do not overfill containers!

Biological and Medical Waste Disposal can be requested online at: http://rehs.rutgers.edu. Questions? Call 848-445-2550