	BROOKHAVEN NATIONAL LABORATORY GENERAL CLINICAL RESEARCH CENTER POLICY	GCRC POLICY:	IC-06.02	Page 1 of 6
		PREPARED BY	: B. Pyatt	Infection Control
	SUBJECT: Handling & Disposal of Regulated Medical Waste	REVIEWED BY:	S.Ferrone/J. Adam Compliance RCD R.Colichio J. Pavlak	C.Burns ESH Mgr. WMR
		APPROVED BY EFFECTIVE DA REVISION HIST	TE:2/1/08	Medical Dept. Chair

1.0 **PURPOSE**

This document describes the mechanism established within the Medical Department for the proper identification, packaging, labeling, collection, storage, disposal and tracking of both Regulated Medical Waste (RMW) and Radioactive Regulated Medical Waste (R-RMW), see 2.2 for definitions). Specific responsibilities are defined within the Guideline. This is a supplement to the BNL SBMS Regulated Medical Waste Management Subject Area. See BNL's ON LINE Standards Based Management System for actual procedure.

2.0 APPLICABLE DOCUMENTS/DEFINITIONS

Applicable Documents:

New York State Dept. of Environmental Conservation (NYSDEC) 6NYCRR Part 364.9 6 NYCRR Part 364 ES&H Standard 2.8.0, "Bloodborne Pathogens Bloodborne Pathogen Program Medical Department Guideline IC-6.1, "Bloodborne Pathogens Exposure Control Plan" SBMS Regulated Medical Waste Management Subject Regulated Medical Waste Management Subject Area Radioactive Waste Management SBMS U.S. Department of Transportation Subject Area Transfer of Hazardous Materials Onsite Process Assessment Form MED-370-MWM Medical Waste Management

Definitions/Acronyms: (for the purposes of this document, for further information reference the specific Subject Area)

<u>REGULATED MEDICAL WASTE</u> ("RMW)-This is a <u>two-part</u> definition. RMW is any waste generated in the diagnosis, treatment (e.g., provision of medical services), or immunization of human beings or animals, in research pertaining there to, or in the production or testing of biologicals and that is listed in the above documents.

3.0 GENERAL NOTES

All RMW generated at BNL is picked-up by a licensed contractor for disposal. The contract and this program are administered by the Medical Department. R-RMW is either allowed to decay for a sufficient number of isotope half-lives (See SBMS Subject Area "Radioactive Waste Management" for DIS Policy) and then handled as RMW or is sent to a vendor for treatment to render it noninfectious and the residue is disposed of as rad waste (see 5.4.3). Arrangements for disposal of RMW, including RMW contaminated with short-lived isotopes, are made through Medical Department's Medical Waste Supervisor/Medical Hospital Service Assistant/designee. Arrangements for disposal of long-lived R-RMW are made through your departments Environmental Compliance representative and Medical Department's ES&H Coordinator who then contacts the Environmental and Waste Management Services Division (EWMSD) for disposal. Failure to comply with requirements in this subject area may be treated as a reportable event.

NOTE: Generators shall minimize all waste production.

4.0 MATERIALS

- 4.1 The Contractor provides:
 - a. Cardboard shipping boxes (meeting U.S. Dept of Transportation requirements-see 49 CFR Part 178)
 - b. BB (order two bags per box ordered)
 - c. Sealing tape and tape dispenser
 - d. Scale for weighing boxes
- 4.2 Medical Dept./BNL provides:
 - a. "Radioactive" labels
 - b. Biohazard labels

BROOKHAVEN NATIONAL LABORATORY GENERAL CLINICAL RESEARCH CENTER POLICY	GCRC POLICY: IC	-06.02	Page 2 of 6
GENERAL CLINICAL RESEARCH CENTER FOLICT	PREPARED BY: B.	. Pyatt I	nfection Control
SUBJECT: Handling & Disposal of Regulated Medical Waste	Co RO R.	Ferrone/J. Adams ompliance CD .Colichio Pavlak G. J. Wang	GCRC Manager s Envir. C.Burns ESH Mgr. WMR Medical Dept. Chair

- c. Radioactive Waste Inventory Sheets
- d. Orange Waste tags
- e. Large white BNL address labels-Medical Hospital Service Assistant orders from stock.
- f. Pre-Numbered Medical Waste Control Form (Attachment 2)
- g.Calibrated weighing scale

5.0 POLICIES & PROCEDURES

5.1 GENERATOR - REGULATED MEDICAL WASTE (see also Attachment 4)

Verification must be made that generator's training status is up-to-date. This can be performed by checking the BNL training home page and entering the individuals name: http://training.bnl.gov/

If your training is not current, complete the Web-based training course: http://training.bnl.gov/

The following is accepted medical waste: Sharps, laboratory wastes (cultures and stocks of Biohazard Level 1,2, and 3 infectious agents, test tubes) Contaminated Disposal Material, equipment, and instruments (includes but is not limited to: blood administration sets, drainage collection devices, disposal gloves and gowns, dressings, dialysis tubing and filters, blood, blood products, body fluids.

The following is non-accepted medical waste: Certain pharmaceutical waste (See pharmacist for instructions) chemicals, hazardous waste, radioactive waste, compressed gas cylinders, canisters, inhalers and aerosol cans, glass thermometers, sphygmomanometers, and other medical devices or solutions containing mercury

<u>NOTE:</u> Improper packaging of RMW must be corrected or the waste will be returned to Generators (see 5.3.1). The Generator shall:

- 1. Collect RMW as follows:
 - a) Sharps must be collected in approved sharps containers.
 - b) Solid non-sharps may be collected in a single BB, a BB-lined ice cream container (ICC) or directly into a U.S. DOT-approved shipping container if it is double-lined with BB.
 - c) Under certain circumstances blood/serum may be treated and disposed of in the sanitary waste system see the Medical Waste Supervisor/designee for approval. Individual containers of liquid waste (i.e., vials, bottles, etc.) containing more than 20 ml of fluid <u>must</u> be placed segregated in rigid, leak-proof, secondary containers (i.e., plastic screw-capped jars) and then placed in sharps containers.
- 2. Attach approved Biohazard label to each package, if not pre-labeled, prior to use.
- 3. Seal BB with "J-Seal", ICC or other box (2" masking tape) or sharps container (snap lid) when no more than 3/4 filled.

NOTE: Do not compact materials in containers.

- 4. Place sealed ICCs in BB and seal with "J-Seal".
- 5. Contact the Medical Waste Supervisor/the Medical Hospital Service Assistant/delegated individual for access to the Medical Department Receiving room before transporting containers to Medical. The generator shall transport the RMW to the Medical Department in a laboratory vehicle only. All rooms containing RMW shall remain locked at all times. Under no conditions shall the bags or sharps containers be abandoned in the hall.
- 6. Complete and sign Medical Waste Control Form. One Medical Waste Control form can be used for several BBs and sharps containers. Assure that the correct number of items is indicated on the Form.
- 7. Fill out the waste tag, one tag for <u>each</u> BB and one tag for each sharps container. Numbers on the waste tag and Medical Waste Control Form must match.

BROOKHAVEN NATIONAL LABORATORY GENERAL CLINICAL RESEARCH CENTER POLICY	GCRC POLICY: IC-06	6.02	Page 3 of 6
GENERAL CLINICAL RESEARCH CENTER FOLICT	PREPARED BY: B. P	Pyatt In	fection Control
SUBJECT: Handling & Disposal of Regulated Medical Waste	Com RCD R.Co	errone/J. Adams appliance bolichio E avlak W J. Wang M	CRC Manager Envir. C.Burns SH Mgr. VMR edical Dept. Chair

- 8. Tape Medical Waste Control Form to BB or sharps container.
- 9. Seal BB with a "J-Seal".
- 10. Tie or tape Waste tag on the BB or sharps container.

5.2 GENERATOR - RADIOACTIVE REGULATED MEDICAL WASTE (see also Attachment 4) **NOTES:**

- a) Improper packaging of R- RMW must be corrected or the waste will be returned to the Generator (see 5.3.1). b) Generators who use ¹¹C, ¹⁸F, ¹⁵O or Tc-99m shall follow the Non-radioactive RMW instructions (section 5.1) after at least 10 half lives have elapsed and generators must follow all Decay-in-Storage requirements. Radioactive Waste Inventory Sheets are not required for short-lived radioisotopes. Generators must also use waste tags on the container(s).
- c) Radioactive Regulated Medical Waste generated in other Departments/Divisions will not be accepted in the Medical Department unless appropriate RCD and Medical Dept. personnel have approved the transfer. (see also the SBMS Subject Area "Radioactive Waste Management").

The Generator shall:

Verify that their training status as a generator of R-RMW is up-to-date.

To ensure that they have completed the training, generators must check the Web-based system (see above).

If training is not current, then generators must complete the training course (see above).

to ensure that you are within the two-year qualification period for the BTMS course RAD-I-GEN, check the Webbased training system (see above), or contact the Department/Division's Training Coordinator.

If generator training is not current, complete the Web-based course.

The following is accepted medical waste: Sharps, laboratory wastes (cultures and stocks of Biohazard Level 1,2, and 3 infectious agents, test tubes) Contaminated Disposal Material, equipment, and instruments (includes but is not limited to: blood administration sets, drainage collection devices, disposal gloves and gowns, dressings, dialysis tubing and filters, blood, blood products, body fluids.

The following is non-accepted medical waste: Certain pharmaceutical waste (See pharmacist for instructions) chemicals, hazardous waste, radioactive waste, compressed gas cylinders, canisters, inhalers and aerosol cans, glass thermometers, sphygmomanometers, and other medical devices or solutions containing mercury 1. Collect R-RMW as follows:

- a) Sharps must be collected in approved sharps containers.
- b) Solid non-sharps may be collected in a single BB, a BB-lined ice cream container (ICC) or directly into a shipping box if the box is double-lined with BB.
- c) Under certain circumstances non-radioactive blood/serum may be treated and disposed of in the sanitary waste system - see the Supervisor and Environmental Compliance Rep. for approval. Individual containers of liquid waste (i.e., vials, bottles, etc.) containing more than 20 ml of fluid must be placed segregated in rigid, leak-proof, secondary containers (i.e., plastic screw-capped jars) and then placed in sharps containers.
- 2. Attach approved Biohazard and Radioactive Material labels to Package, if not pre-labeled, prior to use. NOTE: If long-lived radioisotopes are generated, then containers must have a properly completed Radioactive Waste Inventory Sheet (available from RCD/FS rep.) attached and maintained during use. If short-lived radioisotopes are involved no radioisotope inventory sheets are required.
- 3. Seal BB (J-Seal), ICC (2" masking tape) or sharps container (snap lid) when no more than 3/4 filled. **NOTE:** Do not compact materials in containers.
- 4. Place sealed ICCs in BB and seal with "J-Seal".
- 5. Attach Radioactive Waste Inventory Sheets to outside of BB or sharps container.
- 6. Contact the Medical Department ES&H Coordinator/designee for further disposal instructions.

Under no conditions shall the bags or sharps containers be left in the hall.

- 7. Fill out yellow Radioactive Material tag (available from (RCD), one tag for each BB and one tag for each sharps container. Contact RCD/FS Rep. for survey.
- 8. Complete and sign Pre-Numbered Medical Waste Control Form (Attachment 2). Numbers on Radioactive

BROOKHAVEN NATIONAL LABORATORY GENERAL CLINICAL RESEARCH CENTER POLICY	CRC POLICY: IC-06.02	Page 4 of 6
PR	REPARED BY: B. Pyatt	Infection Control
Medical Waste AF	EVIEWED BY: W.Gunthe S.Ferrone/s Compliance RCD R.Colichio J. Pavlak PPROVED BY: G. J. Wan FFECTIVE DATE:2/1/08 EVISION HISTORY: -08	J. Adams Envir. e C.Burns ESH Mgr. WMR

Material tags and Medical Waste Control Form must match. One Medical Waste Control form can be used for several BBs and sharps containers, making sure that the correct number of items is indicated on the Form.

- 9. Tape Medical Waste Control Form and Radioactive Waste Inventory Sheet(s) to BB or sharps container.
- 10. Tie or tape yellow Radioactive Material tag on the BB or sharps container.
- 11. Contact Facility Support(FS) to have the container surveyed before transporting it to Medical

5.3 SUBSEQUENT RMW HANDLING

5.3.1 The Medical Hospital Service Assistant/delegate

shall review all waste containers dropped in Regulated Medical Waste Drop-Off Area for appropriate packaging and documentation. Those found to be non-compliant shall be reported by the Handler, using the Medical Waste Problem Notification Form (Attachment 5), to the Generator for correction.

5.4 PACKAGING/PICK-UP

5.4.1 Packaging of RMW

The Medical Hospital Service Assistant/designee shall:

- 1. Assemble cardboard boxes/containers (U.S.DOT-approved)
 - a. Close bottom flaps and seal with contractor tape in H pattern; use 3 strips for center seal and two strips to seal along each of the two edges.
 - b. Line box with red bag liner and drape over four edges.
- 2. Place 3 light or 2 heavy ICC, several sharps containers, or a plastic-lined BB into the BB lined box.
- 3. Close red bag liner by knotting if possible, or by taping.
- 4. Attach small white label (with BNL name and address) to the top (not on side) of BB
- 5. Seal top of box with contractor tape in the H configuration.
- 6. Box must be in upright position with the top facing up.
- 7. Inspect finished product box must not bulge or be deformed; individual boxes cannot weigh more than 40 lbs. each 4.5CF boxes and no more than 50 pounds each carcass-42 gallon boxes.
- 8. generators must weigh all boxes. Contractor requires total weight of shipment and total number of boxes.

5.4.2 Pick-up of RMW

A) Arranging for Box Pickup

Appropriate BNL personnel shall:

- 1. Call Contractor (see Attachment 1 for name and phone number) unless automatic scheduled pick up
- 2. Request box pickup
- 3. Report to contractor the number of new boxes, red bag liners, tape rolls, etc. which are needed (restock).
 - a. Order enough boxes to replace those currently used (usually 15 boxes in each batch).
 - b. Order usually twice as many liners as boxes (usually 30 liners in each batch).
 - c. Order sufficient # of rolls of tape to replace the tape previously used.
- B) Procedure on Day of Pickup

NOTE: Contractor pickup is at loading dock.

Appropriate BNL personnel shall:

- 1. Add shipping date with black marker pen over full area on the box.
- 2. Attach large white BNL labels in space in middle of sealed box. Also, add number of pounds box weighs.
- 3. Ensure the transporter's name and address are on the outer container and the universal biohazard label is on the outer container or is labeled as "Regulated Medical Waste".
- 4. Affix contractor's scan label to each individual shipping box for tracking purposes.
- 3. Complete Shipping Manifest (Medical Waste Tracking Form).
 - a. Contractor completes:
 - #11 Contractor driver signs

BROOKHAVEN NATIONAL LABORATORY GENERAL CLINICAL RESEARCH CENTER POLICY	GCRC POLICY	: IC-06.02	Page 5 of 6	
GENERAL GEINIGAL RESEARCH GENTER POLICY	PREPARED BY	: B. Pyatt	Infection Contro	ol
SUBJECT: Handling & Disposal of Regulated Medical Waste	APPROVED BY EFFECTIVE DA	S.Ferrone/J. Adam Compliance RCD R.Colichio J. Pavlak ': G. J. Wang	GCRC Manage ns Envir. C.Bur ESH Mgr. WMR Medical Dept. C	ns

#14 - Contractor lists new supplies delivered

#12 - Total number of boxes

#13 - Total weight

b. Appropriate BNL personnel shall completes:

#15 - Print and sign name of Medical Waste Handler/Supervisor/Med. Hospital Service Assistant/designee, and add date.

<u>NOTE:</u> Appropriate BNL personnel shall gets yellow copy (#4). Once RMW has reached its destination, BNL gets signed white copy (#1) back by mail. It must be returned within 35 days of shipment date.

5.4.3 Disposition of R-RMW (Short-lived – DIS R-RMW)

The BBs, bagged ICCs and sharps containers holding R-RMW shall be stored in room 9-174C or dedicated locked freezer in the 490 basement. The FS Rep. shall review the inventory periodically to identify which wastes have undergone sufficient radio-decay to allow disposal (Decay-In-Storage, see SBMS Subject Area "Radioactive Waste Management" for DIS Policy). Under DIS procedures, R-RMW shall be stored for at least ten half lives and then surveyed by RCD/FS Rep. at the request of the Medical Dept. Supervisor. When no exterior radioactivity can be detected, the FS Rep. shall remove or obliterate radioactive labels from the container and return the waste, with Medical Waste Control Forms and orange waste tags, to room 9-257 to be handled as RMW.

5.4.4 Disposition of R-RMW (Long-lived R-RMW)

All BB's, bagged IC's and sharps containers holding R-RMW shall be stored either in 9-174C (locked cold room) and/or in the locked freezers located in the basement of Bldg. 490. All waste containers must have the appropriate RMW documentation including the RMW Control Form, waste tag, Rad Waste Control Form and associated radionuclide inventory form. All R-RMW must not contain any infectious agents (wastes containing infectious agents must be thoroughly disinfected using universal precautions). Prior to off-site shipments, the above waste containers that may have moisture and/or liquids must be double-wrapped using 4-mil (minimum thickness) clear polyethylene bags that have been properly sealed ("J" sealed). These double bags must be placed into heavy-duty, DOT-approved fiber drums/boxes with a minimum of two (2) inches of adsorbents added to the bottom of each container. Animal carcasses containing long-lived R-RMW must NOT be combined within individual containers with R-RMW sharps. After the above packaging is completed, the bags must be placed into an outer U.S. DOT-approved container. Containers and above R-RMW must have no metallic parts (excluding sharps). Outer containers must be securely closed with duct tape/equivalent so that all edges/flaps are not visible. Individual containers must NOT have a gross weight exceeding 50 lbs. Outer containers must be marked with Brookhaven National Laboratory, a package number corresponding to the pkg. Number on the waste manifest and be marked "THIS END UP". Also, mark each outer container with the following: "BIOLOGICAL WASTE - FOR INCINERATION ONLY". Animal carcasses containing long-lived R-RMW must be kept frozen from BNL to the ultimate disposal facility. Additionally, complete vendor's shipping documentation prior to off-site shipping. [NOTE: all R-RMW packaging must be performed under the oversight of a properly trained waste verifier as per EWMSD procedures].

5.5 TRAINING

Generators of RMW and R-RMW shall be trained via the Web-based training program as previously mentioned. See BTMS Link (TQ-HAZMAT-A/B and TQ HMT-SECURITY)

In addition, packagers must review this procedure and verify familiarity.

5.6 RECORDS MANAGEMENT

- 5.6.1 RMW Records
 - a. White Pre-Numbered BNL Medical Waste Control Form
 - i. Batch of forms for each shipment is set aside until Contractor's white shipping manifest comes back to BNL. It is then filed.
 - ii. Batch of forms is filed by year.
 - b. Contractor Shipping Form (#1) is filed in logbook.

BROOKHAVEN NATIONAL LABORATORY GENERAL CLINICAL RESEARCH CENTER POLICY	GCRC POLICY:	IC-06.02	Page 6 of 6
GENERAL CLINICAL RESEARCH CENTER FOLICT	PREPARED BY	: B. Pyatt	Infection Control
SUBJECT: Handling & Disposal of Regulated Medical Waste	REVIEWED BY	W.Gunther S.Ferrone/J. Adam Compliance RCD R.Colichio J. Pavlak	GCRC Manager ns Envir. C.Burns ESH Mgr. WMR
	APPROVED BY EFFECTIVE DA	TE:2/1/08	Medical Dept. Chair

- c. Annual inventory of the total number and weight of all containers shipped to contractor is sent to Hazardous Waste Management in the event the NY State DEC requests the information.
- d. NYSDEC Medical Waste Tracking Form (MWTF) copies-original copy and returned copy from the disposal facility. (Note: returned copies from disposal facility are tracked to ensure receipt within 35 days from shipment. Contact the ECR if copies are not received within 30 days from shipment).

5.6.2 R-RMW Records

Records for contaminated waste shall be handled as in 5.4.3.

5.6.3 Training Records

The Dept. Training Coordinator shall utilize the Web-based training system for records management.

6.0 RECORDS

6.1 See 5.6

6.2 All records shall be retained by the Med/Hospital Service Assistant/designee in the GCRC Office, per Dept. Guideline GCRC Policy and Procedures Manual 5.0.

7.0 ATTACHMENTS

- 1. Medical Waste Transporter Contractor
- 2. Pre-numbered Medical Waste Control Form
- 3. Instructions to Generators of Regulated Medical Waste (Is this in Subject Area?)NO
- 4. Medical Waste Problem Notification Form
- 5. RMW Area log (optional)
- 6. Vendor's NYSDEC transporter permits
- 7. RMW Annual Shipment List

The only official copy of this file is the one online at the Medical Department website under "Clinical Research Center Policy Manual." Before using a printed copy, verify that it is the most current version by checking the document effective date on the website.

Medical Waste Transporter Contractor

Date: 2/1/07

Transporter: Stericycle Inc. 210 Sherwood Avenue Farmingdale, N.Y. 11735 NYSDEC IL-033 USEPA CTD983872698 631-756-7289

Staging Area: Stericycle Inc. 910 East 138th Street Bronx, New York 10454 (718) 401-7243 (Dispatch)

Stericycle Inc, 13975 Polo Trail Drive Lake Forest, Il. 60045 Customer Service: 866-783-7422 (NYSDEC # 1A-161, EPA ID # NYD986975282)

Stericycle Dispatcher (RMW pick-up scheduling):800-633-9278 or 718-401-7243 $\ [800\text{-MEDWASTE}\ (X1)]$

REGULATED MEDICAL WASTE CONTROL FORM

Medical Waste Control No.

WASTES! ASSURE TH THE BNL REGULATEL			TED MEDICAL WASTE MEET THE DEFINITIONS LISTED IN
**************************************		********	**********
Name:	BNL	Ext:	Date:
Department where waste	-		Number:
2. CONTAINER INFOR	RMATION eled as a BIOHAZARD.		o #3, label it with a yellow radioactive waste tag. If your answer was
Enter number of each con	tainer type:		
_	Other (Specify):		_
(circle one) YES NO			ved isotopes? (i.e., Tc-99m, ¹⁸ F, ¹¹ C, ¹⁵ O). nd total weight. A Radioactive Waste Inventory Sheet must be
attached <u>except</u> if the short			nd total weight. A Radioactive waste inventory sheet must be
<u>Isotope</u>	Amount ΦCi	As of Date	
1			
2			
Total Cubic Ft:	Total Weight:		
cylinders/gas canisters/	aerosol cans, no chen	notherapeutic wastes	yde)/radioactive/mixed wastes, no batteries, no gas , no mercury-containing items and no lead-containing items. ined within the above container(s).
Generator's Signature:		Date:	
	DO NOT W	/RITE BELOW THIS	LINE
Medical waste containers	were surveyed prior to	pickup by the contract	or. No detectable radioactive material was found.
Facility Support Represen	tative Signature:		Date Surveyed:

INSTRUCTIONS TO GENERATORS OF REGULATED MEDICAL WASTE ("RMW")

NOTES:

- a) Beatrice Pyatt (ext. 3642, pager 5216) is the Medical Waste Supervisor, Robert Colichio (ext. 8440, pager 6114) is the ES&H Mgr..
- b) Definitions of RMW are listed below.
- c) Generators of RMW contaminated with ¹¹C, ¹⁸F, ¹⁵O or Tc-99m shall follow the Nonradioactive RMW instructions, Radioactive Waste Inventory Sheets are not required. Generators shall use Hazardous Waste tags on the container.
- d) Radioactive Regulated Medical Waste generated in other Departments/Divisions will not be accepted in the Medical Department. However, special arrangements may be made for RMW contaminated with short-lived/ radioisotopes by contacting the Medical Waste Supervisor/Medical Hospital Service Assistant/designee.
- e) Any materials needed for this procedure are either stock items, or are available in room 9-185, from the Medical Waste Supervisor/ the Department's ES&H Mgr. (room 9-423)/Medical Hospital Service Assistant/designee..
- f) Improper packaging of RMW must be corrected or the waste may be returned to the Generator.

DEFINITIONS:

<u>REGULATED MEDICAL WASTE ("RMW")</u> - This is a <u>two-part</u> definition. RMW is any waste generated in the diagnosis, treatment (e.g., provision of medical services), or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biological <u>and</u> that is listed in items 1-7 below.

1. ANIMAL WASTE - Animal carcasses, body parts and bedding of animals, but only those known to have been

exposed to infectious agents.

<u>2. CONTACT WASTE</u> - Wastes from <u>surgery that were in contact with infectious agents</u>, including soiled dressings, sponges, drapes, lavage tubes, drainage sets, underpads and surgical gloves.

<u>3. CULTURES/STOCKS</u> - Cultures and stocks of infectious agents and associated biological, including: cultures from medical and pathological laboratories, cultures and stocks of infectious agents from research laboratories, wastes from the production of biological, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate and mix cultures.

<u>COMMENT:</u> See also "Sharps", below. Vessels (i.e., petri dishes, etc.) containing "fixed" (i.e., treated with formaldehyde, alcohol, etc.) cells are exempt, however used glass slides are Sharps. Tissues in paraffin blocks are exempt. "Cultures" includes all human cell lines, all non-human primate cell lines, and all "impure" animal cell lines. "Impure" cell lines are those which cannot be certified as free of infectious agents (i.e., any ATCC cell line which has not been tested for viruses). Culture flasks or petri dishes containing a pure cell line are not RMW.

<u>4. BLOOD AND BLOOD PRODUCTS</u> - blood, items <u>saturated and/or dripping with blood</u>, or items that were saturated and/or dripping with blood that are now caked with dried blood, including serum, plasma and other blood components, <u>and their containers</u>. Intravenous bags which contained blood or have been contaminated with blood

are also included in this category.

<u>COMMENT:</u> "Blood" refers to human or non-human primate blood or blood from animals known to have been exposed to infectious agents. One must be able to express liquid or dried material from these items for them to qualify. Anything more than the size of a band aid should be handled as RMW. A piece of gauze from venipuncture would not be RMW.

- <u>5. LABORATORY WASTES</u> Laboratory wastes <u>that were in contact with infectious agents</u>, including disposable gloves, laboratory coats and aprons.
- <u>6. PATHOLOGICAL WASTES</u> Human and non-human primate pathological wastes, including tissues, organs, body parts and body fluids that are removed during surgery, or other medical procedures and specimens of body fluids and their containers.

<u>COMMENT:</u> Urine is exempted unless known to be infectious. Defined tissues are exempted, however note that used formaldehyde is a hazardous waste.

<u>7. SHÁRPS</u> - Hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, glass or plastic culture vessels and all other types of broken or unbroken glassware which have been used in work defined above (part 1 of this definition), are considered RMW.

COMMENTS: The following are considered Sharps;

a) all broken tissue culture vessels which have been used as defined in part one of this definition

- b) all unused, discarded hypodermic needles, suture needles, syringes, scalpel blades and microscope slides
- c) Pasteur pipettes (when used as noted above, but <u>not</u> when used for chemicals only)
- d) all syringes with the needle still attached

<u>BIOHAZARD BAG</u> - Bag, red in color, which may have the "Biohazard" symbol on it, defining the contents as infectious.

<u>BIOLOGICALS</u> - Preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing or treating humans or animals or in research pertaining thereto.

<u>BLOOD PRODUCTS</u> - Any product derived from human blood, including but not limited to blood plasma, platelets, red or white blood cells.

<u>BODY FLUIDS</u> - Liquid emanating or derived from humans and limited to blood, cerebrospinal, synovial, pleural, peritoneal, and pericardial fluids, semen and vaginal secretions.

CONTRACTOR - The vendor holding the contract for the transport/disposal of N-RMW.

<u>INFECTIOUS AGENT</u> - 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.

<u>MEDICAL WASTE SUPERVISOR</u> ("Supervisor") - The individual designated as responsible for oversight of this program - the Department Infection Control Practitioner.

<u>REGULATED MEDICAL WASTE GENERATOR</u> ("Generator") - Any individual producing and/or packaging materials as defined above.

NONRADIOACTIVE RMW

The Generator shall -

- 1. Collect RMW as follows:
 - a) Sharps must be collected in approved sharps containers.
 - b) Solid non-sharps may be collected in a single Biohazard Bag (BB), a BB-lined ice cream container (ICC) or directly into a shipping box if the box is double-lined with BB.
 - c) Under certain circumstances blood/serum may be treated and disposed of in the sanitary waste system see the Supervisor/Medical Hospital Service Assistant/designee for approval. Individual containers of liquid waste (i.e., vials, bottles, etc.) containing more than 20 ml of fluid must be placed segregated in rigid, leak-proof, secondary containers (i.e., plastic screw-capped jars) and then placed in sharps containers. **Do not compact container** contents.
- 2. Attach approved Biohazard label to each package, if not pre-labeled, <u>before</u> use.
 3. Seal filled (3/4 of capacity) BB ("J-Seal"), ICC (2" masking tape) or sharps containers (snap lid).
 4. Place up to 3 sealed ICCs in BB and seal with "J-Seal".
- 5. Contact the Medical Waste Supervisor/Medical Hospital Service Assistant/designee for access to the Medical department Receiving room before transporting containers to Medical. The generator shall transport RMW to the medical Department in a laboratory vehicle only. All rooms containing RMW shall remain locked at all times. Under no conditions shall the bags or sharps containers be abandoned in the hall.
- 6. Fill out orange waste tag, one tag for each BB and one tag for each sharps container.
- 7. Complete and sign Medical Waste Control Form. Numbers on orange waste tags and Medical Waste Control Form must match. One Medical Waste Control form can be used for several BBs and sharps containers, making sure that the correct number of items is indicated on the Form.
- 8. Tape Medical Waste Control Form to BB or sharps container.
- 9. Tie or tape waste tag on the BB or sharps container.

RADIOACTIVE RMW

The Generator shall -

- 1. Collect R-RMW(short-lived/DIS only) as follows:
 - a) Sharps must be collected in approved sharps containers.
 - b) Solid non-sharps may be collected in a single Biohazard Bag (BB), a BB-lined ice cream container (ICC) or directly into a shipping box if the box is double-lined with BB.
 - c) Under certain circumstances blood/serum may be treated and disposed of in the sanitary waste system see the Medical Waste Supervisor and the Environmental Compliance Rep. for required approvals. Individual containers of liquid waste (i.e., vials, bottles, etc.) containing more than 20 ml of fluid must be placed segregated in rigid, leak-proof, secondary containers (i.e., plastic screw-capped jars) and then placed in sharps containers. **Do not** compact container contents.
- 2. Attach approved Biohazard and Radioactive Material labels to each package, if not pre-labeled, before use. 3. Seal
- any filled (3/4 of capacity) BB ("J-Seal"), ICC (2" masking tape) or sharps containers (snap lid).

 4. Place up to 3 sealed ICCs in BB and seal with "J-Seal". Radioactive Waste Control Form (RWCF)/ Radioactive Waste Inventory Sheets must be attached to the outside of containers.
- 5. Contact the ES&H Coordinator/designee for access to the Medical Department Receiving room before transporting containers to Medical and after the containers have been surveyed by an RCD/FS rep. The generator shall transport R-RMW to the Medical Department in a laboratory vehicle only. All rooms containing R-RMW shall remain locked at all times. Under no conditions shall the bags or sharps containers be abandoned in the hall.
- 6. Fill out yellow Radioactive Material tag (from EHS&Q), one tag for each BB and one tag for each sharps container. Contact RCD for survey.
- 7. Complete and sign Medical Waste Control Form and a RWCF with a Radioactive Materials Tag. The corresponding numbers on the yellow Radioactive Material tags and Medical Waste Control Form(s) must match. One Medical Waste Control form can be used for several BBs and sharps containers, making sure that the correct number of items is indicated on the Form.
- 8. Tape Medical Waste Control Form and RWCF/Radioactive Waste Inventory Sheet(s) to BB or sharps container.
- 9. Tie or tape yellow Radioactive Material tag on the BB or sharps container.
- 10. See above procedures (5.4.4) for handling R-RMW containing long-lived radioisotopes.

Medical Waste Problem Notification Form

DATE:
ГО:
FROM: B. Pyatt, Medical Waste Supervisor
Medical Waste in room (Medical Waste Form #) is not compliance with requirements in Guideline IC 6.2/0. The following problems were noted:
_ Improper packaging
_ Container broken/bulging/leaking
Form(s) missing/incomplete
_ Other
Please retrieve the waste and correct the problems promptly or it will be returned to you.
cc: W. Gunther