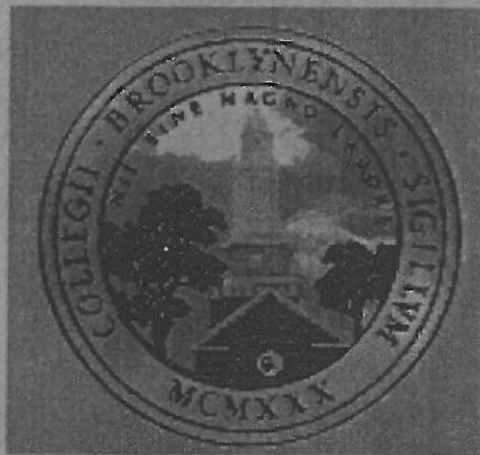


BROOKLYN COLLEGE
City University of New York



RADIATION SAFETY PLAN

**Office of Environmental Health & Safety
Room 1219 Boylan Hall**

BROOKLYN COLLEGE
RADIATION SAFETY PROGRAM
(REVISED SEPT. 2005)

TABLE OF CONTENTS

	<u>Page</u>
I. Alara Program.....	2
II. Radiation Safety Committee.....	3
III. Rules of Safe Use of Radioactive Material.....	4
IV. Guidance for Ordering and Receiving Radioactive Material.....	5
V. Procedure for Safely Opening Packages Containing Radioactive Material.....	5
VI. Records for Radioactive Materials Use.....	6
VII. Procedure for Area Surveys.....	6
VIII. Procedure for Leak-Testing Sealed Sources.....	7
IX. Personnel External Exposure Monitoring Program.....	8
X. Emergency Procedures.....	9
XI. Waste Management.....	11
Appendix A: Waste Disposal (Section 175.104 of the NYC Health Code).....	13
Appendix B: Central Routing Procedure for Receiving Radioactive Materials.....	16
Appendix C: Incoming Radioactive Material Package Survey Form.....	17
Appendix D: Record of Radioactive Material Use.....	18

I. ALARA PROGRAM

Management Commitment

- a) Brooklyn College is committed to the program described herein for keeping individual and collective exposures As Low As Reasonably Achievable (ALARA). In accord with this commitment, we hereby describe an administrative organization for radiation safety and will develop the necessary written policy, procedures, and instructions to foster the ALARA concept within our institution. The organization will include a Radiation Safety Committee (RSC) and a Radiation Safety Officer (RSO).
- b) There will be an annual review of the radiation safety program, including ALARA considerations. This will include reviews of operating procedures and exposure records, inspections, etc., and consultations with the radiation safety staff or outside consultants.
- c) Modifications to operating and maintenance procedures and to equipment and facilities will be made if they will reduce exposures, whenever and wherever feasibly possible.

Radiation Safety Committee

a. Review of Proposed Users and Uses

- (1) The RSC will review the qualifications of each applicant with respect to the types and quantities of materials and methods of use for which application has been made to ensure that the applicant will be able to take appropriate measures to maintain exposure ALARA.
- (2) When considering a new use of radioactive material, the RSC will review the efforts of the applicant to maintain exposure ALARA.
- (3) The RSC will ensure that users justify their procedures and that individual and collective doses will be ALARA.

b. Delegation of Authority

- (1) The RSC will delegate authority to the RSO for enforcement of the ALARA concept.
- (2) The RSC will support the RSO when it is necessary for the RSO to assert authority.

c. Review of ALARA Program

- (1) The RSC will encourage all users to review current procedures and develop new procedures as appropriate to implement the ALARA concept.
- (2) The RSO will perform a quarterly review of occupational radiation exposure. The principal purpose of this review is to assess trends in occupational exposure as an index of the ALARA program quality and to decide what action is warranted if permissible exposure levels are exceeded.
- (3) The RSC will evaluate the institution's overall effort for maintaining exposures ALARA on an annual basis. This review will include the efforts of the RSO, authorized users, and workers.

II. RADIATION SAFETY COMMITTEE

Charge of the Committee:

1. Ensure that licensed material will be used safely. This includes review as necessary of training programs, equipment, facility, supplies, and procedures
2. Ensure that licensed material is used in compliance with applicable regulations and the institutional license
3. Ensure that the use of licensed material is consistent with the ALARA philosophy and program
4. Identify program problems and solutions.

Responsibilities of the Committee:

1. Be familiar with all pertinent regulations, the license application, the license, and amendments.
2. Review the training and experience of the proposed authorized users to determine that their qualifications are sufficient to enable the individuals to perform their work safely and is in accordance with the regulations and the license.
3. Review all requests for authorization to use radioactive materials, and approve or deny use on the basis of safety, consistent with the limitations of the regulations, the license, and the ALARA philosophy.
4. Prescribe special conditions that will be required during a proposed method of use of radioactive material, such as requirements for bioassays, and other special monitoring procedures.
5. Establish a program to ensure that all persons whose duties may require them to work in, or frequent restricted areas where radioactive materials are used, are appropriately instructed as required by Section 175.04 of the New York City Health Code.
6. Review the radiation safety program at least annually to determine that all activities are being conducted safely, in accordance with regulations and the conditions of the license, and consistent with the ALARA program and philosophy. The review must include an examination of records, reports from the RSO, results of Bureau for Radiation Control inspections, written safety procedures, and the adequacy of the management control system.
7. Recommend remedial action to correct any deficiencies identified in the radiation safety program.
8. Maintain written minutes of all Committee meetings, including members in attendance and members absent, discussions, actions, recommendations and decisions; and
9. Ensure that the radioactive materials license is amended, if required, to reflect changes in facilities, equipment, policies, procedures and personnel.

Administrative Information

1. The Committee shall meet as often as necessary to conduct its business but not less than twice each academic year.

2. Membership must include one authorized user from each department using radioisotopes, the RSO, and a representative of management who is neither an authorized user nor the RSO. Management may appoint alternate members to participate in meetings in the case of absence of principal members and can appoint as adjunct members representatives from security, physical plant, and other departments. (Adjunct members will abstain from balloting on radiation safety technical questions such as Item 2 through 5 in the "Responsibilities" section above).
3. To establish a quorum, one-half of the Committee's membership, including the RSO and the management representative, must be present.
4. The Committee shall report to the Dean of Graduate Studies and Research.

III. RULES FOR SAFE USE OF RADIOACTIVE MATERIAL

1. Wear laboratory coats or other protective clothing at all times in areas where radioactive materials are used.
2. Wear disposable gloves at all times while handling radioactive materials, changing them frequently.
3. Either after each procedure or before leaving the area, monitor your hands for contamination in a low-background area with an appropriate radiation detector.
4. Do not eat, drink, or apply cosmetics in any area where radioactive material is stored or used.
5. Do not store food, drink, or personal items in areas where radioactive material is stored or used.
6. Dispose of radioactive waste only in designated, labeled, and properly shielded receptacles.
7. Never pipette by mouth.
8. Wipe-test radioactive material storage, preparation, disposal areas monthly or as appropriate for contamination control. If necessary, decontaminate or secure the area for decay.
9. Survey all areas daily where radioisotopes are being used with an appropriate radiation detection survey meter. If necessary, decontaminate or secure the area for decay as appropriate.
10. Confine radioactive solutions in shielded containers that are clearly labeled. Radioisotope containers must be labeled with the isotope, the name of the compound, and the date and time of receipt or preparation. A log shall be kept to record the preceding information and total prepared activity, specific activity as mCi/cc at a specified time, total volume prepared, total volume remaining, and any other appropriate information. (See Appendix D).
11. Always keep sources, waste, and other radioactive material in shielded containers.
12. Use a cart to move sources, waste, and other radioactive material to minimize exposure.

IV. GUIDANCE FOR ORDERING AND RECEIVING RADIOACTIVE MATERIAL

Written order records will be maintained that identify the authorized user or department, isotope, chemical form, activity, and supplier. The Radiation Safety Officer (RSO) must be notified of each order for radioactive materials to verify that the requested materials and quantities are authorized by the license for use by the requesting person, and that possession limits are not exceeded. A copy of the order will be adequate for this purpose.

When placing an order, authorized user will instruct shipping company to address package to the attention of the Radiation Safety Officer, in addition to designated recipient and location. Central Routing will accept shipment and notify RSO or EHS Office as soon as possible. If RSO or EHS Office representative cannot be contacted in a timely manner, incoming shipment will be delivered directly to the recipient. (See Appendix B: "Procedure for Receiving Package Containing Radioactive Materials").

V. PROCEDURE FOR SAFELY OPENING PACKAGES CONTAINING RADIOACTIVE MATERIAL

1. The following procedure for opening each package will be followed:
 - a. Put on gloves to prevent hand contamination.
 - b. Visually inspect the package for any sign of damage (e.g. wet or crushed). If damage is noted, stop the procedure and notify the Radiation Safety Officer (RSO).
 - c. Open the package with the following precautionary steps:
 - (1) Remove the packing slip.
 - (2) Open the outer package following the supplier's instructions, if provided.
 - (3) Open the inner package and verify that the contents agree with the packing slip and the purchase order.
 - (4) Check the integrity of the final source container. Look for broken seals or vials, loss of liquid, condensation, or discoloration of the packing material.
 - (5) If anything is other than expected, stop and notify the RSO.
 - d. If there is any reason to suspect contamination, wipe the external surface of the final source container and remove the wipe sample to a low-background area. Assay that wipe sample to determine if there is any removable radioactivity.
 - e. Monitor the packaging material and the empty packages for contamination with a radiation detection survey meter before discarding.
 - (1) If contaminated, treat this material as radioactive waste.
 - (2) If not contaminated, remove or obliterate the radiation labels before discarding in in-house trash.
 - f. Make a record of the receipt. (See Appendix C: Incoming Radioactive Material Package Survey Form).

VI. RECORDS OF RADIOACTIVE MATERIAL USE

For each unit received from a supplier, make a record of the:

1. Radionuclide;
2. Generic name or its abbreviation or trade name;
3. Date of receipt;
4. Supplier;
5. Lot number or control number, if assigned;
6. Activity in millicuries or microcuries as recorded on the unit or packing slip and its associated time;
7. Date(s) of use and date(s) of disposal.
(See Appendix D: Record of Radioactive Material Use)

VII. PROCEDURE FOR AREA SURVEYS

Survey Procedure

All areas where radioactive materials are used must be surveyed with survey meters and/or wipe tests as appropriate.

1. In laboratory working areas conduct meter surveys daily for contamination when radioisotopes are in continuous use and after each use when the isotope is used infrequently. A commercial laboratory must calibrate survey meters at least annually.
2. Designated working areas in each laboratory must be wiped monthly for contamination when radioisotopes are in continuous use and after each use when isotopes are used infrequently. A dry cotton swab or filter paper should be used. Each wipe should be labeled to identify the area. The wipe sample assay procedure should be sufficiently sensitive to detect the presence of 200-dpm/100 cm² of removable contamination.
3. Areas showing contamination levels or yielding wipes showing more than 2X background must be decontaminated. RSO must be notified if area cannot be properly decontaminated or if assistance is needed.

Records

1. Keep a record of dose rate and contamination survey results. It must include the following information:
 - a. The date, area surveyed, and equipment used.
 - b. The name or initials of the person who made the survey.
 - c. A drawing of the areas surveyed with measured radiation levels in mR/hr or contamination levels in dpm/100 cm², as appropriate.
 - e. Actions taken in the case of excessive radiation and/or contamination levels and follow-up survey information.
2. The RSO will review and initial the record periodically and also promptly in those cases in which background levels were exceeded.

VIII. PROCEDURE FOR LEAK-TESTING SEALED SOURCES

1. Make a list of all sources to be tested. This should include at least the isotope, the activity, and the physical form.
2. If you will be testing sources stronger than a few millicuries, set out a survey meter so you can monitor your exposure rate.
3. Prepare a separate wipe sample for each source. A cotton swab or filter paper is suitable. Number each wipe so you will know for which source it is to be used. Samples should be taken as follows:
 - a. For small sealed sources, it may be easier to wipe the entire accessible surface area. Pay particular attention to seams and joints.
 - b. For larger sealed sources and devices, (e.g., survey meter calibrator), take the wipe near the radiation port and on the activating mechanism.
 - c. If you are testing radium sources at the same time you are testing other sources, they should also be checked for radon leakage. This can be done by submerging the source in a vial of fine-grained charcoal or cotton for a day. Then, remove the source and analyze the absorbent sample as described below. A survey should be done to be sure the sources are adequately shielded during the leak-test period.
4. The samples will be analyzed as follows:
 - a. Select an instrument that is sufficiently sensitive to detect 0.005 microcurie. For beta sources, a proportional flow counter, liquid scintillation counter, or thin-end-window GM survey meter may be appropriate. For gamma sources, a crystal with a rate meter or scalar may be appropriate. Dose calibrators and gamma cameras, used in nuclear medicine are not sufficiently sensitive.
 - b. To estimate the detection efficiency of the analyzer used to assay the wipe samples, assay a check source that has the same isotope as the sealed source and whose activity is certified by the supplier. If one is not available, it will be necessary to use a certified check source with a different isotope that has a similar spectrum. If calculations demonstrate that the instrument is not sufficiently sensitive to detect 0.005 microcurie, a different instrument must be used.
 - c. Assay the wipe sample. It must be in the same geometry relative to the detector as was the certified check source.
 - d. Record the wipe sample counts per minute. Then calculate and record the estimated activity in microcuries on the wipe sample.
 - e. Continue the same analysis procedure for all wipe samples.
 - f. If the wipe sample activity is 0.005 microcurie or greater, notify RSO. The source may need to be withdrawn from use to be repaired or discarded. If it is a source distributed under an NRC or Agreement State license, the NYC DOH Bureau Radiological Control must be notified.
 - g. Sign and date the list of sources, data and calculations.

IX. PERSONNEL EXTERNAL EXPOSURE MONITORING PROGRAM

1. As necessary, all individuals who are occupationally exposed to ionizing photon radiation on a regular basis will be issued a film or TLD whole body monitor that will be processed by a contract service on a monthly or quarterly basis. This service will be provided by a dosimetry processor who holds current personnel dosimetry accreditation from the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Bureau of Standards for the type of radiation(s) monitored.
2. Other individuals who may be exposed to radiation on a brief, occasional basis such as security, personnel who deliver packages, secretarial personnel, etc. who do not work with radioactive materials will not normally be issued exposure monitors.
3. The RSO will promptly review all exposure records to look for workers or groups of workers whose exposure is unexpectedly high or for reports which are missing or late.

X. EMERGENCY PROCEDURES

NOTE: ALL INCIDENTS MUST BE REPORTED TO THE ENVIRONMENTAL HEALTH AND SAFETY OFFICE AT EXT. 5400. IF YOU SHOULD NEED EMERGENCY ASSISTANCE AFTER HOURS OR ON WEEKENDS, PLEASE CALL EMERGENCY HOT LINE (EXT. 5444).

All laboratory personnel must read these procedures prior to commencing work.

Minor Spills

1. Notify all other persons in the room.
2. Restrict number of persons in spill area.
3. Confine spill immediately.
4. Notify the Environmental Health & Safety office (Ext. 5400).
5. Decontaminate as necessary.
6. Permit no person to resume work in the area until a survey has been made and confirmed by the Radiation Safety Officer.

Liquid Spills

- a. Wear rubber or plastic gloves.
- b. Drop absorbent paper on spill.

Dry Spills

- a. Wear rubber or plastic gloves.
- b. Place damp absorbent paper over spill. Take care not to spread contamination.

Major Spills

1. Notify persons not involved to vacate the room at once.
2. If a liquid spills, right the container (have hands protected with gloves).
3. If spill is on skin, flush thoroughly.
4. If spill is on clothing remove at once.
5. Turn off all fans or ventilation, if possible.
6. Leave the room.
7. Notify the Environmental Health & Safety office (Ext. 5400).
8. Decontaminate personnel involved as per the Radiation Safety Officer instructions.
9. Decontaminate area as per the Radiation Safety Officer Instructions.
10. All persons involved must be monitored.
11. Permit no person to resume work in the area until a survey by the Radiation Safety Officer is performed.

Radioactive Dusts, Mists, Fumes, Gases, etc.

1. Notify other persons to vacate room. If possible, while holding your breath, close valves and turn off air-circulating devices, as necessary. Vacate room.
2. Close all doors. Post area.
3. Notify the Environmental Health & Safety office (Ext. 5400).
4. Report suspected inhalations of radioactive material.

5. Decontaminate as instructed by the Radiation Safety Officer.
6. An air survey must be performed before work can be resumed.

Injuries Involving Radiation Hazards

1. Wash minor wounds immediately, under running water, spreading edges of wound.
2. Report all radiation accidents/injuries of personnel to the Environmental Health & Safety office.
3. In the case of traumatic injury, contact the Emergency Medical Squad at Ext.5858 or Emergency Hot Line at Ext. 5444.

Fires Involving Possible Radiation Hazards

1. Sound alarm.
2. Extinguish the fire, only if safely possible!
3. Close all doors and windows. Vacate room.
4. Call Emergency Hot Line (5444) and report location.
5. Call the Environmental Health & Safety office (5400).
6. Decontamination may be necessary before work is resumed in the area.

Table to distinguish between major or minor spills

Estimate the amount of radioactivity spilled. Spills above these millicurie amounts are considered major, below are considered minor:

<u>Radionuclide</u>	<u>Millicuries</u>
P-32	10
S-35	100
C-14	100
H-3	100
I-125	1

Personnel Decontamination. Contaminated clothing should be removed and stored for further evaluation by the Radiation Safety Officer. If the spill is on the skin, flush thoroughly with lukewarm water and wash with a mild soap. If contamination remains, induce perspiration by covering the area with plastic. Then wash the affected area again to remove any contamination that was released by perspiration.

XI. WASTE MANAGEMENT

Overview

There are three possible methods of waste disposal: decay-in-storage (DIS); transfer to a burial site or back to the manufacturer; and release to the environment (only for permissible concentration of liquids or gases).

General Guidance

1. All radioactivity labels must be defaced or removed from containers and packages prior to disposal in in-house waste. If waste is compacted, all labels that are visible in the compacted mass must be defaced or removed.
2. It is important to keep volume of waste to an absolute minimum. Remind employees that non-radioactive waste such as leftover reagents, boxes, and packing material should not be mixed with radioactive waste.
3. Periodically monitor all procedures to ensure that radioactive waste is not created unnecessarily. Review all new procedures to ensure that waste is handled in a manner consistent with established procedures.
4. In all cases, consider the entire impact of various available disposal routes. Consider occupational and public exposure to radiation, other hazards associated with the material and routes of disposal (e.g., toxicity, flammability).

Procedure for Environmental Release of Liquids and Gases

Note: Only permissible non-hazardous material may be disposed of by release to the sanitary sewer or evaporative release to the atmosphere. Licensees must comply with all other applicable regulations regarding toxic or hazardous properties of these materials (Refer to Chemical Hygiene Plan or contact RSO).

1. Regulations for disposal and limits on permissible concentrations in air and water effluents or in the sanitary sewer appear in Section 175.03, Appendix B of the New York City Health Code. For Sink disposal, material must be readily soluble in water. There are daily and monthly limits based on the total sanitary sewerage release of your facility. A record of the date, radionuclide, permissible activity that was released (in microcuries/ml), and of the designated sink at which the material was released must be maintained. (Contact RSO for additional information prior to this manner of disposal).
2. Limits on permissible concentrations in air effluents are also enumerated in Appendix B of Section 175.03 of the New York City Health Code. A record of the date, radionuclide, permissible activity that was released (in microcuries/ml) and of the fume hood at which the material was released must be maintained. (Contact RSO for additional information prior to this manner of disposal).

Procedures for Disposal by Decay-in-Storage (DIS)

Short-lived material (physical half-life less than 90 days) may be disposed of by DIS. If you use this procedure, keep material separated according to half-life.

1. When the container is full, seal it with string or tape and attach an identification tag that includes the date sealed, the radioisotope in the container, and the name of the authorized user. The container will then be transferred to the DIS area.
2. Store the material for at least 10 half-lives. NOTE: This may not be sufficient depending on the initial activity.
3. Prior to disposal as in-house waste, monitor each container as follows:
 - a. Check your radiation detection survey meter for appropriate detector, sensitivity and proper operation
 - b. Plan to monitor in a low-level (less than 0.05 millirem per hour) area.
 - c. Remove any shielding from around the container.
 - d. Monitor all surfaces of each individual container.
 - e. Discard as in-house waste only those containers that cannot be distinguished from background. Record, the date on which the container was sealed, the disposal date, and type of material. Check to be sure all radiation labels have been obliterated.
 - f. Containers that can be distinguished from background radiation level must be returned to the storage area for future decay.

Disposal of Long-Lived Radioactive Waste

Long-lived material (physical half-life greater than 90 days) must be stored separately in labeled containers pending disposal at an approved disposal site through the Environmental Health & Safety Office. The radioactive storage vault located in Room 010NE will be used for storing these materials. Attach an identification tag with your name, date stored, radioisotope in the container, and activity level. Contact the Radiation Safety Officer at X4268 for access to the storage vault.

APPENDIX A:

ARTICLE 175—RADIATION CONTROL

§175.104

§175.104 Waste disposal

- (a) General requirements
- (b) Method for obtaining approval of proposed disposal procedures
- (c) Disposal by release into sanitary sewerage
- (d) Treatment or disposal by incineration
- (e) Disposal of specific wastes
- (f) Transfer for disposal and manifests
- (g) Compliance with environmental and health protection regulations.

Appendices

Appendix A

Appendix B

§175.104 Waste Disposal. (a) *General requirements.* (1) A licensee shall dispose of licensed material only:

- (i) by transfer to an authorized recipient as provided in §175.101 or §175.104(f) of this Code, or to the U.S. Department of Energy; or
- (ii) by decay in storage; or
- (iii) by release in effluents within the limits in §175.03(d); or
- (iv) as authorized pursuant to §175.104(b), (c), (d) or (e).

(2) A person shall be specifically licensed to receive waste containing licensed material from other persons for:

- (i) treatment prior to disposal; or
- (ii) treatment or disposal by incineration; or (iii) decay in storage; or
- (iv) disposal at a land disposal facility licensed pursuant to 10 CFR Part 61 or the equivalent regulations of an agreement state; or
- (v) storage until transferred to a storage or disposal facility authorized to receive the waste.

(3) A licensee or applicant for a license shall obtain any permits required by the New York State Department of Environmental Conservation pursuant to 6 NYCRR Part 380, or any successor law or regulation.

(4) A licensee or applicant for a license shall develop, document and implement a discharge minimization program required by the New York State Department of Environmental Conservation pursuant to 6 NYCRR Section 380-7, or any successor law or regulation.

(c) *Method for obtaining approval of proposed disposal procedures.* (1) A licensee or applicant for a license may apply to the Department for approval of proposed disposal procedures, not otherwise authorized in this Code, but which will conform to state and federal regulations, to dispose of licensed material generated in the licensee's operations. Each application shall include:

§175.104

NEW YORK CITY HEALTH CODE

(i) a description of the waste containing licensed material to be disposed of, including the physical and chemical properties that have an impact on risk evaluation, and the proposed manner and conditions of waste disposal; and

(ii) an analysis and evaluation of pertinent information on the nature of the environment; and

(iii) the nature and location of other potentially affected facilities; and

(iv) analyses and procedures to ensure that doses are maintained ALARA and within the dose limits in §175.03.

(c) *Disposal by release into sanitary sewerage.* (1) A licensee may discharge licensed material into sanitary sewerage if each of the following conditions is satisfied:

(i) the material is readily soluble in water or is biological material that is readily dispersible in water, and

(ii) the quantity of licensed radioactive material that the licensee releases into the sewer in 1 month divided by the average monthly volume of water released into the sewer by the licensee does not exceed the concentration listed in Table 3 of Appendix B of §175.03; and

(iii) if more than one radionuclide is released, the following conditions must also be satisfied:

(A) the licensee shall determine the fraction of the limit in Table 3 of Appendix B of §175.03 represented by discharges into sanitary sewerage by dividing the actual monthly average concentration of each radionuclide released by the licensee into the sewer by the concentration of that radionuclide listed in Table 3 of Appendix B of §175.03; and

(B) the sum of the fractions for each radionuclide required by §175.104(c)(1)(iii)(A) does not exceed unity; and

(iv) the total quantity of licensed radioactive material that the licensee releases into the sanitary sewerage in a year does not exceed 37 GBq (1 Ci) of all radioactive materials combined.

(2) Excreta from individuals undergoing medical diagnosis or therapy with radioactive material are not subject to the limitations contained in §175.104(c)(1).

(d) *Treatment or disposal by incineration or burial.* (1) No person shall treat or dispose of licensed radioactive material by incineration except as specifically approved by the Department pursuant to §175.104(b).

(2) No person shall bury any licensed radioactive materials within this City.

(e) *Disposal of specific wastes.* (1) A licensee may ship for disposal out side of this City the following licensed material as if it were not radioactive, provided however, that the receiving jurisdiction regulates such materials as if they were not radioactive:

ARTICLE 175—RADIATION CONTROL

§175.104

- (i) 1.85 kBq (0.05 μ Ci), or less, of hydrogen-3 or carbon-14 per gram of medium used for liquid scintillation counting; and
- (ii) 1.85 kBq (0.05 μ Ci), or less, of hydrogen-3 or carbon-14 per gram of animal tissue, averaged over the weight of the entire animal.
- (2) A licensee shall not dispose of tissue pursuant to §175.104(e)(1)(ii) in a manner that would permit its use either as food for humans or as animal feed.
- (3) The licensee shall maintain records in accordance with §175.03(k)(10).
- (f) *Transfer for disposal and manifests.* (1) The requirements of §175.104(f) and Appendix A of §175.104 are designed to control transfers of low-level radioactive waste intended for disposal at a licensed low-level radioactive waste disposal facility, establish a manifest tracking system, and supplement existing requirements concerning transfers and recordkeeping for those wastes.
- (2) Each shipment of radioactive waste designated for disposal at a licensed low-level radioactive waste disposal facility shall be accompanied by a shipment manifest as specified in Section I of Appendix A of §175.104.
- (3) Each shipment manifest shall include a certification by the waste generator as specified in Section II of Appendix A of §175.104.
- (4) Each person involved in the transfer of waste for disposal or in the disposal of waste, including the waste generator, waste collector, waste processor, and disposal facility operator, shall comply with the requirements specified in Section III of Appendix A of §175.104.
- (5) The licensee or applicant for a license shall comply with the requirements of the New York State Department of Environmental Conservation as codified in 6 NYCRR Part 381, or any successor law or regulation.
- (g) *Compliance with environmental and health protection regulations.*
- (1) Nothing in this section relieves the licensee from complying with other applicable Federal, State and local regulations governing any other toxic or hazardous properties of materials that may be disposed of pursuant to this section.
- (h) *Records of waste disposal.* (1) The licensee shall maintain records of the disposal of licensed materials made under §§175.104(b), (c), (d), (e) and 10 CFR Part 61 or the equivalent regulations of an agreement state.
- (2) The licensee shall retain the records required by §175.104(h)(1) until the Department authorizes disposition.

APPENDIX B:

**CENTRAL ROUTING PROCEDURE FOR RECEIVING PACKAGE
CONTAINING RADIOACTIVE MATERIALS**

- (1) Record package information including time and date received.
- (2) Separate package from other packages and place in a designated location.
- (3) Contact Badrul Chowdhury, Radiation Safety Officer, immediately for pick-up or proper handling at ext. 4268 or (917) 658-1775. If he does not respond, contact Aldo Orlando, Director of EHS at ext. 5400.
- (4) If Badrul or Aldo are not available, please contact the researcher to whom package is addressed for he/she to pick it up.

In case of an emergency situation during off-hours, contact the Office of Public Safety and Security at ext. 5511.

- Effective 01/02
- Revised 05/05

