**General Instructions**

NEW APPLICANTS: All new individuals seeking authorizations to use radioactive materials for non-human use must complete the attached application form and Appendices A through G.

AMENDMENT APPLICATIONS: Individuals who have already obtained authorization for the use of radioactive materials, but who wish **to amend** their authorization **to add** additional radionuclides or **to increase** the authorized amounts of radionuclides must complete the attached application form and Appendices A through F.

RENEWAL APPLICATIONS: **Renewal of permits** is required periodically. Individuals who have been requested to renew their permit are required to complete the attached application form and Appendices A through G.

**List of Forms**

|  |  |
| --- | --- |
| Form | Title |
| Application | Application Form |
| Appendix A | Facilities & Equipment For Handling The Requested Activity |
| Appendix B | Laboratory Diagram & Survey Form Set-Up |
| Appendix C | Purpose, Procedures, & Specific Experience |
| Appendix D | Volatile Radiochemicals & Procedures |
| Appendix E | Radioactive Waste Disposal Questionnaire |
| Appendix F | Training, Experience, And Supervision Of Technical Staff |
| Appendix G | Applicant's Formal Training & Experience In The Use Of Radioactive Materials |
| Appendix H | Use of Radioactive Materials in Animals |

**The Process**

1. Download an application from the web site of the Radiation Safety Office (<http://oehs.slu.edu>).
2. Complete the original application, keep a copy for personal reference, and forward as an email attachment to Kevin Ferguson ([fergusk2@slu.edu](mailto:fergusk2@slu.edu)). Sign and date the Statement of Agreement and send via campus mail or deliver to Kevin Ferguson, Caroline Hall C-305.
3. The Radiation Safety Office will review the application for completeness, and arrange an appointment with the applicant for review of their facilities and radiation safety procedures. In some cases, a member of the Radiation Safety Committee experienced in the applicant's field of research, may be asked to provide additional review of the applicant's technical procedures.
4. The entire application packet, along with any additional information, is reviewed by the Radiation Safety Committee at its next meeting. The Radiation Safety Committee makes the final decision regarding approval or disapproval of the application.
5. The Radiation Safety Officer may grant an interim approval pending full review and approval by the Radiation Safety Committee.
6. Upon review and approval by the Radiation Safety Committee, the applicant is provided a copy of the Radioactive Materials Use Permit, signed by the Chairman of the Radiation Safety Committee. The permit, including any special conditions of approval, must be posted in the permit holder's laboratory.

(06/02/2014 Revision)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Last Name:** Click here to enter text. **Degree:** Click here to enter text. **First Name:** Click here to enter text.  **Last 4 Digits of Social Security Number:** Click here to enter text.  **Department:** Click here to enter text.  **Office - Building:** Click here to enter text. **Room:** Click here to enter text. **Phone:** Click here to enter text.  **Lab(s) - Building:** Click here to enter text. **Room(s):** Click here to enter text. **Phone:** Click here to enter text.  **Lab(s) - Building:** Click here to enter text. **Room(s):** Click here to enter text. **Phone:** Click here to enter text. | | | | | | | |
| **Application Type (New Applicant; Renewal; Amendment for Additional Radionuclides, Animal use, Increased Activity or New Procedures):** Click here to enter text. | | | | | | | |
| **RADIONUCLIDES AND ACIVITIES REQUESTED** | | | | | | | |
| **Radio-**  **nuclide** | **Chemical Form\***  (details on specific chemical compounds must be included in Appendix C procedures) | | **Physical Form**  (gas, Liquid, Solid) | **Maximum Activity Requested** | | | |
| To Be Used Per Experiment (mCi) | To Be Ordered Per Shipment (mCi) | To Be Ordered Per Year (mCi) | Possession Limit (mCi) |
| H-3 | Any, except volatile\* | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| **H-3** | **Volatile:**  Enter Form. | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| C-14 | Any, except volatile\* | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| **C-14** | **Volatile:** Enter Form. | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| P-32 | **Any** | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| P-33 | **Any** | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| S-35 | **Any** | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| Ca-45 | **Any** | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| Cr-51 | **Any** | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| Fe-59 | **Any** | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| I-125 | Any, except volatile\* | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| **I-125** | **Volatile: NaI** | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| Radionuclide | Click here to enter text. | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| Radionuclide | Click here to enter text. | | Physical Form | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. | Enter mCi Here. |
| Volatile includes processes that will release airborne radioactivity, e.g., incubations, byproducts of cell metabolism, etc.; address in detail in Appendix C to this Application. | | | | | | | |
| **Radiation Safety Office**  Date Received: \_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date Reviewed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_  RSO Action: \_\_\_\_\_\_\_\_\_\_\_\_\_\_  Database Logged: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | **Radiation Safety Committee**  full  conditional  w/restrictions  Signature of Committee Chairman: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | |

**Applicant Last Name:** Click here to enter text. **Applicant First Name:** Click here to enter text.

|  |  |  |
| --- | --- | --- |
| **Laboratory Facilities** |  | **Laboratory Equipment** |
| designated bench tops (covered with plastic backed absorbent paper) |  | cell harvester |
| stainless steel counter tops | centrifuge |
| designated fume hood; location: Click here to enter text. | electrophoresis equipment |
| refrigerator; location: Click here to enter text. | heat sealer |
| -200F freezer; location: Click here to enter text. | hybridization oven |
| -800F freezer; location: Click here to enter text. | incubator (CO2) |
| cold room; location: Click here to enter text. | laminar flow hood |
| dark room; location: Click here to enter text. | lyophilizer |
| warm room; location: Click here to enter text. | microcentrifuge |
| tissue culture facility; location: Click here to enter text. | pipette(s); designated & labeled for radioactive work |
| Click here to enter text. | vacuum pump (e.g., portable unit) |
| **Personal Safety/Protection** | water bath |
| disposable gloves | Click here to enter text. |
| lab coats for each worker | Click here to enter text. |
| safety glasses for each worker | Click here to enter text. |
| safety goggles for each worker | **Radiation Survey Instrumentation** |
| disposable booties | **For Beta Emitters or Gamma Emitters:**  (other than H-3 and I-125)  Manufacturer: Click here to enter text.  Model #: Click here to enter text. Serial #: Click here to enter text.  Detector Type or Model #: Click here to enter text.  Manufacturer: Click here to enter text.  Model #: Click here to enter text. Serial #: Click here to enter text.  Detector Type or Model #: Click here to enter text. |
| beta shield (plastic/acrylic) – bench top |
| beta shield (plastic/acrylic) – closed containers for transport of samples to other labs |
| beta shield (plastic/acrylic) – waste storage |
| gamma shielding – lead bricks |
| gamma shielding – lead foil |
| gamma shielding – leaded eye glasses | **For I-125:**  Manufacturer: Click here to enter text.  Model #: Click here to enter text. Serial #: Click here to enter text.  Detector Type or Model #: Click here to enter text. |
| gamma shielding – leaded apron |
| bench top lead shield w/leaded glass |
| stainless steel tongs | **Wipe Test Assay Equipment** |
| decontamination solution | **Beta Counter:** (Liquid Scintillation Assay System)  Location: Click here to enter text.  Manufacturer: Click here to enter text.  Model #: Click here to enter text. Serial #: Click here to enter text. |
| Complexion brush for skin decontamination |
| mild soap (e.g., Joy or hand soap, suitable for skin decontamination) |
| “Radioactive” or “Radioactive Materials” tape/labels | **Gamma Counter:**  Location: Click here to enter text.  Manufacturer: Click here to enter text.  Model #: Click here to enter text. Serial #: Click here to enter text. |
| Click here to enter text. |
| Click here to enter text. |

**Application Date:** Click here to enter a date.

**Applicant Last Name:** Click here to enter text. **Applicant First Name:** Click here to enter text.

**Application Date:** Click here to enter a date.

You are required to submit a diagram of your laboratory, suitable for documenting your routine weekly or monthly laboratory contamination surveys. Please identify areas where radioactive materials will be used or stored. On the diagram, number the locations that will be surveyed/wipe tested. Generally, 15 to 20 areas should be identified. Hand drawn diagrams are not acceptable.

|  |  |  |  |
| --- | --- | --- | --- |
| **RADIATION SAFETY ARE SURVEY RESULTS** | | | |
| ENTER LAB DIAGRAM HERE – IDENTIFY RELEVANT FEATURES AND LOCATIONS OF SURVEY POINTS  **Room Number(s):** Click here to enter text. **Building:** Click here to enter text. | **REQUIRED FREQUENCY**  Weekly  Monthly | | |
| **Key**   |  |  |  | | --- | --- | --- | | B | = | Bench Top | | D | = | Desk | | DH | = | Door Handle | | F | = | Floor | | FR | = | Freezer | | H | = | Hood | | M | = | µ-Centrifuge | | R | = | Refrigerator | | S | = | Sink | | SA | = | Storage Area | | SH | = | Shaker | | T | = | Telephone | | WA | = | Waste Area | | | |
| **RADIONUCLIDES** | | |
| **In Use** | **Eff. Β-** | **Eff. γ** |
| In Use | Eff. | Eff. |
| In Use | Eff. | Eff. |
| In Use | Eff. | Eff. |
| In Use | Eff. | Eff. |
| In Use | Eff. | Eff. |
| In Use | Eff. | Eff. |
| Wipe Test Assay System (Beta) Manufacturer: Click here to enter text. Model #: Click here to enter text. Serial #: Click here to enter text.  Wipe Test Assay System (Gamma) Manufacturer: Click here to enter text. Model #: Click here to enter text. Serial #: Click here to enter text. | | | |

**Applicant Last Name:** Click here to enter text. **Applicant First Name:** Click here to enter text.

**Application Date:** Click here to enter a date.

*The following stipulations apply to all protocols (click* [*here*](http://www.slu.edu/Documents/research/environmental_health_safety/appendixCSample.pdf) *for an example of completed Appendix C):*

**Handling Procedures:**

Yes No My lab will use the personal protective equipment listed in Appendix A of this application when working with radioactive materials (at a minimum lab coat, gloves, eye protection).

Yes No My lab will use shielding when appropriate.

* Plexiglas/Plastic for high/medium energy beta emitters (also useful for splash protection of lower energy beta emitters).
* Lead for Gamma or X-ray emitters.

*Briefly describe procedures specific to the safe handling of radionuclides:*

Click here to enter text.

**Equipment:**

Yes No My lab will decontaminate the equipment listed in Appendix A of this application prior to non-radioactive use. *Briefly describe decontamination techniques in the procedures below.*

Click here to enter text.

**Security/Food and Drink:**

Yes No My lab will ensure appropriate security for all radionuclides (including waste).

*Briefly describe procedures specific to the security of radionuclides:*

Click here to enter text.

Yes No My lab will identify areas outside of laboratory space for food and drink, application of cosmetics and contact lenses, etc.

*State the location of the identified non-laboratory space:*

Click here to enter text.

**Radioactive Waste:**

Yes No My lab will segregate radioactive waste by radionuclide and physical form

*If you checked no, explain:*

Click here to enter text.

Yes No My lab will transfer all radioactive waste to the Radiation Safety Office as specified in “Saint Louis University Waste Packaging Instructions for Laboratories” (available on the EHS website).

**Surveys:**

Yes No My lab will conduct surveys according to the following schedule (please indicate weekly or monthly):

*Surveys will include meter readings (unless only H-3 is being used) and wipe tests to be recorded in units of dpm/100cm2.*

Surveys will be performed during and after each use of radionuclides. These need not be documented.

For labs having > 100 microcuries of radioactivity in the aggregate in use or storage, documented weekly surveys will be performed.

For labs having < 100 microcuries of radioactivity in the aggregate in use or storage, documented monthly surveys will be performed.

|  |
| --- |
| For each radionuclide/radiochemical that you are applying, please provide the following information in the specified format (see sample protocol at the end of this application).   1. Radionuclide 2. Chemical Compound(s) 3. Specify the purpose/type of experiment for which the requested radiochemical will be used. 4. Provide a detailed by concise description, in narrative form, of procedures involving requested radiochemical. |

Click here to enter text.

**Applicant Last Name:** Click here to enter text. **Applicant First Name:** Click here to enter text.

**Application Date:** Click here to enter a date.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Part 1: REVIEW OF PROCEDURES** | | | | | |
| **Please check the box adjacent to the applicable statement:**  None of the radiochemicals for which I am seeking radiation safety committee approval via this application are volatile compounds. Nor will they be used in any procedure that will result in the release of airborne radioactivity. Therefore, I am not required to complete Parts 2 and 3 of this form.  Some or all of the radiochemicals for which I am seeking radiation safety committee approval via this application are volatile compounds (e.g., sodium iodide, tritiated water, S-35 labeled compounds), or will be used in a procedure during which airborne radioactivity will be generated (e.g. sodium borohydride, acetic anhydride, etc.). I have listed these radionuclides and their chemical forms in Part 2 below, and completed all other requested information in Parts 2 and 3 of this form. | | | | | |
| **PART 2: VOLATILE RADIONUCLIDES OR PROCEDURES** | | | | | |
| Radionuclide | Chemical Compound | Type of Experiment or Procedure | | Maximum Activity to be Used in a Single Experiment | Specify the Location of Fume Hood or Other Equipment to be Used |
| Radionuclide | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | Click here to enter text. |
| Radionuclide | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | Click here to enter text. |
| Radionuclide | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | Click here to enter text. |
| **List and describe any apparatus and/or procedure that you will employ in order to trap or contain airborne components of these radiochemicals during use:**  Click here to enter text. | | | | | |
| **Specify the maximum activity that will be released as airborne radioactivity per experiment as a function of the starting activity:**  % Release % of the initial activity will be released as airborne radioactivity during the experiment. | | | | | |
| This estimate is based upon: | | | Data from my past experiments  Published papers  Vendor supplied product information  Crude estimate  Other; specify; Click here to enter text. | | |

**Applicant Last Name:** Click here to enter text. **Applicant First Name:** Click here to enter text.

**Application Date:** Click here to enter a date.

|  |  |  |  |  |  |  |  |  |  |
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| **PART 1: ESTIMATED RADIONUCLIDE WASTES GENERATED PER MONTH** | | | | | | | | | |
| **Radio-**  **nuclide** | **Non-Biol. Dry Solid (cu. ft.)** | **Bulk Aqueous Liquid (gal.)** | **Bulk Liquid Scint. Fluid (gal.)** | **Liquid Scintillation Vials** | | **Animal Carcasses** | | **Biological Non-Carcass Solid Radioactive Waste**  (e.g., syringes, test tubes, capillary tubes, animal bedding containing excreta, etc.) | **Does waste contain mixed radioactive & hazardous chemical or biological waste?** |
| no. of vials | Size (ml) | qty. | type |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
| Radionuclide | Cubic Feet | Gallons | Gallons | No. of Vials | Size | Quantity | Type | Cubic Feet | Enter text here. |
|  |  |  |  |  |  |  |  |  |  |
| **PART 2: INTERIM WASTE STORAGE LOCATION** | | | | | | | | | |
| Specify the location where you will store your waste until transferred to Radiation Safety Office staff for final disposal:  Building: Click here to enter text. Room(s): Click here to enter text. | | | | | | | | | |

**Applicant Last Name:** Click here to enter text. **Applicant First Name:** Click here to enter text.

**Application Date:** Click here to enter a date.

|  |  |  |  |  |  |  |  |  |  |
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| **PART 1: TRAINING & GENERAL EXPERIENCE OF TECHNICAL STAFF** | | | | | | | | | |
| **Name of Individual**  (last name, first name) | | | **Degree** | **Last 4 Digits of Social Security Number** | | | **SLU Radiation Safety Orientation Date** | | **Prior Experience with Radionuclides** |
| Last name., First name. | | | Click here to enter degree. | XXX-XX- 4 Digits | | | Click here to enter a date. | | Enter text here. |
| Last name., First name. | | | Click here to enter degree. | XXX-XX- 4 Digits | | | Click here to enter a date. | | Enter text here. |
| Last name., First name. | | | Click here to enter degree. | XXX-XX- 4 Digits | | | Click here to enter a date. | | Enter text here. |
| Last name., First name. | | | Click here to enter degree. | XXX-XX- 4 Digits | | | Click here to enter a date. | | Enter text here. |
| Last name., First name. | | | Click here to enter degree. | XXX-XX- 4 Digits | | | Click here to enter a date. | | Enter text here. |
| Last name., First name. | | | Click here to enter degree. | XXX-XX- 4 Digits | | | Click here to enter a date. | | Enter text here. |
| Last name., First name. | | | Click here to enter degree. | XXX-XX- 4 Digits | | | Click here to enter a date. | | Enter text here. |
| Last name., First name. | | | Click here to enter degree. | XXX-XX- 4 Digits | | | Click here to enter a date. | | Enter text here. |
| Last name., First name. | | | Click here to enter degree. | XXX-XX- 4 Digits | | | Click here to enter a date. | | Enter text here. |
| **PART 2: PERMIT HOLDER SUPERVISION OF TECHNICAL STAFF** | | | | | | | | | |
| I will be available in the laboratory to directly supervise experiments involving the use of radioactive materials a minimum of: | | | | | | | | | |
|  | **Full Time:** minimum of 40 hours per week (8 hours per day)  **Three Quarter Time:** minimum of 30 hours per week (6 hours per day)  **Half Time:** minimum of 20 hours per week (4 hours per day)  **Quarter Time:** minimum of 10 hours per week (2 hours per day)  **Eighth Time:** minimum of 5 hours per week (1 hour per day)  **No Time:** I generally will not be available for supervision in the laboratory. | | | | | | | | |
| **PART 3: PROCEDURE SPECIFIC EXPERIENCE OF TECHNICAL STAFF**  {This section must be completed by all applicants} | | | | | | | | | |
| **Name of Individual**  (last name, first name) | | **Experimental Procedure** | | | **Radionuclide** | **Number of Times Procedure Conducted** | | **Maximum Activity Used per Experiment** | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |
| Last name., First name. | | Click here to enter text. | | | Radionuclide | Click here to enter text. | | Enter mCi Here. mCi | |

**Applicant Last Name:** Click here to enter text. **Applicant First Name:** Click here to enter text.

**Application Date:** Click here to enter a date.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PART 1: FORMAL EDUCATION** | | | | | | | | | | | | | | |
| **Degree** | | | **Specialty** | | | **Granting Institution** | | | | | | | **Year Granted** | |
| Click here to enter text. | | | Click here to enter text. | | | Click here to enter text. | | | | | | | Click here to enter text. | |
| Click here to enter text. | | | Click here to enter text. | | | Click here to enter text. | | | | | | | Click here to enter text. | |
| Click here to enter text. | | | Click here to enter text. | | | Click here to enter text. | | | | | | | Click here to enter text. | |
| **PART 2: EXPERIENCE INVOLVING THE USE OF RADIOACTIVE MATERIALS** | | | | | | | | | | | | | | |
| **Experimental Procedure** | | | **Radionuclide** | **Number of Times Procedure Conducted** | | | **Length of Experience** | | | | | **Maximum Activity Used per Experiment** | | |
| (hrs/wk) | | (wks/yr) | **Total Hours** | |
| Click here to enter text. | | | Radionuclide | Click here to enter text. | | | hrs/wk | | wks/yr | Total Hours | | Enter mCi Here. mCi | | |
| Click here to enter text. | | | Radionuclide | Click here to enter text. | | | hrs/wk | | wks/yr | Total Hours | | Enter mCi Here. mCi | | |
| Click here to enter text. | | | Radionuclide | Click here to enter text. | | | hrs/wk | | wks/yr | Total Hours | | Enter mCi Here. mCi | | |
| Click here to enter text. | | | Radionuclide | Click here to enter text. | | | hrs/wk | | wks/yr | Total Hours | | Enter mCi Here. mCi | | |
| Click here to enter text. | | | Radionuclide | Click here to enter text. | | | hrs/wk | | wks/yr | Total Hours | | Enter mCi Here. mCi | | |
| Click here to enter text. | | | Radionuclide | Click here to enter text. | | | hrs/wk | | wks/yr | Total Hours | | Enter mCi Here. mCi | | |
| Click here to enter text. | | | Radionuclide | Click here to enter text. | | | hrs/wk | | wks/yr | Total Hours | | Enter mCi Here. mCi | | |
| Click here to enter text. | | | Radionuclide | Click here to enter text. | | | hrs/wk | | wks/yr | Total Hours | | Enter mCi Here. mCi | | |
| Click here to enter text. | | | Radionuclide | Click here to enter text. | | | hrs/wk | | wks/yr | Total Hours | | Enter mCi Here. mCi | | |
|  | List the institutions where the experience with radioactive materials was gained, indicate the time period during which this experience was gained, and whether you were previously a permit holder (i.e. an authorized user approved by the institutional radiation safety committee to be responsible for the use of radioactive materials) | | | | | | | | | | | | |  |
| **Institution(s)** | | | | | **Period of Experience** | | | | | | **Were you a Permit Holder?** | | | |
| **Date Began** | | | **Date Ended** | | |
| Click here to enter text. | | | | | Click here to enter a date. | | | Click here to enter a date. | | | Enter text here. | | | |
| Click here to enter text. | | | | | Click here to enter a date. | | | Click here to enter a date. | | | Enter text here. | | | |
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| **PART 3: TRAINING/COURSE WORK RELATED TO THE USE OF RADIOACTIVE MATERIALS**  (e.g. Radiation Safety Principles/Practices, Instrumentation, Radiochemistry, Radiation Biology, etc.) | | | | | | | | | | | | | | |
| **Date of Course(s)** | | **Title or Type of Course Work** | | | | | | **Number of Contact Hours** | | | **Institution where Attended Course** | | | |
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**Applicant Last Name:** Click here to enter text. **Applicant First Name:** Click here to enter text.

**Application Date:** Click here to enter a date.

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| **PART 1: ADMINISTRATION OF RADIOACTIVE MATERIALS TO ANIMALS** | | | | | | | | | |
| **Species**  (common name) | **Average Mass** (Kg) | | **Radionuclide** | **Maximum Activity Administered** (µCi) | | **Chemical Form** | | **Duration of Post Administration Maintenance of Animal** | |
| Click here to enter text. | Enter Kg here. | | Radionuclide | Enter µCi here. | | Click here to enter text. | | Click here to enter text. | |
| Click here to enter text. | Enter Kg here. | | Radionuclide | Enter µCi here. | | Click here to enter text. | | Click here to enter text. | |
| Click here to enter text. | Enter Kg here. | | Radionuclide | Enter µCi here. | | Click here to enter text. | | Click here to enter text. | |
| **PART 2: AIRBORNE RADIOACTIVITY & WASTE MANAGEMENT** | | | | | | | | | |
| **Species**  (common name) | | **Location of Administration** (Room Number and Building) | | | **Respiration – Is there a potential for airborne radioactivity?** (e.g., CO2 byproducts of metabolism, etc.) | | **Animal Excreta -**  **Will the radionuclide be shed in urine or feces?** | **Number of Carcasses Generated** | |
| (per week) | (per year) |
| Click here to enter text. | | **Room Number(s):** Enter room number. **Building:** Enter building. | | | Enter text here. | | Enter text here. | Per Week | Per Year |
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| **PART 3: BRIEF NARRATIVE OF PROTOCOL FOR ADMINISTERING RADIONUCLIDES AND MAINTAINING ANIMALS AFTER ADMINISTRATION** | | | | | | | | | |
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The following Statement of Agreement must be signed, dated and received by the Radiation Safety Office prior to final approval of this application. The application itself may be submitted in electronic form, however, this page must be manually signed by the applicant and submitted.

**STATEMENT OF AGREEMENT:**

I agree to comply with all rules and regulations governing the use of radioactive materials. I also agree to adhere to the terms approved in my license application and certify that all information provided in the application is correct. I acknowledge that failure to conform to these requirements will result in revocation of any authorizations. I am familiar with the radioactive waste disposal policies and procedures of Saint Louis University, including the definitions of the radioactive waste categories listed in Appendix E, the need to segregate and properly package these categories of waste by radionuclide, physical form, and in some categories by chemical form. I understand that I am ultimately responsible for the proper disposal of radioactive materials obtained under my authorization, including safe storage, accurate record keeping and transfer form completion, and payment of disposal fees associated with disposition of these materials. I acknowledge that any change to procedures involving radioactive materials or laboratory space used for radioactive materials must be approved in advance by the Radiation Safety Office and/or the Radiation Safety Committee.

Signature of Applicant: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: Click here to enter a date.

*Please sign, print and deliver or mail this page to Kevin Ferguson in Caroline Hall C-305.*

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| **RADIATION SAFETY ARE SURVEY RESULTS** | | | | | | | | | | | | | |
| ENTER LAB DIAGRAM HERE – IDENTIFY RELEVANT FEATURES AND LOCATIONS OF SURVEY POINTS  **Room Number(s):** Click here to enter text. **Building:** Click here to enter text. | | | | | | | | | | **REQUIRED FREQUENCY**  Weekly  Monthly | | | |
| **Key**   |  |  |  | | --- | --- | --- | | B | = | Bench Top | | D | = | Desk | | DH | = | Door Handle | | F | = | Floor | | FR | = | Freezer | | H | = | Hood | | M | = | µ-Centrifuge | | R | = | Refrigerator | | S | = | Sink | | SA | = | Storage Area | | SH | = | Shaker | | T | = | Telephone | | WA | = | Waste Area | | | | |
| **RADIONUCLIDES** | | | |
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| Wipe Test Assay System (Beta) Manufacturer: Click here to enter text. Model #: Click here to enter text. Serial #: Click here to enter text.  Wipe Test Assay System (Gamma) Manufacturer: Click here to enter text. Model #: Click here to enter text. Serial #: Click here to enter text. | | | | | | | | | | | | | |
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| **Survey**  **Location** | **Wipe Test**  (dpm/100 cm2) | **Meter**  (cpm, cps,  or mR/hr) | **Wipe Test**  (dpm/100 cm2) | **Meter**  (cpm, cps,  or mR/hr) | **Wipe Test**  (dpm/100 cm2) | **Meter**  (cpm, cps,  or mR/hr) | **Wipe Test**  (dpm/100 cm2) | **Meter**  (cpm, cps,  or mR/hr) | **Wipe Test**  (dpm/100 cm2) | | **Meter**  (cpm, cps,  or mR/hr) | | |
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| **RADIATION SAFETY ARE SURVEY RESULTS** | | | | | | | | | | | | | |
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| **Key**   |  |  |  | | --- | --- | --- | | B | = | Bench Top | | D | = | Desk | | DH | = | Door Handle | | F | = | Floor | | FR | = | Freezer | | H | = | Hood | | M | = | µ-Centrifuge | | R | = | Refrigerator | | S | = | Sink | | SA | = | Storage Area | | SH | = | Shaker | | T | = | Telephone | | WA | = | Waste Area | | | | |
| **RADIONUCLIDES** | | | |
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| **RADIATION SAFETY ARE SURVEY RESULTS** | | | | | | | | | | | | | |
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