•**Please type all required information**•

|  |  |  |  |
| --- | --- | --- | --- |
| Name (last, first): |  | Office Phone: |  |
| OSU ID#: |  | After Hours Phone: |  |
| name.#: |  | E-mail Address: |  |
| College: |  |
| Department: |  |
| Building and room number: |  |
| Street Address: |  |

|  |  |
| --- | --- |
| **1.** | **Locations (Enter “NA” for Items Which Are Not Applicable)** |
|  | **Type of Location** | **Room(s) and Building(s)** |
| **A.** | **Laboratory** |  |
| **B.** | **Fume Hood** |  |
| **C.** | **Hot Sink** |  |
| **D.** | **Radioassay Instrumentation** |  |
| **E.**  | **Storage Methods Indicate building and room** | **Refrigerator:** |  | **Safe:** |  |
|  | **Freezer:** |  | **Other:** |  |
| **Ambient Conditions:**  |  |
|  |  |  |  |

|  |  |
| --- | --- |
| **2.** | **Animal Use:** |
|  |  |  |  |  |  |
| For use in Animals? |  | Yes |  | No |
|  |  |  |  |  |
|  | If “**Yes**,” append completed Form RS-5 and documentation of approval from IACUC. |

|  |  |
| --- | --- |
| **3.** | **Limiting Facility Type: (To be completed by RS staff ONLY)** |
| **A.** | **Limiting Radiotoxicity Index** |  | **B.** | **Maximum Activity Used** |  |
| **C.** | **Facility Type Needed** |  | **D.** | **Facility Type Available** |  |
| **Radiation Safety Representative**  |  | **Date**  |  |

|  |
| --- |
| **For RS Use Only** |
| **PI Number** | **Date Received Pre-Review** | **Date Received Final Review** | **RS Preliminary Approval Signature / Date** | **URSC Committee Review Date** | **1-Year Renewal Month** |
|  |  |  |  |  |  |
| **4.** | **Radionuclide Information (Complete Items A through H only)** |
|  |  | **Isotope** | **Isotope** |
| **A.** | **Radionuclide Requested** |  |  |
| **B.** | **Chemical Form Group(s) (example: nucleotides)** |  |  |
| **C.** | **Physical Form (gas, liquid, solid)** |  |  |
| **D.** | **Solubility Class** |  |  |
| **E.** | **Possession Limit (mCi)** |  |  |
| **F.** | **Max. Stock Vial Activity (mCi)** |  |  |
| **G.** | **Potential for RAM in Breathing-Zone** |  |  |
| **H.** | **Monthly Hot Sink Disposal Limit(To be completed by RS)** |  |  |
| **I.** | **License and Line No.****(To be completed by RS)** |  |  |

|  |  |
| --- | --- |
| **4.** | **Continued (for more than 4 isotopes attach additional Section 4 pages, which can be found on our website.)** |
|  |  | **Isotope** | **Isotope** |
| **A.** | **Radionuclide Requested** |  |  |
| **B.** | **Chemical Form Group(s) (example: nucleotides)** |  |  |
| **C.** | **Physical Form (gas, liquid, solid)** |  |  |
| **D.** | **Solubility Class** |  |  |
| **E.** | **Possession Limit (mCi)** |  |  |
| **F.** | **Max. Stock Vial Activity (mCi)** |  |  |
| **G.** | **Potential for RAM in Breathing-Zone** |  |  |
| **H.** | **Monthly Hot Sink Disposal Limit(To be completed by RS)** |  |  |
| **I.** | **License and Line No.****(To be completed by RS)** |  |  |

|  |  |
| --- | --- |
| **5.** | **Radiation Detection Instruments** |
|  | **Instrument Type** | **Manufacturer** | **Model Number** | **Serial Number** |
| **A.** | **Survey Meter** | **Meter** |  |  |  |
|  |  | **Probe**  |  |  |  |
|  | **Date of Last Calibration** |  |  |  |
| **B.** | **Liquid Scintillation Counter** |  |  |  |
| **C.** | **Gamma Counter** |  |  |  |
| **D.** | **Dose Calibrator** |  |  |  |
| **E.** | **Other Equipment** |  |  |  |

|  |  |
| --- | --- |
| **6.** | **Personnel Monitoring (To Be Completed By RS)** |
| **A.** | **Dosimeters** | 🞎 None Required | 🞎 Whole Body  | 🞎 Finger  |
| **B.** | **Thyroid Bioassays** | 🞎 None Required | 🞎 Frequency: |
| **C.** | **Urine Bioassays** | 🞎 None Required | 🞎 Frequency: |

|  |  |
| --- | --- |
| **7.** | **Laboratory Monitoring (To Be Completed By RS)** |
| **A.** | **Smear Wipe Frequency** | 🞎 None | 🞎 Weekly | 🞎 Monthly | 🞎 Other: |
| **B.** | **Survey Meter Frequency** | 🞎 None | 🞎 Weekly | 🞎 Monthly | 🞎 Other: |

|  |  |
| --- | --- |
| **8.** | **Methods and Procedures (Attach additional Section 8 pages, which can be found on our website, as needed.)** |
|  | Attach a description of the methods and procedures to be used under this authorization **or** reference the procedure, from accepted publications, in the table below. State the activities of radionuclide(s) used for each experiment and the frequency with which the experiments will be conducted. Please see the corresponding instructions for this section. |
| **Objective of Research:** |

**Attach additional references as required.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Procedure** | **Publication Number(Indicate by numbered publications from instructions) and page or section number** | **Radio-nuclide** | **Activity per experiment** | **Frequency** | **Activity of Waste Generated for Each Category(Activity per Experiment (mCi))** |
| **Solid** | **Aqueous Liquid Waste** | **Organic Liquid Waste1** | **Scintillation Cocktail** | **Animal Carcasses** |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

Note 1: Mixed waste that cannot be held for decay-in-storage or neutralized so it is no longer mixed waste, must be segregated from other radioactive waste.
 Records regarding the identification and quantity of all hazardous chemicals in the mixed waste, along with the standard radionuclide information, must be maintained.

|  |  |
| --- | --- |
| **9.** | **Annual Training of Approved Users** |
| Approved Supervisors must provide for annual training of Approved Users in the laboratory.The training must cover, as a minimum, the following: |
| **A**. | **Forms, characteristics, and hazards of radionuclides used in the laboratory** |
|  |  |
| **B.** | **Administrative procedures** |
|  | * Ordering and receipt of radioactive materials
* Record keeping
* Inventory
* Waste disposals
* Contamination surveys
* Processing dosimeters
 |
|  |  |
| **C.** | **Laboratory Safety** |
|  | * General safety and precautions - ALARA
* Prohibited activities
* Personnel protective equipment
* Transportation of radioactive materials
* Contamination control
* Use of fume hood
* Applicable personnel monitoring programs
* Personnel contamination
* Spill response
* Storage and security
* Preparation and use of working solutions
* Waste disposal methods
* Survey methods
* Decontamination methods
 |
|  |  |
| **D.** | **Site-specific laboratory techniques** |
|  | * A written and performance-based evaluation for each user must be performed and the results documented, with 70% to pass. **Include outline below.**
 |
|  |
|  |  |  |
| **Training performed by:** |  |  |
|  |  |  |

|  |  |
| --- | --- |
| **10.** | **Radionuclide Risk and Levels of Security and Training (To Be Completed by RS)** |
| **A.** | **Radionuclide Risk Category** |  |
| **B.** | **Security (check all that apply)** |
|  |  | An active police and security presence on campus. |
|  |  | Laboratory entrances are locked during off-hours. |
|  |  | Radioactive materials shall either be secured or under constant surveillance. |
|  |  | Key access shall be limited to authorized users. |
|  |  | Ancillary personnel shall not be left unattended. |
|  |  | Licensed materials shall be separately locked. |
|  |  | Access to secondary keys shall be by authorized users only. |
| **C.** | **Training (check all that apply)** |
|  |  | Laboratory personnel should be trained with basic knowledge of chemical, biological and radiological hazards and procedures – Lab Safety Training. |
|  |  | All personnel who work within the laboratory shall take the On-Line Radiation Safety Course. |
|  |  | All personnel who use radioactive material are required to take the Initial In-Lab training and Annual In-Lab training. |

|  |  |
| --- | --- |
| **11.** | **Supervisor Evaluation Conference (To Be Completed by RS)** |
| **Date Completed:** |  |  |
| **RSS Signature:** |  |  |
|  |  |

|  |  |
| --- | --- |
| **12.** | **Applicant’s Acknowledgment of Responsibility** |
| As the Approved Supervisor of a project employing the use of radioactive materials, my primary responsibilities include:1. Insuring a commitment to the philosophy to keep radiation exposures **A**s **L**ow **A**s **R**easonably **A**chievable (ALARA) in keeping with the University’s commitment to the ALARA concept;
2. Insuring every user under my supervision has been instructed in, or has read, OAC chapter 3701:1-38, the *Radiation Safety Standards for The Ohio State University,* and the contents of my approved permit. All personnel will be prepared to make such a declaration to Ohio Department of Health representatives;
3. Insuring all users of radioactive material have successfully completed the OSU On-Line Radiation Safety Course and the required in-laboratory training prior to beginning work under my permit;
4. Notifying Radiation Safety immediately of any new individuals who begin work after this application is submitted, so those individuals may receive approval for the use of radioactive materials;
5. Controlling contamination in areas of radioactive material use;
6. Maintaining records of receipt and disposal of all radioactive materials used under my permit;
7. Insuring the procedures and precautions as outlined in my approved permit are followed;
8. Maintaining postings of the Ohio Department of Health’s *Notice to Employees* and other appropriate caution signs, labels and signals as required by 10CFR35 and/or the Ohio Administrative Code rule 3701-38-18.

 In addition to the above, I certify I have read OAC chapter 3710:1-38, and the *Radiation Safety Standards for The Ohio State University*. Moreover, I agree to abide by these regulations, by all statements, precautions and procedures presented in this application; and by any conditions added by the URSC during its review. Such conditions will be forwarded to me in writing by RS.  I understand and will abide by the requirements outlined above. |
|  |  |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  | **Applicant’s Signature** |  | **Date Signed** |  |