

**Old Dominion University
Radiation Safety Committee**

Application to Possess and Use Radiation Producing Machines

Directions: This form is to be completed only by Authorized Users or persons applying concurrently for Authorized User status on form RSO-3. *Complete in duplicate, sign both copies,* and return to the Environmental Health and Safety Office. This authorization expires in two years from the date of approval.

1. **Applicant:** _____

2. **Application Type:** New Renewal Amendment

3. **Office:**

Building _____ Room _____ Phone _____

4. **Location(s) of Proposed Use:**

Building _____ Room _____ Phone _____

Is the equipment portable: Yes No

5. **Equipment**

A. Machine type:

x-ray (diffraction) x-ray (veterinary) x-ray (dental/diagnostic/therapy)
 accelerator

B. Manufacturer: _____

C. Model: _____

D. Serial number: _____

E. Number of tubes: _____

F. Maximum accelerating potential: _____ kVp

G. Maximum tube current: _____ mA

H. Timer:

Electronic Mechanical Electromechanical None

RSO-4 (rev. 2/02)

6. **Description of Radiation Producing Machine:**

Give a complete description of the radiation producing equipment. Include information as to shielding, arrangement of machine components and any other information not covered previously in this application. Attach an additional sheet if necessary.

7. Facilities

- A. Describe primary and secondary room shielding, and/or protective barriers that will be used.

- B. Draw and attach a floor plan of the area of proposed use on a separate sheet and attach. Indicate the uses of all adjacent areas including above and below where applicable.

8. Radiation Safety

- A. Describe any other protective equipment (e.g. lead gloves aprons, sleeves etc.), that will be used.

- B. Describe the shielding on the machine, including, where applicable, tube housing, collimation, beam stoppers, or other shielding that is part of the machine. Specify which shielding parts are removable.

- C. Attach a copy of your written operating and safety procedures for the machine that all users of the equipment and associated radiation workers will be required to follow. Also, attach a copy of any special emergency procedures pertaining machine usage.

(Radiation Safety continued)

D. Describe warning devices such as lights or audible alarms that indicate to radiation workers that the machine is producing radiation. Also describe interlocks designed to shut the equipment off or prevent it from being turned on in case shielding integrity is compromised.

E. Describe radiation detection instrumentation (if any) you plan to employ during machine usage. Describe survey procedures and the documentation of surveys.

F Describe calibration and inspection procedures for the machine(s).

(1) Date of last inspection: _____

(2) Planned interval between calibrations/inspections: _____

G. Describe the minimum training that operators and associated personnel must have to operate the machine.

H. Is there the possibility of exposure to non-radiation workers or members of the public from operation of the radiation producing machine:

Yes No

I. Is there any possibility of the productions or radioactive material:

Yes No

9. Use Protocol:

A. Will human subjects be used as a part of your experimental protocol:

Yes No

B. Attach a description of your experimental protocol involving the radiation producing machine.

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10. Security

Describe security measures designed to prevent unauthorized persons from operating the machine.

10. Regulatory

Virginia Department of Health registration number: _____

11. Personnel:

List all persons who will use the machine and those persons (if any) who will be exposed to radiation as a result of the machine’s operation. The Authorized User is responsible for notifying the Environmental Health and Safety Office of changes in personnel.

Principal User: _____

Others: _____

12. Certification:

The signature below affirms that the applicant has read and will comply with the rules, regulations, and procedures of the Old Dominion University Radiation Safety Committee and Radiation Safety Officer. The applicant accepts the responsibility of maintaining current knowledge of the rules and regulations, and responsibility for the actions of those persons working under his/her authorization. Any changes in the use protocol, personnel, and the location or configuration of the machine will be reported to the Radiation Safety Officer in a timely manner.

Signature _____

Date _____

Radiation Safety Committee:

Authorization No.: _____

Approval Date: _____

This authorization to possess and use radiation producing machines expires two years from the above approval date.

Approved: RSC Chair _____

RSO _____

Member _____

Member _____