

Registration/Application to use X-ray generating devices

X-ray machines must be registered with the Radiation Safety Office. All Principle Investigators (PI's) must be approved and authorized by the Radiation Safety Officer prior to using x-ray generating machines. Additionally, prior approval for procurement and installation of x-ray machines must be obtained from the Radiation Safety office.

A Standard Operating Procedure (SOP) is required as part of the application process. A facility evaluation will be performed during the application review process to ensure proposed research can be conducted safely. Engineering controls (if applicable) will also be evaluated post-installation to verify that special safety features for the equipment and facility meet current requirements. Training recommendations required for the PI and all Radiation Workers is part of the application review process and should be completed as early as possible.

Authorization Information (to be completed by the Principal Investigators (PI's))

1. PI/ Operator/Supervisor: _____
2. Phone: _____ E-mail: _____
3. Emergency Contact: _____ Phone: _____
4. Department: _____
5. Building/ Office #: _____
6. Lab Location: _____
7. Purpose or Intended Use: _____
8. Survey Instrument (Manufacturer/Model/Serial #/Recent Calibration Date):

9. X-ray machine description:

Manufacturer	
Model	
Serial #	
Max kV	
Max mA	
Type*	

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***Categories of x-ray machine for Massachusetts Department of Public Health Radiation Control Program registration:** Medical Radiographic (e.g. Bone densitometer), Veterinary, Other Industrial (XRD, XRF, etc), Minimal Threat (e.g. cabinet x-ray), *Please consult with the RSO for assistance if needed.*

10. X-ray Control Measures

Access Control/Hazard Warning Signs & Device Labels

Yes No

- Posted entrances
- Access control/device securityControl Area
- established Warning label

Engineering Controls

Yes No

- Protective (Shielded) housingProtective housing
- interlock Key/Lock control
- Activation warning system

Administrative Controls

Yes No

- Standard Operating Procedures/Emergency proceduresEmergency contacts posted
- Personnel authorization

Safety Controls

Yes No

- X-ray machine is secured from unauthorized move
- Beam intensity reduced or filtration in place
- Radiation exposure below 2mR/hr at 30 cm from the machine
- Limited access to spectators/visitors

Important Notes:

- This application is strictly for non-human use only except as specifically authorized.
- X-ray use on humans under the scope of this authorization is prohibited. (Please indicate if clinical/ veterinary use x-ray machine is involved)
- Any actual or suspected exposure must be reported to the RSO immediately.
- Modifications and repairs to an x-ray machine that could affect the beam quality (excluding routine beam alignment) must be reported to and receive prior approval from the RSO before the device is put back into operation.
- Notify the RSO prior to the x-ray machine being moved to another location, transferred to another individual, or disposed of.
- When completed, please email this form to askehs@umass.edu