Did you know...

That researchers at MU have been working and performing research with radioactive materials since the early 1900’s! That is more than 100 years for MU! Note the history of use is 100 not the researchers. The NRC (old AEC) is only 63 years old.

Source: RS’s data base

Q&A

Q: What is the ALARA contamination limit for swipes of your authorized area? Ans: 200 dpm (Not CPM).

Source: RSM Table 2

Q: What is the annual and hourly dose limit for all workers, guests, and visitors in your lab who are non–Radiation or Ancillary Worker trained? Ans: 100 mRem/yr TEDE not to exceed 2mr in any one hour.

Source: 10 CFR 20.1301

Q: How many rooms (labs) at MU’s campus and hospitals are authorized for radioactive material use? Ans: 442 active labs at last count (Dec 08).

Source: RS’s data base

Q: How many active Radiation Workers are there at MU? Ans: 763 at last count (Dec 08).

Source: RS’s data base

Keeping Track of Your Authorization

Besides keeping track of your inventory of radioactive materials, there are three other important pieces of information that Authorized Users, Radiation Workers and the Radiation Safety Office need to track for each authorization. The Nuclear Regulatory Commission (NRC) Inspectors will ask any of the questions listed below. Check out how your authorization measures up to these questions. If you have questions, please contact your Assigned Health Physicist or me.

Approved Use Areas

Are all the areas where you handle, use or store radioactive materials listed on your authorization form? This is important so that we can show the NRC that we know and monitor all areas where radioactive materials are used or stored. If you are using or storing radioactive materials in an area that is approved for use under another authorization, you still need to get that area approved under your authorization. Or, you can transfer the radioactive material to that other authorization each time you work in that area.

Approved Radiation Workers

Are all the individuals handling or surveying for radioactive materials without direct supervision listed as Radiation Workers under your authorization? Direct supervision means that the Authorized User or a Radiation Worker is in direct visual and oral contact with the person handling the radioactive material.

Instruments Approved for Surveys

Are all your survey instruments listed on your or another currently approved authorization? All instruments used for radiation safety surveys must be calibrated at least annually. These calibrations must be documented by the Radiation Safety Office to demonstrate to the NRC that Authorized Users and Radiation Workers can correctly detect, measure and identify radioactive materials, especially in control of contamination and dose rates. The Radiation Safety Office supports the calibration and minor repair of Ludlum 3 survey meters with pancake probes.
We try to calibrate and maintain other survey meters, but they are more likely to need outside service to calibrate or repair. Liquid scintillation counters (LSCs) and gamma counters must be calibrated (or “standardized”) so that counts per minute (cpm) can be converted to disintegrations per minute (dpm). Survey instruments can be shared between authorizations.

Do all your Radiation Workers know how to confidently demonstrate the check and proper use of the survey meter? Do all your Radiation Workers use a calibrated LSC or gamma counter protocol for radiation safety surveys and know how to convert from cpm to dpm? Each of your Radiation Workers must be ready to demonstrate the proper use of their survey meters including functional checks and how to properly use a survey meter to find contamination and how to use Liquid Scintillation or Gamma counters and to inform an NRC Inspector what they would do if they found high readings.

I just don’t have the time for filling out this paperwork! I can’t read her handwriting! Did he want me to order P-33 or P-32? What are my order limits? How do I order Dosimetry?

How do I add a RW to my Authorization?

We listened! Radiation Safety of EHS with help from other EHS staff and our business technical services partners have developed a number of new web based processes and new electronic forms to try and save you time, and make your life just a bit easier. Some new forms and tools on our website are;

Isotope Request/Transfer - http://ehs.missouri.edu/webapp/isotopereqxfer.html
Radwaste Pick Up Request Form - http://mubsweb.missouri.edu/ehsweb/purf/purf_login.cfm