NOAA ESRL Radioactive Material Training

- 1. The U.S. Nuclear Regulatory Commission (NRC) materials license for NOAA ESRL (license number 05-11997-01) permits the use of nickel-63 (Ni-63), polonium-210 (Po-210), and americium-241 (Am-241). Use of other radioactive materials is allowed under certain conditions, however, please check with the Radiation Safety Officer (RSO) for more information. The ESRL RSO is Brian Vasel (303-497-6655).
- 2. These materials must be sealed (embedded under a thin metal layer) and remain sealed.

 DO NOT TAKE THEM APART.
- 3. These materials cannot be disposed in the trash; they must be returned to the manufacturer for disposal. **DO NOT THROW THEM AWAY.**
- 4. These materials must be LOCKED OR UNDER SURVEILLANCE AT ALL TIMES.
- **5.** If any of these materials are stolen, damaged, or opened, <u>immediately</u> notify the RSO.
- **6.** Radioactive material must be labeled with the words "CAUTION: RADIOACTIVE MATERIAL" along with the type of material, the activity, and a reference date.
- 7. The RSO <u>is required</u> to maintain an inventory and conduct audits of radioactive materials.
 - The RSO MUST APPROVE of purchases or new leases of radioactive materials.
 - The RSO must be notified whenever a lease is terminated or not renewed.
- 8. The RSO <u>must</u> be notified **PRIOR** to any transfer of radioactive material TO/FROM another institution that will either assume responsibility for the material under their license, or ours. In addition, leak tests must be performed with the transfer.
- 9. The RSO must be notified whenever radioactive material is relocated. This includes between rooms in the DSRC, to/from field sites, and to/from short-term missions.
- **10.** Serial numbers of Po-210 units <u>must</u> be tracked by the authorized user/users (date received, location(s), and return notice from the manufacturer).
- 11. Per the NRC license, ESRL will perform leak tests of radioactive material periodically. Typically, every 6-months. If a leak test result is above acceptable limits, the source will be immediately retested for confirmation and the RSO will notify users. If the retest result is still above acceptable limits, the RSO will notify users, remove the radioactive material from service, and make the required notifications.
- 12. Electron capture detectors (ECDs) must be temperature controlled. If the temperature control fails in any way and the ECD is heated above regular operating temperature, the RSO <u>must</u> be notified immediately.

I have completed the yearly training requirement, read & understand the above information, and have been instructed by personnel familiar with the equipment as to the specific operation of each unit that I may be required to use.

Signature	Date
Printed Name	_