

## ORNL General Property Radiological Clearance Processes

DOE O 458.1, *Radiation Protection of the Public and the Environment* establishes standards and requirements for operations of DOE and its contractors with respect to protection of members of the public and the environment against undue risk from radiation. The release of property containing residual radioactivity is a potential contributor to public dose, and DOE O 458.1 establishes requirements for clearance of property from DOE control.

At ORNL, a graded approach is employed to release material and equipment for unrestricted public use. In some cases property may be released without a radiological survey. Such material originates from non-radiological areas and includes items such as the following:

- documents, mail, diskettes, compact disks, and other office media;
- nonradioactive items or materials received that are immediately (within the same shift) determined to have been mis-delivered or damaged;
- personal items or materials;

Other items originating from non-radiological areas at ORNL are surveyed before release to the public or a process knowledge evaluation is conducted to ensure that material has not been exposed to radioactive material or beams of radiation capable of creating radioactive material. In some cases both a radiological survey and a process knowledge evaluation are performed. “If the property custodian is unable to certify the complete history of the item, the process knowledge approach is not used, and a radiological survey is completed prior to releasing the item for sale.” When the process knowledge approach is used, the item’s custodian is required to sign a statement that specifies the history of the material and confirms that no radioactive material has passed through or contacted the item. This ensures the item’s complete history is known before it can be released to the public.