

August 22, 1966

2219

Key Point Card
for Tech/Ops Model 525
Industrial Gamma-Ray Projector

The necessary equipment on the job is:

1. Detectors - Film, film badges, dosimeters, lead numbers, shims, penetrameters, tape and gamma ray survey meter.
2. Tools - Wire, ladder or scaffold, spring, rope and film holding devices.
3. Protection - Rope and radiation signs, warning blinker light, tarpaulin, canvas, polyethylene film, pliers, lead sheets.

You should know:

1. The nature of any hazards existing in your work area.
2. Where safety and eye showers are located.
3. Where the nearest telephone is.
4. Which men are near and who their supervisor is.
5. The location of congested areas, escaping gasses or fumes, stairways, floor gratings, sewers, and openings in the floor.

Normal work procedure includes the following:

1. Lift the lead shielded container properly, keeping your back erect and using your legs.
2. Inform supervision and persons in the area that you will be using a radiation source which requires that part of the area be roped off.
3. Rope off a practical exclusion area, post it with radiation warning signs, and measure the radiation levels at the barrier with the Victoreen 592B survey meter. If possible, adjust the barrier so that the level at the rope is 2 mr/hr or less. If it is not practical to attain this maximum by adjusting the rope or shielding the source, patrol the region and warn people away from the rope.

4. Each man entering the area of radiation must have a film badge and a dosimeter. Dosimeters must be read beforehand and should be checked about every fifteen minutes to assure recognition of overexposure. The permissible dose limit is 1250 mr per calendar quarter.
5. Radiation intensity increases rapidly as you approach the source. Radiographers should not approach closer than a few feet from the source and under no circumstances whatsoever should they come close enough to touch it.
6. To keep personnel exposure to a minimum, the complete exposure setup is made before any radioactivity is handled. Objects to be inspected, film holders, penetrameters, and identification are all in place and the source setup firmly located, before the source is reeled out.
7. Shielding should be provided to keep radiation levels as low as possible without interfering with the use of the source.
8. The source will be wipe tested by the Environmental Research Laboratory at intervals not to exceed six months.
9. All sources must be plainly marked according to AEC regulations to warn transients of their presence.

LGS:reh
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