Isle of Man Government

Department of Environment, Food and Agriculture

Rheynn Chymmyltaght, Bee as Eirinys,

Indicative list of practices

If you are finding it difficult to decide which tier of the risk based approach applies to your use of ionising radiation, see the guidance below, which includes an indicative list of practices that fall into each tier. This list is not exhaustive but may be useful to help you determine what to apply for.

Notification

Work in an atmosphere containing radon above an annual concentration of 300 Bq per cubic metre

 this could be any work, even work not involving any other form of ionising radiation that is conducted in an area where the annual average concentration of radon is above 300 Bq per cubic metre

Radon concentrations may be higher in subterranean work locations.

Registration

Work with a radiation generator

- you use an X-ray postal inspection unit to scan incoming post for suspicious objects
- you use X-ray equipment to monitor the fill level of items you produce
- you use X-ray equipment in a dentist or veterinary practice or in a hospital environment
- you use X-ray equipment in a laboratory setting to analyse an item/product

Work with artificial radionuclides and/or naturally occurring radionuclides which are processed for their radioactive, fissile or fertile properties

- you use a sealed source to monitor the level of a tank/vessel or the thickness of a product (not a high activity sealed source [HASS])
- you use radioactive sources in a school environment to demonstrate radioactivity to students

Consent

The deliberate administration of radioactive substances to people or animals for medical or veterinary diagnosis, treatment or research

- you administer radioactive substances through either injection, ingestion or inhalation to patients (hospital) or animals (veterinary practice)
- you are treating a patient with a sealed radioactive source (e.g. brachytherapy)

The deliberate addition of radioactive substances in the production or manufacture of consumer products or other products, including medicinal products

- you work with radiopharmaceuticals
- you work with unsealed radioactive material in a research environment, for example, to produce medical tracers

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Industrial irradiation

• you utilise ionising radiation in a process to sterilise food or other items

Industrial radiography

- you employ ionising radiation (either in the form of X-rays or a sealed radioactive source) to carry out non-destructive testing of articles in a fixed location that you are responsible for
- you employ ionising radiation (either in the form of X-rays or a sealed radioactive source) to carry out non-destructive testing of articles at different sites that you are not responsible for

Working with a high-activity sealed source (HASS) (except for industrial radiography or industrial irradiation purposes)

- you use HASS in medical treatments e.g. brachytherapy
- you use HASS in underground structures (e.g. wells)
- you supply HASS to other operators

Discharging significant amounts of radioactive material with airborne or liquid effluent into the environment

• you discharge radioactive material as airborne or liquid effluent where the activity in a single discharge exceeds the quantities in column 5, part one of Schedule 7 of IRAO19

Operation of an accelerator (except when operated for industrial radiography or industrial irradiation purposes and except an electron microscope)

- you use an accelerator to treat patients in a hospital
- you use an accelerator for research purposes, e.g. in a university

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