What do you need to discuss with your appointed Radiation Protection Adviser?

A check-list

Radiation Protection

- Requirement for Notification, Registration or Consent from HSE
- Radiation Risk Assessment including occupational doses and radon gas exposure
- Critical Examination of new equipment
- Designation of Radiation Controlled or Radiation Supervised areas
- Need for installed control measures
- Radiation surveys and dose assessment
- Routine safety checks
- Routine examination, maintenance and testing
- Appointment of a Radiation Protection Supervisor (RPS)
- Radiation Protection training
- Procedures (Local Rules)
- Contingency plans and rehearsals
- Sealed source leak testing

Environmental Protection

- Application for an environmental permit and compliance with permit conditions
- Security and source accountancy checks

SRP's Non-Nuclear Industries Committee comprises radiation protection professionals from a range of non-nuclear workplaces: members include Radiation Protection Advisers to the food and drinks industry, specialist radiation regulators and academics. For further information on any of the matters set out here, contact the committee using the details below.

SRP is a registered charity, promoting radiation protection and, as such, will not charge for any assistance it is able to provide. Please note, however, that employers are obliged to formally appoint and consult with a Radiation Protection Adviser. The information in this leaflet does not constitute consultation with an RPA under IRR17 Regulation.

The Society for Radiological Protection is the UK professional body, incorporated by Royal Charter, to promote the science and public understanding of Radiation Protection. Incorporated by Royal Charter 2007

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THE SOCIETY FOR RADIOLOGICAL PROTECTION

A Guide to the Use of Ionising Radiation in the Food and Drink Industry

A Guide to the Use of Ionising Radiation in the Food and Drink Industry

Radiation is commonly used in the food and drinks industry: X-ray systems are useful for inspecting food products before, during or after packaging. Gauges use a small radioactive source or an X-ray beam to check that cans or bottles are correctly filled and larger gauging systems may use radioactive sources to monitor the flow of raw ingredients through a processing plant.

Some of the most common questions on radiation safety in the food and drinks industry are answered here by members of SRP's Non-Nuclear Industries Committee.

1 Could my staff be harmed?

If the equipment is properly installed and maintained, there is a good radiation risk assessment, appropriate procedures and supervision, staff have the right information and the employer takes professional advice, then the equipment can be used safely and no one should be at risk.

2 Could the radiation affect my product?

No – the radiation beam does not affect the material it passes through. Food and drink are safe to consume and other items are safe to handle straight after they have been exposed to radiation.

3 What are my legal obligations?

Employers have several obligations under health and safety law[1] and, if they use radioactive sources, they must comply with environmental protection law[2] as well. The relevant regulators are the Health and Safety Executive and the various environment agencies within the devolved administrations.

A significant requirement in all radiation safety legislation is that employers must restrict the exposure of their employees and others to radiation, so far as is reasonably practicable.

4 Who can I talk to?

Employers are required to formally appoint and consult with a Radiation Protection Adviser (RPA) over many aspects of radiation safety. RPAs are experts in radiation protection; typically radiation protection is their profession. Employers must talk to their RPA about various practical radiation protection matters and regulatory requirements.

RPAs are often external to the organisation and provide advice on a contractual basis through site visits and remote consultations.

A checklist of topics that an employer might want to talk to their RPA about is included in this leaflet.
A list of all the UK's accredited individual RPAs is published at www.rpa2000.org.uk (look for 'RPA certificate holders' on the homepage). A list of RPA bodies (organisations accredited by HSE that may offer RPA services) is available on HSE's website: www.hse.gov.uk/radiation/rpnews/bodieshse.htm

[1]The Ionising Radiations Regulations 2017
[2]The Environmental Permitting (England and Wales) Regulations 2016 and The Environmental Authorisations (Scotland) Regulations 2018.