

Briefing note

Radioactive Substances Regulation

Security of radioactive substances – our role

Radioactive substances are widely used in medicine, industry and research. It's our job to regulate organisations that use them and make sure adequate security measures are in place to protect people and the environment.

What is the Environment Agency doing?

Our role as regulator

We regulate the organisations that use radioactive sources in England and Wales. Our colleagues in the Scottish Environment Protection Agency (SEPA) and in Northern Ireland's Environment and Heritage Service (EHS) perform a similar role. Any organisation that wants to keep and use sources needs a permit. About 3,000 sites in England and Wales hold licences to keep and use radioactive sources.

We also have a legal duty to regulate the security of sealed radioactive sources on all permitted sites, other than nuclear licensed sites, in England and Wales. We do this under the High-Activity Sealed Radioactive Sources and Orphan Sources (HASS) Regulations.

These regulations create even more stringent requirements for controlling high-risk sources. These include annual inspections, a national inventory of high activity sources, (so that we know who in the UK owns each individual source at any time) and a requirement to make proper financial provision to dispose of the sources at the end of their lives, even if the organisation that owns them goes out of



business. We must make sure that the owner of a premises has adequate security measures in place to protect their radioactive sources. We do this by inspecting sites and taking advice on the need for security measures from the Police and the Security Service.

Our work makes it more difficult for potential terrorists to obtain radioactive substances. We are determined to make a contribution to the national effort to counter the terrorist threat.

Risk-based approach

We use a risk-based approach that means more security measures are required for higher risk sources and less for lower risk ones. We assess security measures using a document developed by the Government's Centre for the Protection of the National Infrastructure (CPNI), part of MI5.

This, in turn, relies on an international system for categorising radioactive sources according to risk, developed by the International Atomic Energy Agency of the United Nations (IAEA).



We will only issue a permit to an applicant who has met the security requirements for the type of sources they hold. We have overwhelmingly found that our customers understand the threat of a potential dirty bomb, and we see a very high level of compliance on security issues.

Of course, we also have to protect the information we hold about premises that use sealed radioactive sources, whilst making sure that information about radioactive waste remains in the public domain. The Government has directed us not to publish details of who holds sealed sources. We have to protect this information from people who may try to use it for malicious purposes. However, we do make as much other information about radioactive substances and radioactive waste in the environment available as we can.

Surplus sources that are not recycled are disposed of either at the national low-level waste repository near Drigg in Cumbria or stored securely at one of two nuclear sites - either Sellafield or Harwell to be eventually disposed of to a future geological disposal facility. A source that has been disposed of or is being stored safely at a nuclear site is far less likely to fall into the wrong hands, so there were real benefits to UK security in completing this project.

The future

We have now collected and safely disposed of or recycled more than 99.9 per cent of the total radioactivity in surplus sources. Alongside our

colleagues in SEPA and EHS we will continue to enforce the law surrounding radiation protection through permitting, inspection and enforcement. In particular, we will do our bit to ensure that sealed radioactive sources are kept securely and safely managed when they are no longer required.

Success story

We in the Environment Agency certainly feel that the Surplus Source Disposal Programme has been a success. In future, there will be much less chance of stockpiling surplus sources because of the difficulty of paying to dispose of them. The HASS Financial Provision arrangements will at least ensure that the disposal of bigger sources will be funded.

In these ways the Environment Agency contributes to the security of the nation, so that people can continue to carry out the extremely beneficial work they do with radioactive sources despite the high security climate we live in.

Further information

For further information visit our website (<http://www.environment-agency.gov.uk/nuclear>).

You can use our interactive maps at <http://maps.environment-agency.gov.uk/wiyby> to find out more about the environment where you live.

About this briefing

This briefing is part of a series which highlight our work in the area of regulating radioactive substances. Our other briefings include: Regulating radioactive substances - our role, Incidents involving radioactive contamination, Environmental Regulatory Principles, Managing radioactive waste and Decommissioning.

You can find these briefings by typing 'rsr' in the keyword search on our publications catalogue (<http://publications.environment-agency.gov.uk>).