

## RECYCLING RADIOACTIVE MATERIAL

For many years radioactive material could only be disposed of (put into long term safe storage). Increasingly it is possible to recycle radioactive material and we are firmly committed to recycle materials wherever they are suitable.

We are not the only organisation to believe that recycling is the right thing to do: governments, regulators, industry bodies and commercial companies are now seeing the benefits of re-using or recycling material and making their stakeholders and customers know they are following best practice.

We will only recycle material when we can satisfy ourselves and regulators, such as the Environment Agency and Scottish Environmental Protection Agency, that the processes are good practice and represent genuine recycling. We provide recycling solutions for our clients via facilities in Europe and the United States. In addition to conducting an initial Duty of Care inspection on each facility and process, we audit them once operations have begun.

Whilst Open Waste material is not usually in a form that can be recycled, there is often a recycling solution for Closed Sources, Depleted Uranium, Tritium and Contaminated Metals.

There are four main technologies that can be used for closed source recycling:

- Re-use: if a source is still safe, within its nominated working life and has residual value, it can be re-used by another organisation.
- Re-serialisation: where, once checked, re-encapsulation is not needed but, for quality control purposes, the source has to be stamped with a new serial number.
- Over encapsulation: sealing the existing source within another capsule in a quality controlled environment for re-use.
- Re-blending: for gaseous sources and others, carefully blending virgin material with the existing can make it suitable for encapsulation and re-use.

Depleted Uranium (DU) has been recycled at Safeguard International's sister company in Tennessee since 1985 which has the world's only commercially-available DU recycling plant. DU is cast, rolled and machined to make products such as radioactive materials transport packages, sheets and cylinders.

We also have the ability to take contaminated metals for beneficial re-use. For more than 15 years EnergySolutions's Bear Creek facility has used a patented metal melting process to provide this service to the nuclear energy industry and other organisations. A 20-ton, coreless induction furnace is used to melt the material before being poured into blocked forms for controlled reuse, most often in high-energy physics projects.

- TO VIEW RECYCLING FOR BRITISH AMERICAN TOBACCO CASE STUDY, PLEASE [CLICK HERE](#)
- TO VIEW DEPLETED URANIUM RECYCLING CASE STUDY, PLEASE [CLICK HERE](#)

- TO VIEW BENEFICIAL RE-USE OF CONTAMINATED METALS FOR THE ENVIRONMENT AGENCY CASE STUDY, PLEASE CLICK [HERE](#)

- TO VIEW Tritium Recycling in the Oil & Gas Sector CASE STUDY, PLEASE CLICK [HERE](#)

- TO REQUEST A BUDGETARY ESTIMATE OR QUOTATION, PLEASE CLICK [HERE](#)

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