



Waste Reduction

Free-Release and Recycling

During operation and decommissioning of nuclear facilities, large quantities of radioactively contaminated materials arise, including metal components such as pipes, valves, heat exchangers and other devices made of steel, or concrete components and rubble. GNS provides specific disposal solutions for these as well, while always checking whether or not a component can be reused. Ideally, one can dispose of these components by way of free-release for reuse or recycling.



Freimessanlage

The contaminated parts may need to be decontaminated before they are released. At its operating sites, GNS has appropriate facilities that can process such contaminated metal components. Even large components (up to 100 t) can be treated.

Following their release, the components may either be conventionally recycled, provided that the products do not exceed permitted limits, or they are disposed of to a conventional waste dump.

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Controlled Recycling

Another way of disposing of contaminated metal is controlled recycling for nuclear applications. In order to achieve this, slightly activated scrap is melted down under a licence for handling radioactive substances in accordance with §7 of the German radiation protection ordinance. The raw material produced in this way is used to manufacture castings such as containers, shields or other components which are reused in nuclear facilities or for the final disposal of radioactive waste. GNS cooperates with foundries in Germany, Sweden and the U.S. and provides complete service packages for this disposal procedure too.

