

Decommissioning and transporting NORM and TENORM

Naturally Occurring Radioactive Material (NORM) and Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) need a considerable amount of time and resources spent on them when it comes to their transportation. A failure to provide either can result in a far more expensive decommissioning and transporting process from NORM and TENORM — a cost felt both in time and money. Consulting experts at the beginning of the process is invaluable to the planning process, and can also help secure large savings.

Large structures that need to be consigned need careful planning. The first issue to be addressed is parts that are both inaccessible and cannot be monitored. Such a structure cannot be declared as uncontaminated with no means of proving it, so it is better to assume that contamination is present. A base line survey before decommissioning is not able to prove that NORM is not present in this situation. Therefore, ongoing surveyance throughout the decommissioning process will be needed to ensure contaminated items aren't transported incorrectly. It is important that all parties involved receive advice and guidance on transporting potentially NORM contaminated structures.

Large structures may also house smaller vessels that have Low Specific Activity (LSA). Most bulk NORM, like sludge and sand, will be classified as LSA-1, but there are some exceptions to this. It's also possible for the same structure to contain SCO (Surface Contaminated Objects). Like the LSA vessels, these NORM contaminated SCOs will be classed as SCO-I more often than not, but there are some exceptions to this.

The procedure needs marking and labelling, which isn't easy on large structures. In addition to this, the following documents are also required:

- DGSA contact details for the drivers
- Emergency plans
- Instructions in writing — ADR requirement. 5.4.3 — standard set of instructions
- A dangerous goods form
- The container packing certificate, if being transported by sea, ADR 5.4.2

You will also need Contamination Monitors, Intrinsically Safe Dose Rate Monitors, and of course, trained personnel. Plus, to safely understand the provisions in transport regulations regarding shipping large items, it is good practice to speak with a DGSA (Dangerous Goods Safety Adviser). Consulting with Radiation Waste Advisers and Radiation Protection Advisers will also be required when transporting NORM.

There are specific activities than need to be analysed before NORM is transported. This can be done at a radiochemistry facility, and a fast turnaround service will help to avoid transportation delays.

To ensure a smooth transportation and decommission process, detection, training, transportation and measurement of TENORM and NORM is crucial. Speak to an experienced and certified Radiation Protection Adviser to help maintain a smooth procedure.

This article was brought to you by [subsea pipeline inspection](#) experts, Tracerco.