



Data Quality Objectives (DQO) and Sampling Characterisation Services

Applying the DQO process and site sampling programmes to characterise radiological and chemical contaminants. Providing robust data to support waste categorisation, ensure regulatory compliance and inform remediation strategies.

Our Services

Amentum's dedicated Decommissioning Characterisation Consultants within the Radiation Protection & Characterisation (RP&C) team provide expert support in the application of the DQO process, sampling and data analysis.

We support clients to deliver informed and proportionate characterisation methodologies for redundant facilities, ensuring that radioactive and hazardous waste is appropriately categorised, managed and routed for compliant treatment and disposal.

Our services include:

- Desktop studies and gap analysis
- Data gathering to develop a comprehensive site "history file"
- Production of tailored and proportionate DQO reports for building structures, plant and wastes
- Development of Sampling and Analysis Plans (SAP)
- Application of Visual Sample Planning (VSP) and Geographic Information System (GIS) mapping
- On-site operations team, including Health Physicists
- Site-wide surveying and sample collection for all matrix types
- In-situ and laboratory analysis of samples for radiological and chemical contaminants
- Production of Data Quality Assessment (DQA) reports

The DQO process, developed by the U.S. Environmental Protection Agency, is a strategic, seven-step iterative planning approach.



DQO is used to ensure data collection efforts are efficient, cost-effective, and sufficient for stakeholders to make informed decisions.

- Hazardous waste assessments
- Interpretation of data against UK regulatory thresholds (e.g. EPR, EASR and WM3)

We are committed to delivering high-quality services and engaging with stakeholders to provide bespoke solutions tailored to the specific needs of our clients.

Our Experience

Our team of Amentum characterisation specialists has more than 20 years of proven capability in the application of systematic planning processes for site characterisation. Our client portfolio spans the civil nuclear and defence estates within the UK and supports civil nuclear decommissioning programmes abroad.

We work closely with clients and stakeholders to define appropriate levels of confidence and deliver reports that support robust, defensible, site-wide decision-making. Our experience covers a broad range of facilities, including reactor buildings, research laboratories, hot cell facilities, chemical stores and intermediate-level waste (ILW) stores.

We have extensive experience working in challenging environments and adapting methodologies where required. For example, by designing sampling campaigns in extremely high dose rate or heavily contaminated environments.

Using our technical expertise and practical site experience, we deliver characterisation programmes to support regulatory compliance and enable informed decision-making throughout the decommissioning lifecycle.

Contact

For more information on our experience and the services we can provide your business, please contact:

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Mapping of large-scale buildings and plant (left) to a zoned sampling plan (right)