Naturally Occurring Radioactive Material NORM
Naturally Occurring Radioactive Material

Studsvik is at the forefront of radioactive waste management providing solutions to a range of companies with Naturally Occurring Radioactive Material (NORM). We have delivered innovative solutions in the oil & gas, petrochemical, mining and ore/mineral extraction & processing sectors, offering a full cradle to grave waste management service for our customers. Our team of highly skilled and qualified consultants and health physics professionals specialise in licencing, radiological characterisation, packaging, transport and waste treatment.

Studsvik has built upon its extensive experience of managing the nuclear industry’s legacy waste and can bring this expertise to projects within the NORM industrial activity sector. Whilst the waste, legislation and client drivers are undoubtedly different, the techniques and principles utilised to successfully identify, treat and dispose of NORM are the same. The safe and cost effective treatment and disposal of radioactive waste is day-to-day business for Studsvik and we have a proven track record of working with our clients to deliver the right solution every time.

Waste Management & Environmental Protection

Studsvik delivers the full range of consultancy and on-site services to manage NORM projects from inception to completion and our areas of expertise include:

- Environmental Assessments for NORM-contaminated materials (BPEO, BAT and BPM)
- Licencing and regulatory compliance including EPR10 and RSA93
- Sampling and analysis for waste fingerprint generation
- Design and implementation of waste assay techniques and methodologies
- On-site assay and waste packaging
- Consignment paperwork for treatment/disposal sites
- Transport of waste to appropriate treatment/disposal sites
- Site clearance and land contamination surveys
- Contaminated land remediation

All our consultants, including experienced Radioactive Waste Advisers (RWA), are extremely skilled individuals who are specialists in their field, having extensive knowledge of NORM waste management over a wide variety of industry sectors.

Radiological Protection

Studsvik’s NORM waste management services are fully supported by an integrated team of radiation protection consultants including Radiation Protection Advisers (RPA) and health physics personnel. Service offerings cover all aspects of radiological protection, from production of Prior Radiological Risk Assessments to advice on dosimetry provision.

Full life cycle NORM waste treatment services

www.studsvik.com/NORM
CASE STUDY - NORM MANAGEMENT FOR A MINERAL PROCESSING FACILITY

Since 2010 Studsvik has been delivering a full life cycle waste management solution for a mineral processing facility. This on-going project involves the characterisation, assay, packaging, transport and disposal of production wastes. During campaigns Studsvik construct a temporary radiological Controlled Area for the work to be undertaken. A team of four operatives comprising an RPA and Health Physics resources work on site to successfully consign the operating waste to a suitable disposal facility in line with all the relevant Environmental Regulations.

Studsvik has added value by working pro-actively with the client to ensure that all wastes are appropriately streamed, to ensure consignment to an appropriate facility for the particular category of waste.

Year on year Studsvik has refined our approach to characterisation, using the decades of experience of similar work in the Nuclear Industry. This has allowed for the refinement of the waste streaming process, enabling more appropriate disposal of wastes according to their individual risk category.

Since 2010 we have consigned significant volumes of waste in line with all regulatory requirements, and approximately 40% of these disposals were to lower risk category landfills.

This has resulted in huge cost savings for the client.
Oil & Gas Industry

Exploration and Decommissioning
Studsvik is experienced in providing support relating to licencing for exploratory purposes of both conventional and unconventional onshore oil and gas. We deliver services at all stages of operation for both up- and down-stream sectors, including:

- BAT Assessments & Waste Management Plans
- Licence applications
- Advice on novel waste characterisation techniques
- Surveys to identify NORM-contaminated equipment
- Method Statement & Waste Management Plan production
- Size-reduction & waste treatment
- Containerisation & characterisation of waste
- Consignment of waste to suitable disposal facilities

Ore Processing & Mineral Extraction

Titanium Dioxide Manufacture
Studsvik are specialists in providing radiation protection advice and waste management services to the UK titanium dioxide industry, in relation to both operational production waste and post-closure decommissioning, including:

- Development of in-situ waste assay techniques
- Packaging & consignment of waste
- Pre-decommissioning surveys of process plant
- Decommissioning and waste disposal
- Site Condition Report production & licence surrender

Mining

China Clay Production
Studsvik provide advice on routine NORM-waste management and radiological protection issues associated with china clay production and also in relation to decommissioning, decontamination and the surrender of site licences. Service offerings include:

- Exposure assessments relating to facility maintenance
- Radiation Protection Supervisor training
- Contaminated land surveys & remediation
- Waste treatment of metallic components at Studsvik’s UK Metals Recycling Facility

For further information please contact Chris Hannon or Nick Chambers via email at NORM@studsvik.co.uk

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