DIALOGUE - An e-newsletter from the Nuclear Decommissioning Authority

UK - Go ahead for £6 million Waste Treatment Plant

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A new multi-million pound Metal Recycling Facility (MRF) to be built at Lillyhall, Workington in West Cumbria, will help the NDA and its contractors to implement the national waste hierarchy by ending the practice of sending valuable metals for burial at the Low Level Waste Repository (LLWR) near Drigg.

The plant, to be built by Studsvik UK Ltd, was given planning permission by Cumbria County Council at the end of July 2007. In February 2008 the company obtained its nuclear site licence from the HSE to allow construction and subsequent operation.

Studsvik estimates that there are 500,000 tonnes of slightly contaminated scrap metal in the UK which can be safely treated, recycled and reused. The Workington facility will handle metal arising from both operations and decommissioning activities on UK nuclear sites.

Following treatment, the recycled metal will be proven to be below exemption limits before it is eventually sold on for industrial use via the UK recycled metal market.

The remaining radioactive metal (less than 10% of the original volume) will be packed and safely disposed of in the LLWR.

In addition to the metal recycling capability, the facility will also be used to accommodate Studsvik's mobile High Force Compaction unit which reduces the volume of low-level waste for disposal.

Joanne Fisher, NDA's Head of Low Activity Waste Management said: "Decontaminating low-level radioactive metals such as steel and lead and recycling it for re-use will reduce the amount of waste requiring expensive disposal and help us to save taxpayers' money."

Mark Lyons, President of Studsvik UK Ltd confirmed that the MRF was completely aligned to the Government's new LLW policy which prioritises recycling, re-use, treatment and volume reduction instead of disposal.

The plant has been approved by the NII and Environment Agency. He said the facility would result in significant economic investment in Allerdale and create 30 highly paid jobs in its first year of operation.

Studsvik UK Ltd is to become a member of the West Cumbrian Sites Stakeholder Group and the MRF would include an education resource facility for secondary school students.

Mr Lyons added: "We have operated similar facilities in Sweden for 20 years. Sixty per cent of the metal we will treat at the Lillyhall plant will emanate from Sellafield. The rest will come from nuclear sites throughout the UK. It will be transported by road, rail or sea to the port of Workington."

Last year Studsvik UK completed a trial to process 15 tonnes of low- level contaminated metal at its site in Sweden. Nearly 95% of the material from the trial was successfully recycled.

Ms Fisher added: "Since a change in government policy, the NDA and its contractors have undertaken to deliver a more effective waste management strategy. Innovative methods - such as treating and smelting - to reduce the volume of waste and to help minimise its impact on the environment are excellent ways of utilising technologies previously developed in the United States and Europe.

"The scrap metal being handled by Studsvik includes contaminated steel, old containers used to transport waste to the LLWR, scaffolding, pipes and lead bricks used for shielding. The new facility at Lillyhall will decontaminate the vast majority of scrap metal on site although some will be shipped to Sweden for smelting."

Sellafield Ltd has worked with the environmental regulators to establish protocols for shipping material to Sweden.

Recycling one tonne of steel hugely offsets the environmental impact caused by mining iron ore and needs only 25% of the energy required to turn iron into steel, according to the British Metals Recycling Association.