

# Local Sludge Treatment Plant (LSTP), Sellafield

**Client :**  
Sellafield Ltd

**Main Contractor :**  
VT Nuclear Services

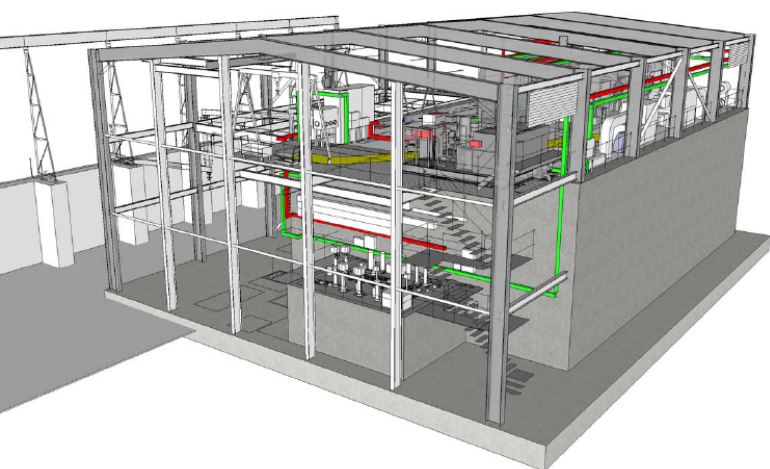
**Location :**  
Sellafield, Cumbria

**Date :**  
2006 - 2010



The Sellafield site has a legacy from when Windscale was operational between 1951 and 1962. Part of the original Windscale facility was a fuel storage pond open to the environment, which has been subject to a gradual accumulation of sludge and debris arising from fuel corrosion, wind blown debris, a variety of metallic corrosion products and bio-organic materials such as pond weed, algae and bird droppings. In addition to the sludge there is a significant quantity of pond floor debris, which includes pieces of concrete, graphite, wire, cladding, spent fuel and other metals present as oxides.

The driving factor behind the requirement of the LSTP was that the Nuclear Installations Inspectorate (NII) stipulated to Sellafield that at least 90% of the total volume of potentially mobile Intermediate Level Waste (ILW) which has been accumulated as sludge in the fuel storage pond should be stored within modern (stainless steel) containment.



## **BAM Nuttall's scope of work includes the following:**

- The plant detail design to thicken, store and sentence the sludge
- Procurement and supply of all material and equipment.
- Construction of the building adjacent to operational nuclear facilities
- Works Testing of modularised equipment manufactured by key suppliers
- Installation of all mechanical plant including electrical and instrumentation elements
- Setting to work of the plant.
- Inactive commission of the plant.
- Demonstrating that the plant performance meets the performance and technical requirements.

## **Use of local labour and sub-contractors**

BAM Nuttall has used local labour from within a 20 mile radius to construct the reinforced concrete elements of the structure. Ninety percent of the modularised mechanical plant has been manufactured in Cumbria and the installation of the mechanical and electrical elements will all be completed by companies established within Sellafield.

## **Safety Initiatives**

The BAM Nuttall (BNL) site management team and workforce in conjunction with VT Nuclear Services (VTNS) have been fully committed to safety and behavioural safety training. The site's team commitment to safety has been supported by BNL and VTNS who jointly donate money to a nominated local charity for each incident free month. For the 6 months the scheme has been in place £2,500 has been presented to local charities.

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