

SELLAFIELD PLANT

Contract: Sellafield Nuclear Plant

Client: Sellafield Ltd

Principal Contractor: Nuvia Ltd

Contract Duration: 8 weeks, April – May 2011

Sub-Contract Value: £140,000



Thompsons of Prudhoe were contracted by Nuvia Ltd. to dismantle and demolish a series of five buildings and the associated connecting corridor, on the Sellafield Nuclear Power Plant. Operational since the 1940's, the Sellafield plant is still a working plant, with fuel handling, chemical processing and various nuclear production, processing and storage facilities onsite. The plant also has a large range of redundant buildings from various working periods, including the B100 former storage buildings which Thompsons were contracted to demolish.

Prior to demolition works commencing, a boundary fence was erected surrounding the site to ensure no unauthorised access. A series of laydown areas were established at a suitable distance from the buildings being demolished, to allow for the processing and storage of waste materials. A traffic management system was also put in place to ensure the incoming and outgoing traffic from the demolition area wasn't causing a disruption to the working areas of the site, or the surrounding access roads.

The demolition works were carefully phased, beginning at the southern end of the corridor which connected the five buildings. A series of 8x4 steel plates were used to ensure the existing ground floor slab wasn't damaged during the demolition of the buildings. Using the Komatsu PC210 (22t) excavator machines, the brick work was reduced first into small, easy to handle sections, before being transferred to the laydown area for processing. Works then moved North East down the corridor, before moving on to the buildings themselves. Each building had the roof reduced first, with the waste

being carefully segregated due to traces of asbestos within the materials. Once exposed, the steel roof support structure was reduced using the 360 degree excavator machines with a rotating grab attachment. The superstructure of the buildings was then dismantled, followed by any pipework, duct work and tanks, with strict vigilance from Thompsons' staff to any possible remaining asbestos. Works were halted at regular intervals to allow the transporting of arisings from the demolition exclusion zone, through to the laydown areas using the Bobcat SR250 loader. The waste was then processed and segregated in preparation for reuse on site, or transportation to our waste facilities for recycling or disposal.

Any redundant drains exposed by the works were sealed off, and any voids or ducts within the working area were filled to ground level using crushed aggregates produced on site from the demolition arisings. All other waste materials were transported offsite for disposal or recycling. All works were carried out in line with BS 6187:2011 demolition standards, as well as ISO 14001:2006 environmental compliance and ISO 9001:2008 quality policies.