

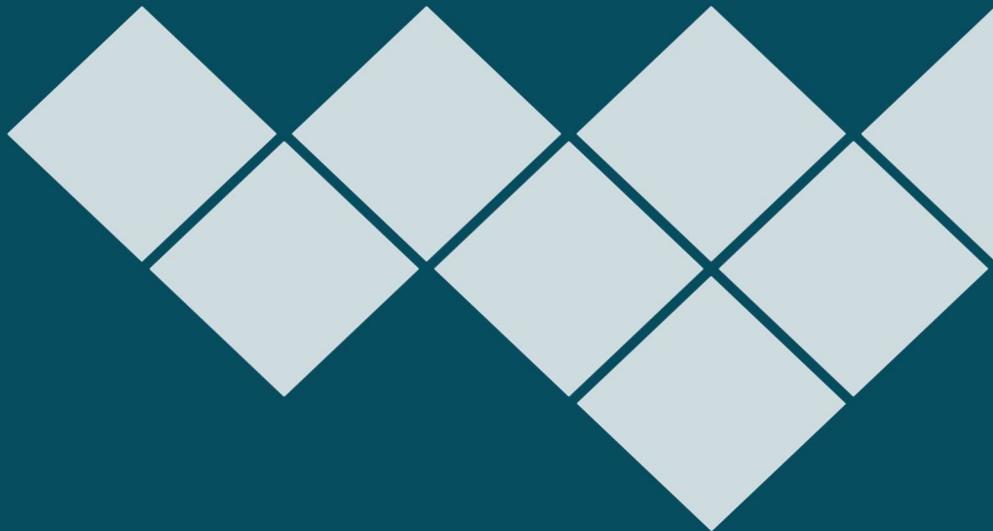


FELLSIDE CHP PLANT

Demolition of WHRB's and GT's 2 / 3

November 2023

FCHP-OMST-REP 002 Rev 0





Demolition of Units 2&3 - FCHP

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Introduction

Building Description to Support the Demolition of Units 2/3

The two Power and Steam Generation units are located on the Fellside Combined Heat and Power Plant (FCHP) near the Sellafield (SL) Calder gate entrance and formally provided power and steam to SL. Both units were built circa 1990 and consist of a Waste Heat Recovery Boiler (WHRB) and Gas Turbine (GT).

The WHRB's are 42M in height and consist of multiple levels whilst the GT's are estimated to be approximately 10M in height located behind the WHRB's.



Picture 1 – The Upper Structures of the Waste Heat Recovery Boiler on Units 2 &3



Demolition of Units 2&3 - FCHP

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Picture 2 – The Gas Turbine housings of Unit 2, with the WHRBs of Units 2 & 3 behind.



Demolition of Units 2&3 - FCHP

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Reason for Demolition

The units are now redundant and no longer have a function on site.

- Once removed this will release a significant land area for reuse.
- Demolition of these structures will reduce the life cycle costs of maintaining them safely and securely.
- Due to the recent high wind and loose items falling from height the demolition of the Units is to be completed at the earliest opportunity to prevent any potential serious injury in the future. (Appropriate measures are already in place to remove loose items in the interim period and the area has been barriered off)

Scope

Method of Demolition

The demolition will be executed by Technical Demolition Services (TDS), who have been appointed by PX Limited on Behalf of SL. The physical works will be managed by PX in conjunction with TDS who have proven experience across the PX FCHP site using industry standard practices.

The demolition activities include the following: -

- Site preparation prior to demolition, including fencing off the work area and protection of drains. etc
- All services have been previously disconnected or are in progress.
- Internal asbestos removal (if confirmed present by asbestos surveys).
- Mechanical removal of superfluous items remaining within the area
- Removal of WHRB's / GT's achieved using a 360 wheeled excavator c/w selector grab attachment and crane in line with Demolition Methodology report
- Protection of the existing:
 - Steam expansion Loops
 - Gas pipework
 - Pipe bridge
- Segregation of waste.
- Disposal of waste materials in accordance with Waste Management Plan.
- Complete demolition of the units and structures to Grade where applicable.



Environmental Impact and Waste Streaming

- Appropriate characterisation of waste has conducted in line PX procedures and industry norms.
- Asbestos R&D Surveys have been undertaken to determine appropriate routes.

The following waste has been determined for the demolition.

Waste Type	Waste Weight (te)	Radiological Categorisation	Chemical Categorisation	Waste Route
Cabling	Unknown	OOS	Non-Hazardous	TBC
Concrete	500-1000	OOS	Non-Hazardous	TBC
Metal (Ferrous)	1000-2000	OOS	Non-Hazardous	TBC
Metal (Non-Ferrous)	30-50	OOS	Non-Hazardous	TBC

* 'Out of scope' broadly equates to 'not radioactive' for the purposes of the both the Radioactive Substances Act 1993 (RSA93) and the Environmental Permitting (England and Wales) Regulations 2016 (EPR16). Radioactive substances which are 'out of scope' are not subject to any regulatory requirement under this legislation.

Ecology Report

Please find attached enclosed report, ERA-Remediation-MRFOC Habitat-Ecology Assessment completed in 2023 for the scope of work.