

# Combustion Engineering Windsor, Connecticut

Resource Conservation and Recovery Act (RCRA) Corrective Action Reuse Success Stories

December 2008

## Property Details

<b>Property Address:</b>	200 Day Hill Road
<b>Property Size:</b>	600 acres
<b>Former Use:</b>	Research, develop, and manufacture nuclear and fossil fuel systems
<b>Contaminants Found:</b>	Radiological residues, (uranium, cobalt), various solvents and metals
<b>Proposed Use:</b>	Industrial
<b>Current Owner:</b>	ABB

## Project Partners

- CT Department of Environmental Protection (DEP)
- US Environmental Protection Agency (EPA)
- Nuclear Regulatory Commission (NRC)
- US Army Corps of Engineers (ACOE)

## Funding Details

Formerly Utilized Site Remedial Action Program (FUSRAP)

## Project Highlights

Since 2001, ABB has successfully completed over \$50 million in cleanup work.

The cleanup of the Combustion Engineering facility will allow for its redevelopment.

## Project Timeline

<b>2000</b> .....	Human Exposure Under Control
<b>2001</b> .....	Migration of Groundwater Under Control
<b>2006</b> .....	ICM Complete
<b>2009</b> .....	Remedy Selection
<b>2010</b> .....	Construction Complete

## Facility History:

The Combustion Engineering Facility in Windsor, CT opened in 1956 as a research, development, and manufacturing facility for nuclear and fossil fuel. Operations were conducted under contract with the US Atomic Energy Commission (AEC) until the early 1960s. The facility expanded manufacturing in 1968 to include commercial contracts. On-site operations included manufacturing of commercial fuel rods, nuclear and fossil fuel labs, and experimental coal gasification testing. Radiological residues, uranium, various solvents, waste acid, acetone, alcohol, Freon, hydrazine solution, and photographic solutions containing silver were generated through operations. Waste that remained on-site for over 90 days was placed in a storage area which held 3 to 150 drums at a time. In 2000, ABB sold its nuclear fuel and fossil fuel businesses to Westinghouse and Alstom Power, respectively, and remained the property owner. Nuclear operations terminated in 2001.



*Before and after photograph of the Combustion Engineering facility*

## Clean-up Work:

The presence of uranium and cobalt at the site due to work for the US Navy enabled the facility to enter into the US Department of Energy (DOE) Formerly Utilized Site Remedial Action Program (FUSRAP) in 1994 for all areas that were affected by these contaminants. Three years later, Combustion Engineering also entered in the RCRA Voluntary Corrective Action Program (VCA). Soil samples were gathered and tested during a post-demolition phase, after which an Interim Corrective Measure (ICM) plan was developed. The ICM aimed to mitigate site contamination that had resulted from the facility's research and development, fuel manufacturing and power plant operations. From May to June 2006, four on-site buildings were decontaminated and demolished. Soil removal activities included the excavation

of a total of 460 tons of soil, which was replaced with clean, native soil from an on-site hillside.

## Project Results:

Since 2001, the company has worked to educate and inform the Windsor community of on-site progress and has presented at numerous town meetings along with representative from ACOE. Since entering the FUSRAP program, Congress reassigned the facility to the US Army Corps of Engineers (ACOE) in 1998 and later to the Nuclear Regulatory Commission (NRC) in 2007 which continues to regulate work at the site. Completion of cleanup is expected to be completed by approximately 2010.

