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DEFENSE WASTE PROCESSING FACILITY (DWPF) ANTIFOAM DEGRADATION

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We do the right thing.

What is Antifoam ?

A chemical additive, used in small quantities, that prevents the formation of foams or breaks a foam that has already formed.

Where is it used ?

It is used in DWPF during feed preparation activities when heating and boiling sludge waste.

Why is it used ?

Operation without antifoam can cause “solids entrainment / carryover issues” resulting in operational issues and the need to clean process vessel ventilation equipment.

What caused an issue with using Antifoam ?

Although most of the antifoam products are fed to the melter, SRNL testing with simulants revealed that the antifoam used in DWPF feed processing can degrade to small quantities of flammable components which are not included in the current Safety Analysis.

Immediate Actions

Compensatory measures taken to prohibit antifoam addition on May 15, 2015. Decision made to not operate DWPF without antifoam and to perform additional outage activities.

Subsequent Action

SRR Developed and DOE Approved a Justification for Continued Operations with additional controls to ensure safe operations. Longer term resolution is in progress.

DWPF resumed operations on September 8, 2015