

GLOSSARY

“Non- Stockpile” Chemical Materials

Recovered chemical weapons, chemical samples, former chemical weapons production facilities, binary chemical weapons and miscellaneous equipment such as empty aerial spray tanks.

“Stockpile” Chemical Materials

Chemical materials in munition form, or developed to be used in weapons.

Accelerated Chemical Neutralization

The process of chemical neutralization in which the containers are cleaned after the agent itself is neutralized, prioritizing agent destruction and thereby speeding the process. Accelerated demilitarization is used at Newport and Aberdeen.

Effluent

The wastewater that flows out of a treatment plant, sewer, or industrial complex as a byproduct of operations, generally into surface waters.

Energetics

The fuse, booster, burster and propellant of a munition are collectively referred to as the energetics.

Extrusions Common extrusions include tracks, rails, belt guides and bearings.

Hydrolysate The end product of the process of hydrolysis.

Hydrolysis A chemical process that uses water to break down a compound.

Lewisite A blister agent.

Neutralization

The act of altering the chemical, physical, and toxicological properties of a chemical agent to render it ineffective.

Pilot Testing

A period between the end of systemization and the beginning of operations, to verify the performance of destruction facilities and their ability to destroy chemical agent. Pilot testing

is separated into three stages: shakedown and ramp-up, testing, and post-pilot testing. These stages use a specified amount of agent to replicate the actual processes of destruction.

Pre-Systemization

A period to verify and document that the facility and equipment was constructed and installed according to the design. Pre-systemization may overlap or occur simultaneously with construction, and ends when systemization begins.

Sarin A nerve agent.

Super Critical Water Oxidation (SCWO)

A high temperature and pressure technology developed in 1975 that uses the properties of supercritical water to destroy organic compounds and toxic wastes.

Self-Ignition

A phenomenon in which a material or fuel catches fire naturally when its temperature is increased, even if no external fire is nearby.

Sulfur Mustard- H

A form of blister agent that contains 20-30 percent impurities (mostly sulfur).

Sulfur Mustard- HD

A form of blister agent that is nearly pure and also called distilled mustard.

Sulfur Mustard- HT

A form of blister agent created by mixing 60 percent HD with 40 percent of a substance called T. This results in a closely related agent to HD, but with a lower freezing point.

Systemization

A period beginning the day construction ends, to demonstrate that all facilities, equipment, procedures and personnel are ready to operate.

Tabun A nerve agent.

Vesicant

A chemical which causes extensive tissue damage, with vesicle formation or blistering.

VX A nerve agent.