

Pantex INFO

Nuclear Weapons Dismantlement

NNSA is increasing the dismantlement goals for the Nuclear Security Enterprise. The principal site for dismantlement is the Pantex Plant where operations are conducted under the highest levels of safety and security. Pantex is managed and operated by B&W Pantex for the U.S. Department of Energy/National Nuclear Security Administration.

Safety

During dismantlement operations, extensive steps are taken to ensure the safety and health of workers, the public and the protection of the environment.

Pantex workers operate under stringent standards that limit exposure to radiation, chemical and other hazardous materials to levels well below existing federal regulations. Safety improvements also have been made in handling non-nuclear hazardous materials.

Operations

The disassembly of a nuclear weapon is an exacting process and is conducted in a controlled environment using proven procedures under strict supervision.

A variety of methods are used to dismantle weapons and dispose of the resulting materials. The time required to dismantle a nuclear weapon ranges from a few days to a few weeks, depending on the type of unit.

Disassembly occurs in facilities designed to mitigate the effects of the unlikely accidental detonation of the weapon's conventional high explosive component. There is no credible scenario at Pantex in which an accident can result in a nuclear detonation.

Removal of the conventional high explosive material from the plutonium component (called a pit) is an important part of the dismantlement operation. A non-nuclear, metallic cladding surrounding the pit protects workers from direct exposure to plutonium during dismantlement.

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