

The east and west transuranic surveillance gloveboxes are used for material inspections and packaging. They were placed into service in 2014.



Zero Power Physics Reactor Facility

The Zero Power Physics Reactor (ZPPR) facility is a nuclear facility at Idaho National Laboratory's Materials and Fuels Complex. The reactor portion of ZPPR was operated by Argonne National Laboratory-West between 1969 and 1992. In 1992, the ZPPR reactor was placed into nonoperational standby. The ZPPR reactor and auxiliary equipment have since been removed from the facility. The current capabilities of the ZPPR facility include storage, inspection, and repackaging of transuranic elements and enriched uranium. The facility also provides suitable

areas and material handling capabilities to support homeland security material

detection experiments and the training of military and
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The Zero Power Physics Reactor was first operated in 1969. Its two halves held the reactor's fuel and moved closer together to become critical.



The Energy of Innovation

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ZPPR operators performing material inspections in the transuranic surveillance glovebox.



The Zero Power Physics Reactor was placed in nonoperational standby in 1992, and has since been dismantled, which frees the space for nuclear material storage, inspection, and repackaging.

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first responders to deal with nuclear materials.

The ZPPR facility consists of a workroom, cell area, material storage vault, and the Material

Control Building. Current facility activities are material inspections and packaging in the workroom/vault, National and Homeland Security testing and detection training in the cell area, and transuranic and

uranium material storage in the vault. This includes routine activities conducted in the ZPPR vault/workroom to monitor and maintain the integrity of the ZPPR fuel plates and other fissile materials in storage. The Material Control Building is primarily used to store and stage non-fissile nuclear material.

Key Equipment:

- Workroom hood
- East and west transuranic surveillance glovebox
- Vault Storage for special nuclear material
- Cell area with very low radiation background environment
- Material Control Building: storage and use areas for equipment and nonfissile nuclear material

