

Safeguards and Security

The quantity of plutonium contained in these materials dictates that they be subjected to the same safeguards and security requirements as materials that could be used in nuclear weapons. Therefore, intersite shipments would be made in SST/SGTs while intrasite transportation could require temporary road closures while the material would be moved from one area of the site to another. This practice would provide all needed security and mitigate potential risk to the public, without requiring the use of SST/SGTs for intrasite transfers.

The PDC Project would have appropriate security features at both the processing building at K-Area and the F/H Lab in F-Area. Physical barriers; access control systems; detection and alarm systems; procedures, including the two-person rule (which requires at least two people to be present when working with special nuclear materials in the facility); and personnel security measures, including security clearance investigations and access authorization levels, would be used to ensure that special nuclear materials stored and processed inside are adequately protected.

Nuclear material control and accountability would be ensured through a system that monitors storage, processing, and transfers. Closed-circuit television, intrusion detection, motion detection, and other automated material monitoring methods would be employed as part of the material control and accountability program. At any time, the total amount of special nuclear material in each facility, or in any material balance area within a specific facility, would be known. Physical inventories, measurements and inspections of material both in process and in storage would be used to verify inventory records. In addition, each of the three facilities would need to provide space and, to varying degrees, access for international inspection.

Excerpts above taken from SPD EIS, 1999

Excerpt below from an

Refinement Study Y-AES-K-00002

Revision 0, September 29, 2009

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APPENDIX K – USE OF F/H LABORATORY STRATEGY

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Currently, F/H Laboratory operates as a Category IV security facility, and is part of the F-Area Property Protection Area. The laboratory anticipates needing to transition from Category IV to Category III based on anticipated new mission scope including, but not necessarily limited to, the KAC Combination Project.

The evaluation concluded that, given the current inventory in F/H Laboratory, the lab could accept up to 700 grams from the KAC Combination Project and an additional 1100 grams of plutonium oxide (equivalent) from future new missions, and remain a Category III facility. The evaluation of rollup from a Category III quantity of SNM to a Category II quantity within F/H Laboratory was determined not to be credible, based on the anticipated configuration and dispersion of material.

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- F/H Lab currently Category IV
 - Phase 1 not expected cause change to Category III
 - Phase 2 will cause change to Category III
 - For Phase 2:
 - F/H Lab will become a Limited Area
 - Rollup study performed last year indicated Category II threshold would not be exceeded
 - Classified computing capability will be required

From PDC Formal Design Review presentation, August 2010