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For Immediate Release

SAVANNAH RIVER SITE CEASES CRYOGENIC OPERATIONS

AIKEN, S.C., (Nov. 17, 2004) - After nearly 40 years of safely processing tritium, a radioactive form of hydrogen gas that is vital component of nuclear weapons, the employees of the Savannah River Site's Tritium Facility ceased cryogenic distillation operations. The SRS Tritium Facility is one of the National Nuclear Security Administration's Defense Program facilities.

Cryogenic distillation has been used to purify tritium for the past 37 years. It is based on principle that every liquid has a unique boiling point. During distillation, liquid hydrogen is heated, and one component is boiled off while the other remains liquid. Cryogenic means the production of very low temperatures.

Because cryogenic distillation takes place at -424° Fahrenheit, the process uses a great deal of energy to keep the temperature so low. SRS has replaced the cryogenic distillation process of tritium separation with hydride separations technology. Hydride separation uses solid material that absorbs hydrogen when cooled and releases it when heated.

(more)

THE WSRC TEAM

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This new technology is a safer and more cost-effective method of storing and separating hydrogen. It is one of the technologies being developed for used in hydrogen fueled vehicles.

“The termination of the cryogenic distillation is part of our efforts to modernize processing capability in support of the nation’s nuclear stockpile,” said General Manager Defense Programs Chuck Spencer. “It is part of a series of steps we are taking to consolidate tritium gas processing operations in the state-of-the-art facilities in the 233-H building and enable the deactivation of the 50-year-old 232-H building.”

Deactivation of the 232-H building is scheduled for completion at the end of fiscal year 2005.

The Savannah River Site is owned by the U.S. Department of Energy and operated by Westinghouse Savannah River Company of Washington Group International and its partners—Bechtel Savannah River Inc., BNFL Savannah River Corporation, and BWXT Savannah River Company, Inc.

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