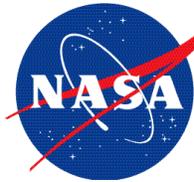


J U N E 2 0 0 1



# AN UPDATE FROM

## NASA Glenn Plum Brook Station

NASA operated the Reactor Facility at Plum Brook Station for over 10 years - conducting experiments on materials used in space flight - before the facility was closed in 1973. At that time, the fuel was removed and building systems were shut down, but NASA left much of the office and laboratory equipment in place, thinking that the Reactor Facility might be reactivated in the future. Then in 1998, the Nuclear Regulatory Commission (NRC) asked NASA to decommission the Reactor Facility in order to terminate its license. NASA submitted a comprehensive Decommissioning Plan to the NRC in 1999 and recently submitted a revision of that plan. The NRC must approve the plan before decommissioning of the Reactor Facility begins. While awaiting NRC approval, there are activities that we can do under our existing Reactor Facility "Possess But Do Not Operate" license to help prepare for decommissioning. We refer to this work as pre-decommissioning and consider it an important preliminary step in preparing for decommissioning.

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Pre-decommissioning is NOT cutting or disassembling equipment, structures or systems. It is NOT unfastening of stationary items. It is NOT torching, demolition or heavy work. This kind of work is outlined in the Decommissioning Plan and will take place only after we receive approval of the Plan from NRC.

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### Pre- Decommissioning

Pre-decommissioning involves preparing the work area to minimize obstacles in order to protect workers from accidents and injury and to enable us to move quickly with decommissioning once approval is received. For example, during pre-decommissioning we will remove loose debris in areas where asbestos and lead abatement will be conducted later during decommissioning. Pre-decommissioning also gives us a chance to make sure our team is fully in place and that all plans and procedures are functioning well before going into actual decommissioning mode.

### What We Will Be Doing

Pre-decommissioning work will begin in mid-June starting with the Hot Cells. Hot Cells is the term given to the area in the Reactor Facility where experiments were conducted. During pre-decommissioning, we will be:

Cleaning out loose equipment including equipment left over from experiments, desks, file cabinets, small tools, worktables, gloves, and measuring devices;

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Inspecting and safe-testing our standard construction equipment;

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Restoring to service the facility systems that will be required to support decommissioning such as electricity and emergency lighting;

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Inventorying and collecting items in the Hot Cells of historical value such as log books, specialized tools and small memorabilia; and

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Transporting waste off site for volume reduction and disposal.

## Transportation

Material from the Hot Cells will be placed in B-25 boxes, (see photo below) which are standard containers for transporting solid, low-level radioactive waste. B-25 boxes are approximately 4' tall x 4' wide x 3' deep containers that will be safely secured on a flatbed truck. Trained personnel will survey the entire truck before it leaves the site. They will use detection instruments to check for direct radiation levels, ensuring that materials have been appropriately containerized. They will also use standard survey procedures on the truck's exterior to check for loose contamination.

NASA has discussed transportation of pre-decommissioning waste with Erie County officials and will continue to coordinate with them as the actual shipping date approaches. We expect the first shipment of waste to occur by mid-July. The radiation levels in this shipment will be very, very low



Photo of empty B-25 boxes at Plum Brook Station.

(Class A waste). The truck will stay on the Plum Brook Station property as long as possible and use the Scheid Road gate onto Route 250. It will head south to the Ohio Turnpike, to the Pennsylvania Turnpike, to exit 2, then 3 miles on to Alaron - a company specializing in recycling and reclamation of lightly contaminated metal. The remaining waste will be sent for permanent disposal to Envirocare, in Clive, Utah. NASA will create a complete listing (manifest) of the contents in all the shipping containers that will accompany the shipment to its final destination.

## The Next Step

Once the Hot Cell work is completed, the next step in pre-decommissioning will occur in an area called Hot Dry Storage where more irradiated (meaning the higher end of low-level radioactive waste) equipment remains, including pieces from experiments and the first set of Beryllium plates used in the reactor. It will take about two months of work using remote handling equipment and cranes to take material out of the 25-foot vault and package it for shipment.

Material from Hot Dry Storage will be surveyed and packaged according to its level of radiation. All of the waste will be solid and still within the range of what is considered low-level radioactive waste (Class A or B). This material will be shipped in either B-25 boxes or in a cask - a standard shipping container for Class B low-level radioactive waste. (See photo, right) The cask will be transported on a specialized "low boy" flatbed truck. Similar to the first shipment, the truck will stay on PBS property as long as possible before exiting at the Scheid Road gate, onto Route 250 to the Ohio Turnpike, to Route 77 south and then to Barnwell, South Carolina. Once again the containers and trucks leaving the Reactor Facility will be thoroughly surveyed before departing, manifests prepared, and local officials will be notified in advance.



Photo of shipping cask on truck.

## Safety is our No. 1 Priority

Our commitment to our neighbors is to focus on safety in every step of the project. NASA has been taking air, water and sediment samples since 1973, detecting no release of radiation off site from the Reactor Facility above what is considered background. We will be sampling more often and in more locations starting with pre-decommissioning and throughout actual decommissioning. Radiation monitoring is a vital part of our safety program ensuring that our workers are protected along with the community and the environment. We will also continue to keep the community informed every step of the way.



**NASA Glenn  
Plum Brook Station**

**For more information on Pre-decommissioning or Decommissioning the Reactor Facility at Plum Brook Station**

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Or call our toll-free number at **1-800-260-3838** for regularly updated progress reports.