Finding of No Significant Impact
for the
Construction and Operation
of the
Environmental Monitoring Laboratory
at the Savannah River Site

Agency: U. S. Department of Energy

Action: Finding of No Significant Impact

Summary: The Department of Energy (DOE) has prepared an Environmental Assessment (EA) (DOE/EA-1010) for the proposed construction and operation of a new Environmental Monitoring Laboratory (EML) at the Savannah River Site (SRS) near Aiken, South Carolina. To support the EML, a Health Protection (HP) Complex Wastewater Neutralization Facility would also be constructed and operated. On the basis of the analyses in the EA, DOE has determined that the proposed action is not a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act (NEPA) of 1969. Therefore, the preparation of an environmental impact statement is not required, and DOE is issuing this Finding of No Significant Impact (FONSI).

Public Availability:

Copies of the EA and FONSI or further information on the DOE NEPA process are available from:

A. R. Grainger
SR NEPA Compliance Officer
Environmental Compliance Division
Savannah River Operations Office
P. O. Box 5031
Aiken, South Carolina 29804
Phone/FAX: (800) 242-8269
E-mail: nepa@barms036.b-r.com

Background: The existing EML operations are located in buildings 735-A, 735-11A, 735-16A, and 773-57A. These facilities cannot continue to support the current analytical work required to support the Environment, Safety, and Health mission to provide radiological and chemical protection for SRS workers, the public, and the environment. Building 735-A, constructed in the early 1950's, is nearing the end of its design life. In addition to ventilation system failures that have occurred in isolated laboratory modules, there has been inadequate temperature and humidity control. In the past, the facility waste neutralization system capabilities have been substandard or non-existent. Building 735-11A constructed in 1986, cannot presently support radiological preparation activities due to extensive ventilation duct corrosion. Neither building is equipped to meet the current sample preparation requirements. Buildings 735-16A and 773-57A are trailers used to house Environmental Monitoring Section (EMS) personnel.

Proposed Action: The proposed action is to construct and operate a new EML at the SRS. This new facility would allow the EMS to consolidate environmental operations. The facility would provide adequate accommodations for laboratory analyses, computer analytical functions, and administrative space. The new radioanalytical laboratories

would have acid-resistant hoods, ductwork, and exhaust fans. The laboratories would also contain improved temperature and humidity controls to ensure proper functioning of the analytical instruments and reliable analyses.

To support the EML, an HP Complex Wastewater Neutralization Facility would also be constructed and operated. This facility would collect wastewater from laboratory modules, safety showers, lab floor drains, and scrubbers. This facility would also be designed to handle wastes from the new HP facility, which would be located in B Area near the EML. The HP facility is covered under separate NEPA documentation.

Alternatives: In addition to the proposed action, DOE considered the following alternatives:

- No Action (i.e. continue to use existing facilities);
- Utilize shifts in existing facilities;
- Use of off-site facilities for sample analyses; and
- Upgrade existing facilities.

The no-action alternative is not a reasonable alternative because current conditions would continue to deteriorate. Going to shift work would address operational concerns, but would not address the deterioration problem. Use of off-site facilities is not cost-effective, and would not address the deterioration problem. Upgrading the existing facilities would address the operational and deterioration concerns, but would be costly. Combining the EML with the new HP facility would also address the operational and deterioration concerns, but would again be too costly to implement.

Environmental: There are not expected to be any significant impacts due to construction and operation of the proposed facility. One potential impact identified during construction and operation of this facility is erosion due to stormwater runoff. These impacts would be mitigated by taking appropriate erosion control measures, and the construction of a new stormwater retention basin. Construction debris is not expected to be hazardous and would be disposed of in the designated off-site sanitary landfill or on-site erosion control pit. All other impacts are expected to be either minimal or negligible.

The principle cumulative impact of the proposed action is an increase in demands placed on the B Area domestic water supply. These demands as well as demands due to other proposed B Area projects through 1999 are well within the capacity of the B Area domestic water system.

Determination: Based on the information and analyses in the EA, DOE has determined that the proposed construction and operation of the EML does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, an environmental impact statement is not required and DOE is issuing this FONSI.

Signed in Aiken, South Carolina, this 3 day of August, 1995.

Mario P. Fiori
Manager
Savannah River Operations Office