



Environmental Bulletin

Volume 14, Number 22
August 28, 2003

from the Savannah River Site

Savannah River Site IOU Early Action Fact Sheet

The Savannah River Site (SRS) has six Integrator Operable Units (IOUs) corresponding to each of the major onsite watersheds (Upper Three Runs, Fourmile Branch, Pen Branch, Steel Creek, Lower Three Runs) and the Savannah River (including the Floodplain Swamp). IOUs are defined as surface water bodies (e.g., streams and lakes) and associated wetlands, including the soil, sediment, and related biota (fish). The IOUs are being evaluated because they are a possible pathway for onsite and off site release of SRS related contamination to human receptors and the environment.

The Environmental Protection Agency, South Carolina Department of Health and Environmental Control, and the Department of Energy are working together to accelerate the investigation and cleanup of SRS in a comprehensive manner by focusing on the large scale IOUs.

The IOU program is being performed in three phases. Phase I includes the evaluation of existing data and historical information to determine if any early actions to reduce risk are needed. Phase I has been completed or is nearing completion for all the IOUs. Phase II involves the ongoing sampling and evaluation of new data and information. Phase III is the final remedial investigation and remedial action which will be documented in a Record of Decision.

Results of the Human Health Evaluation

An early action may be warranted if contaminant levels indicate unacceptable risks. The Phase II evaluations performed for the Steel Creek and Fourmile Branch IOUs identified unacceptable human health risk levels. The early action evaluation identified areas of cesium contamination in the soil and sediment along the onsite sections of the streams.

For Steel Creek and Fourmile Branch, early actions taken to protect current site workers included the expansion of some soil contamination areas (SCAs).

Additionally, Radiological Control Area signs installed at the access points leading to the SCAs prevent inadvertent onsite worker exposure to the cesium contamination in the SCAs.

Early actions taken to protect trespassers on the SRS include the installation of additional No Trespassing signs, No Fishing signs, and Caution/Warning signs at the public road crossings of the five site streams, at the stream mouths, and along the Savannah River boundary at SRS.

Additional signs will be installed to protect onsite workers or trespassers as needed.

Cesium

Cesium-137 is one of the radionuclides associated with SRS activities and was released to the IOUs during the early years of SRS operations. Another source of radioactive cesium is "fallout" from the nuclear testing and nuclear incidents like Chernobyl. Elevated levels of cesium-137 are a concern to human health because cesium-137 emits radiation. Exposure to radiation can increase the chance of getting cancer. The relatively low-level of cesium contamination in the IOUs does not cause a risk to the general public.

Results of the Ecological Evaluation

The IOU investigations also include an ecological evaluation. Results from the evaluations conducted thus far indicate that early actions are not needed to be protective of the environment.

**If you have questions:
Call 800-249-8155 (toll free)
U. S. Department of Energy**

MAILING LIST

Name _____

e-mail address _____

mailing address _____

____ Add to mail list

____ Remove from mail list

____ Correct my address

Mail to:

SRS Environmental Bulletin
Savannah River Site
Building 742-A
Aiken, S.C. 29808



The SRS Environmental Bulletin

For more information on this or other
environmental and compliance activities
at SRS, please contact:

Jim Moore	Lyddie Broussard
Westinghouse	Westinghouse
Savannah River Co.	Savannah River Co.
Aiken, S.C. 29808	Aiken, S.C. 29808
(800) 249-8155	Public Involvement
e-mail: jim02.moore@srs.gov	(803) 725-7169

The SRS Environmental Bulletin
Savannah River Site
Building 742-A
Aiken, S.C. 29808

