



**Savannah River Site Citizens Advisory Board**

**Recommendation 165**

**SRS National Pollution Discharge Elimination System (NPDES) Permit Revision**

**Background**

The federal Clean Water Act (CWA) sets up the basic requirements for regulating toxic substances discharged to all waters of the United States. The CWA states that the discharge of such substances in toxic amounts is prohibited. In addition to setting water quality standards for the nation's waterways, the Clean Water Act establishes guidelines and limitations for discharges from point-sources and a permitting program known as the National Pollutant Discharge Elimination System (NPDES). The Environmental Protection Agency (EPA) has overall responsibility for enforcing the Clean Water Act, but has delegated to South Carolina Department of Health and Environmental Control (SCDHEC) primary enforcement authority for waters located within South Carolina. Under the South Carolina Pollution Control Act, SCDHEC operates a permitting program. South Carolina's NPDES program is designed to protect surface waters by limiting all nonradiological releases of effluents into streams, reservoirs, and other wetlands. The Clean Water Act and state regulations do not apply to DOE discharges of radionuclides, which are covered under other regulations (Ref. 1).

The Savannah River Site (SRS) discharges wastewater into site streams and the Savannah River under permits that contain detailed requirements for each discharge point, including parameters to be tested and limits for each parameter. At SRS, there are 31 outfalls (discharges) covered by one NPDES permit. Some of these outfalls are to various ephemeral streams that carry facility effluents to larger creeks that are tributary to the Savannah River. These ephemeral streams only contain natural flowing water after rain events and the water is considered soft (i.e. contains very little hardness). The SRS NPDES permit is required to be reissued once every 5 years but can be and has been extended through administrative extensions. The current SRS NPDES permit was issued in 1996 and formally expired in 2001 but it has been extended to date through the use of administrative extensions. SCDHEC wishes to issue a new NPDES permit before the end of 2003 (Ref. 2).

**Comment**

Because SCDHEC revised South Carolina's water quality standards regulations (R.61-68) and instituted a more stringent hardness value, the metal permit limits for many of the SRS outfalls, especially the ephemeral stream discharges, are nearly as low as the water quality standards themselves. Typically, the permit limits would be well above water quality standards due to blending credits with the applicable receiving stream. It is doubtful that many of these SRS effluents will meet the future metal limits and may need to spend millions of dollars in an attempt to meet them. This is exactly the case the SRS Citizens Advisory Board (CAB) wanted to avoid when it provided comments on the revisions to South Carolina's water quality standards (Ref. 3). At that time, the SRS CAB questioned the need to spend excessive amounts of taxpayer money to meet a new standard with no demonstrated or technically-defensible improvement in the overall quality of the water and did not want to see SRS transfer funds from current projects and missions, which are actually being protective of human health and the environment, to costly wastewater projects. These same issues hold true to the proposed SRS NPDES permit revisions.

**Recommendation**

This is an opportunity for the stakeholders to have input to the NPDES permit process before the permit is written rather than responding to the draft permit after it is written. Therefore, the SRS CAB offers the following recommendations in an effort to be protective of the environment and at the same time protective of taxpayer money:

1. DOE work with SCDHEC to gain a minimum 3-year period and maximum 5-year period for monitoring designated outfalls that may be affected by the new hardness limit under the revised NPDES permit.
2. SRS provide a schedule for developing a cost-benefit analysis, which demonstrates water quality impacts versus the cost to achieve compliance by September 23, 2003.
3. DOE work with SCDHEC to develop a more reasonable approach to regulating discharges into ephemeral streams such as site specific standards and provide a joint report of the progress by September 22, 2003.

## **References**

1. SRS Environmental Report for 2002.
2. National Pollutant Discharge Elimination System (NPDES) Update, presentation to the SI Committee by Bill Payne, July 15, 2003.
3. Citizens Advisory Board Recommendation No. 134 (adopted November 14, 2000), "Water Quality Standards 2000 Revisions."

## **Agency Responses**

[Department of Energy-SR](#) (PDF)