



## Recommendation No. 104

November 16, 1999

### Hazardous Waste Combustors Clean Air Act SRS Consolidated Incinerator Facility

#### **Background**

The Clean Air Act (CAA) of 1990 mandated that the U. S. Environmental Protection Agency (EPA) promulgate the Maximum Achievable Control Technologies (MACT) Rule for a variety of standard industrial technologies. Hazardous Waste Combustors is one of the technology classifications. The final rule was signed by the EPA administrator July 30, 1999, and published in the Federal Register September 30, 1999. This rule specifies the emission standards, which must met by April 2003, by the three Department of Energy (DOE) Hazardous Waste Combustors (Consolidated Incinerator Facility [CIF] at Savannah River Site, Toxic Substance Control Act Incinerator [TSCAI] at Oak Ridge, and Waste Experimental Reduction Facility [WERF] in Idaho). This rule also specifies extensive documentation, training and operator certification requirements. Preliminary tests indicate that the SRS CIF will meet the MACT emission requirements during normal operation; additional tests are required to prove it. The other two DOE incinerators do not currently meet the new standards although TSCAI could meet them by reducing their waste throughput and WERF could meet them by the expenditure of capital funds.

These 3 incinerators burn Low Level Waste (LLW) and Mixed Low Level Waste (MLLW). In addition, the TSCAI at Oak Ridge can destroy toxic and PCB waste. However, the volume of wastes available from the DOE complex is less than the capacity of the 3 incinerators combined. Consequently, consideration is being given to shutting one or more of them down. In June 1999, representatives from DOE sites identified 12 different alternatives for operating and/or closing the three incinerators. In August 1999, this list was narrowed to four alternatives plus a baseline, with lifetime costs ranging from \$0.978 to \$1.3 billion (see Ref. 1). The baseline case and the four alternatives have CIF operating through 2030 consistent with the recommendations in Ref. 2.

In this consideration, the factors were operating costs, MACT compliance costs, projected waste volumes, and stakeholder acceptance. A choice among the four alternatives and baseline will be made after stakeholder input.

In 1996, the SRS Citizens Advisory Board (CAB) recommended the start-up of CIF (Ref. 3). In 1997, the Board added that the continued operation of CIF was absolutely necessary and essential to the DOE cleanup; and that excess capacity of CIF to treat mixed low-level wastes from other DOE sites should be permitted when cost-effective and when the ultimate disposal of hazardous waste residue at another site was assured (Ref. 4). In 1997, the also Board stated that the criteria for Environmental Management Integration should be the optimal use of DOE facilities. However, CIF has been operating at a much lower capacity than its permits allow (Ref. 2).

The State of South Carolina concurred with the Board's recommendation in 1997 (Ref. 4) that there are benefits to Environmental Management Integration (EMI) across the DOE complex, adding that it was working with the Governor's Office to ensure that equitable integration was achieved.

#### **Recommendation**

The SRS Citizens Advisory Board recommends that:

1. DOE choose the alternative that minimizes cost and balances equity across the DOE complex.
2. DOE and SCDHEC discuss equity issues concerning South Carolina with SRS stakeholders in March 2000, to review the alternatives and equity issues, and to receive their input. Receiving future shipments of waste for the CIF from other sites will not be acceptable until equity issues are satisfactory to our stakeholders.
3. DOE provide an annual update to the CAB and stakeholders on CIF operations including CIF progress with compliance to the new NESHAPS Hazardous Waste Combustor Emission Standards.

4. DOE provide annual updates on equity issues.

#### **References**

1. Low Level Waste/Mixed Low Level Waste (LLW/MLLW) Program Area Integration Team (PAIT), DOE Complex Incineration Opportunity, presentation to the CAB ER&WM Subcommittee by Maxcine Miles, October 28, 1999.
2. Waste Incineration at the Savannah River Site, U. S. Department of Energy, Office of Inspector General, Office of Audit Services, Report DOE/IG-0453, October 1999.
3. Citizens Advisory Board Recommendation No. 25 (adopted September 24, 1996), "Begin Operation of CIF by January 1997".
4. Citizens Advisory Board Recommendation No. 47 (adopted November 18, 1997), "Environmental Management Integration and some SRS Specific Recommendations".

#### **Criteria for Closure of this Recommendation**

1. The alternative chosen minimizes costs and balances equity.
2. DOE and SCDHEC provide stakeholders' meeting to review equity considerations and to receive stakeholder input.
3. Annual updates on CIF by the three agencies are reported to the SRS Board and stakeholders.

---

#### **Agency Responses**

[\*Department of Energy-EM\*](#)

[\*Department of Energy-SR\*](#)

[\*Department of Health and Environmental Control\*](#)