

BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

---

IN THE MATTER OF	)	
US DEPARTMENT OF ENERGY &	)	
WESTINGHOUSE SAVANNAH RIVER COMPANY	)	MAY 13, 2003
SAVANNAH RIVER SITE	)	
	)	
Permit No. TV-0080-0041	)	

---

THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE'S PETITION  
OF THE ENVIRONMENTAL PROTECTION AGENCY  
TO OBJECT TO THE TITLE V PERMIT ISSUED TO  
THE US DEPARTMENT OF ENERGY  
AND WESTINGHOUSE SAVANNAH RIVER COMPANY

The Blue Ridge Environmental Defense League ("BREDL") hereby petitions the Environmental Protection Agency to object to the final Title V permit issued to Savannah River Site ("SRS"), Westinghouse Savannah River Company ("WSRC") and the United States Department of Energy ("DOE") on February 19, 2003 by the South Carolina Department of Health and Environmental Control ("DHEC"), which has been designated Permit No. TV-0080-0041 by DHEC. The grounds for this petition are set forth in the following: (1) BREDL's November 21, 2002 comments submitted to DHEC on the draft permit (Exhibit 1); (2) BREDL's December 6, 2002 comments sent to DHEC on the draft permit (Exhibit 2); (3) Letter of Dr. Peter Rickards to the US Department of Energy, November 22, 2002 (Exhibit 3), (4) DHEC's response to these comments contained in Public Notice #01-241-TVO-H, ("Response"), dated February 26, 2003 (Exhibit 4); and (5) BREDL's reply to this response ("Reply") dated May 13, 2003 (Exhibit 5 attached).

Respectfully submitted,

Dated: May 13, 2003

---

Louis Zeller  
Blue Ridge Environmental Defense League  
P.O. Box 88  
Glendale Springs, North Carolina 28629  
(336) 982-2691 (phone)  
(336) 982-2954 (fax)

REPLY OF THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE TO  
PUBLIC NOTICE No. 01-241-TVO-H, FINAL PERMIT DECISION ISSUED BY  
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
(DHEC)

MAY 13, 2003

Compliance Assurance Monitoring

DHEC appears to have sidestepped the applicability of 40 CFR 64 in this permit. The engineers review for the permit states,

There are processes for which PTE exceeds Title V threshold limits (PTE > 10/25 TPY HAP or > 100 TPY criteria pollutants), and that also has control equipment associated with it. However, since this TV permit application was deemed complete prior to April 20, 1998, applicability will apply at the next Title V renewal." [ DHEC Engineering Calculation Sheet, 10/11/02, page 23] (emphasis added).

DHEC notes in the SRS permit that 40CFR64 is not applicable, and in their public comment Response they state that the SRS Title V application was deemed complete in April 1996, two years earlier than noted in the engineer's calculation sheet. As we stated in our comments of November 21, (Exhibit 1) federal regulations under 40CFR64 do apply to SRS. The CAM rule 40 CFR 64 was promulgated and published in the Federal Register on Oct. 22, 1997 (62 FR 54940), six months prior to the date the SRS Title V application was deemed complete. No exemptions listed in subsection (b)(1) of the rule apply to SRS, control devices are installed, and SRS is classified as a major source. Therefore, compliance assurance monitoring applies to the permit. At a minimum, EPA must verify the discrepancy in DHEC's acceptance date of a completed SRS Title V permit application.

National Emission Standards for Hazardous Air Pollutants (40CFR63)

DHEC stated "There do not appear to be any final MACT standards to which SRS would be subject at this time." (Engineering Calculation Sheet, 10/11/02, page 23) In their February 26<sup>th</sup> Response DHEC stated, "As new MACT standards are promulgated, this applicability will be re-evaluated." However, other means for limiting HAPs are readily available which do not depend on the EPA to issue a final decision on a MACT for SRS sources. In 1995 the EPA issued a memo which states that HAP-emitting facilities must comply with all major source requirements regardless of whether a specific MACT has been finalized and directs owner/operators to take action before final compliance deadlines. The memo also outlined how they may be applied by states under Section 112 of the Clean Air Act. (See Exhibit 1)

In 1996 the OAQP&S provided further instruction to states lacking federally-enforceable PTE limits. The memo outlines an option for enforcing emission limits by treating some sources as non-major if their PTE is below the applicable threshold. SRS is a major source comprised of some major and many non-major sources. The thrust of the EPA's policy here shows that the

agency intends for all sources, major and minor, to have practically enforceable emission limits even when administrative or legal procedures delay implementation.

The EPA must require DHEC to ensure each SRS source has the lowest possible emission limits, with corresponding monitoring, recordkeeping, and reporting requirements. Furthermore, the compliance documents must be made readily available to interested members of the public.

#### Incineration of Radioactive Waste at SRS Does Not Meet Ambient Standards

As we stated in our comments of 21 November (Exhibit 1), the burning of hazardous and radioactive wastes in the H-Area Consolidated Incinerator Facility (Unit ID # H-010) is allowed by the draft permit. In their Response, DHEC states, "The CIF has essentially been abandoned in place." However, regardless of the current operating status of the CIF, DHEC does not dispute BREDL's contention that DOE/WSRC cannot assure that emissions of radionuclides to the air would not exceed 10 millirem per year to any member of the public. The CIF must comply with 40 CFR 61 Subpart H, *National Emission Standards of Radionuclides Other Than Radon From Department of Energy Facilities*. Emission rate measurements from the stacks are stipulated in the permit, but the millirem standard for maximum allowable dosage to the public is an ambient standard, not an emission limit. The permit fails to require any direct measurement of radioactive dose to the public and cannot be enforced as a practical matter. Therefore, the Blue Ridge Environmental Defense League recommends that EPA require DHEC to delete the CIF from the permit.

#### HEPA Filter Unreliability Allows Excess Radionuclide Risks

The SRS Title V permit may allow uncontrolled levels of radionuclides into the atmosphere. As outlined in the letter from Dr. Peter Richards to DOE (Exhibit 3), HEPA filters are an unreliable means of controlling radionuclide emissions. The HEPA filter's failures include alpha migration, re-entrainment of particles, and alpha recoil through multiple filters. In his letter Dr. Rickards explains that alpha emitters like plutonium may "creep" through four HEPA filters in sequence. He states:

"Alpha recoil" is a DOE term, for the ability of alpha emitters, like plutonium, to "creep" through 4 HEPA filters in a row! Nobody knows how much plutonium comes out of the last filter. We need to make the DOE reveal the plutonium releases for normal operations, in a lab. The DOE has known of this problem since the 1970's, but has chosen to ignore it.

HEPA filters are in use at SRS. Pollution reduction efficiency claimed by WSRC/DOE is 98.99% for the Tank Farm Stack (SRS Part 70 Operating Permit Application, Vol. X, Book 2). We question the validity of emission reduction efficiencies of HEPA pollution control devices for all atmospheric emission points at SRS. Without further testing of HEPA filters as outlined by Dr. Rickards, DHEC cannot assure that SRS will meet NESHAP radionuclide emissions limits. SRS may be out of compliance. We recommend that EPA require DHEC to re-open the SRS Title V permit until such assurance can be determined.

#### SRS Violates Five Emission Levels Standards

DHEC received public comments which revealed 2001 SRS Environmental Report emission levels exceed Title V permit levels, resulting in an ongoing violation. DHEC responds noting that "unpermitted" sources insignificant activities including cooling towers, laboratory hoods and stacks, maintenance shops, sewage treatment facilities, miscellaneous chemical usage, etc. accounted for the emissions which exceed permitted maximums. However, air pollution sources cannot be set aside under the rubric of insignificant. The EPA has published guidance on insignificant activities and how they are to be managed. For example, EPA required the State of Nevada to place limits on such sources to ensure NAAQS were met.

The meaning of the term "insignificant" as used in section 70.5(c) is that information is unessential for determining whether and how an applicable requirement applies at a source. If emissions at an activity are extremely low, that activity is unlikely to be subject to an applicable requirement. That is why EPA suggested that NDEP create an across-the-board emissions threshold above which activities could not qualify as insignificant. Without an across-the-board threshold or unit-specific limits, activities on NDEP's list, such as "agricultural land use" and "equipment or contrivances used exclusively for the processing of food" could be construed as being "insignificant" even if subject to an applicable requirement. [Federal Register: December 12, 1995 (Volume 60, Number 238) Page 63632 section II.A.2 ]

<http://www.epa.gov/docs/fedrgstr/EPA-AIR/1995/December/Day-12/pr-1248.htm>

1

In other actions regarding insignificant activities, the EPA placed additional restrictions on paint spray booths, water pump motors, and portable fuel burning equipment in the State of Hawaii and limited the state air pollution control agency director's discretion, requiring that sufficient information be submitted by the permittee to assure compliance with air pollution limits. .

a. Insignificant activities. The rule must not allow the director to determine what activities are insignificant without EPA approval of these activities or the criteria that delineate such activities (40 CFR 70.5(a)). Therefore, sub-section 82(f)(7) must be deleted or include criteria, such as emission levels, for determining which activities are insignificant. Section 70.5 requires that Hawaii submit a list of insignificant activities with criteria demonstrating that the activities listed are insignificant. The director's discretion clause is bounded by the requirement that the source submit enough information to determine and impose all applicable requirements. However, the rule does not contain the required criteria, such as the type of equipment or emission rate, for determining whether activities designated under Sec. 82(f)(7) are insignificant (40 CFR 70.4(b)(2)). EPA is proposing that an emissions cap of two tons per year would constitute an approvable criterion for ensuring that any activities designated under this clause would not hinder the State's ability to make applicability determinations and impose all applicable requirements and fees. Therefore, the director's discretion clause may be approved if it includes criteria, such as an emissions cap, that will ensure that any activities designated by the director are insignificant. For toxic or hazardous air pollutants, the threshold would be twenty-five percent of any title I modification threshold or

1000 pounds per year, whichever is less. Hawaii may also choose to impose a more stringent cap. EPA is proposing that restrictions on the following insignificant activities are also necessary to qualify for full approval: paint spray booths, water pump motors, and portable fuel burning equipment. EPA believes that these activities could emit significant amounts of emissions triggering applicable requirements and these activities must contain an emissions cap.

[Federal Register: July 26, 1994, Section II.B.1.a, Page 18187 ]

<http://www.epa.gov/oar/oaqps/permits/prohiia.html> (emphasis added)

Similarly, the EPA must require DHEC to adopt practices at SRS which would reduce air pollution from all sources to permitted levels and to meet NAAQS.

Dated May 13, 2003

---

Louis A. Zeller  
Blue Ridge Environmental Defense League  
PO Box 88

Glendale Springs, NC 28629