



Department of Energy

Washington, DC 20585

September 30, 1998

Mr. John T. Greeves, Director
Division of Waste Management
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

SUBJECT: Natural Resources Defense Council Petition to Exercise Licensing Authority over Savannah River Site High-Level Waste Tanks

Dear Mr. Greeves:

This is in response to your letter of August 27, 1998, offering DOE the opportunity to file comments on the July 28, 1998 Petition to Exercise Licensing Authority filed by the Natural Resources Defense Council (NRDC) with the NRC. The NRDC petition requests that the NRC exercise immediate licensing authority pursuant to § 202(4) of the Energy Reorganization Act (ERA)¹ over all high-level radioactive waste (HLW) that is stored in the 51 underground tanks at the DOE Savannah River Site (SRS). DOE recommends that NRC deny the petition for lack of jurisdiction.

Factual Background

DOE owns and operates 51 underground storage tanks at SRS to receive and age² HLW generated from defense applications. All of these HLW tanks are intended for interim liquid waste storage only.³ The tanks currently contain 34 million gallons of waste. They were authorized to be constructed from 1952 through 1981. Tanks 1 to 24 are single wall tanks built from 1952 to 1962.⁴ Tanks 25-51 are doubled-walled tanks built from 1969 through 1981. All

¹42 U.S.C. § 5842(4).

²This is the practice of giving shorter-lived radionuclides time to die down in order to reduce the radioactivity of the waste.

³Westinghouse Savannah River Company, High Level Waste System Plan, Revision 9 at 13 (April 1998) (hereinafter "System Plan"), attached hereto as Exhibit 1.

⁴An active annual inspection program is in place to continuously certain and verify the integrity of the 51 tanks at SRS. As a result of this program, leak sites (minor cracks) have been identified in 11 tanks. Only one of these 11 tanks has leaked to the environment. (Tank 16 has leaked tens of gallons.) Of the remaining 10 tanks, 8 leaked to the secondary annulus pan which prevented further release to the environment. For the other 2 tanks, the leak sites are above the



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of the newer tanks have full secondary containment and forced water cooling, are above the water table and have no known leak sites. Eighteen of them were built after the passage of the ERA in 1974. DOE closed two of the older tanks in 1997 (tanks 17 and 20) and has scheduled the next tank closure for 2000 (tank 16). DOE's future plans include closure of all the older tanks by 2014. DOE hopes to close the newer style tanks by 2022 unless there is a need for them to remain in service for some longer period⁵. The tank closure process involves removing the high-level waste for vitrification, washing the tanks with water or oxalic acid, pouring grout to stabilize any residue and closing the tank.

Discussion

Section 202(4) of the ERA gives the NRC licensing authority over DOE facilities "authorized for the express purpose of subsequent long-term storage of high level radioactive waste generated by [DOE and its predecessor agencies]." As explained in greater detail in the discussion below, this statutory language, the legislative history and governing case law establish that this licensing authority exists only with respect to facilities⁶ that are (i) authorized by Congress for the express purpose of long-term storage of HLW and (ii) developed and constructed after the passage of the ERA. None of the SRS tanks have been authorized for the express purpose of long-term storage of HLW and only 18 of the newer tanks were constructed after the passage of the ERA. As a result, NRC has no licensing authority over the SRS tanks.

level of the waste.

⁵As explained in the System Plan:

Lack of actual operating experience in the new processes, as well as emergent budget issues, changes to Canyon production plans, evolution of Site Decontamination & Decommissioning initiatives, and other factors preclude execution of a "fixed" plan. Therefore, DOE Headquarters (DOE-HQ), DOE Savannah River (DOE-SR) and Westinghouse Savannah River Company (WSRC) personnel are continuously evaluating the uncertainties in the Plan and incorporating changes to improve planning and scheduling confidence. WSRC refines and updates this Plan in conjunction with facility operations planning and budget planning.

⁶In its petition, citing § 202(4) of the ERA, NRDC asks the NRC to "assume and *exercise immediate licensing authority over all high-level radioactive waste (HLW) that is stored in the 51 underground tanks*" at SRS. Petition at 1 (emphasis added). The statute, however, gives NRC jurisdiction only with respect to the specified class of "facilities". Jurisdiction under § 202(4) over *waste* arises only in conjunction with an exercise of licensing authority over facilities that fall within the statutory criteria.

Notwithstanding the absence of NRC licensing authority, DOE began consultations with NRC almost ten years ago on appropriate standards for closure of tanks used for the interim storage of HLW. Those consultations have been useful, and DOE intends to continue them. In particular, DOE requests that NRC complete the in-process review of the SRS tank closure methodology and incidental waste basis determination undertaken pursuant to the 1997 Memorandum of Understanding (MOU) and Interagency Agreement (IA). Such consultations do not, however provide the basis for the exercise of licensing authority by NRC.

A. **The SRS Tanks Are Not Within the Scope of §202(4).**

1. **Congress Has Not Authorized Any of the SRS Tanks for Long-Term Storage of HLW.**

In 1977, the NRDC sought to have the NRC license the post-ERA tanks at SRS on the theory that they would in practice be used for long-term storage of HLW. The D.C. Circuit, affirming a determination by the NRC, squarely held that the existence of an “authorization” for “the express purpose” of long-term storage of HLW is a prerequisite to NRC jurisdiction.⁷ Specifically, the court held that certain tanks authorized by Congress in 1976 and 1977 at SRS and Hanford (including some of the same tanks now at issue) were not subject to NRC licensing under § 202(4) because the tanks were not “authorized” for long-term storage.⁸ The court refused to consider the likelihood that the tanks would be used in the future for long-term storage and reasoned that, if Congress had desired to base licensing on “a factual determination of the probability that particular ERDA waste storage facilities would, for reasons of necessity or otherwise, be used for long-term storage,” it would have enacted a significantly different statute.⁹ Instead, the court stressed that Congress chose to give licensing jurisdiction to the NRC only when such facilities are “authorized for the express purpose of subsequent long-term storage.”¹⁰ In its new petition, NRDC apparently seeks to again by-pass this statutory requirement for an express authorization.¹¹

In *NRDC v. NRC*, the D.C. Circuit was not presented with the question whether DOE could create NRC licensing jurisdiction by itself authorizing a facility for the express purpose of long-

⁷*NRDC Inc. v. NRC*, 606 F.2d 1261 (D.C. Cir. 1979), *aff'g in relevant part*, 451 F. Supp. 1245 (D.D.C. 1978), *aff'g in relevant part*, 5 NRC 550 (1977) (Commission Decision).

⁸*Id.* at 1266.

⁹*Id.* at 1267.

¹⁰*Id.*, accord NRC Denial of Petition for Rulemaking by States of Washington and Oregon, 58 Fed. Reg. 12342 (Mar. 4, 1993 hereinafter “Denial of Rulemaking Petition”).

¹¹See Petition at p.2 ¶2, p.3 ¶5.

term storage of HLW, or whether Congress alone had the requisite authorizing authority. In passing, the Court noted that “the parties suggest that some ambiguity exists concerning who must give the required authorization—Congress or ERDA.”¹² But the Court there concluded it was unnecessary to resolve the issue since it was clear that neither had authorized the tanks for long-term storage.¹³

While the statute does not specify that the word “authorized” is intended in the technical legislative sense of “authorized by Congress,” there is no basis to construe “authorize” broadly to include a decision by DOE to use a facility for the long term storage of HLW. Such a construction would give DOE, in effect, discretionary authority to choose NRC licensing of certain DOE facilities used for the storage of HLW. This outcome would be at odds with the overall purpose of section 202 which is to impose *mandatory* NRC licensing on certain specified DOE facilities.

The legislative history¹⁴ is clear that section 202(4) is restricted to facilities authorized by Congress. The Senate Report states that § 202(4) provides for licensing of “facilities for high-level radioactive wastes which are or may be *authorized by the Congress* to be built by ERDA or with ERDA financial assistance for long-term (tens to hundreds of years) storage of such radioactive wastes”¹⁵ (emphasis added).

The requirement that Congress must authorize a facility for the express purpose of long term storage of HLW is consistent with subsequent action by Congress. In 1980 and 1981 Congress legislated prohibitions against the licensing of any defense activity or facility of DOE by NRC.¹⁶

¹²606 F.2d at 1267.

¹³*Id.*

¹⁴Reference to the legislative history is appropriate in order to discern the meaning of statute. *Train v. Colorado Public Interest Research Group, Inc.* 426 U.S. 1, 9 (1976) *accord*, *U.S. v. Public Utilities Commission of California* 345 U.S. 295, (1953). (Where the language and purpose of the question statute is clear, courts, of course, follow the legislative direction in interpretation. Where the words are ambiguous, the judiciary may properly use the legislative history to reach a conclusion. And that method of determining congressional purpose is likewise applicable when the literal words would bring about an end completely at variance with the purpose of the statute). [citations omitted]

¹⁵ S. Rep. No. 93-980, *reprinted in* U.S.C.C.A.N. at 5521 (1974).

¹⁶ See § 210 of the Department of Energy National Security and Military Application of Nuclear Energy Authorization Act of 1980 and § 210 of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1981 codified at 42 U.S.C. § 7272.

According to the accompanying 1980 Conference Committee Report, Congress adopted this provision to "continue current policy with respect to NRC licensing of DOE defense programs until Congress address[ed] certain concerns raised by the NRC in its report on 'Regulation of Federal Radioactive Waste Activities.'"¹⁷ This reference to "continu[ing] current policy" relating to defense waste reflects the Congressional view that no facilities had then been authorized for NRC licensing under § 202(4) of the ERA. All of the SRS tanks had been authorized by that time. In 1982, consistent with section 202(4) of the ERA and the 1980 and 1981 licensing prohibitions, Congress did, in fact, authorize a facility for the express purpose of long term storage of HLW.¹⁸

DOE has searched all of the authorization and appropriations acts that permitted the construction of and provided the funding for the tanks built at SRS since passage of the ERA. None contains an express authorization for long-term storage of HLW.¹⁹ Therefore, NRC has no licensing jurisdiction over any SRS tank and any HLW therein.

Even if the NRC were not convinced that Congress must be the authorizing body, the jurisdictional threshold is still not satisfied because DOE, likewise, has not authorized the use of any of the tanks at SRS for long-term storage of HLW. To the contrary, DOE's express purpose is to use the 51 HLW tanks at SRS "for *interim* liquid waste storage only."²⁰ Consistent with that

¹⁷H.R. Rep. No. 96-702, 96th Cong., 1st Sess. at 33.

¹⁸Section 8(b) of the Nuclear Waste Policy Act provides that "[a]ny repository for the disposal of high-level radioactive waste resulting from atomic energy defense activities only shall (A) be subject to licensing under section 202 of the Energy Reorganization Act of 1973 [sic] (42 U.S.C. 5842)

¹⁹Energy Research and Development Administration Authorization Act of 1977 and 1978- Military Applications, Pub. L. No. 95-183; Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1979, Pub. L. No. 95-509; Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980, Pub. L. No. 96-164; Department of Energy National Security and Military Applications of Nuclear Energy Act of 1981, Pub. L. No. 96-540; Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1982, Pub. L. No. 97-90; Public Works for Water and Power Development and Energy Research Appropriation Act of 1978, Pub. L. No. 95-96; Department of the Interior and related agencies. Appropriations, fiscal year 1978, Pub. L. No. 95-74; Joint Resolution making continuing appropriations for the fiscal year 1979, and for other purposes, Pub. L. No. 95-482; Energy and Water Development Appropriation Act of 1980, Pub. L. No. 96-69; Energy and Water Development Appropriation Act of 1981, Pub. L. No. 96-367; Energy and Water Development Appropriation Act of 1982, Pub. L. No. 97-88.

²⁰System Plan at 13 (emphasis added).

express purpose and with enforceable commitments made to the South Carolina Department of Health and Environment (SCDHEC) and the Environmental Protection Agency (EPA), DOE has undertaken a plan to terminate storage of HLW in these tanks and to close them over a period of approximately 20 years.

2. Section 202(4) Applies only to Tanks Constructed After Passage of the ERA.

In enacting § 202 of the ERA, Congress departed from “the general exemption of ERDA programs from NRC licensing authority” in order to “enabl[e] NRC ‘to develop early expertise in *new generations* of nuclear technology as they approach commercial application’.”²¹ In § 202(3), Congress gave the NRC licensing authority over facilities for storage of HLW from commercial (i.e., licensed) activities; § 202(4) created a comparable authority over facilities “authorized for the express purpose of subsequent long-term storage” of HLW generated by DOE and its predecessor agencies. These provisions originated in the Senate, and the accompanying Senate Report stated clearly what was *and was not* the Congressional intent behind those two provisions of § 202:

Paragraphs (3) and (4) provide [NRC] the authority and responsibility for licensing and related regulation of retrievable surface storage facilities and other facilities for high-level radioactive wastes which are or may be authorized by the Congress to be built by ERDA or with ERDA financial assistance for long-term (tens or hundreds of years) storage of such radioactive wastes generated by the Administration or to which present high-level radioactive wastes may be transferred by the Administration in the future. *It is not the intent of the committee to require licensing of such storage facilities which are already in existence or of storage facilities which are necessary for the short-term storage of radioactive materials incidental to ERDA’s R. & D. activities.*

These two paragraphs anticipate the time, probably in the 1980’s, when commercial nuclear power reactors will generate more high-level radioactive waste materials than reactors in the Government sector, including those used in the weapons program. At present, most of the wastes which are leaking from temporary tanks in AEC storage facilities are from the weapons programs. *The committee intends that new facilities now being planned for long-term storage of commercial wastes will meet the strict licensing standards of [NRC].*²²

²¹*NRDC v. NRC*, 606 F.2d at 1266 quoting S. Rep. No. 93-980 at 59, 1974 U.S.C.C.A.N. at 5520 (emphasis added).

²²S. Rep. No. 93-930 at 59-60, reprinted in 1974 U.S.C.C.A.N. at 5521 (emphasis added).

In short, the Senate proposed a limited departure from the traditional practice of exempting the activities of DOE's predecessor agencies from licensing because it anticipated that the government would be first in developing *new* technologies for long-term high-level waste storage, and it wanted the NRC "to develop an early expertise" in regulating the new technologies, so that it would be prepared to deal with its more traditional customers from the commercial sector. But the Senate expressly declined to impose licensing requirements on already existing facilities, presumably because it would not serve the purpose of the NRC to develop expertise on the "new generations of nuclear technology" which NRC expected to have commercial application.²³ Congress captured this limitation in § 202(4) to facilities to be built in the future in the statutory language "subsequent long-term storage." It unmistakably eliminates from NRC's jurisdiction, 33 of the 51 tanks at SRS, all of which were built prior to the enactment of § 202(4).²⁴

The Conference Committee on the bill adopted the Senate provision and again stressed that its focus was solely on facilities authorized in the future for long-term storage.

The conference substitute also retains the Senate language with respect to licensing of 'retrievable surface storage facilities' and other facilities for long-term storage of high-level radioactive waste. *Such facilities are not now in existence but will be developed in the near future for long-term, possibly permanent, storage of high-level radioactive waste, including wastes from the licensed sector.*²⁵

In response to the prior NRDC petition for the licensing of tanks at SRS and Hanford, the NRC itself observed, "this passage evidences Congress' intention that Section 202(4) applies to a new generation of facilities which have yet to be designed...."²⁶

²³Further underscoring that Congress' intent was to enable NRC to develop expertise in new technologies, the express recognition in the Senate Report that some of the AEC's tanks were known to be leaking did not lead Congress to extend licensing to those existing tanks.

²⁴In various documents and communications between NRC technical staff and DOE technical staff, there has been the suggestion from time to time that facilities not originally "authorized for the express purpose of subsequent long-term storage of HLW," including facilities in existence prior to the passage of the ERA, could become subject to NRC licensing jurisdiction if DOE decided to use them for long-term storage of HLW. That conclusion cannot be squared with the statute or the legislative history. Even by mutual agreement, DOE and NRC could not create licensing jurisdiction that went beyond what Congress enacted. *Cf. Owen v. Michigan Academy of Family Physicians*, 476 U.S. 667, 670 (1986).

²⁵H. Conf. Rep. No. 93-1445, at 93d Cong., 2nd Sess. Oct. 8, 1974, *reprinted in* 1974 U.S. C.C.A.N. 5470, 5547 (emphasis added).

²⁶5 NRC 550, 553.

B. DOE's Voluntary Consultations With the NRC Do Not Give Rise to NRC Licensing Jurisdiction.

As demonstrated above, the SRS tanks were *not* "authorized for the express purpose of subsequent long-term storage" of HLW, and therefore do not fall within the NRC licensing jurisdiction provided for by § 202(4). To the contrary, DOE has broad regulatory authority to regulate its own facilities and activities under the Atomic Energy Act, the ERA, the Nuclear Waste Policy Act, the Low Level Waste Policy Act, and other applicable authorities. Nevertheless, as it has in many other situations, DOE has recognized that the NRC has relevant expertise that could be useful to DOE as it proceeds with the SRS tank closure program. Thus, in 1997, DOE entered into a MOU and IA with the NRC for technical assistance in assessing DOE's SRS tank closure methodology and its basis for determining incidental waste. This assistance is still underway. Seeking such assistance does not, however, provide a basis for shifting regulatory jurisdiction over the SRS tanks from DOE to NRC, even if some of the residual waste ultimately is classified as HLW.

If you have any question about these comments, please call Ben McRae at 586-4331.

Sincerely,



Mary Anne Sullivan
General Counsel

Enclosure

cc: Karen Cyr, NRC OGC
Carl Paperiello, NRC NMSS
Thomas Cochran, NRDC