

Testimony of  
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On SB 1541

# What is Low Level Radioactive Waste?

In Texas and nationally, most commercial low level radioactive waste comes from nuclear power plants.

Low level radioactive waste includes:

- **Irradiated components and piping:** reactor hardware and pipes that are in continual contact with highly radioactive water for the 20-30 years the reactor operates. The metal becomes “activated” or radioactive itself.
- **Control Rods:** from the reactor core of nuclear power plants
- **Poison curtains:** which absorb neutrons from the water in the reactor core and irradiated fuel (high level waste) pool.
- **Resins, sludges, filters, and evaporator bottoms:** from cleansing the water that circulates around the irradiated fuel in the reactor vessel and the fuel pool.
- **Entire Nuclear power plants:** if and when they are dismantled. This includes, for example, from a typical 1,000 megawatt nuclear reactor reactor building floor over 13,000 tons of contaminated reinforcing steel bar.

# How Long Does Low Level Waste Last?

Among the radioactive elements commonly found in nuclear reactor “low level” waste are:

- Tritium, which remains radioactive for 120-240 years,
- Strontium-90 (280-560 years),
- Nickel-59 (760,000-1,520,000 years), and
- Iodine-129 (160-320 million years)

By contrast, common medical waste elements include:

- Technetium-99m (2.5-5 days)
- Gallium-67 (1-2 months)
- Iodine-131 (80-160 days)

# How Many Low Level Waste Generators Are There in Texas?

- There are 59 radioactive waste *generators* in Texas, according to the Texas Department of Health, Bureau of Radiation Control.<sup>1</sup> This is a smaller number than the amount of radioactive materials *users*.
- Of these 59 generators, only 43 generate radioactive waste on an annual basis.
- Of these 43, less than half (19) generate more than 15 cubic feet annually. 15 cubic feet of waste would fit into a box with 2 ½ foot sides.
- *The four largest radioactive waste generators—South Texas Nuclear Project, Comanche peak nuclear plant, Waste Control Specialist's waste processing facility, and Rhodia Rare Earths Inc.—account for 97% of all the waste generated in Texas on an annual basis. (36,503 ft<sup>3</sup> out of 37,723 ft<sup>3</sup>)*
- Ninety-two percent of the radioactive waste currently stored on site in Texas comes from five generators (Chaparral Steel, Rhodia Rare Earths Inc., Gulf nuclear of Louisiana, and the two nuclear power plants). Total waste currently stored on site minus these five generators is only 4,814 cubic feet.

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<sup>1</sup> *Texas Low Level Radioactive Waste Status*, TDH BRC July 3, 2000.

# Compact Waste Compared to DOE Waste

Since the Compact law was passed in 1980, none of the 44 states in 10 compacts have opened a compact facility. Presently, no state or compact is trying to identify a site for a disposal facility.<sup>2</sup>

Over the next 35 years, the Texas, Maine, and Vermont generators will produce approximately 2.7 million cubic feet of waste. Two million, or 75%, will come from dismantling the nuclear power plants.<sup>3</sup>

Over the next ten years, the US Department of Energy will generate over 93 million cubic feet of waste for disposal.<sup>4</sup>

The DOE's Office of Environmental Management (EM) is the primary DOE program office to address DOE nuclear waste cleanup throughout the DOE complex. The EM program has identified 134 "geographic sites" (distinct geographic locations that generated waste or were contaminated by DOE or predecessor agency activities) as part of its scope. These sites are located in 31 states and one territory.

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<sup>2</sup> GAO, "Low Level Radioactive Wastes: States Are Not Developing Disposal Facilities," 9/17/1999Chapter 0:1, Chapter 0:3.1.

<sup>3</sup> *Texas Compact Low-Level Radioactive Waste Generation Trends and Management Alternatives Study*, INRCC August 2000, p. 1-5.

<sup>4</sup> US DOE Central Internet Database, September 15, 2000, "DOE Actual and Projected Amounts of Waste/Contaminated Media and SFN in Inventory," available at [cid.em.doe.gov](http://cid.em.doe.gov)

# How Much DOE Waste is There?

## **Texas Attorney General:**

“The extent of the contamination is staggering. In 1995, DOE said that it owned more than 2,000 facilities that required decontamination and decommissioning. Besides close to 50 million cubic meters of radioactive waste, the DOE estimated it had to deal with 21 billion gallons of contaminated soil media and 475 billion gallons of contaminated water.<sup>5</sup>

The cost of cleaning up the contamination will be comparable to the historical costs of building and operating the entire nuclear weapons complex. In 1998, DOE estimated that cleaning up 353 projects is about \$147 billion between 1997 and 2070.<sup>6</sup>

## **US Government Accounting Office:**

“In March 1999, DOE estimated that it may generate and dispose of over 300 million cubic feet of low level radioactive wastes (including mixed low level waste) over about the next 70 years as it cleans up its complex of nuclear facilities.”<sup>7</sup>

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<sup>5</sup> Waste Control Specialists, L.L.C v. United States Department of Energy, No. 97-11353, In the united States Court of Appeals for the Fifth Circuit, Brief for Amicus Curiae State of Texas, p. 10.

<sup>6</sup> Ibid, p. 11, and Office of Environmental Management, US DOE, “Accelerating Clean-Up: Paths to Closure, Draft 4 (DOE/EM-0342, February 1998).

<sup>7</sup> GAO, “Low Level Radioactive Wastes: States Are Not Developing Disposal Facilities,” 9/17/1999Chapter 0:1, Chapter 4:2.

# DOE POLICY: Why Privatization and SB 1541 Open the Door to Uncontrolled Amounts of Imported Waste and Possible Loss of State Regulation of the Site

Dallas Morning News Jan 10, 1996

"[WCS] Executives will soon ask regulators for permission to bury the material at an Andrews County site, claiming that the state's ban on private companies dumping such waste doesn't apply to federal contractors."

"Waste Control's interpretation of federal energy statutes is that "states don't have jurisdiction over the Department of Energy or its contractors, adds a company lawyer, Joe Egan. Waste Control officials expect that once they get approval for low-level nuclear waste disposal, they will be in line for federal contracts."

"Indeed, company officials say that if allowed to accept nuclear wastes, the landfill could turn annual profits of more than \$100 million within 5 to 10 years."

## Brief for Amicus Curiae State of Texas, WCS v. US Department of Energy, 1997

"DOE argues that it has nonreviewable discretion to choose not only how to dispose of its low level waste, but also how its waste disposal sites will be regulated. In so arguing, DOE is claiming the discretion to decide whether to preempt state law at a given commercial disposal site or portion of a site, by asserting that it controls the site... At the WCS site, both WCS and DOE assert that DOE could have exercised control in such a way as to preempt state law."<sup>8</sup>

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<sup>8</sup> Waste Control Specialists, L.L.C v. United States Department of Energy, No. 97-11353, In the united States Court of Appeals for the Fifth Circuit, Brief for Amicus Curiae State of Texas, p. 19-20.

1US Government Accounting Office Report, September 1999  
*Low Level Radioactive Wastes—States Are Not Developing Disposal Facilities*  
Chapter 4:2

“ [REDACTED] ...  
DOE intends to promote competition for its disposal services within the private sector by, among other things, offering incentive payments or minimum volume guarantees for new facilities that obtain NRC or state licenses within a short period of time.”

“Waste Control Specialists, Inc. is one private company that wanted to obtain a license from the state of Texas to permit the company to compete for DOE contracts... According to company officials, the company’s primary interest was in meeting the conditions that are necessary for it to compete for DOE’s waste management contracts.” [REDACTED]

Texas Attorney General Opinion  
May 18, 1999, No. JC-0052

[REDACTED] But we also conclude that the existing law which, because of current federal policy, has the effect of precluding DOE waste disposal at private facilities, is constitutional.”

“ ... [A] private company disposing of DOE waste at a privately-owned site controlled by DOE is exempt from NRC, and thus state, licensing requirements.

It is the current policy of DOE to dispose of DOE waste only at facilities licensed under state or federal law. (U.S. Dep’t of Energy, Commercial Disposal Policy Analysis for Low Level and Mixed Low-Level Wastes ES-2 (Mar. 9, 1999)



# SB 1541:

- Mandates that a private company hold the waste disposal license. (Sec. 402.011)
- Requires in several places that the disposal facility be big enough to meet “unmet necessary capacity.” (402.012 (3), 402.061 (a) and (c), 402.021 (3), 402.062 (b) (7))
- Allows two disposal facilities to be built—presumably contemplating a compact site and a DOE site. (402.061 (c)) Requires TNRCC to report to the Governor and Compact Commission recommendations for further legislation regarding non-compact waste managed at or adjacent to sites that may be opened under this bill. (402.014 (c))
- Does not close the Compact loophole

## CHAPTER 403. TEXAS LOW-LEVEL RADIOACTIVE WASTE DISPOSAL COMPACT

Sec. 3.04 (11) ... The shipments of low-level radioactive waste from all nonhost **party** states shall not exceed 20 percent of the volume estimated to be disposed of by the host state during the 50-year period. When averaged over such 50-year period, the total of all shipments from nonhost **party** states shall not exceed 20,000 cubic feet a year. The commission shall coordinate the volumes, timing, and frequency of shipments from generators in the nonhost **party** states in order to assure that over the life of this agreement shipments from the nonhost **party** states do not exceed 20 percent of the volume projected by the commission under this paragraph. (*emphasis added*)

The volume limits apply **ONLY** to Maine and Vermont—the only “nonhost party states.” Waste that is brought in through the contracting loophole is not bound by these limits, because it comes from companies, states, or groups of states that are **NOT** party states to the compact.

# Waste Control Specialists

Hobbs Daily News-Sun, October 14, 1994  
Hobbs New Mexico

Company attorney and spokesperson Kent "Hance said the company will be selective about what goes into the dump and stressed that [REDACTED]." (in response to questions from the audience at a public forum.)

1995

WCS lobbied (unsuccessfully) the Texas Legislature to change state law to allow private companies to obtain waste disposal licenses. Two State Representatives accused WCS lobbyists of bribing them to drop their opposition.<sup>9</sup>

1997

- WCS sues DOE, arguing that DOE can legally bypass state law and force states to accept DOE waste. A federal judge sided with WCS, but the US Court of Appeals overturned the ruling in May 1998, citing DOE policy of contracting only with private companies licensed by states to dispose of radioactive waste.
- WCS receives license from Texas Department of Health to store and process radioactive waste.

TDH letter to WCS in 1996:

"We are currently processing your application for a radioactive material license.... The preliminary review has found the submitted application to be severely deficient. It must be noted that (1) the applicant is requesting authorization for one of the most complex and potentially hazardous activities the Agency has jurisdiction over; (2) the Agency held many conversations with the applicant; and (3) the applicant had been supplied with the regulations and various guidance documents. While mis-communications may occur in conversation, it is of concern that regulatory requirements and written guidance documents were not followed."

- WCS begins to gain exemptions to dispose of a variety of low level waste streams. WCS begins to dispose of NORM waste, waste contaminated with radioactive cesium-137, Superfund waste contaminated with radioactive thorium and cadmium, DOD waste containing depleted uranium and lead, among other waste.

1999

Legislation again introduced to privatize nuclear waste disposal. The bills fail.

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<sup>9</sup> *Houston Chronicle* 5/23/95.