

A Summary Overview: WCS's Radioactive Waste Dump in Andrews County Texas

WCS in Andrews Tx: A Geologically Unsuitable Locale. The Company's Billion-Dollar Political Influence. The waste, what it is, what they do with it, and how the company's proposed changes to Texas law will make things much, much worse.



RadTexas Bulletin 1v.04032003 written by Tristan Mendoza, Researcher/Director, Texas Radiation Online http://www.RadTexas.org

Radioactive Waste Disposal On The Ogallala Aquifer Regional Earthquakes and Nearby Lower Colorado River Raise Additional Concerns

The site, known as Windmill Hill, is part of a ranch in Andrews County, Texas. Not only is this disposal site located above two aquifers, (the Ogallala and the Dockum), but there are also aquifer recharge features on the property. The Ogallala aquifer ranges under 7 other states: New Mexico, Oklahoma, Kansas, Colorado, Wyoming, Nebraska, and South Dakota; demonstrating that opposing the WCS facility is not just a "not-in-my-backyard" stance. The presence of the Ogallala, and a 100-year floodplain which extends through the facility boundary, are both denied by WCS. The site is also located within 10 miles of the feedwaters of the Lower Colorado River, which flows through Austin 12 blocks from the State Capitol. This subject has never been raised in any discussion on site suitability.

To date since counted, there are over 18 seismic epicenters within a 30 mile radius of the disposal site. Of these 18, the latest occurred June 2, 2001 at a depth of 5 km, with a 3.3 magnitude. The largest seismic event occurred January 2, 1992 approximately 15 miles from the site with a 5.0 magnitude. (the USGS Natl Earthquake Information Center said 5.5 magnitude) Eight of these events happened in 1976 alone, which simply cannot be dismissed as random activity.

The TDH never conducted an Environmental Assessment (EA) for the WCS Andrews facility. What was used instead was a report which WCS submitted and which contains some serious flaws. It denies the presence of the Ogallala aquifer on the property, claiming that each of the other geological studies done on the site have confused the Ogallala Formation with "Antler's Sandstone." The Antler aquifer, of which Antler's Sandstone is indigenous to, is in southeastern Oklahoma and northeast Texas over 300 miles away.

An extremely detailed geological survey was conducted of the site in 1993 as part of it's application with the TNRCC. This study is included with the rest of WCS's file at the TDH. It not only proves the presence of the aquifers at the WCS, but also the 100-year floodplain. The report WCS submitted as an site assessment makes references to this report, yet unscientifically attempts to debunk its most important findings by scratching out the word Ogallala and replacing it with Antlers Sandstone. In 1999, the UT Bureau of Economic Geology concluded of this issue that scientific evidence would be needed before WCS's claims could be taken seriously - evidence which has still not been produced.

"Despite thorough site-specific geological evidence of the Ogallala aquifer, the Texas Dept of Health licensed Andrews WCS for radioactive waste processing without questioning their wild hydrology claims"

When the DOE was investigating the suitability of Deaf Smith County for high-level waste disposal (later sited at Yucca Mountain), Andrews had actively sought to also be a candidate. Andrews was also runner-up in the bid for the Superconducting Super-Collider project. None of these proposals met suitability requirements, primarily due to the presence of the Ogallala aquifer in the county.

In June 1987, the Texas Disposal Authority (TLLRWDA) had been contacted about siting a disposal facility owned by the University of Texas about 20 miles east of the town of Andrews. When the TLLRWDA visited the proposed site and noted that the site was probably not suitable due to the proximity of the Ogallala, the Andrews Board insisted the Ogallala was not present, and asked that they come out and begin drilling test holes to demonstrate this wasn't the case. The Authority did this, and found the Ogallala within 40 feet just below the site.

WCS spends millions yearly to influence the political process

Waste Control Specialists is owned by a larger company called Valhi. Valhi is controlled by a man named Harold Simmons, who has been known as the second richest man in Texas. Since Valhi also owns National Lead Industries, one of the worst polluters in the US, Simmons has also been called the 'king of superfund sites'.

Valhi and Simmons give millions in campaign contributions to Texas representatives. Simmons was 2nd biggest donor (\$90,000) and #1 fundraiser in the Bush for governor campaign. He also was a large donor in two of Jeb Bush's Florida campaigns. Through Contran, another company in the Simmons' empire, millions more is also funneled to GOPAC and the GOP in soft money contributions to influence the political process on a national level. The Houston Chronicle stated Simmons personally was one of the primary contributors to the Bush presidential campaign. Campaign contributions for the year 2000 included \$70,000 for Sen. Kay Bailey Hutchinson, \$350,000 for Sen. Phil Gramm, and \$211,000 for Gov Rick Perry. He also gave \$10,000 to Sen. Buster Brown, Chairman of

the Senate Natural Resources Committee. This news came out just prior to a key Senate vote on WCS's bill

Simmons contributions to the 2002 Texas election cycle currently list: \$201,000 more for Gov Perry, \$18,000 for Lt. Gov Dewherst, \$20,000 for Atty Gen Abbott, \$20,000 to Comptroller Rylander, \$13,500 for various Commissioner candidates, \$15,000 or more to 3 winning Supreme Court candidates, and \$5000 for House Speaker Craddick.

There were over 20 other recipients in the House and the Senate- out of 11 members of the Senate Committee on Natural Resources (which would rule on any radioactive waste legislation) 6 of them had received a total of \$6,500. The Chair and Vice Chair of the counterpart House Committee both received a total of \$2,500.

Not only has Simmons been in court by the US government several times for violating campaign contribution laws, but he also has been taken to court by his daughters for making illegal contributions in the names of his own family members without their consent. (He settled that lawsuit for \$50 million).

"this is a stinky deal, and the public needs to get a whiff of this" - Texas House Rep. Ray Allen



Who's the Boss? Left to right: Harold Simmons of Valhi, #1 fundraiser and #2 donor to George W. Bush. Bush Sec of the Interior Gayle Norton was employed as attorney to defend Valhi's NLI from lead paint lawsuits involving poisoned schoolchildren. Dick Cheney was employed as CEO of Halliburton when the company was primarily owned by Valhi.

Political mischief, including bribery is nothing new for WCS

In 1995, just prior to being purchased by Valhi, WCS lobbied the Texas Legislature, and caused quite a stir-up when two of their lobbyists, John Birdwell and former congressman Kent Hance, were exposed trying to get an outspoken republican opponent of their radioactive waste bill to change his mind by promising \$60,000 in campaign contributions in the next elections. Reps Robert Talton (R-Pasadena) and Ray Allen (R-Grand Prarie) reported the incident.

Allen stated that he had been approached by Birdwell who said of Talton,"why, they would put \$60,000 in his campaign in a heartbeat if he would back off." Allen stated that "it certainly sounded like a bribe using campaign contributions... There was clearly a linkage between the campaign contributions and Robert dropping his opposition."

Hance denied everything. He stated that it was a "cheap trick" to kill the bill, and went on to say "it is an absolute

lie... I don't know what he is smoking. This guy is out of control." Addressing the entire situation, Rep Allen pretty much summed it up saying, "this is a stinky deal, and the public needs to get a whiff of this"

Documents released in 1998 showed that former top Senate Energy Committee aide Daryl Owen had been lobbying for WCS since October 1995, and was promised a huge \$18.4 million award if successful. By 1998, WCS had already donated over \$90,000 to key senators and House members.

Hance had asked three senators who had recieved large WCS contributions to block the nomination of Mary Anne Sullivan for DOE General Counsel, which succeeded [the three were Shelby (R-Alaska), Hutchison (R-Texas) and Gramm (R-Texas)]. Sullivan had questioned the legality of a proposal by WCS that the DOE assist in circumventing Texas State oversight at Andrews.

Low Level Radioactive Waste: Not "Low-Level" at All!

Radioactivity of the "low-level" waste (LLW) category varies widely and includes both short- and long-lived isotopes. It encompasses materials that are slightly radioactive trash to highly radioactive materials which require extreme caution and handling by remote control, yet do not meet the exact definition of highlevel waste.

The LLW classification has absolutely nothing to do with the degree of radioactivity or the length of halflife. Additionally, over 90% of LLW that is generated is from nuclear power plants, and includes everything except the spent fuel.

Low-level waste is defined by what it is not and consequently is the most broad category of waste. It is a catch-all category and is simply waste which is does not fall into other existing waste classes. Industries, hospitals and medical, educational, or research institutions; private or government laboratories; and nuclear fuel cycle facilities (from fuel fabrication to reactors) using radioactive materials generate low-level wastes in many physical and chemical forms and levels of contamination.

96% of the low-level waste generated in Texas yearly is produced by the two nuclear power plants. Proponents for a dump often discuss medical waste which makes up less than 5% generated yearly. Shutting down nuclear power plants would greatly reduce the amount of waste destined for disposal.

When decommissioned, entire nuclear power plants from the entire reactor vessel (minus the spent fuel rods) to the concrete floor are considered "low-level" waste.

A typical 1000 megawatt reactor building floor contains 13,000 cubic feet of contaminated concrete, and 1,400 cubic feet of contaminated reinforcing steel bar.

In addition, power plant waste contains:

- Irradiated Components and Piping: reactor hardware and pipes that are in continual contact with highly radioactive water for the lifetime of the plant. The metal becomes activated, or radioactive, from the bombardment of neutrons.
- Control Rods: from the core of nuclear power plants, these rods regulate and/or stop fission chain-reactions in the reactor by absorbing neutrons.
- Resins, Sludges, Filters, and Evaporator Bottoms: residues and cleaning wastes from the water that circulates around the irradiated fuel in the reactor vessel and in the fuel pool, which which holds the irradiated fuel when it is removed from the core.

LLW is divided into four subcategories: Classes A, B, C, and Greater-Than Class-C (GTCC). On average, Class A is the least radioactive while GTCC is the most radioactive.

Contaminated Groundwater: Ingestion of Radioactive Particles

Every single low-level radioactive waste dump has leaked to date. Dump proponents downplay the health effects of radioactivity with discussion of periodic external exposure to radiation, and completely ignore hazards of the ingestion of radioactive particles (or radionuclides) which can lodge in the body and damage organs with a consistent dose.

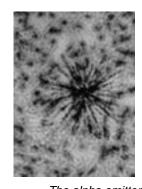
Groundwater contamination, a major problem common among all dumpsites, raises a risk of human ingestion in the drinking of the water or eating contaminated plants or livestock.

While a few radionuclides are able to pass through the human body quickly, many are taken in by the body, mistaken as needed minerals. and are taken in areas such as the bone tissue, or the thyroid. Other radionuclides can get trapped in the body's tissues or the bloodstream. Airborne particles which are breathed in get trapped in the lungs and cause problems there. From the mouth through the digestive tract, into the bloodstream, microscopic radioactive particles can settle in a variety of organs.

Alpha radiation, which can be very powerful yet has such a small range it must be in contact with an organ to do damage, is emitted by most of the radioisotopes found in LLW. Beta and gamma radiation are the types which require shielding, for they can penetrate skin and cause damage from outside of the body. Radioactive particles inside of the body are too small to be removed by modern medicine.

When a microscopic alpha emitting substance is located next to or inside an organ, the cells in that part of the organ will become constantly bombarded by alpha radiation, ultimately damaging the cells. Alpha radiation knocks out parts of molecules and surrounding cells-smashing proteins and DNA.

This may lead to cancer, organ dysfunction, and/or damage the reproductive system in ways which become apparent in future generations.



The alpha emitter (plutonium) inside of this baboon's lung is not visible in the picture. The rays which are seen are spikes of alpha radiation shooting out from the particle, penetrating the tissue - up to 10,000 cells in their range. [DOE, 1982-magnified 500 times]

Attempts by WCS to Evade and Change Texas Law

From early on, WCS has sought to change Texas law primarily to remove a ban on private companies being licensed for radioactive waste disposal.

It has been determined that if a private company is allowed to get a license, the State of Texas can not legally limit the importation of waste by them (waste and garbage are considered "goods" under interstate commerce law).

Removing this tiny section from Texas Law by itself would allow WCS to import massive amounts of waste from the US Dept. of Energy (DOE) and others. Sen. Teel Bivins, who has historically presented legislation for WCS, even outlines the importation of DOE waste.

This legislation pretends to satisfy the Texas Compact, with other motives. Logically, any dump would last as long as Texas would receive waste for the Compact- a period of 35 years.

In April 2001, DOE estimated that over 249 million cubic feet of waste would be slated for disposal in just the decade 0f 2000-2010. This alone is an amount the DOE says is equivalent to a football field 433 stories tall. For a 35-year period, it would be over 3 times as much waste.

In the late 1990s, WCS tried to circumvent laws it could not change at the Legislature, and proposed to the DOE that as a DOE contractor, it should be able to dump radioactive waste in Texas without a State license or oversight. The DOE declined the proposal, as it requires a State license for qualification. In response, WCS sued the DOE, which lasted several years, and lost. What alarmed officials in many states is that the DOE stated that they thought the proposition was legal- and that it merely was against DOE policy- thus validating the idea of overriding State authority elsewhere.

WCS Allowed To Dump "Exempted" Waste, Store Remote-Handled Waste

A hazardous waste landfill since 1994, WCS got a license for radioactive materials processing and storage in 1996, and ever since has lobbied the Bureau of Radiation Control monthly for amendments to its license to expand its activities.

Since WCS can not dispose of radioactive waste under a bona fide license, it seeks loopholes. Waste can be labeled as "exempted" if found to radiate particles at a small enough amount to be deemed "below regulatory concern." Once waste has been exempted it is outside the regulatory restrictions placed upon radioactive materials, and can be transferred to the onsite hazardous waste landfill for disposal. [10 CFR 40.13(a)]

WCS has been dumping quite a bit of exempted waste over the years, and it is one of the sites biggest selling points to waste generators, including the Department

of Defense. This is because it is cheaper to dilute waste and dump it into a landfill than to pay the high prices of a licensed radioactive waste disposal facility.

This material is not placed in a separate area of the hazardous waste dump, and to date, neither the Texas Commission on Environmental Quality (formerly TNRCC) or the Texas Bureau of Radiation Control has been keeping track of the amounts of exempted radioactive waste which are disposed of at WCS. It is estimated that at least 120,000 cubic feet of this waste has been dumped at Andrews.

For storage at Andrews, all classes of "low-level" radioactive waste are currently allowed, and recently included remote handled "Greater-than-Class C" waste. They were also recently granted permission to store larger amounts of fissionable material (called special nuclear material), which is a concern to national security.

Want To Get Some More Information? Visit Us Online!

Texas Radiation Online provides a complete overview of the nuclear problem in Texas [from nuclear power plants, uranium mining, radioactive waste, nuclear weapons production, and more]. An in-depth review of radiation basics and needed references for understanding the issues is also provided.

For the 78th Texas Legislature of 2003, the radioactive waste problem has returned as **Senate Bill 824** and its companion **House Bill 1567**, which favor the infamous firm WCS in Andrews County, would allow the company to import massive amounts of waste from the Department of Energy (DOE) for disposal.

It is time for Texans to deliver to House and Senate members a strong message that we can't allow Texas to be turned into a pay toilet for the nation's radioactive waste. Call your district's reps in the House and Senate. Get in touch by asking the Capitol clerks at the numbers below for their phone numbers- all you need is your zip code!

House Clerks Office: (512) 463-0845 - Senate Clerks Office: (512) 463-0100.



Texas Radiation Online

http://www.RadTexas.org http://www.TexasRadiation.org

