

# Nuclear Waste, More Sites Arriving

SEPTEMBER 2005 **Texas Radiation Online http://www.TexasRadiation.org** Tristan Mendoza, Director/Producer

Over the past few years, we are increasingly reminded that Texas plays a major role in the US nuclear program- in both atomic weapons development and nuclear power. Texans ironically have been deemed to have more potential than anywhere in the world to generate clean electricity from wind turbines rather than dirty fuel from fossil deposits of oil, gas, coal, and uranium. While the Bush administration calls for more nuclear weapons production and subsidizing commercial reactors with tax dollars, the mining companies and waste brokers have settled in with big plans for the future, lobbying for pliant regulation, adjusting geological and other data, and other attempts to maximize profit at the public's expense.

Texas is not only about to become the national waste dump for commercial power plant waste, but the new destination for legacy weapons waste from the cold war. This means chopped up plutonium production reactors, control rods, filters and sludges- and pretty much everything that isn't sent to Yucca Mountain (spent fuel rods)- this is what so-called "low-level radioactive waste" consists of. Hot trash is here for storage, and the same company storing it is trying to permanently dispose of it here in Texas in a hole in the ground, openly aspiring to bring in as much as they can to satisfy the profit motive.

While the original intent of this writing was to talk about the entire nuclear predicament facing Texas and the region, this packet primarily discusses two sites which are right next to each other between Midland, Texas and Hobbs, New Mexico. They affect the same local geology, and combined significantly increase the risk to humans, as if the new Texas waste dump itself was not sufficiently dangerous. Both sites lie upon the border (or shelf margin) of what geologists refer to as the Central Basin Plateau, at a fault line with the southernmost part of what is called Mescalero Ridge. Both sites also are above the national Ogallala aquifer, and several minor aquifers as well. The sites lie just above the border of the Rio Grande and Pecos River Basins. As the geological boundaries meet underground, the Monument Draw tributary separates near Hobbs into two: one runs to the north of these sites and flows straight into the Lower Colorado River through cities including the Texas State Capitol; the other runs west between the actual site locations and eventually flows into a lake at Monahans, Texas and the Peco River.

# HISTORY

As the defeat of the infamous State-operated nuclear waste dump at Sierra Blanca was underway in the mid-1990s, waste companies had moved in and sought to overturn a Texas law prohibiting privatized waste disposal, in attempts to open a dump of their own, import massive amounts of nuclear waste, and reap huge profits.

This effort was spearheaded by a company calling itself "Waste Control Specialists" (WCS) which was originally a small operation centered out of Pasadena. While they battled rival company "EnviroCare" from Utah for rights to dispose in Texas, and after a significant bribery scandal during the 1995 legislature, WCS was bought and has been since controlled by multibillionaire Harold Simmons and his corporate empire through the Valhi Corporation in Dallas. Since WCS was then prevented by Texas law from disposing of nuclear waste, it asked the federal government to circumvent State law and grant a license directly. When federal officials notified that WCS that they were not able to grant a disposal license to a site that was not already licensed by the State, WCS sued, lost the suit, and

later retaliated with their Washington lobby and successfully prevented the appointment of those very officials that upheld Federal law.

After spending hundreds of millions of dollars for years to influence the political process in the form of campaign donations, soft money contributions, and employing some of the highest paid lobbyists in Texas and Washington, Valhi/ WCS finally managed to manipulate the Texas State Legislature to change the law in 2003, with SB1567. The new law not only removed the prohibition of companies importing waste to dispose into Texas, but also outlined and mandated that this new dump would import 162 million cubic feet of waste from the legacy United States nuclear weapons factories now overseen by the US Department of Energy (DOE), specifically referred to as an incentive package for industry.

While the proposed Sierra Blanca dump of the 1990s was only intended to dispose of under 2.5 million cubic feet of waste, a company like WCS is now allowed to open a dump site over 60 times larger. These sites historically take hundreds of billions of dollars to clean up, yet the law even allows WCS to operate the dump and just leave with billions in profits, the polluted mess remaining behind for Texas taxpayers to pay for in eternity.

### Timeline for The Texas Nat'l Nuclear Waste Dump

The waste dumps mandated in 2003 would be licensed and regulated by the Texas Commission on Environmental Quality (TCEQ). The license (or denial) is expected to be issued in December 2007, with the facility opening planned for 2008, just as the national nuclear dump in Barnwell, South Carolina is scheduled to close. For WCS however, this is not soon enough, as they have been lobbying to rush the licensing process, and are likely to introduce bills in future legislative sessions to that end. It could be argued that Rep. Joe Barton's recent assertions that Yucca Mountain should open earlier than scheduled are also applicable to disposal of nuclear waste in Texas.

The licensing process for WCS began in August 2004, when they first submitted their application. After three Administrative Notices of Deficiency on the application were narrowly addressed, TCEQ finally declared the application to be administratively complete in mid-February 2005. At the end of March, public comments were accepted and a public hearing on the application was held in Andrews County. At the beginning of May, TCEQ released a transcript of the Andrews hearing, responses to public comments and released a Evaluation of Merit report. Now, TCEQ has entered a Technical Review period of the application, which is scheduled for completion in July 2006. It is during this interim that the agency will look over the geological and other shortcomings of the WCS site, and hopefully familiarize themselves with WCS actions historically and their well earned reputation for being dishonest and manipulative in regards to State and Federal radioactive waste policy.

# WCS's New Neighbor: the LES National Enrichment Facility

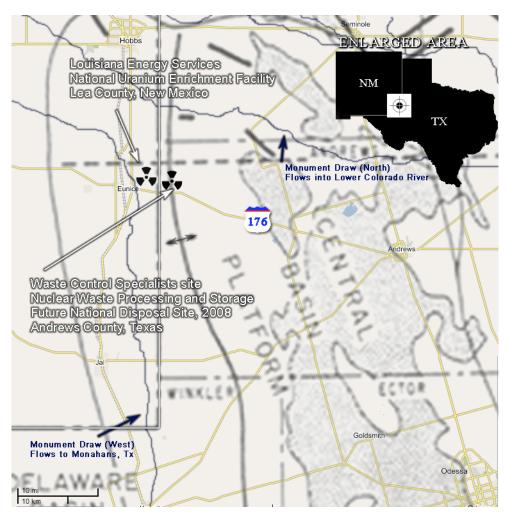
In the past few years, an international consortium\* called Louisiana Energy Services (LES) has been working to open the proposed National Enrichment Facility (NEF) in Eunice, New Mexico- within few miles of WCS in Andrews County. Its proximity to WCS raises the similar geological concerns of aquifers, seismicity and Monument Draw.

The \$1.3 billion plant is projected to generate 133,000 metric tons of depleted uranium (197,000 metric tons of DUF6 gas), which is not allowed to be disposed of until undergoing a solidification process called 'deconversion.' LES has an agreement with Areva (parent company of Framatome and Cogema) to open yet another nearby facility to perform this processing, and the waste is commonly considered to be destined for ultimate disposal at WCS.

Rod Critch, who is LES's VP of nuclear engineering, has said that the waste generated at the plant would be more radioactive than waste at the WIPP site near Carlsbad. A report by IEER and NIRS also stated that depleted uranium is radiologically comparable to transuranic waste, and that "the health risks of depleted uranium may be far more varied than is recognized in federal regulations today ... may be mutagenic, tumorigenic, teratogenic, cytotoxic, and neurotoxic, including in a manner analogous to exposure to lead. It may also cross the placenta and harm the embryo/fetus.

There is also research that indicates that the chemical and radiological toxicities of uranium may, in some cases, be acting in a synergistic manner."

[\* LES is led by URENCO, also includes Westinghouse, Duke Power, Entergy and Exelon]



# Geology and the WCS site

The site is at a ranch known as Windmill Hill in Andrews County, Texas. Not only is this disposal site located above two aquifers, (the Ogallala and the Dockum), 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) Their hazardous waste pit, where they have so far dumped several million cubic feet of toxic waste and low-radioactivity trash, is actually dug into the Ogallala which is just below the surface. It has a plastic lining, which historically have been found to leak at similar sites.

The presence of the Ogallala, and a 100-year floodplain running through the facility boundaries, have been denied by WCS. Both items were on record when applying to the State to dispose of hazardous waste in 1993, however, when applying for a permit to process and store nuclear waste in 1996, an Environmental Assessment was not conducted. Instead, WCS was allowed by the State to submit a report claiming (without presenting new data) that the Ogallala had been misidentified by all other regional geological surveys. While WCS geologists have continued to revise their findings to suit their needs regarding the Ogallala, the issue of the 100-year floodplain has simply been dismissed with no explanation whatsoever.

Within recent years, WCS geologists have reluctantly admitted that the Ogallala is actually present, yet insist that it is dry. This is not supported by the findings of State records of wells within feet of the property, or by local landowners who state that the levels of water in the aquifers have dropped

since WCS began draining the water for their own operations. WCS also consistently refers to a layer of "impermeable red bed clay" which lies between the aquifer formations on the property, not above. Dubious claims have often been made about this red clay being supposedly "impenetrable," such as at the Pantex weapons plant in Amarillo, which has been leaking for some time.

Additionally, a fact that is hardly discussed is that the area is seismically active with over 18 seismic events counted within a 30 mile radius (48 km). One of the latest counted occurred on June 2, 2001 at a depth of 5 km, with a 3.3 magnitude, and the largest occurred on January 2, 1992 approximately 15 miles from the site with a 5.5 magnitude. Eight of these events happened in 1976 alone.

The site is located on the border of the Colorado and Pecos River basins. About 8 miles to the north of the site is part of Monument Draw, which feeds into the Lower Colorado River. Within 2 miles to the west is the second fork of Monument Draw, which flows south as an underground waterway of the Pecos River Alluvial aquifer toward Monahans, Texas. As with local seismicity, the issue of Monument Draw has hardly been raised in any discussion on either site suitability, or the possibility that the site may be in violation of the La Paz treaty with Mexico, which protects the Rio Grande downstream.

### Things get worse...

The biggest deal with SB1567 of 2003 is that it specifically mandates that a waste dump open for waste from US nuclear weapons factories, touted as a financial incentive for a company to open a separate nuclear dump for the Texas Compact for nuclear power waste. The Texas Compact never required that Texas take nuclear weapons waste, but it still applies to waste coming from commercial nuclear power plants. It has been obvious for some time that while The Texas Compact supposedly guaranteed that if Texas opened a waste dump dedicated to waste from Texas, Maine and Vermont (like Sierra Blanca), it would keep out commercial power plant waste imports from other States, it in fact contained loopholes which could quite potentially do the opposite, and make Texas a national dump for commercial nuclear plant waste. (Note: in 2004, Maine left the Texas Compact, with only Texas and Vermont remaining). It appears that similar trends are already developing even prior to a site becoming licensed, or any Compact Commissioners yet being appointed.

In 2004, the Central Compact had petitioned to send its waste to Texas from its member states of Louisiana, Arkansas, Oklahoma, Kansas, and Nebraska, and had offered a \$25 million payment to Gov. Rick Perry for this venture. Then, in May 2005, the Nuclear Regulatory Commission (NRC) began considering a proposal from nuclear plant operators in Connecticut and Massachusetts to import a total of 180 million pounds of decommissioning rubble and debris to Texas. As of this writing, these deals are still on the table.

Over the years, it has been apparent that WCS' actions are preceded by the ultimate goal to import as much waste as they are able, for increased profits. Despite bipartisan Senate demands to hold off until further legislative consideration, the Texas Department of State Health Services (TDSHS) granted WCS permission to begin storing waste from a DOE plant in Fernald, Ohio, which began arriving in June 2005. WCS has simultaneously been seeking for a special permit to dispose of this waste, which would functionally be a third nuclear dump at the WCS site, as this waste is far more radioactive than allowed at any existing nuclear dump in the nation, or even at the proposed dumps mandated by SB1567.

Due to a strange clause in State law, a hearing on the storage of this waste was to be held after the permit was issued. Unsuccessful legislation during the 79th Regular Session would have repaired this clause and additionally transferred authority from TDSHS to TCEQ, but ultimately sought to tax this waste rather than prohibit its disposal in Texas.

