

TEXAS OBSERVER

Good to Glow

Despite its own scientists' objections, state regulators are greenlighting a massive nuclear waste dump in West Texas.

FORREST WILDER | APRIL 04, 2008 | FEATURES

In February, hundreds of government regulators and businesspeople gathered in Phoenix for "Waste Management '08," the annual radioactive waste industry confab. Amid the swag and schmoozing, industry insiders appraised the state of their business. The good news: The nuclear industry appears to be rebounding in the United States, providing potentially huge new radioactive waste streams as planned reactors come online. The bad news: The number of landfills for burying low-level radioactive waste is dwindling. One of the oldest sites, in Barnwell, South Carolina, will close to all but a handful of states on July 1. That will leave 36 states, including Texas, with no place to send the radioactive waste generated by their nuclear power plants, universities, hospitals, and companies.

Since 1980, when the federal government delegated to the states the task of dealing with low-level radioactive waste, not a single new landfill has opened. Ten attempts have been made by states to develop one. The congressional Government Accountability Office estimates that the failed efforts in developing sites cost a combined \$1 billion.

The industry largely blames public opposition. "We just didn't get kicked out of South Carolina," said Steve Creamer, CEO of Utah-based EnergySolutions Inc., the company that runs Barnwell. "We got brutalized and kicked out of South Carolina."

Creamer estimated that the United States' 104 commercial nuclear reactors would generate 117 million cubic feet of waste over their collective lifetimes. Federal nuclear facilities under decommissioning orders will produce millions more. Where will it all go?

A subsidiary of Dallas-based conglomerate Valhi Inc., Waste Control Specialists LLC was in Phoenix to make the case that it was on the verge of doing what no other company has been able to do—license and build a massive radioactive waste landfill.

"Considering our political support, considering our local support, if a new facility cannot be licensed in Texas, it probably can't be licensed anywhere," said Bill Dornsife, a Waste Control vice president.

By early 2010, Waste Control officials told the conference-goers, the company hopes to begin disposing federal and state radioactive waste at two adjacent Texas landfills in Andrews County. All the company lacks are two final licenses from the Texas Commission on Environmental Quality. One, known informally as the "byproduct license," would authorize the disposal of 3,776 canisters of radioactive waste from a closed, Cold War-era processing plant in Fernald, Ohio, as well as mill tailings from the Texas uranium mining industry. TCEQ has issued a draft license for the byproduct dump.

The second license would allow the company to bury low-level radioactive waste from federal and state sources, including nuclear reactors, weapons programs, and hospitals. With both licenses, Waste Control could bury more than 60 million cubic feet of waste over the span of 30 years, more than half the volume of the new Dallas Cowboys stadium.

If Waste Control can repel legal challenges by environmental organizations and secure final approval from TCEQ for the second license, its remote site in Andrews County would become the

repository for commercial nuclear waste from Texas, and also Vermont as part of a "compact" between the two states. A loophole in state law, however, allows the state compact commission, an oversight board appointed by Gov. Rick Perry, to contract with other states and compacts for waste disposal. "For political reasons, we don't want anyone to come knocking on the door until we get this up and operating, but I think there are some capabilities there," Dornsife told his Phoenix audience.

Federal radioactive waste, mostly the leftovers from the U.S. government's atomic weapons program, is the most lucrative of the waste streams contemplated by the company. In 2003, as part of Waste Control-backed state legislation that authorized privatized radioactive waste disposal in Texas, the Legislature granted companies like Waste Control the right to dispose of Cold War-era federal waste as well as waste generated by states.

"[W]e just had to get the state law changed," said Rod Baltzer, Waste Control president, at the conference. It probably didn't hurt that Dallas billionaire Harold Simmons owns Waste Control through Valhi. Simmons is one of top campaign contributors to the state's Republican leadership. The new landfills would join Waste Control's expanding waste portfolio, all of which are clustered on the company's 1,338-acre site in Andrews County, near the New Mexico state line. The company's radioactive waste treatment and storage plant opened in 1997. The license for that facility is "very unique," Dornsife said, because it allows for "unlimited storage time, and we could go to unlimited [radio]activity."

There's also the hazardous waste landfill. Half of that dump is actually filled with radioactive waste, material the state has deemed "exempt" from radioactive disposal standards. The company's efforts to broaden the exemptions are ongoing. "[D]isposing of radioactive material at [hazardous waste] pricing is extremely cost-effective," Dornsife said.

In their conference presentations, Baltzer and Dornsife failed to mention the problems the company has encountered with worker exposure to radiation. And while Baltzer admitted that the licensing process has been "brutal," he didn't detail the rift it has created within TCEQ between scientists and engineers, who stridently object to Waste Control's plans, and agency upper management that wants to approve the licenses.

In March 2005, Waste Control began processing radioactive waste from the Rocky Flats plant, a site in Colorado that manufactured plutonium triggers for the United States' Cold War-era hydrogen bomb program. On June 2, 2005, while processing this waste, a worker known in state documents as Number 67 at Waste Control's mixed waste facility was wounded on his leg by a piece of contaminated metal. The company tested the worker's urine and feces, and found elevated levels of two plutonium isotopes, as well as americium-241. Later in June, an independent expert determined that the worker had probably inhaled the radionuclides. Over the next few months, as processing of the Rocky Flats waste continued, the investigation expanded to include eight of Number 67's co-workers. All but one tested positive for low levels of radionuclides, including one employee who hadn't worked at the mixed waste facility for three years. On September 22, Waste Control management decided to suspend operations at the mixed waste facility and expand the testing to virtually all employees.

In all, 43 individuals had been exposed to plutonium and americium, company testing showed, according to documents uncovered by the *Observer*. According to Waste Control, a ventilation system wasn't working properly, allowing plutonium and americium particles to escape into the lunchroom and adjacent hallways.

Waste Control maintains that the radiation exposures were not dangerous. The highest calculated dosage to any employee was "less than 10 percent of the regulatory limits," according to a January 2008 Waste Control report. "We did find a handful of employees that were over our planned exposures; they were below regulatory concern," said company president Baltzer in an interview with the *Observer*. "We are very fastidious about applying ALARA—as low as

reasonably achievable—principles. ... We did note that we had some ways to improve our program. Partially as a result of this, we changed out our general manager ... We think some of the employees were not as thorough in their conduct, in their operations, as they should have been."

A TCEQ audit of the company's incident report questioned Waste Control's dosage calculations and its handling of the situation. Waste Control officials assert that the workers were exposed to plutonium and americium-241 over a six-month period covering the summer of 2005. In contrast, the TCEQ audit, completed in spring 2007, posits that the exposures "might have been going on since 2002, at least intermittently at a minimum." The audit suggests that the company underestimated the number of batches of radioactive waste that were processed. If that were the case, the actual doses might be much higher than company reports indicate. The audit notes that a preliminary review by John Poston Sr., a professor of nuclear engineering at Texas A&M, "suggested WCS employee doses were ... seven times greater than the WCS-assigned employee doses, but still below regulatory [limits]." The agency has declined to release Poston's complete findings.

The TCEQ audit also criticized Waste Control for waiting months to suspend operations after it learned employees had been exposed. "It is my opinion that WCS management did not act in a timely manner in their decision to suspend operations until the source of the intakes could be identified," wrote Sheila Meyers, a TCEQ chemist who authored the audit report. Baltzer said the company began testing workers as soon as possible, and temporarily closed the facility once conclusive lab results were received.

The radioactive contaminations were in large part preventable, the audit noted. Waste Control acknowledged in a report on the incident that testing employee fecal samples could have caught the exposures sooner. That failure to test may be partly the fault of state regulators. In 2003, the Department of State Health Services dropped a requirement that Waste Control test employees' feces annually for the presence of radionuclides. Instead, the analysis could be "performed at the discretion of the [company's] radiation safety officer."

Four male workers tested positive for radionuclides in 2007, according to TCEQ documents. One employee told inspectors in an August 2007 interview that "the air vents at the mixed waste treatment facility had not been fixed completely."

In August 2007, Susan Jablonski, the head of TCEQ's radioactive materials division, provided her boss, Deputy Director Dan Eden, with a written update on the review of Waste Control's two license applications. In the memo, which is stamped "confidential," she identified "radiation protection" as one of four major outstanding problem areas. "The radiation protection issues appear not to be under control at the larger site," she wrote. "The apparent loss of control of radioactive materials also impacts the ability to establish true background [radiation] at the site." Background, or natural radiation, is necessary as a baseline so that leaks can be detected. TCEQ would not make Jablonski available for an interview. The agency did not respond to written questions before the *Observer* went to press.

The TCEQ hasn't issued any violation notices to Waste Control for the radiation exposures. There have been other accidents involving radioactive material at Waste Control's facilities. In October 2005, two state inspectors visited the site in Andrews to investigate a string of contamination events, including the worker exposures. Their report notes three other "cross-contamination" incidents that had occurred in as many years: one involving tritium; one involving radon gas; and a leakage of americium-241 and plutonium-239 into a septic system. This string of problems "reflects either defects in ventilation scheme or inadequate administrative controls to prevent cross contamination of facilities," the inspectors wrote.

Recently, Waste Control agreed to pay \$151,000 in fines to TCEQ for contaminating septic systems on two occasions, and for elevated levels of heavy metals such as arsenic, lead, and mercury at a railcar unloading area.



TCEQ whistleblower Glenn Lewis

Photo by Daniel Carter

So far, the accidents have not derailed the company's activities. Yet stiff resistance from TCEQ personnel in charge of reviewing Waste Control's proposals has put the company on the defensive. One of the company's fiercest critics, Glenn Lewis was brought on at the TCEQ's radioactive materials division to manage any controversies concerning the application. He quickly soured on the process. "It was obvious from the beginning that the enabling legislation was written for the benefit of, and largely by, this applicant," Lewis said. "That raised immediate concerns about how objective a review of the application could possibly be." In December, Lewis left TCEQ after serving 25 years in Texas state government.

In all, three former TCEQ employees who worked on the Waste Control license applications said they left the agency because of frustration with the licensing process. All three came to the conclusion, after years of working on the applications, that Waste Control's site is fundamentally flawed. "After years of reviewing the application, I submitted my professional judgment that the WCS site was unsuitable," said Patricia Bobeck, a hydrogeologist who worked on the byproduct application. "Agency management ignored

my conclusions and those of other professional staff, and instead promoted issuance of the licenses."

Encarnación "Chon" Serna, Jr. an engineer, said he quit in June 2007 when it became apparent that a license for the low-level radioactive waste landfill would be issued despite staff objections. At the end of the staff's technical review in August 2006, Serna and other staff members decided the application was "very, very deficient" and couldn't be approved. Nonetheless, TCEQ managers decided to move forward, giving the company until May 2007 to address some problem areas. "Around that time I started getting the idea that these people are going to license this thing no matter what," said Serna. "I felt that in clear conscience I couldn't grant a license with what was being proposed."

Serna said that when he left, there were still "thousands of questions in every area of review." For example, he had trouble determining accurate calculations of radiation doses workers might expect to receive when handling soil-like "bulk waste." In 2006, Serna wrote in an internal e-mail that he'd come across 57 scenarios in Waste Control's plan in which workers would be close to radioactive waste. "I think there could be potential exposures to significant doses of radioactivity," he wrote.

His overarching concern, shared by the other former staffers, relates to the site's physical location. Serna said he is convinced that the geology of the site is unsuitable for containment of radioactive waste for thousands of years.

That view was echoed in an August 14 memo prepared by two TCEQ engineers and two agency geologists. The proximity of a water table to the disposal site "makes groundwater intrusion into the disposal units highly likely," the four wrote. Their memo stated that "natural site conditions cannot be improved through special license conditions" and recommended denial of the license.

The next day, Susan Jablonski conveyed those concerns to Deputy Director Dan Eden, who reports directly to Executive Director Glenn Shankle. Waste Control "states the second water table is no closer than 14 feet from the bottom of the low-level landfill," read her memo to Eden, which is stamped "confidential." A staff analysis, she wrote, "shows that the water table may be closer than 14 feet."

Company president Baltzer told the *Observer* that the former staffers' fears are outdated and overblown. Once Waste Control heard that staff had lingering concerns about the groundwater situation, the company began drilling new boreholes and wells to verify that water wasn't present in or near the landfill. Waste Control has spent \$3 million on the drilling and found no water, Baltzer said. "WCS's license application demonstrates that the site will protect human health and the environment and that water will not intrude into the proposed disposal units under any credible scenario," he said.

In September, the two TCEQ teams working on Waste Control's applications gathered to rehearse a presentation they would be giving Executive Director Shankle later that day. "The entire gist was to communicate the impossibility of licensing either facility," said Lewis, who resigned in December. "As we were adjourning, [Deputy Director] Dan Eden remarked to [TCEQ attorney Stephanie Bergeron Perdue], 'We have to find a way to issue a byproduct license.' This was after an hour-long presentation on why it would be unwise to issue a license for either the byproduct or low-level application."

As staff opposition grew, Waste Control took its case to the agency's upper management. Lobbyist and attorney Pam Giblin, who represents Waste Control, met with Shankle once in September and twice in November, according to agency records. Baltzer left nine messages for Shankle and four for Eden between July 2007 and January 2008, according to phone logs that reflect only missed calls. Eden met with Waste Control officials at least five times during that period. Former Republican Congressman Kent Hance, a Waste Control investor and chancellor of the Texas Tech University System, paid a visit to Shankle's office in early November. Cliff Johnson, a principal in Textilis Strategies, an Austin-based firm that lobbies for Waste Control, visited with Shankle in September. Shankle also met with Giblin, Baltzer, and Mike Woodward, a Waste Control lobbyist and attorney with Hance's law firm, during that period.

The TCEQ higher-ups were in a bind: Their own technical experts had unequivocally recommended denial, and two members of the team had left in disgust. Yet the agency's managers still wanted to push the licenses forward.

"In late October, Susan Jablonski acknowledged in writing to senior management in the agency that faulty site conditions exist and that they cannot be corrected through license conditions," said Lewis, the former staffer. "What is baffling is that Ms. Jablonski—at the same time acknowledging the inherent impossibility of correcting a bad application—still pledged to support whatever nonsensical recommendation her boss may decide to pursue."

By late October, Waste Control had a draft license in hand for its byproduct dump. TCEQ Executive Director Shankle had chosen to deal with his staff's objections by adding stipulations to Waste Control's licenses, including a requirement that the company conduct further studies on erosion, groundwater, and possible fractures. In March, he rebuffed the Sierra Club's call to rescind the license. A draft license for the low-level landfill is currently being written.

Waste Control Specialists, a Dallas-based firm, wants to install a radioactive waste dump, similar to this one in Clive, Utah, in Andrews County near the New Mexico border.

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West Texas radioactive waste site a hot topic

TCEQ scientists, citing water issue, want application for license denied

By JANET ELLIOTT

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AUSTIN — The executive director of the state's environmental agency is poised to recommend a radioactive waste dump in West Texas despite a report from agency scientists who said nearby groundwater makes the site unsuitable.

Two geologists and two engineers who reviewed the proposed location in Andrews County, on the New Mexico border about 130 miles northwest of Midland, concluded in August that the license application by Waste Control Specialists, a politically connected Dallas firm, should be denied.

They said one water table may be closer than 14 feet, making it "highly likely" that water could seep into the dump as annual rainfall increases due to climate change.

"Analysis of available data shows that groundwater in the natural system already is unacceptably at or near the boundaries of the proposed disposal units. Predicted increases in rainfall are expected to drive the water tables into the proposed units," the team said in an interoffice memo obtained by the Houston Chronicle through a public information request.

They said Waste Control Specialists failed to show that its site complies with a state law requirement that water "shall not intrude into the waste."

WCS is seeking two licenses to store low-level radioactive material at a 1,300-acre former ranch in Andrews County. The company is owned by Harold Simmons, a top donor to Gov. Rick Perry and other state politicians.

The firm has done extensive soil sampling and well drilling that shows the site is safe, WCS President Rodney Baltzer said.

Baltzer took his company's case directly to TCEQ Executive Director Glenn Shankle in September after learning of the staff's concerns.

"We mobilized and prepared a pretty extensive presentation," he said.

TCEQ also responded to the review team's concerns, requiring additional soil sampling and computer modeling that must show the waste material would remain unsaturated at all times before construction could begin, according to a draft of the license provided Friday by the agency.

"The initial conclusions in the Aug. 14, 2007, memorandum did not take into account draft license provisions that were subsequently developed by the technical review team," Susan Jablonski, an engineer who directs the agency's radioactive materials division, said in an e-mailed statement. "The executive director supports the team's ongoing review to ensure the protection of human health and the environment, as the agency proceeds with finalization of the draft license."

But more monitoring of the site won't address the fundamental problem of the area's geology, said Glenn Lewis, a technical writer who worked with the TCEQ team that evaluated the dump site until he resigned from the agency last December.

Lewis warned agency officials that their decision to support the license would subject TCEQ to "public ridicule."

"These facilities are supposed to contain the radioactive waste safely for tens of thousands of years," Lewis said. "Fourteen feet is not much of an insurance policy for tens of thousands of years."

Baltzer said he expects Shankle to sign off on a low-level radioactive waste disposal draft license sometime this month. That would trigger a public comment and hearing period that could last one year, with the three-member commission deciding whether to issue the license or not.

Strong support

Although water-bearing deposits are closer to the arid red clay dump site than WCS initially believed, Baltzer said the moisture poses no threat to the public in either the near future or thousands of years from now, when some of the waste will still be radioactive.

He said the company used computer modeling to assess what would happen to the water if rainfall increased from the current average of 16 inches per year to 60 inches.

"It got close but it did not get into the landfill," Baltzer said.

Meanwhile, WCS is intensifying efforts to promote its facility in Andrews County, where support has been strong. The company hosted a barbecue Saturday, featuring Texas Tech University Chancellor Kent Hance, vice chairman of the company's board of directors.

Andrews County Judge Richard Dolgener said last week that he hadn't heard that TCEQ technical reviewers had opposed the license. He said such concerns might need to be aired in the community, although at this time he doesn't see any problems with the project.

"We've always had good science for that thing to be here," he said.

Simmons, an investor who has other business interests, has donated nearly \$500,000 to Perry since 2001. Perry has named all three members of the environmental commission, who will ultimately decide next year whether to approve the waste sites.

In 2007, Simmons was the state's third top political contributor, giving \$655,000 to mostly Republican officeholders and political action committees.

WCS has spent more than four years and tens of millions of dollars seeking to develop the nation's largest private disposal site for low-level radioactive waste. The TCEQ licenses it seeks would allow it to store radioactive materials from Texas and Vermont nuclear power plants (although not the highly radioactive fuel rods), medical and industrial facilities and some federal weapons programs.

The licenses would be lucrative, allowing WCS to meet demand for stores of radioactive waste as existing dumps fill up and close. Texas is one of several states where public opposition has killed plans to develop publicly run radioactive waste dumps.

"Our goal is to be a one-stop shop for radioactive waste materials," said Baltzer, referring to an operation that will treat, package and dispose of problem waste.

License protested

In October, TCEQ officials issued a draft license that, if made final, would allow WCS to dispose of radioactive waste byproducts, which includes leftover equipment and residue from uranium mining and processing. Byproducts material is less toxic than low-level radioactive waste.

The Sierra Club and several citizens from Eunice, N.M., which is just six miles from the WCS site, are protesting the byproducts license and have filed requests at TCEQ for public meetings and review of the application by a state administrative law judge.

Andrews County, which has a population of about 15,000, and the state would each get 5 percent of the gross receipts from the dump operations.

Local officials initially viewed the WCS facility as a way to diversify their oil-dependent economy. Now, however, record-high oil prices have turned Andrews, the county seat, into a mini-boomtown.

State Sen. Robert Duncan, R-Lubbock, sponsored a bill in 2007 that transferred application review of the byproducts dump from the Department of State Health Services to TCEQ. He said TCEQ has the expertise to consider all the issues.

"If that expertise is being overruled, there should be a compelling reason why," he said.

Lewis, a 59-year-old former journalist who joined TCEQ in 1992, said the handling of the WCS application prompted him to resign from the job where he earned about \$60,000 a year.

He said he wants to speak publicly about the area he calls a "nuclear Las Vegas" because of a New Mexico uranium enrichment plant being constructed just across the border from the WCS site.

"It seems irresponsible to create a situation that is ultimately going to lead to a massive cleanup by people in the future," he said.

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Burying the Opposition

A plan for radioactive waste burial is so bad even some TECQ staffers think it should be killed. Fat chance.

Forrest Wilder | December 11, 2007 | Texas Observer

For more than a decade, Waste Control Specialists has had big plans for a desolate corner of the West Texas oil patch near Andrews along the Texas-New Mexico line. There, this aggressive company, controlled by Dallas billionaire and major Republican donor Harold Simmons, has been preparing a permanent home for some of America's most unwanted waste, a sort of poisonous melting pot. Along the way, Simmons has donated millions of his fortune—\$1.3 million to Texas politicians in 2005 and 2006 alone—to help political leaders see the value of his plans.

Waste Control, a subsidiary of Simmons' holding company, Valhi Inc., has already wrangled permits from state regulators allowing it to dispose of hazardous and toxic wastes, and to operate temporary storage and processing facilities for radioactive waste. In 2006, Waste Control scored a major contract from the U.S. Department of Energy to temporarily store thousands of tons of highly-radioactive tailings from a Cold War-era uranium processing plant in Fernald, Ohio. Utah and Nevada had rejected the waste. PCBs dredged from the bottom of the Hudson River, an EPA Superfund site, will start arriving by rail from New York in 2009.

The right to permanently dispose of radioactive waste has long been the company's Holy Grail, the key to unlocking billions in revenues. Waste Control, a small corner of Simmons' business holdings, consistently loses money (\$9.7 million in the first three quarters of 2007, according to Securities and Exchange Commission filings). Burying vast quantities of state and federal nuclear spoils in the red clay of West Texas could make the outfit a national player. As other radioactive waste dumps around the nation close or curtail their operations, Waste Control is anxious to close the deal in Texas.

The Texas Commission on Environmental Quality appears on the cusp of granting the company two permits it covets, despite the objections of some of the agency's own scientists and engineers. They worry that the company's political clout will trump their fears of a future environmental disaster, and say the company's permit application is shoddy and incomplete. In documents obtained by the Observer, several TCEQ staffers assert that Waste Control's current application for one of two planned waste dumps is out of step with the law.

TCEQ did not respond to repeated *Observer* requests for responses to the startling charges made by some of its staff, or to explain why some of those concerns have been omitted from the draft license documents released for public comment.

A spokesman for Waste Control says the company's license application was "thorough, complete, technically correct," and addressed safety concerns.

In 2003, after years of failed attempts, Waste Control managed to ram a bill through the Texas Legislature privatizing radioactive waste disposal in the state. It allowed a private entity—and Waste Control was the only one in line—to apply for a permit to construct a landfill for federal and state low-level waste. In 2004, Waste Control sought permits to build permanent dumps for two different categories of radioactive waste, technically known as "low-level" – generally remnants from nuclear reactors – and "byproduct material," which includes uranium and thorium mill tailings and radioactive soil.

In October, the TCEQ issued a draft license and environmental analysis for the byproduct waste dump. The draft license terms are being challenged by the Sierra Club—which says it is not restrictive enough—and Waste Control, which says it is too restrictive. The draft permit would

allow the company to dispose of up to 1.17 million cubic yards of waste with up to a total of 24,530 curies of radioactivity. (A curie is a measure of radioactivity energy.)

Along with environmental groups, some TCEQ insiders are publicly and privately expressing grave concerns about Waste Control's plans. They argue that the company's voluminous application has failed to prove that the landfill will be safe for people and the environment.

Specifically, they worry that the landfill, as proposed, could contaminate groundwater with radionuclides; that the same High Plains winds that gave birth to wind farms might spread soil-like, radioactive byproduct around the region; that workers could be exposed to harmful levels of radiation; and that rail deliveries of waste could be unsafe for towns along the route.

The company proposes burying the byproduct waste in a 16-acre pit, about 100 feet deep, that would remain open for 30 years and then be sealed. Five years after it is closed, the state or federal government would assume responsibility for the site for the next few millennia.

"WCS stands to make millions on this and stick the liability with the taxpayers," says a former state regulator familiar with the application.

The regulator, who spoke on condition of anonymity for fear of retribution, says the framework for the byproduct dump license is outdated and inadequate, based on rules that were written for already-contaminated uranium mining operations in South Texas rather than a new commercial landfill for radioactive materials.

"WCS exploited a loophole in the regulations to apply for this landfill," says the former regulator. "The regulations require WCS to only look 200 years into the future as to how far the groundwater contamination may have migrated, when in fact, the waste is going to be radioactive for much longer than that."

Retired geologist Stephen Etter says he left TCEQ in 2002 rather than suffer through what he expected to be a less-than-rigorous review process for Waste Control. "I had a real concern that the information requirements for the Andrews County site would not be nearly as extensive as the Sierra Blanca site," Etter says, referring to the proposed state-run radioactive waste dump in West Texas that was killed in 1998 after a massive public outcry.

Critics charge that the application Waste Control submitted is riddled with incongruities, errors, and subtle evidence of reverse engineering. "The [byproduct] application was voluminous, but it was very poorly organized and written, making it very difficult to decipher or to figure out what [WCS] was planning to do," says the former regulator. "It was presented in a very amateur way, with big chunks of data you needed to review it not there. It wasn't well thought out. It was contradictory and inconsistent from one page to the next, from one section to the next."

For example, computer modeling performed for the low-level waste permit application shows that radioactive waste in the byproduct dump will come into contact with groundwater. Waste Control did not include these findings in its byproduct application, according to a report by two TCEQ geologists working on the byproduct licensing review team.

The geologists wrote in a draft technical review of the application that they are "uncertain" why this information wasn't included, since it "shows that the site features do not assure isolation of the waste material," a key requirement for a potential radioactive waste site.

Waste Control also omitted specific data on the "nature and width" of fractures in the red-bed clay in which the landfill is located. The gaps could be pathways for contaminants to reach underground water sources, according to the geologists. Waste Control ran a computer simulation of water movement based on a maximum fracture size of 300 microns, about the width of three to six human hairs. On this assumption, the company calculated that it would take

at least 70,000 years for radionuclides to reach saturated sands. However, the geologists assert that Waste Control never gave any justification for the use of a 300-micron fracture or any research on the actual size of fractures in the landfill area.

Waste Control has bragged to legislators, regulators, industry, and the media about the impermeability of the red-bed clay that underlies the site. A narrow portion of the Ogallala Aquifer, the primary source of water for much of the High Plains, is near the landfill. The landfill will be excavated into the Dockum Group, a minor aquifer used for irrigation and municipal water. Usable groundwater from the Dockum is found about 500 feet below the proposed byproduct dump. In a document obtained by the *Observer*, two TCEQ geologists concluded that these problems and others were so serious that the application did not meet the requirement that "the issuance of the license will not be inimical to the health and safety of the public." This part of the geologists' technical review was not included in the publicly released environmental analysis.

TCEQ would not make Susan Jablonski, who directs the agency's radioactive materials division, available for an interview, instead insisting that questions be submitted in writing. By press time, the agency had not provided responses.

Another technical report, the process engineering review, raises the possibility that if the waste is not sealed in containers, high winds in the area could disperse the soil-like material outside of the pit, spreading radioactive contamination. Waste Control argued in its application that "windblown dispersion is expected to be minimal" because of the natural protection offered by the landfill and the use of water sprays for dust suppression. The company also says it will stop work when winds reach 25 mph. However, the TCEQ process engineer notes that Andrews County lies in the "highest dust emission zone in the southwestern United States" and that winds in the area sometimes exceed 50 mph.

Lou Gloystein, the author of the engineering review and a TCEQ engineer, also criticizes Waste Control for not checking the condition of a railroad line in southeastern New Mexico that apparently will be used to transport waste. He also raises the specter of "the potential for fire and explosion involving [hazardous] wastes," which might affect the railcar receiving area for the byproduct dump, and "cross-contamination" between the adjacent byproduct and low-level landfills.

In the executive summary of the engineering report, Gloystein disparages the Waste Control application as "difficult to review," "fragmented," and "contain[ing] significant errata." These comments were not included in the agency's draft environmental analysis.

Gloystein's report suggests a motive for Waste Control's haste. "The proposed site in Andrews County appears to have been selected primarily because it is already owned by WCS, and currently represents a significant capital investment in land and existing facilities."

As far back as 1987, before WCS had been formed, the state was questioning the suitability of locating a radioactive dump in Andrews County. The state-run Low-Level Radioactive Waste Disposal Authority sent a team out to Andrews to investigate. The team described the site as "marginal," and Rick Jacobi, then general manager of the authority and now a Waste Control consultant, decided to scratch Andrews County as a possible site. In 1996, two years before the state rejected the contentious Sierra Blanca site, geologist Etter prepared another unfavorable report on Andrews.

Now retired and living in Austin, Etter says he prepared the memo on his own initiative because Waste Control had begun discussing its desire for a radioactive waste facility with state regulators. In the memo, which he took heat for, Etter used rough calculations to predict that "wastes disposed of at the WCS site could be exposed and removed within 5,000 years."

"All I was saying was, 'Hey, this site is an erosional regime'," Etter recalled. "It's actually losing material, and it will eventually be eroded away ... I still think that's probably the case." Waste Control contends the site is actually "aggrading," the opposite of erosion.

The draft license, issued in October, addresses many of the staff's concerns by imposing 96 conditions on the company. Under the draft license, Waste Control would have to put the waste in containers, bring it in by truck instead of rail, and conduct further study of groundwater and engineering. However, in a voluminous filing during the public comment period, Waste Control proposes "alternative language," which in many cases means striking or altering many of the license conditions. In all, the company proposes 59 modifications to the license conditions, including eliminating the container requirement, allowing rail transport, increasing the level of radioactivity allowed at the dump, and shifting toward monitoring conditions at the site versus verifying them before building the landfill.

"WCS is proposing changes to the individual license conditions to be consistent with the license application and the license application was thorough, complete, technically correct and fully addressed the safety and potential health effects of the proposed" byproduct facility, said Chuck McDonald, a WCS spokesperson. McDonald said that modeling done by the company shows that containerization is "not required for safe disposal."

WCS also proposes major edits for the civil engineering, process engineering, environmental health physics, and operational health physics sections of the Environmental Analysis, gutting or weakening critical passages. In the case of the geology section, WCS simply asks to replace TCEQ's skeptical language with an assessment written entirely by their own consultants.

"Everything that was said about the environmental analysis was done in a fashion that was consistent with the license application," said McDonald.

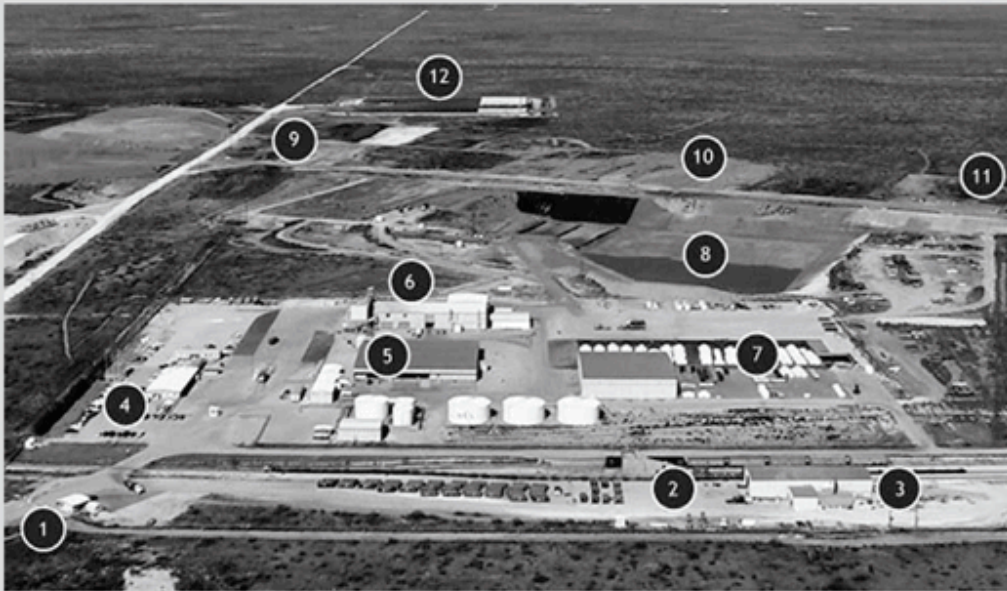
"From our perspective, what happened is it was a shoddy application, TCEQ reviewed the application, saw it was shoddy, and added in the draft license a bunch of conditions to make up for the fact that the applicant failed to show it was a safe site," says Cyrus Reed of the Sierra Club; he had not reviewed Waste Control's latest filings at press time. The Sierra Club argues in public filings that the license should never have been issued and asks for a contested case hearing on behalf of 11 New Mexico residents and Sierra Club members if the draft license is not scrapped.

Critics say they believe TCEQ, under pressure from the company and its political allies, is speeding recklessly toward final approval, perhaps within 60 days. A draft license for the low-level waste facility, which some environmentalists say is the worse of the two, is expected soon as well. This favorable treatment of Waste Control was set in 1994, when the company got its first permit from the state in record time.

"There was always some, I don't know, feeling that their hazardous material permit had been issued rather quickly," says Edgar Bailey, a retired health physicist for the Department of State Health Services. "It just sort of left a bad taste in people's mouth in how the company operated vis-a-vis the regulatory agency. They tended to seek political solutions."

Critics fear politics will allow Waste Control to prevail on its new permit applications. "I think that the agency is generally in the business of promoting business and doesn't regard the environment on an equal footing with business," says the former regulator, "and I think particularly in this case, given the ownership of WCS, that there is pressure to approve this in spite of the harmful effect to the environment."

Waste Control Specialists Site in Andrews County



1. Access road to 1,338-acre fenced site (*guarded entrance*)
2. On-site rail spur and rail-unloading facility
3. Maintenance building
4. Administration building with analytical and radiological laboratories
5. Container Storage Building
6. Stabilization Building (*left portion*) and Mixed Waste Treatment Facility (*right portion*)
7. Bulk/Bin Storage Units
8. Hazardous waste landfill (*being expanded to the East*)
9. Proposed location for byproduct radioactive material landfill
10. Proposed location for Federal low-level radioactive waste landfill
11. Proposed location for Texas Compact low-level radioactive landfill
12. Ten-acre storage area for low-specific-activity

Map adapted from www.wcstexas.com

Laying Waste to West Texas

FORREST WILDER | FEBRUARY 18, 2005 | CAPITOL OFFENSE

Going Nuclear in West Texas

BY FORREST WILDER

Like nuclear waste, bad ideas never seem to go away. Long-time *Observer* readers will remember the decades-long knock-down drag-out fights over where to put a radioactive waste dump. The last major episode was in 1998, when an unusually effective citizen-led campaign succeeded in persuading the Texas Natural Resources Conservation Commission (now the Texas Commission on Environmental Quality (TCEQ)) to deny the license for a low-level radioactive waste dump in Sierra Blanca. Oddly, not just the people of Texas celebrated this victory. A particularly aggressive and well-connected private outfit, Waste Control Specialists (WCS), backed by Dallas billionaire Harold Simmons, saw opportunity in the Sierra Blanca site's demise. Now, because of WCS's deep pockets, deeper political connections, and dogged persistence, Texas could soon find itself the national dumping ground for state and federal, commercial and governmental nuclear waste.



Sen. Robert Duncan (R-Lubbock) tries to get to the bottom of WCS schemes.

photo: Senate Media Services

On February 1, Sen. Robert Duncan (R-Lubbock), whose district lies near WCS-owned land in Andrews County in West Texas, organized a hearing for the Senate Committee on Natural Resources. Chair Sen. Ken Armbrister (D-Victoria), who accepted \$2,500 in campaign contributions in 2004 from WCS interests, called it a "fact-finding mission." Sen. Duncan was intent on getting to the bottom of just what WCS was up to. He and several other senators seemed blindsided by WCS's multiple (and multiplying) schemes to accept state and federal radioactive waste streams. Under legislation passed in 2003, WCS has a license to process, store, and dispose of hazardous and toxic materials at its mammoth

site in Andrews County, near the New Mexico border. Now WCS is back asking for more. As Sen. Duncan related, the company has several pending applications into the TCEQ and the Department of State Health Services (DSHS) that, if approved, would vastly expand WCS's fledgling radioactive empire in West Texas.

One of the DSHS licenses would allow WCS to begin accepting the leftovers from a retired bomb plant in Fernald, Ohio, for permanent storage—some 10 million cubic feet to be brought in on an estimated 800 railcars. This Ohio nuclear waste is at least four times (and up to 140 times) more radioactive than the average gram of uranium waste, according to Richard Ratliff, chief of the bureau of radiation control of DSHS. The TCEQ license would also allow WCS to permanently dispose of Texas' (and other states') commercial radioactive waste as well as federal low-level radioactive waste. Additionally, WCS has its eyes on a proposed uranium enrichment facility right across the border in New Mexico that could conveniently hand over its by-product—depleted uranium—to WCS for disposal. WCS, a company that consistently reports quarterly losses to the Securities and Exchange Commission, stands to make billions of dollars from these deals. The state and the people of Texas, however, won't receive a cent on most of this revenue.

In a presentation to the committee, Sen. Duncan reviewed what transpired in the 2003 legislative session. WCS, after years of failed attempts and millions of dollars spent on political contributions and high-dollar lobbyists, finally succeeded in getting a bill passed, House Bill 1567, that catered to its interests. HB 1567 essentially authorized a private radioactive waste facility in Texas for this state, Vermont, and possibly others. Although it technically allowed any

private company to apply to establish the dump, WCS was the only company that was positioned to qualify. Vermont comes into the picture because of a "compact" agreement that states can enter into that makes one state—Texas, in this case—a host for other states' low-level radioactive waste. But because of a loophole, any other entity—including a foreign government—can opt into the compact with the majority consent of the compact commissioners, according to Richard Simpson, a long-time activist who has worked on anti-nuclear waste dump campaigns in New Mexico and Texas.

Sen. Duncan also reminded the committee that the Legislature had authorized a private company to process and (temporarily) store *federal* low-level radioactive waste in addition to the compact waste. Sen. Mike Jackson (R-La Porte) seemed to have forgotten this fact. "We formed the compact to avoid being a dumping ground for the federal government," he told George Dials, President of WCS. Dials, who was testifying in front of the committee, gently corrected Sen. Jackson. In fact, in the lead-up to passage of HB 1567, WCS's proxies had convinced lawmakers that compact waste alone wouldn't generate enough revenue to keep WCS afloat, the loophole notwithstanding. Obliging, legislators passed the bill without any meaningful caps on the amount of federal waste the company can accept. As a result, WCS potentially has full access to massive amounts of nuclear waste that the feds have been trying to unload since the Cold War.

If Dials succeeds in landing a permit from the TCEQ for (permanent) disposal of "low-level" radioactive waste, Andrews could be the home for vast amounts of this waste forever. Luckily, TCEQ's permit process is relatively stringent and a decision isn't expected until December 2007. According to an official with TCEQ, WCS was recently issued its "third notice of administrative deficiency." If not corrected, WCS would have to start the licensing process all over again. TCEQ oversight of the compact and federal low-level radioactive waste was a concession won by Sen. Duncan in 2003. Perhaps that's why he seemed a little miffed at the prospect of DSHS—seen by many as a regulatory pushover—handling the application for the Fernald waste. One of Sen. Duncan's concerns is that the agency will approve WCS's applications before the Legislature has time to intervene. The Legislature "has never considered whether the state of Texas should be a commercial importer of [Fernald radioactive materials]," Duncan said at the hearing.

The twist is that WCS may not even need to get its disposal permit granted to become the nation's repository for aging Cold War waste. A "perfect storm" may make it one by default. On February 7, President Bush announced major budget cuts to the environmental cleanup budget of Fernald and two other similar facilities. According to the Alliance for Nuclear Accountability, a grassroots network that monitors nuclear issues, that kind of pressure forces the Department of Energy to find a permanent home for their radioactive waste soon. Currently, the other states that could feasibly accept Fernald-type and other low-level radioactive waste—Nevada, Utah, and South Carolina—are signaling their intention to cut back or get out of the business.

Nevada, which is still fighting to rid itself of the Yucca Mountain high-level waste site, has said that it will also fight any attempted low-level importation. In a letter to the DOE, Nevada attorney general helpfully mentioned WCS's site as an alternative. Utah, which is home to WCS's long-time rival Envirocare, has been moving away from radioactive dumping due to public opposition. Finally, South Carolina is eliminating the importation of the most radioactive of the low-level waste despite its generating an estimated \$300 million in revenue for the state. That leaves WCS holding a virtual monopoly. Sen. Duncan argues that "once we get the [Fernald waste] here we're going to have to dispose of it most likely," even if WCS is only permitted for storage, not disposal.

The final wild card in WCS's and Texas' radioactive future is the proposed uranium enrichment facility that lies, in the words of Sen. Duncan, "a nine-iron chip away from the [Texas] border" in New Mexico, next door to WCS's facility. An initial agreement has already been inked to create a private uranium plant that will take dangerous depleted uranium coming from the proposed National Enrichment Facility (NEF) outside of Eunice, New Mexico, and try to make it a little more chemically stable.

Sen. Duncan pressed Dials on the matter. "In addition to the waste that we authorized last session and the compact waste, potentially now there's another source of waste that could be disposed of at your site. We could anticipate that in 2008, you might come back to ask for an amendment to allow you to take that waste," said Duncan. After some hesitation, Dials responded. "Yes," he said.

And why can't the depleted uranium just stay in New Mexico? Simple: The state and its people don't want it.

WCS is promoting its various radioactive ventures as a popular jobs program for West Texas and a chance for Texas to seize the market in "an emerging industry." On hand at the hearing to drive his point home was Robert Zap, the mayor of the city of Andrews, and Russell Shannon, Vice President of the Andrews Industrial Foundation. They recounted the hard times their area fell on after the oil crash in the '80s, and plugged the jobs that an expanded dump would create. What they didn't mention was their county's zeal for high-risk holes in the ground no one else seems to want: the national, high-level radioactive waste site (now slated for Yucca Mountain), the failed supercolliding superconductor, and the hazardous and toxic materials dump WCS currently operates at its facility. Shannon told the committee of a sign outside Andrews that promotes the area's values: God, Country, and Free Enterprise. "We hope the Legislature takes no action to impede our growth," Dials said.

WCS has spent a lot of time and money to get to this point. They've been helped along the way by lawmakers either too shortsighted or too indebted to pay attention to WCS's expanding ambitions. HB 1567 allows for a total of 162 million cubic feet of federal low-level waste—virtually all of it. In addition, the Fernald waste is estimated to be 1.3 million cubic feet. The Sierra Club estimates that WCS could generate \$100 billion in profits on the federal waste it's already allowed to accept, to say nothing of the waste from Ohio. That's a nice return on the millions WCS and its affiliates have sunk into political contributions to state and federal candidates, parties, and PACs over the years. (According to Andrew Wheat of Texans for Public Justice, Harold Simmons, one of the company's principals, was the state's number four political donor in 2004, paying out \$548,250. From January 1, 2003, to late October 2004, WCS-related contributions totaled \$843,200. Several members of the Senate Committee on Natural Resources have received significant contributions from WCS and its affiliates.)

It will be hard for a Republican senator, even one with a thoughtful take on the issue, to undercut a company that has dispensed favors so generously to Republican candidates. "Duncan has to realize that he's up against some major donors," according to Colin Leyden, the Legislative Director for Rep. Lon Burnham (D-Fort Worth). Nonetheless, the senator from Lubbock finally seemed to get his colleagues to listen when he broached the topic of fees for the state. Under HB 1567, Andrews County and the state of Texas will each eventually receive 5 percent of WCS's gross receipts from compact and federal waste, much less than the amount South Carolina generates for similar low-level waste. However, the Fernald waste stream would generate not a single dime for Texas under the current fee schedule. According to Cyrus Reed, a registered lobbyist with the Sierra Club, some lawmakers are considering imposing a 5 percent fee on the Fernald waste in order to generate revenue for cash-strapped state coffers. Considering the tremendous pressure the Legislature is under to come up with billions in new funding for public schools, it's not unlikely that Texas may follow South Carolina's example and use the fee money to fund public education. The appearance of a quick-and-easy fix may spur lawmakers reluctant to squeeze WCS's profits into action, quickly setting up a fee system for the incoming radioactive waste while putting pressure on TCEQ and DSHS to expedite WCS's applications. "Once [the waste] is a state revenue source you'll never get rid of it," says Leyden. Left out of the mix, of course, will be the short-term and long-term health and environmental consequences of unloading millions of cubic feet of radioactive junk on future generations.

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