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## West Texas a finalist for deep drill site to explore nuclear waste storage

A Dallas company formerly owned by the late billionaire Harold Simmons has already applied to get tons of the nation's nuclear waste stored temporarily in West Texas. Now, a public-private consortium is hoping to drill a hole three miles deep in West Texas to find new long-term radioactive waste storage.

The U.S. Department of Energy announced this week that the Texas site is one of four under consideration. Los Angeles-based AECOM, a construction and engineering firm, is leading the West Texas team with the assistance of the University of Texas' Bureau of Economic Geology and Corpus Christi-based Orion Drilling Company. The other possible test sites include one in South Dakota and two in New Mexico.

"While there obviously won't be any nuclear waste involved in this initial test, it will prove helpful as we continue to seek safe and environmentally appropriate solutions for what to do with the waste products currently stored at the surface," said Texas' state geologist Scott W. Tinker in a written statement.

The Energy Department is studying the feasibility of conducting a deep borehole field test, which is expected to cost about \$20 million to \$40 million. The primary goal is to see if dangerous radioactive waste can be stored at the bottom of these kinds of deep holes.

Only one site would be selected for the test if the Energy Department goes forward with this project. The first phase is scheduled to last through May and focus mainly on community outreach and some additional geological analysis. A drill site could be chosen by late summer or early fall.

AECOM, the lead contractor for the site near Fort Stockton in Pecos County, is a Fortune 500 company that designs, builds, finances and operates major infrastructure projects. The company is also part of the management team of Los Alamos National Laboratory in New Mexico as well as other major energy department facilities.

Federal officials have emphasized that the "field test site would not be used for future nuclear waste disposal." Earlier planning for tests in North Dakota and South Dakota were opposed by many residents fearful this would require their communities to accept nuclear waste in the future.

"Each contracting team selected by DOE will work to reach a cooperative and mutually beneficial agreement with the community before any drilling takes place," according to an Energy Department statement.

Tinker said researchers will collaborate with Pecos County, Middle Pecos Groundwater Conservation District and other local governments. Public outreach is expected to start in January.

West Texas has long been mentioned as a potential site for nuclear waste storage though.

In the 1980s, Deaf Smith County - southwest of Amarillo - was a contender the country's nuclear waste repository before Nevada's Yucca Mountain was chosen. Funding for the stalled Yucca Mountain project was cut off in 2011, which led to this test project.

When agency officials decide whether to go forward with this test, former Texas Gov. Rick Perry is expected to be Donald Trump' energy secretary. Perry's appointment requires U.S. Senate confirmation.



Former Texas Gov. Rick Perry watches from a suite on the final day of the Republican National Convention on in July in Cleveland. (Smiley N. Pool/The Dallas Morning News) Staff Photographer

In 2014, Perry called for his state to enter the radioactive waste race after noting that New Mexico was seeking a high-level waste dump about 50 miles from the Texas border.

"We have no choice but to begin looking for a safe and secure solution for HLW [high-level waste] in Texas - a solution that would allow the citizens of Texas to recoup some of the more than \$700 million they have paid toward addressing the issue," he wrote in that 2014 letter to the lieutenant governor and state House speaker.

Chuck McDonald, a spokesman for the Texas consortium, wouldn't say that Perry's new position would give the Pecos County site an edge. But he said he feels confident having a former energy state governor who's knowledgeable many of these issues.

"It's good to have a guy with hands-on experience," he said.

The Pecos County drill site is controlled by University Lands, which manages 2.1 million acres of land and mineral rights in West Texas. The proceeds benefit the endowments of the University of Texas and Texas A&M University systems.

That property is about 150 miles from the Waste Control facility in Andrews County. That company accepts low-level radioactive waste, such as material used in medical testing. But the company has also applied this year for a permit for to store high-level waste for several decades while the federal government seeks permanent storage.

The federal government hasn't formally accepted that application, but the Nuclear Regulatory Commission has started seeking public comments.

This drilling test is expected to take  $2\frac{1}{2}$  to 5 years. In Texas, workers would drill a hole  $8\frac{1}{2}$  inches wide and 16,400 feet deep in the crystalline rock far below oil and gas exploration depths. Researchers would then collect data on the types and temperature of rocks and water chemistry found at different depths.

The project would also research the potential for geothermal energy, which McDonald said could be even more valuable than the nuclear waste research.

Pecos County Judge Joe Shuster said he has no estimates of the project's potential economic impact. But he hopes the geothermal data is useful.

Shuster said a geothermal project was previously announced in his county but then dropped. Pecos already has some wind power, three solar farms and five more planned.

"We're blessed with it [renewable energy]," Shuster said.