

## **WCS\_CISFEISCEm Resource**

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**From:** Joni Arends <jarends@nuclearactive.org>  
**Sent:** Monday, November 19, 2018 10:28 AM  
**To:** WCS\_CISFEIS Resource  
**Subject:** [External\_Sender] NRC Docket 72-1050 NRC 2016-0231; NRC - WCS EIS 2018

### **CONCERNED CITIZENS FOR NUCLEAR SAFETY**

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November 19, 2018

Ms. May Ma

Office of Administration

Mail Stop: TWFN-7- A60M

U.S. Nuclear Regulatory Commission

Washington, DC 20555- 0001

**Re: Public comments about NRC Docket 72-1050 NRC 2016-0231**

Environmental Impact Statement 2018 for Waste Control Specialists/Interim Storage Partners (WCS/ISP)  
Application for a Consolidated "Interim" Storage Facility License for High Level Waste

Dear Ms. Ma:

Concerned Citizens for Nuclear Safety (CCNS), a Santa Fe, New Mexico non-governmental organization, respectfully requests that the Commission deny/reject the proposals for consolidated interim storage facilities in southeast New Mexico and west Texas. The applications submitted by Holtec and Waste Control Specialists/Interim Storage Partners (WCS/ISP), including the environmental reports, are technically inadequate, unresponsive to the Nuclear Regulatory Commission (NRC) requirements, and do not address the concerns/issues as detailed below. For these reasons, CCNS opposes the siting of consolidated interim storage facilities in southeast New Mexico and west Texas.

CCNS was founded in 1988 to address community concerns about the proposed transportation of radioactive and hazardous waste from Los Alamos National Laboratory (LANL) to the then proposed Waste Isolation Pilot Plant (WIPP) through the center of the City of Santa Fe on St. Francis Drive. The mission of CCNS is *to protect all living beings and the environment from the effects of radioactive and other hazardous materials now and in the future.*

## **NRC HAS PRESENTED AN ILLEGAL APPLICATION FOR PUBLIC COMMENT-- IMPROPER PROCESS**

CCNS respectfully requests the NRC reject/deny the WCS/ISP proposal to consolidate irradiated fuel because it is illegal; such a facility is not allowed under federal law until there is a permanent repository operating.

The WCS/ISP application for a consolidated “interim” storage facility (CISF) license for high-level nuclear waste is illegal. Further, NRC's entire processing of the application is improper. Such facilities are not allowed under U.S. federal laws, certainly not until a permanent facility has been sited. The Nuclear Waste Policy Act (NWPA) requires that a repository be approved **before** any consolidated storage site is licensed.

NRC is wasting taxpayer money and everyone's time because no permanent facility has been sited. Because of problems with permanent underground disposal at both Yucca Mountain and at the failed WIPP site (its mission was to demonstrate the safe underground disposal of transuranic waste and only 15 years into the project there has already been an explosion and radiological release) such a permanent disposal repository is many years in the future. In fact, it may never be built as better options may become possible. There is therefore a very real possibility that if HLW is ever transported to WCS, it would remain there forever and WCS would become a *de facto* disposal facility. Even if the current disposal plan remains in effect it would be better to start working on some of the many unresolved *other* problems with the plan so that a CISF could be a viable possibility when it actually became legal to apply for a license.

From CCNS's point of view, it's difficult to take NRC's acceptance of the CISF licensing applications seriously since at every level of the proposal, there are so many unresolved problems, unsupported assumptions, and so many promises that everything will be worked out in the future.

Nevertheless, NRC has not held new scoping hearings on the environmental impact statement. Why?

## **NO SCOPING HEARINGS—**

Where are scoping hearings with information in Spanish for the large numbers of people in the local area who speak Spanish in the home? The closest New Mexico town to WCS is Eunice where 45% of people speak

Spanish in the home. There are in fact large numbers of Low English Proficiency (LEP) people in New Mexico and in southeastern New Mexico. NRC has made little effort to involve the people in the process.

Further, NRC should have at least as many scoping hearings, spread out along the routes, as were provided for the Yucca Mountain scoping and EIS hearings. Notice and information would need to be provided throughout the country and in a variety of languages so that Low English Proficiency (LEP) persons can participate equally.

## **ENVIRONMENTAL JUSTICE--**

West Texans have experienced environmental racism for decades. People of Color continue to be disproportionately impacted by hazardous, radioactive, and toxic wastes. Analysis of public health, environmental, and cleanup costs must be done for people living around the proposed site and along the proposed transportation routes.

None of the application materials have been provided in Spanish. This is a call for the NRC and WCS/ISP to provide the application in Spanish.

Although the oil and gas economy can be boom and bust, those impacted are less able politically and economically to afford to challenge the proposed dump.

## **MAKE MATERIALS AVAILABLE FOR NON-ENGLISH SPEAKERS--**

Some public hearings for Holtec included minimal information in Spanish, but no materials in Spanish have been provided for the public about WCS/ISP application. The process for WCS/ISP application has been done in a highly discriminatory manner. NRC must make corrections before proceeding with an EIS.

CCNS believes that the entire process needs to be extended both in time and location with many more information meetings, adequate translation of materials, and a truly inclusive process. So far, like the project itself, the hearing process has been both discriminatory, inadequate, and defies logic.

If NRC proceeds ahead, both the Holtec and WCS/ISP applications must be published in Spanish so residents in the region can review them and provide informed public comments.

Further, the NRC must hold public meetings in key communities surrounding the proposed facilities; however,

none are now planned. Translators must be provided. NRC must hold public meetings in key communities along all the potential routes especially in Texas.

## **THE PUBLIC NEEDS MORE TIME TO PROVIDE INFORMED COMMENTS--**

NRC only provided a 30-day extension of time to provide public comments. This is obviously not enough time to provide a thorough review of the application and attached documents. The comment period must be extended by at least 150 days.

Further, for the number of permit modification requests and permit hearings involving waste generated by Department of Energy (DOE) sites, such as LANL, have frankly slammed groups in New Mexico, such as CCNS. The hearing process is extensive: it involves pre- and post-hearing submittals, as well as testimony by technical witnesses. There has been a concerted effort by the Department of Energy (DOE) to ensure that the permit modifications and discharge permits are approved by the Martinez administration prior to the end of her term on December 31, 2018.

**More time, therefore, is needed for informed public comments to be prepared and submitted to DOE.**

CCNS submits the following comments about what must be included in the Environmental Impact Statement (EIS), which must address the scope of the proposal; and the technical, social, geographic, cultural and political international impacts must be included. Further,

## **ALTERNATIVES--**

NRC must choose the no-action alternative for the WCS/ISP proposal. It is a project that has been conceived in haste and is being continued as cheaply as possible in a reckless, discriminatory, and irresponsible way.

## **SYNERGISTIC EFFECTS — STORAGE OF POTENTIALLY EXPLOSIVE DRUMS--**

WCS/ISP already stores and disposes of hazardous, radioactive and mixed waste and continues to bring in more to the site proposed for high-level waste. There is a uranium enrichment facility next door. The EIS must evaluate the effects of multiple hazards and impacts of accidents, releases, and explosions from its neighbors.

Further, WCS is currently storing 73 containers of unstable nitrate-contaminated transuranic waste that were on their way to WIPP from Los Alamos National Laboratory (LANL in 2013/2014 timeframe. These contain the same materials that were incorrectly processed at LANL, just like the drum(s) that exploded in the WIPP underground. The drums are considered too unstable for transport.

The transuranic drums at WCS are not being cooled, though they are being monitored. They have already had to be moved once into a different storage configuration at WCS because they started to overheat.

The danger that one of these drums could explode is high – in fact, too high. To have tens of thousands of tons of HLW also stored in the same waste facility is to invite a repetition of the Kyshtym disaster that occurred in the Soviet Union in 1957—a HLW explosion that released two million curies of radioactivity, contaminated a thousand square kilometers of land, and forced the evacuation of more than 10,000 people.

This disaster was caused by human error and nitrates, just like the nitrates that are in the stored, explosive, WIPP waste at WCS. The nitrates and radioactive waste at Kyshtym were being cooled when one of the cooling mechanisms broke and was not repaired for a year. The sun heated the wastes and a chance spark in what had become a highly explosive mixture set off an explosion. Please see: *An Assessment of the Flammability and Explosion Potential of Transuranic Waste*, Environmental Evaluation Group Report No. 48 (EEG-48), pages 48-51 by Matthew Silva, which is attached to the Citizens for Alternatives to Radioactive Dumping (CARD) comments.

The EIS must include analysis of the emergency plans WCS/ISP have in place to deal with a drum that starts to heat up? With an indication it might explode? Besides moving it again? Where is the analysis for a drum that actually does explode? Or more than one drum like in Kyshtym? The EIS must analyze how such explosions could this affect the proposed HLW stored there? What is the worst-case scenario?

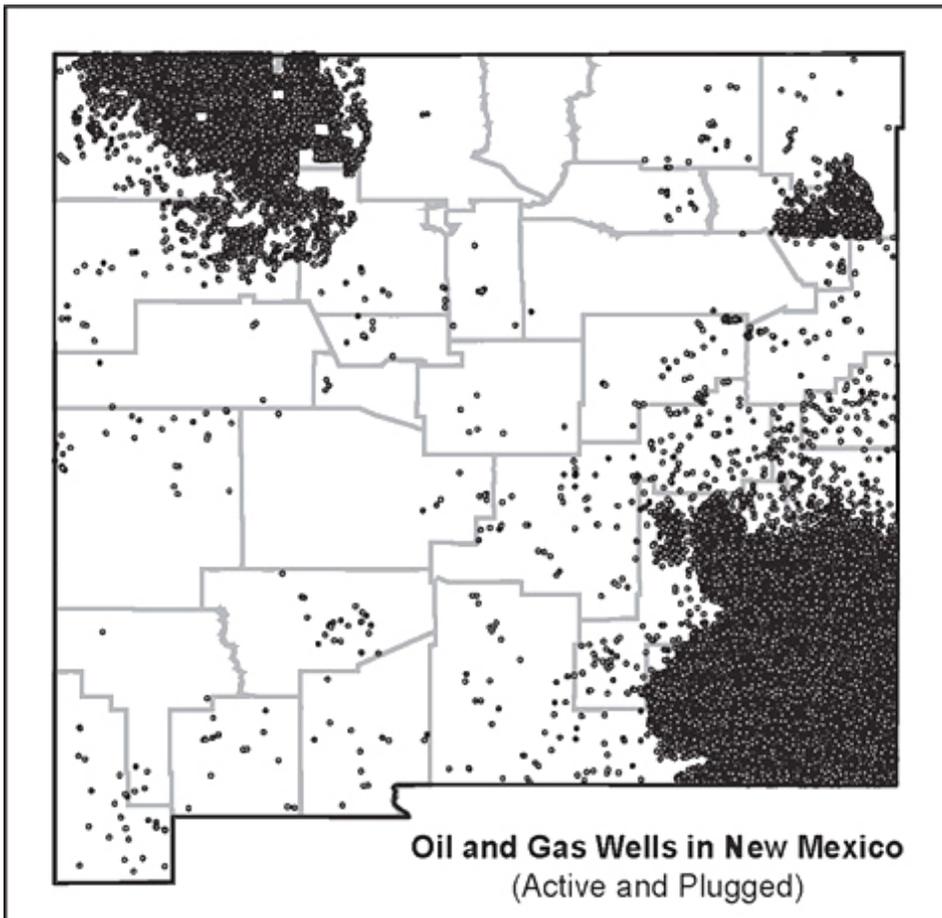
**CCNS believes that it is incompatible to store HLW in the same facility where highly unstable, potentially explosive drums of transuranic mixed waste are stored.** Even if WCS/ISP takes all reasonable precautions, as we learned from the February 2014 WIPP accidents, human error can cause major consequences. In fact, human error in packing the drums at LANL is what caused the original problem—the transforming of drums of waste into bombs.

Even the most basic risk assessment will indicate that the risk increases significantly after 10-15 years for human error to cause an accident. That is exactly when the WIPP drum exploded. There are no plans at this time to move these drums of high-level waste out of WCS -- now or 15 years from now. There is no way to predict when, if ever, the drums will be able to be moved.

**WCS/ISP must withdraw their license application until such time as these unstable drums remain stored there.**

#### **EARTHQUAKES/INCREASING SEISMIC ACTIVITY --**

The area is potentially seismically active and fracking and other extraction activities are HUGE and located in close proximity to the site, possibly even beneath the site. Please see the map "Oil and Gas Wells in New Mexico (Active and Plugged), below. <http://sacredtrustnm.org/new-mexico-maps/> Please note the number of gas and oil wells in New Mexico in close proximity to the proposed WCS/ISP site.



Map showing thousands of oil and gas wells in New Mexico, active and plugged.

**SEVERE WEATHER and CLIMATIC CONDITIONS--**

The site of the proposed consolidated interim storage facility in Andrews County, Texas is subject to severe weather and climatic conditions that could endanger nuclear waste containers. Extreme temperatures, wind and sand storms, wildfires, lightning strikes and storms, floods, and tornadoes can all impact the site.

**PROXIMITY TO WATER--**

There is water at the site and there are nearby major aquifer formations. WCS/ISP is seeking a permit to release radioactive and hazardous water to the New Mexico side of its property. The proposed New Mexico Environment Department (NMED), Ground Water Discharge Permit DP-1817, is not a discharge permit because the permit allows dry wells to be used to monitor underground water flow in violation of 20.6.2.3107.A New Mexico Administrative Code (NMAC). The draft permit is inadequate to protect groundwater "for present or reasonably foreseeable future use." 20.6.2.3103 NMAC; 20.6.2.3106.C.7 NMAC.

**Further, there is no analysis for contaminants during the operational, closure and post-closure phases.**

The DP-1817 permit ignores any problems caused by a 100 year storm completely, evidently assuming that it will never occur, and does not require vadose zone monitoring which is more appropriate for the unsaturated shallow area where the discharge occurs in New Mexico than a monitor well that will never have any water in it. Neither the regulator nor the applicant ever told the public that the explosive mixed-waste transuranic WIPP

drums are being stored there even after this was pointed out to them.

**WCS/ISP is a Resource Conservation and Recovery Act (RCRA) facility – it is a treatment, storage and disposal (TSD) facility and should be regulated as such.**

The RCRA groundwater monitoring requirements are more prescriptive and protective of groundwater quality. *See* 40 CFR §264.90, for “detecting, characterizing and responding to releases to the uppermost aquifer.” “Detected is defined as statistically significant evidence of contamination described in 40 CFR §264.98(f).”

40 CFR §264.91, “Required programs,” including a monitoring and response program. If statistically significant detections of contaminants are found, the Permittees must establish either a 40 CFR §264.98 detection monitoring program, or a 40 CFR §264.99 compliance monitoring program. 40 CFR §264.97 provides the general ground-water monitoring requirements – it “must consist of a sufficient number of wells, installed at appropriate locations and depths to yield ground-water samples from the uppermost aquifer.” If detections continue, the Permittees must establish a 40 CFR 264.100 corrective action program.

The draft DP-1817 does not meet any of these requirements, is inadequate for addressing hazardous and radioactive liquid waters, and should be denied. NMED should require WCS to apply for a RCRA hazardous waste permit.

#### **RCRA MIXED WASTE PERMIT MAY BE NECESSARY --**

The HLW is not exclusively radioactive waste. In fact some or even possibly most of the waste includes some hazardous materials. There is no single "style" or configuration for fuel rods and some of these configurations include beryllium, lead and possibly characteristic zirconium. This information is available with just a cursory look at the inventory. Detailed research may reveal additional hazardous waste. **It appears that a New Mexico RCRA permit will be required.**

**ACTS OF MALICE and OTHER DELIBERATE SABOTAGE**--en route to and at the proposed site must be considered, including potential drone attacks.

#### **STORAGE CONTAINER SYSTEMS--**

The period of consolidated interim storage of irradiated fuel at WCS/ISP could exceed the expected life of the dry cask containers in which it is stored. NRC must consider the industry's present inability to re-containerize nuclear waste at WCS/ISP when casks fail; the absence of a facility at the proposed WCS/ISP site to perform such operations; and the amount and source of funds to pay for design, construction, and maintenance for such a facility.

Hot cells must be maintained safely and securely at sites where they currently exist or be built at the nearby new dry cask storage sites so that inspection, maintenance and repair can proceed normally and without

transportation of leaking containers. Without this capability, no HLW storage or disposal facility can be truly safe.

### **HOTTER HIGH LEVEL WASTE--**

NRC should include a full evaluation of storage and transport of “high burn up” fuel. It is a significant portion of the waste proposed for storage/disposal at WCS/ISP.

### **REPROCESSING + PROLIFERATION DANGER—**

Consolidating waste is the first step to dangerous reprocessing to extract plutonium, increasing nuclear weapons proliferation, massive water use and intense, irreversible environmental contamination. Reprocessing was proposed at this same site before and must be analyzed for in the environmental impact statement.

### **ECONOMIC JUSTICE--**

The proposed area has valuable industries and interests that would be threatened by the site. The Permian Basin produces between 3.26 and 3.3 million barrels of oil per day (Dallas Fed. Reserve, June 2018).

The draft EIS must analyze for the impact on the existing sustainable part of the economic engine in the communities and region, including the potential impact of a severe transport accident and release.

The impacts on lower income residents and on people with lifestyles closer to the land is exponentially greater than on those that have more resources and connections to compensate or relocate following an accident or release.

Even some of the hazardous, toxic and extractive industries that are a big part of the economy oppose the dump. Please see Midland Reporter-Telegram recent article below entitled, "Fasken executive: High level nuclear storage could threaten area's oil industry," posted on November 14, 2018.

<https://www.mrt.com/business/oil/article/Fasken-executive-High-level-nuclear-storage-13393012.php>

### **Fasken executive: High level nuclear storage could threaten area's oil industry**

By [Mella McEwen](#), MRT.com/Midland Reporter-Telegram

Updated 11:06 pm CST, Wednesday, November 14, 2018

Photo: Betsy Blaney, STF / AP

Two applications for sites to serve as interim storage locations for high level nuclear waste in Andrews County and in Lea and Eddy counties, New Mexico, are drawing concern about the risks they pose.

"There is as much nuclear radiation in one cask as was released in Chernobyl in 1986, and they want to eventually bring 20,000 casks here," said Tommy Taylor, director of oil and gas development for Fasken Oil and Ranch. "One cask has as much radiation as the nuclear bomb dropped on Nagasaki."

Taylor addressed the Midland chapter, Society of Independent Professional Earth Scientists Wednesday in an effort to raise awareness of the impact the sites could have, not just on Permian Basin communities but on the region's oil and gas industry.

### **More Information**

--Monday is the deadline for public comments on the WCS site in Andrews County. To submit a comment, go to [regulations.gov](https://www.regulations.gov). More information is available at [www.protectthebasin.com](http://www.protectthebasin.com).

--The Midland City Council and Midland County Commissioners' Court have passed nonbinding resolutions on the nuclear waste issue, according to previous Reporter-Telegram articles.

"The Permian Basin is the No. 1 oil producing region in the U.S. It has changed the geopolitical environment around the world," he said. "This region is too important to U.S. security to allow this."

SIPES member Stephen Robichaud agreed, pointing out that a serious leak from one of the casks could shut in 100 percent of the nation's oil and gas production as well as the Ogallala Aquifer, a main source of water for the middle of the country.

Beyond the environmental impact, "we're talking about monetary damages in the many trillions of dollars. The impact could be enormous," Robichaud said.

While Taylor disagreed that a leak would shut in all oil and gas production, he said most production would be affected.

"I have nothing against nuclear power," he said, noting that 20 percent of the nation's electricity comes from nuclear power plants. "Nuclear power has its pluses and its minuses, and a minus is high-level waste." And there is no solution to safely disposing of the waste, even as more and more is produced each year, he said.

The applications are for interim storage sites, which Taylor said is between 40 and 100 years.

"What we're worried about is, it could be stored here permanently," he said. "The government has been looking for a permanent site for 40 years and hasn't found one yet. This waste could be for our lifetime, our children's lifetimes, maybe even our grandchildren's lifetimes."

Fasken Oil and Ranch owns 10 percent of the land in Andrews County, which explains its interest in the Andrews County site. But Taylor said there is also concern for Midland-Odessa, because a trainload of the waste would come through Midland each week for the next 24 years, heading for the Orano-Waste Control Specialists site in Andrews County.

"We've had a lot of train wrecks," Taylor said, among them a two-train collision in Monahans in April. He told the audience that officials overseeing nuclear-waste disposal estimate one train wreck per 10,000 trips. A leak would impact a 50-mile radius, he said.

"The risk is small, but the consequences are humongous," Taylor said.

He also cited the explosion of several drums of low-level radiation stored at the Waste Isolation Pilot Plant in Eunice, New Mexico, that took three years and several billion dollars to clean up.

He said a representative of the Nuclear Regulatory Commission was asked what would happen if a cask was found on the street. He said the representative replied that it would be checked with a Geiger counter, "and if it's leaking, we'll send it back."

That "is as far as they've thought," Taylor said. "I'm a drilling guy. Something happens every day. We're dealing with people; we're dealing with mechanical things. Things will happen. It took WIPP a month to discover a truckload of waste hadn't arrived. That load was found on a ranch in North Texas. It's human nature. We need to plan for the next step. We need to plan for the next five steps. This is a poorly thought-out plan."

Even though county commissioners in Andrews County and in Eddy and Lea counties wrote the government saying they welcomed the sites, Taylor said most residents in Andrews, Hobbs and Carlsbad are unaware of the plans or their potential impact on the health and environment of their towns.

"Hopefully, when we're done, everyone will know about it," said Taylor.

For more information, please visit the Protect the Basin website at <https://www.protectthebasin.com/>

The Midland City Council recently passed a resolution stating, "We oppose this risk to the Permian Basin."

### **TRANSPORT DANGERS--**

None of today's certified waste containers are designed for real world transport conditions (temperatures, crash speeds, submersion in water, etc.) and have not been physically tested despite the misuse of 40 year-old crash-test videos on different casks - not the casks proposed for transportation and storage.

The storage containers cannot be monitored for potential cracks and leaks, inspected, maintained, repaired or replaced even though it is clear the waste will be dangerous longer than the containers will last. The technology is in the "future" according to NRC staff. The NRC must prevent 10's of 1000's of shipments of the most deadly radioactive waste in super-heavy, inadequate containers over the nation's railroad tracks, roads, bridges and waterways.

**Disparate impact in transportation:** Both disparate impact studies of the facility and of facility transportation must be done. Transportation must be included for both accidents and impacts from normal operations. In addition to irradiation, diesel exhaust from the additional rail traffic can alone cause a disparate negative health impact on people living or working near the routes. Understanding the extent of this exposure and studying whether environmental justice communities along the route would be disparately impacted is critical. Also, the accident risks itself, both at the site and during transportation is possibly discriminatory as it is likely a high percentage of minority and low-income people live near railroad routes not only in New Mexico and Texas but also across the country. Whether the risk burden of an accident falls more heavily on these environmental justice communities must also be studied and understood.

**Social concerns:** In *Colonias Development Council v. Rhino Environmental Services* the New Mexico Supreme Court ruled that not only must disparate impacts be studied when appropriate, but also that social concerns must always be considered.

Social concerns that communities might have include the concept of disparate impacts but also include more. Even the *perception* that the area has become good only as a radioactive or hazardous cesspool can affect a culture or a community. This perception can destroy the dairy, agriculture and ranching that along with tourism and oil & gas development have historically supported the economy of the southeast and indeed, of all of New Mexico.

Lack of access to medical care is another social concern. When poor and minority communities have social concerns that are ignored by the applicants or by the NRC -- that is discrimination. Again, just because this site is barely in Texas, does not mean that it doesn't affect New Mexico as well as Texas.

## **EMERGENCY RESPONSE--**

NRC should include analysis of the reliability and capability of volunteer and distantly located emergency response personnel upon which the proposed site will rely. The analysis must include availability, training, equipment needs, and notification to emergency responders all along the transportation routes for radioactive accidents, releases, and attacks.

## **HARSH ENVIRONMENT--**

NRC must provide in depth analysis for the impacts on the waste and containers from high temperatures, salty dry climate, potential flash floods, lightning, burrowing animals, sand, blocked vents, wind, rain, fire, seismic activity, and climate change and unpredictable conditions on the casks and waste. Further, NRC must assume increased earthquake risks and other impacts from fracking near the site and in the whole region.

## **CONSOLIDATED "INTERIM" STORAGE COULD BECOME PERMANENT-**

WCS/ISP plans to consolidate 40,000 tons of high-level waste from nuclear power reactors in Texas to "temporarily" store for 40 to 60 to 100 or more years. The waste would allegedly move again; however, if no permanent site is found or money to move it again never appears, it could stay forever, despite not being

designed for permanent isolation. As a result, analysis of transport to and from the facility is necessary. Transportation to and from the facility must not be segmented out of the environmental impact statement.

Thank you for your careful consideration of CCNS's comments. Please contact us with any questions or concerns.

Sincerely,

Joni Arends

Executive Director

**Federal Register Notice:** 83FR44922  
**Comment Number:** 25573

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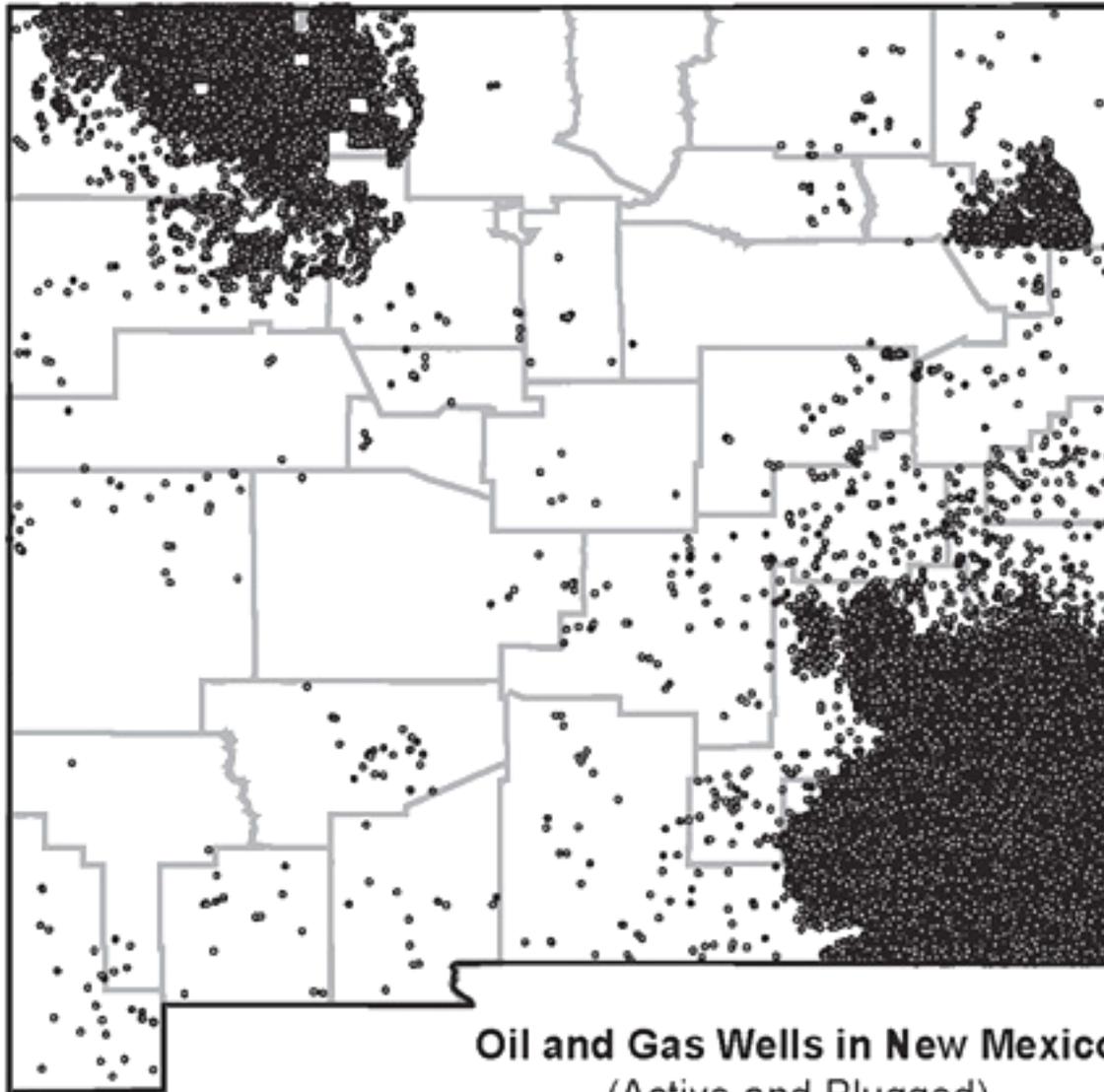
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**Oil and Gas Wells in New Mexico**  
(Active and Plugged)