

Holtec-CISFEISCEm Resource

From: Judy Williams <jkwilliams24@gmail.com>
Sent: Monday, July 30, 2018 2:21 PM
To: Holtec-CISFEIS Resource
Subject: [External_Sender] Comments from League of Women Voters of New Mexico
Attachments: LWVNM Response to HOLTEC Env Rpt 7-30-18.pdf

Attached are comments on the Holtec EIS from the League of Women Voters of New Mexico, which has a number of members who work as nuclear scientists and experts.

Please advise if this is NOT the correct email address.

Thank you,

Judith K. Williams, Ph.D., President
League of Women Voters of New Mexico

Federal Register Notice: 83FR13802
Comment Number: 3504

Mail Envelope Properties (CAOwcK5rLYjCoPUkS6eE7u=UfWZ8R9Sv794_m2ZdCfCn0tJRiug)

Subject: [External_Sender] Comments from League of Women Voters of New Mexico
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**League of Women Voters of New Mexico (LWVNM) Response to
HOLTEC Environment Report July 30, 2018**

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HOLTEC-CISFEIS@nrc.gov

**Subject: LWVNM Response to HOLTEC Environment Report
HI-2167521 7-29-18**

LWVNM evaluated the Holtec Environment report to determine whether the proposed site was suitable. This evaluation included both economic and social and environmental impacts so that decision makers and the public would have adequate information on which to base a decision. In addition to the actual site, secondary land use impacts—such as buffer areas, adequacy of roads, sewers, water, were considered. Limited LWV resources permitted review of sections addressing transportation, water, hydrology, and geology. LWVNM concerns with the adequacy of the Holtec discussion in the Environment Report are identified; we have some concerns about what will be considered an adequate response.

It is estimated that the earliest time by which a geological repository could become available for *permanent disposal of SNF* would be 2048 (DOE 2013, 2.1, pg. 7). This minimum time period and the proposed 160-year storage require consideration of impacts to both NM residents and native species inhabiting this region. The only activities currently occurring at the site are cattle grazing and oil and gas production. The proposed major addition of the CISF for SNF proposed by HOLTEC is a major change for the area and its current uses.

Concern #1 – Water availability

The proposed site must have access to reliable supplies of water (ELEA 2007, Appendix 2C) for workers at the site. The costs of importing water and the reliability of these sources to maintain operation during the proposed time period should be evaluated.

The proposed site lies in a zone of extreme drought. No potable groundwater is known to exist in the immediate vicinity of the Site. Shallow groundwater is present in a number of locations in the area, but water quality and quantity are marginal at best. Much of the shallow groundwater near the site has been directly or indirectly influenced by brine discharges from potash refining or oil and gas production.

3.5.2.1 Regional Groundwater

Tables indicating average precipitation including snowfall consider the time period extending from 1941-2016, but this average does not reflect a projected rise in temperatures and decrease in precipitation due to global warming during extended SNF storage.

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4.5.5, 4.12.4 Decontamination and Decommissioning

A Decommissioning Plan would be prepared at the end of CIS Facility life and would include decontamination, dismantlement, and clean-up procedures; methodology and general decontamination and cleaning methods; and waste management protocol. “It is not anticipated that the storage casks or pads would have residual radioactive contamination because (a) the SNF canisters would remain sealed while in the CIS Facility.” The overall impact to water resources from D&D activities is projected to be minimal; LWVNM would like additional data or sources to support and justify this projection.

Concern #2 - Transportation

Section 3.9 states that the Department of Energy would be responsible for transporting the spent nuclear fuel from existing commercial nuclear power reactor storage facilities to the CIS facility in New Mexico. It provides no source citation for this statement, and there is no indication on the DOE website that it will be responsible for transport to this CIS.

Recommendation: Provide the official documentation in which the DOE states that it assumes the responsibility of transportation to this Consolidated Interim Storage Facility.

Section 3.9 of the Environment Report states “approximately 3,000 canisters are expected to be transported over 40 years.” Section 4.9.3 states “over the course of the operational life of the CIS Facility, Holtec would receive up to 100,000 MTUs of SNF in approximately 10,000 canisters from decommissioned shutdown sites and operating reactor sites.”

Recommendation: Do a breakdown of how many canisters it will receive and from which facilities so interested parties can at least track the source of the statements.

Section 4.9.1 of the Environment Report states “Construction of Phase 1 of the CIS Facility would require a new access road from U.S. Highway 62/180 and a new railroad spur from the existing Carlsbad railroad spur that ends at the Intrepid Mining LLC North facility 3.8 miles due west of the Site.” There is no information about the quality of construction that will be done for either the access road or the railroad spur. There is also no information about source of funding or whether New Mexico taxpayers will be asked to assume a portion of the cost.

Recommendation: The company needs to provide much more detailed information about the road, including the engineering specifications for load bearing capabilities. It should also provide more detailed information about the railroad spur including load bearing capabilities, ownership, and any possible cost or liability to New Mexico taxpayers.

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4.9.3 Incident Free Impacts

In section 3.9 the document states, “Given its proximity to the Waste Isolation Pilot Plant (WIPP) local fire fighters, law enforcement and emergency medical staff have been trained to respond to any emergency response actions that may be needed to reduce the severity of events related to transportation incidents involving the CIS Facility.” There is no sourcing for how Holtec knows what the state of training is for these first responder personnel, and no indication of how many people might be trained to deal with radiological emergencies or how they are equipped.

Recommendation: These first responders have been trained to respond to WIPP waste, which has a much lower level of radioactivity compared to the spent nuclear fuel and projected capacity of this facility. Provide detailed information about the actual level of training, compliance and radiation detection equipment first responders within a 50-mile radius actually possess, and what action the company proposes to remedy any deficiencies.

Insufficient information

There is no specific information about what precisely will be shipped, the condition or age of the canisters being shipped, the expected lifetime or vulnerability created by years of storage, whether shipments will include shipments of mixed canister quality, so it is hard to see how any radiological exposure can be calculated without access to that information. No matter how good the software, if the input information is poor, it cannot be expected to do perform accurate calculations.

Recommendation: Provide information about sample loads from one of the proposed customers of the facility with specific details about the canisters to be hauled, the condition of the most vulnerable canisters that will be shipped from that facility and sample radiological exposures in the event of accidents. In addition, provide information about the minimum quality requirements for any canisters (no matter where the origin) that will be stored.

Insufficient information

This section includes the sentence, “Similarly, in the event that spur is not constructed Holtec would transport the SNF the final 3.8 miles by heavy haul truck.” Does this mean the waste will be hauled on New Mexico public highways?

Recommendation: Provide detailed information about which New Mexico highways would be involved, what load bearing requirements would be needed for those highways to be safe, and what kind of offloading equipment from the train to the trucks would be needed, and how the loads would be secured from possible terrorist activity.

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4.9.3.2 Accident Impacts

Insufficient information

This section says “Type B transportation casks licensed in accordance with 10 CFR Part 71 are constructed to withstand severe accidents so that most transport accidents would not result in damage to the cast body or seals that could result in a radiological release.” There is no indication anywhere in the document that Holtec will require a Type B transportation cask for shipment to the facility. Indeed, the casks Holtec intends to provide are shrouded in the cloak of ‘proprietary information.’ And if the company’s sales site is to be believed, Holtec says, “Specifically, the HI-STORE CIS will accept a loaded Canister of any provenance: whether they are horizontally stored canisters in Areva’s NUHOMS or vertical canisters in NAC’s (a subsidiary of Hitachi Zosen) or the legacy canisters supplied by now- extinct suppliers – they all will be storable in HI-STORE CIS. No repackaging of fuel will be required for storing at HI-STORE CIS.”

Recommendation: Provide explicit, publicly available details about the type of casks that will be used for shipping and how the company will manage the waste stored in many different types of canisters if there is no repackaging required. The company needs to be publicly transparent about the methods it will use to assess the stability of the casks that are to be transported to and stored in New Mexico.

Chapter 3.3 Geology and Soils

Concern: Holtec’s geology evaluation is based on old data and reports.

The Environment Report includes a cross section, Figure 3.3.2, that doesn’t appear to be original. Figure 3 3.1, which depicts major geological structures and faults, is similar. Both figures cite the source as ELEA, 2007 but the original sources of these figures are from the 1960s and 1970s. More modern techniques are now available to map subsurface details such as faults (Oil companies often run 3D seismic devices over their leased property). Holtec should request oil industry data to identify any indication of danger of earthquakes or subsidence in the nearby areas. Holtec could also perform seismic analyses – costs would not be prohibitive.

The New Mexico Oil and Gas Division has a website with GIS maps of all oil, gas and water disposal wells in New Mexico – a segment of this map surrounding the Holtec site is shown below.

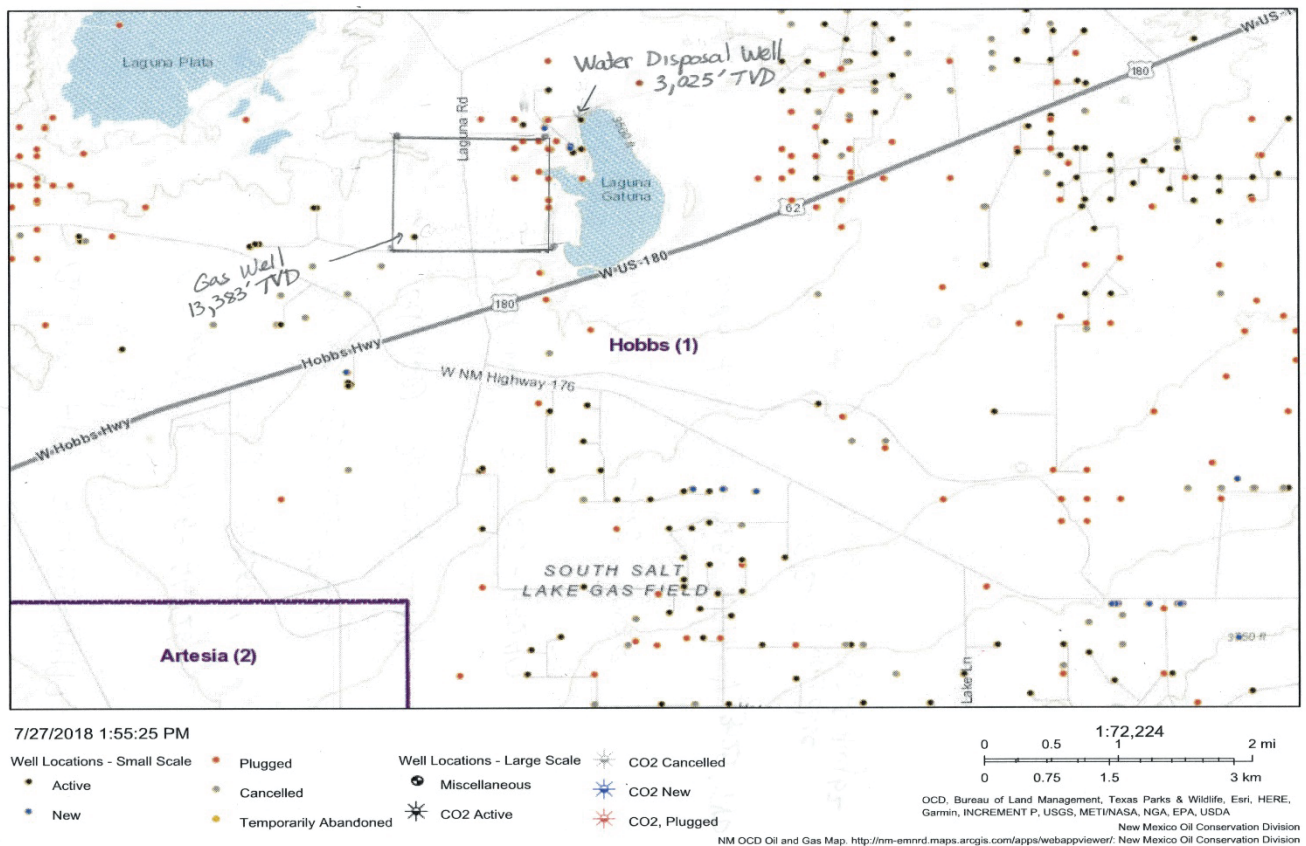
Holtec doesn’t provide the exact coordinates of the site - the approximate location is shown on the map below, based on the maps in the Holtec report. However, these maps are not clear and they appear to show slightly different boundaries. As Holtec states,

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there is a natural gas well within the site boundary. This is a vertical well, 13,383 feet deep, which shouldn't pose a risk to the storage site. However, there would be a gas pipeline from the well to a gas gathering point, which isn't illustrated. Gas pipelines can occasionally leak and possibly explode - proper precautions could prevent this leakage or explosion.

The main concern is a water disposal well located outside the site boundary, which is marked on the map. It is 3,025 feet deep and is operated by Marathon Oil Permian LLC. Water disposal wells are responsible for the earthquakes associated with fracking operations. Holtec does not discuss this well in its report – LWVNM expects this to be addressed.

OCD Well Locations



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CHAPTER 3 AFFECTED ENVIRONMENT

SUMMARY of Chapter 3 – 3.8

3.3.2.2 EARTHQUAKE POTENTIAL

Of some specific interest is the description of earthquake risk in the region. Earthquakes of low to moderate magnitude have been documented within a 200-mile radius of the Site. While the probability of earthquake is rated low, the Geological Characterization Report shown below (citation 2) is somewhat dated and cannot account for seismic changes following recent, extensive oil and gas, although WIPP seismic monitoring (citation 3) attributes the strongest events of the period studied to oil and gas activity.

(3) . . . recent records (1998 through 2005) from the Waste Isolation Pilot Plant (WIPP) seismic monitoring network indicate that the strongest events recorded annually in 1999, 2000, and 2002 through 2005 (typically of 2.5 to 4.0 magnitude during this time period) have been located about 50 miles west of the Site. This seismic activity is suspected to be induced by injection of wastewater from natural gas production into deep well or wells (ELEA 2007, Section 2.3.4.1.4). Any future oil drilling or fracking beneath the Site would occur at greater than 5,000 feet depth. (HOLTEC 2016a)

Conclusion Excerpt:

Seismic information relies on the WIPP monitoring network, geology assessments and previous records. A more aggressive and modern predictive source would be more appropriate.

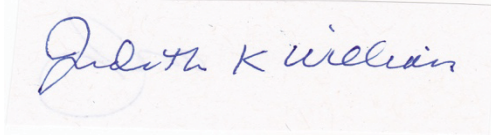
Section 3.7 of the HOLTEC Environment Report addresses cultural resource documents, which will be 45 years or older by 2019. These resources will require evaluation for listing in the NRHP as part of the identification of historic properties.

An additional LWVNM concern is the indemnification ensuring HOLTEC responsibility; cycles with nuclear industry downturn could result in a less favorable economic climate for HOLTEC and other industry sources. Continued safety and security of the CISF site and surrounding perimeter should be assured prior to NRC granting Licensure to HOLTEC.

Please consider these areas of concern identified by LWVNM in the HOLTEC Environment Report. Thank you for this opportunity to evaluate sections of the HOLTEC License application to the US NRC and express concerns. LWVNM will continue to assess HOLTEC/ELEA Consolidated Interim Storage Facility developments and License Application and looks forward to the US NRC response to these concerns.

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Respectfully,

A rectangular card with a light beige background. On the card, the name "Judith K. Williams" is written in a cursive, handwritten style in blue ink. The signature is centered on the card.

Judith Williams, Ph.D., President
League of Women Voters of New Mexico