11/14/2016
81FR 79531

PUBLIC SUBMISSION

As of: 3/14/17 5:06 PM
Received: March 12, 2017
Status: Pending_Post
Tracking No. 1k1-8v7y-y56s
Comments Due: April 28, 2017
Submission Type: Web

Docket: NRC-2016-0231
Waste Control Specialists LLC's Consolidated Interim Spent Fuel Storage Facility Project

Comment On: NRC-2016-0231-0005
Environmental Reviews: Waste Control Specialists, LLC; Consolidated Interim Spent Fuel Storage Facility Project

Document: NRC-2016-0231-DRAFT-0086
Comment on FR Doc # 2017-01966

120

Submitter Information

Name: Deborah Reade
Address: United States,
Email: reade@nets.com

General Comment

My comments for NRC-2016-0231 have been uploaded as NRC-2016-0231_WCS_Comments.pdf. The Waste Control Specialists' (WCS) license application to transport and store High Level Waste (HLW) is incomplete and should be denied for the reasons described in that file.

Attachments

NRC-2016-0231_WCS_Comments

Re: Docket ID NRC-2016-0231
Waste Control Specialists, LLC; Consolidated Interim Spent Fuel Storage Facility
Project Comments

The Waste Control Specialists, (WCS) license application to transport and store High Level Waste (HLW) is incomplete and should be denied for the following reasons:

TRANSPORTATION

1. Transporting 40,000 tons of HLW across thousands of miles, across most of the states in this country and through many major cities possibly for 20 years, massively increases the risk of human exposure and environmental degradation from accidents and possible terrorist sabotage. Yet there is no need to do this transportation at this time as there is actually no pressing need for centralized storage. Waste can safely remain, for the most part, stored at the generator sites for many years—certainly for as long as it would remain in a centralized storage facility.

2. If a permanent disposal facility is eventually built, all that waste would have to be transported yet again—doubling the risks of human exposure and environmental problems because instead of transporting the waste once from the generator sites to the permanent disposal site, it would be transported twice, first to the centralized storage site and then again to the centralized disposal site.

Only if the intention is to dump this waste in the Waste Isolation Pilot Plant (WIPP) does consolidated storage at WCS make any sense. However, this would be a huge betrayal of local communities who were promised that WIPP would never receive HLW. And, as described below, there are many other problems and reasons why WIPP may never be able to accept this waste so that doubling the transportation may become necessary after all.

3. It does not appear that the transportation routes are finalized in the application so it is impossible to calculate risks, human exposure potential and disparate impacts to environmental justice communities along the routes. Exposures and disparate impacts can occur even if there are no accidents or sabotage—significant impacts and exposures can occur during normal facility transportation whether by truck or train from the diesel alone. In addition, because radiation will always be leaking through the casks, this is an added impact from normal operations.

Already, the shipments to WIPP which irradiate at a much lower level than HLW casks will, cause a significant amount of health effects during transportation. In fact, *most of the negative health effects of the entire project* during normal operations occur at the rest stops along the routes where people can receive up to 28 times the lifetime dose allowed for a nuclear worker. Adding HLW exposures to this will only increase the problem. Since most workers at such rest stops are low income and many are people of color, a thorough investigation of possible disparate impacts from this facility transportation needs to be done. Without knowing the routes, the demographics of people along the routes and at the rest stops who will be impacted by both the diesel and the radiation, it is impossible to know what the impacts from both accidents and normal facility transportation will be and thus also impossible to know if those impacts will disparately affect vulnerable persons or communities and be discriminatory. Therefore, without this information, WCS's application is still incomplete.

4. It is unclear if the casks can truly withstand real-world accidents including long, hot fires and certain types of high-speed impacts. The casks have only been tested for 60 mph accidents yet both with train and truck transportation that figure is totally inadequate and that speed is regularly exceeded. Accidents that include long, hot fires are common so to ship this waste in a container that is not 100% able to withstand such a fire or an impact at more than 60 mph is, in my opinion, criminal.

There is a tendency in government projects, where the political pressure is great, to go ahead with the project no matter what, to pretend that the low-probability high-consequence event will never occur. Certainly, this has already occurred at the WIPP project with disastrous results—an explosion, release and contamination of 22 people. Such an explosion was considered to be unlikely, yet it did occur.

Pressure to move the last, most dangerous drums from Los Alamos National Laboratory (LANL) to WIPP was so great that even major safety problems were ignored in the rush to ship. This human error factor was almost completely ignored in WIPP's original risk assessments even though they were told to increase the human error factor during the permit hearing where this writer predicted that there would be a major problem 10-15 years after WIPP opened. The accident happened exactly during that time frame and was caused by human error.

The same potential for a major release to occur during shipping exists with the WCS HLW yet the application, the lack of adequate risk assessments plus the lack of planning for such an event both during transportation and at the site almost guarantee a disaster if everything goes ahead as currently planned.

THE SITE

5. There is yet no repository in place for permanent disposal of this HLW. Yet the Nuclear Waste Policy Act requires that a repository be approved before any consolidated storage site can be licensed. Thus it premature even to be thinking about licensing a consolidated storage site at this time.

6. 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 14 years into the project there has already been an explosion and release.) such a permanent disposal repository is many years in the future. In fact, it may never be built as other, better options may become possible. There is therefore a very real possibility that HLW will remain indefinitely at WCS which would become a de facto disposal facility.

Another more likely possibility is that the intent is actually to move the HLW to permanent disposal in WIPP, despite the fact that HLW and salt are highly incompatible. WIPP's desire to increase above ground storage which is not needed for its current mission but would be very nice if they started receiving HLW, is ominous. However, though The New Mexico Environment Department (NMED) and the Department of Energy (DOE) try to pretend that everything is business at usual at WIPP, in fact large parts of the facility are contaminated, ventilation is so poor that toxic gases underground require the use of full respiratory suits, and there are a host of other problems. Full repair of the facility is years in the future and may never be able to be achieved. NMED's and DOE's denial of the reality that they are still operating under emergency conditions shows that they have learned nothing from the safety mistakes they

made that allowed the explosion to occur. There are hundreds of drums of waste in the facility that are not actually allowed to be there—and for good reason. The danger of another explosion from another of the unstable LANL drums cannot be ruled out and there are other types of problem wastes as well.

7. Groundwater at WCS is only 19 feet below the facility. A deeper groundwater interval is at about 225 feet. Really, the site is not optimal for any kind of hazardous or radioactive waste storage or disposal and certainly not for HLW storage.

The shallow perched aquifer has already been contaminated by WCS's activities with both hazardous and radioactive waste. Yet, there is no modeling of the perched aquifer, thus no knowledge of if the aquifer connects to the deeper aquifer, its extent or other critical information. Has WCS investigated the possibility of karst in the area and how it would affect contamination transport? All of this information needs to be included in the application or the application is incomplete.

8. It appears that the WCS application is incomplete also because it does not adequately cover emergencies at the site including how to transfer radioactive waste from a damaged canister to a new canister. There does not appear to be a hot cell and equipment planned to be in place to handle such events. WCS needs to describe all potential problems and emergencies, do a risk assessment of such events and include a plan in the application to have equipment, facilities and trained personnel in place to deal with such events before waste even begins to be transported to the facility. If they feel an event does not warrant being included in their emergency plan, they must justify not including it. Just because some events are low probability, if the consequences are high enough, even those events must be included in their emergency plan. All of this should be in the application.

Additional risks that are not modeled in the application and do not have responses worked out for them are risks from fracking in nearby oil and gas fields—an area with one of the heaviest concentrations of oil and gas development in the world. Could fracking cause earthquakes on a level that has been seen in Oklahoma? Are there faults under WCS? Could casks be damaged? It is not enough for WCS to figure this out on the fly after a cask has fractured and radiation is leaking out with no hot cell or equipment to deal with this kind of emergency situation.

9. WCS is currently storing 115 drums of unstable nitrate-contaminated transuranic waste. These drums contain the same materials that were incorrectly processed at LANL just like the drum that exploded in WIPP. The remaining drums from this waste stream that were incorrectly processed and were not emplaced at WIPP continue to be stored at LANL; they are considered too unstable for transport and are constantly cooled as well as monitored for a temperature rise that could indicate increased explosion potential.

The drums at WCS are not being cooled, though they are being monitored. The danger that one of these drums could explode is 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 and forced the evacuation of more than 10,000 people. This disaster was caused by human error. The nitrates and radioactive waste were being cooled just as the drums at LANL are cooled, when one of the cooling

mechanisms broke and was not repaired for a year. The wastes heated, dried and an explosion was set off by a chance spark in what had become a highly explosive mixture.

The drums at WCS are not refrigerated. What emergency plan do they have in place to deal with a drum that starts to heat up, indicating it might explode? What plan do they have in place if a drum actually does explode? or more than one drum? How could this affect the HLW stored there and what is the worst case scenario?

I believe that it is incompatible to store HLW in the same facility where you are storing highly unstable potentially explosive drums of radioactive waste, but particularly where they are not being stored with every possible safety precaution taken. Why is it necessary to refrigerate the drums at LANL but okay not to refrigerate them at WCS? WCS can't be licensed to store HLW as long as these unstable drums are present and assuming that the unstable drums will be moved to WIPP before the HLW arrives is a bogus assumption. Years after the explosion, it is still not known how to transport those drums safely. There is no way to predict when, if ever, the drums will be able to be moved. (More on the Kyshtym explosion can be found by Googling *An Assessment of the Flammability and Explosion Potential of Transuranic Waste; EEG-48* by Matthew Silva)

10. WCS already has a terrible history with the current waste it is storing and shows no indication that it will be a better neighbor or more concerned with not contaminating people or the environment in the future if HLW is added to their inventory.

Besides contaminating groundwater below the facility, WCS has been discharging contaminated effluent, without a permit, across the border and into New Mexico. No monitoring well, no nothing. When the dump was sited, WCS knew that New Mexico was down gradient. Eunice, New Mexico is the closest community to the dump—only 6 miles away—yet WCS seemed to do everything possible to exclude Eunice from public participation in their siting and permitting.

There also does not appear to be any analysis of the risks to Eunice from this unpermitted dumping. Because of this history, it is imperative that WCS figure the potential human exposures not only from facility transportation as described above but also from having HLW at the site during normal and accident situations. Modeling must also include exposures from their entire inventory and all of their activities including the HLW dumping. This is so that impacts can be accurately figured since the impacts from HLW storage—both from the site and from facility transportation—will be *in addition* to the impacts that are already occurring.

SOCIAL CONCERNS INCLUDING ENVIRONMENTAL JUSTICE CONCERNS

11. This area of southeastern New Mexico and western Texas is already burdened by a myriad of polluting facilities including various types of dumps—including radioactive and hazardous dumps—massive oil and gas development, a refinery, a uranium enrichment plant and other polluting facilities.

Communities there are already subjected to contamination from superfund sites and radioactive and hazardous releases from the Trinity Test Site and the recent WIPP release. There are almost constant attempts to add more polluting facilities to the area which also has a thriving dairy industry, ranches and farms . However, whether this more agrarian economic development can last as this area, already known as the *Nuclear Corridor* becomes overwhelmed by dumps, pollution and contamination, is doubtful.

This area is already far overburdened by these environmentally degrading activities. The answer is not simply to continue to use the area as the nation's toilet (and the world's, as both the Triassic Park Hazardous Waste Dump and any HLW dumps can include international waste) but to start working to mitigate the disaster that already exists. To stop adding more facilities and more types of waste without cleaning up and decreasing current environmental and health threats. There is a well-documented record of the health problems and stresses on the people of this area. Adding a poorly thought out HLW dump to the area is a bad idea and a significant addition to the perception that this area is worthless for anything except being a garbage pit.

And perception is all that is needed. The area is massive polluted already. Whether it is so polluted that it is no longer viable for food crops or dairy cows isn't known. Even if it's not, if the general perception is that the crops and milk are contaminated, that lowers the cash value of those food products. Property values are decreased and a whole host of social concerns become very important. Where have WCS addressed these types of social concerns? What analyses of the effect on the current economy—especially the agrarian economy—have been done? Without those, the application is still incomplete.

12. A particular type of social concern are environmental justice or civil rights concerns. This area has heavy concentrations of Spanish-speaking and Low English Proficiency (LEP) persons. Many of these communities members are very poor and already have serious health concerns that have been exacerbated by all the industrial, hazardous and radioactive activities in the area. There are environmental justice and civil rights concerns both in terms of disparate impacts and for LEP persons to be able to engage fully in public participation. Among other things, has WCS translated vital documents into Spanish and put them and their English versions both online and in printed copies in local libraries and community facilities? Have they reached out to local communities? Poor relations with people from Eunice, New Mexico—the closest community to the facility—and with other local people in the past indicate that WCS may not have satisfied all legal requirements not to discriminate.

Has WCS calculated human exposures both from accidents and from normal operations at the facility and from facility transportation? Have they looked into the demographics of the area and done a disparate impact study on potentially impacted communities? This must take the transport in water, potentially contamination of aquifers and the high winds, including tornadoes that could affect air transport into consideration. From what I have described above in these comments, I believe the answer is "no" to all these questions. Whether affected communities are in Texas or in New Mexico, social, civil rights, and human exposure concerns must be addressed. It is not okay to discriminate when siting a waste dump. Nor is it okay to destroy the lifestyle, health and environment of an entire area of our country.

Sincerely,
Deborah Reade
117 Duran Street
Santa Fe, NM 87501
reade@nets.com
3-12-17