

## WCS\_CISFEISCEm Resource

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**From:** Kevin Kamps <kevin@beyondnuclear.org>  
**Sent:** Friday, April 28, 2017 11:55 PM  
**To:** WCS\_CISFEIS Resource  
**Subject:** [External\_Sender] Public Comments by Beyond Nuclear, re: Docket ID NRC-2016-0231 and Docket No. 72-1050 (re: WCS CISF environmental scoping public comment opportunity)

Public Comments by Beyond Nuclear re: Mobile Chernobyl shipping risks, re: Docket ID NRC-2016-0231 and Docket No. 72-1050

Submitted via email to the following address: [wcs\\_cisf\\_eis@nrc.gov](mailto:wcs_cisf_eis@nrc.gov)

Submitted by Kevin Kamps, Radioactive Waste Watchdog, Beyond Nuclear

Please note: On April 19, 2017, a joint request was filed by Waste Control Specialists, L.L.C. ("WCS") and the U.S. Nuclear Regulatory Commission ("NRC") Staff to withdraw the Hearing Notice for WCS's application to build and operate the proposed Centralized Interim Storage Facility ("CISF") in Andrews, Texas, and thereby suspend this adjudicatory proceeding, including suspending the environmental and safety reviews. Joint Request to Withdraw the Federal Register Notice Providing an Opportunity to Submit Hearing Requests (Apr. 19, 2017) ("Joint Request").

Despite this, the NRC has not done so yet. Or if NRC has suspended the proceeding, per WCS's (and its own Staff's) request, it has failed to notify the public. This has created significant confusion for the public, exacerbated by the fact that NRC's deadline for submission of public comments on environmental scoping is today, Friday, April 28, 2017, at 11:59pm Eastern. Given that NRC has not yet suspended the proceeding, per WCS's and even its own Staff's joint request, or has not notified the public of the suspension, I am submitting the following comments under protest, to protect our rights in this proceeding.

WCS has asked NRC to suspend its review. WCS is clearly not working on this proceeding right now, and does not want NRC to work on it either. We have significantly more public comments on environmental scoping to submit in addition to what is below, but given the joint request by WCS and NRC Staff to suspend this proceeding, we will no longer be working on it either, until further notice from NRC. NRC should be giving notification that the public should not be wasting its time on public comments re: a license application that WCS is not even currently pursuing.

As our legal counsel (Diane Curran and Robert Eye) wrote to NRC today:

*Consistent with WCS's™ request to the NRC Staff to suspend its safety and environmental reviews, the NRC should publish, in the Federal Register, a correction to the scoping notice for the proposed Environmental Impact Statement (â€œEISâ€ ) for the WCS facility (81 Fed. Reg. 79,531 (Nov. 14, 2016)), clarifying that the NRC's™ environmental review has been suspended at WCS's™ request and that the NRC Staff will not request public comment on the scope of the EIS pending further notice.*

*If and when WCS submits a new revised application that includes a complete Environmental Report, and if and when the Commission denies any and all motions to dismiss the application for lack of jurisdiction, the NRC should reopen the time period for scoping comments for the environmental impact statement. Notice of an opportunity to submit scoping comments should be published in the Federal Register. Given the broad national implications of WCS's™ application to ship spent fuel from around the country to the CISF, the scoping notice should provide 120 days after publication of the notice for submission of scoping comments.*

*(RESPONSE BY BEYOND NUCLEAR ET AL. TO JOINT REQUEST TO WITHDRAW THE FEDERAL REGISTER NOTICE PROVIDING AN OPPORTUNITY TO SUBMIT HEARING REQUESTS, In the Matter of Waste Control Specialists, LLC, Consolidated Interim Storage Facility, Docket No. 72-1050, April 28, 2017, internal numbering system omitted)*

### **Mobile Chernobyl shipping risks**

Eunice, New Mexico (four miles from WCS, across the TX/NM border) has the dubious distinction that every single train car load of high-level radioactive waste will pass through on its way into (and, if it ever leaves, out of) WCS. But transport impacts, to import more than half the irradiated nuclear fuel in the U.S. into West Texas, will be felt nation-wide. In that sense, ***when it comes to radioactive waste transportation, we all live in Eunice, NM.***

But a parking lot dump at WCS would only increase safety risks. It would not decrease them. It would multiply transport risks, as it would only be temporary (supposedly). All that highly radioactive waste would have to move again, to a permanent burial site (yet to be identified â€“ that's™ a big IF!). And that could be back in the same direction from which it came in the first place!

WCS's™ assumption that the dump at Yucca Mountain, Nevada will open someday, to take the high-level radioactive waste away, is inappropriate. The vast majority of Nevadans has expressed its very adamant non-consent for 30 years now, and still vehemently oppose it. This is reflected by bipartisan resistance by elected officials, at both the state government level, as well as the congressional delegation level.

WCS's™ assumption that another permanent burial dump will be opened, by someone, somewhere, someday, somehow, is also inappropriate. After all, the search for a national geologic repository has gone on since the 1950s, but has failed. And DOE's™ current estimate for the opening of the U.S.'s™ first repository is 2048, 31 years from now. Except they have no idea where that will be. There is every likelihood that 2048 date will slip into the future as well.

The failed Private Fuel Storage, LLC parking lot dump targeted at the Skull Valley Goshutes Indian Reservation in Utah, likewise assumed the Yucca dump would open. They were, of course, incorrect.

So PFS's "Plan B" was to "return to sender." If 40,000 metric tons of irradiated nuclear fuel "the same amount targeted to go to WCS, isn't that curious?! " what would that "return to sender" policy have looked like?

Maine Yankee was a PFS consortium member. More than 50 rail sized containers of irradiated nuclear fuel would have traveled 5,000 miles round trip, accomplishing absolutely nothing, other than exposing millions of people in numerous states to high-risk shipments.

Another version of this is the fact that permanent burial sites could be located right back in the same direction from which the waste came in the first place. In fact, at one time, DOE was targeting two sites in Maine, seven sites in Vermont, and two sites in New Hampshire, for permanent burial dumps. (See Beyond Nuclear's backgrounder, re: the NH targets, at: [http://static1.1.sqspcdn.com/static/f/356082/24115710/1487366549330/New\\_Hampshire\\_dump\\_final+draft.pdf?token=ZDgyvKfq8uxG4HPqWmvVvXBuwmY%3D](http://static1.1.sqspcdn.com/static/f/356082/24115710/1487366549330/New_Hampshire_dump_final+draft.pdf?token=ZDgyvKfq8uxG4HPqWmvVvXBuwmY%3D)).

This game of high-risk, high-level radioactive waste musical chairs, or hot potato, on the roads, rails, and waterways, is unacceptable. It amounts to Radioactive Russian roulette. Multiplying transport risks for no good reason is wrong, and makes no sense.

The Nuclear Assurance Corporation's Quality Assurance (NAC QA) failures mentioned above are very significant to shipping risks. Shipping casks would be less capable of withstanding severe accidents (such as high-speed crashes, including into immovable objects, like bridge abutments; high-temperature, long-duration fires; deep, long-lasting underwater submersions; drops from tall heights, onto unyielding surfaces, such as bridge foundations; or some combination of all those), as well as intentional attacks (such as with shaped charges, or anti-tank weapon systems "see below) or other powerful explosions (such as explosive cargoes on passing trains, including, nowadays, crude oil "Bomb Trains," as from the Bakken oil fields in North Dakota).

Adding to these shipping risks, is the potential for barge shipments on surface waters. WCS is supposed to be "mostly rail" -- which can also mean many barges (26 reactors in the U.S. lack direct rail access, meaning barges on surface waters -- the Great Lakes, rivers, seacoasts -- could be used to haul the 100+ ton, rail-sized casks to the nearest rail head). Backgrounders (including more details on the high risks) on these various barge routes (including maps) were originally written for the Yucca dump scheme; however, WCS could just as well involve such barges.

DOE's Feb. 2002 Yucca Mountain Final Environmental Impact Statement gives a preview of barge shipments that could well be required to ship high-level radioactive waste to WCS, TX. The following barge shipment routes were proposed under the Yucca Mountain plan:

(See NIRS factsheets on barge shipments of deadly high-level radioactive waste on waterways, by state, posted online September 28, 2004):

- o [MD - Chesapeake Bay](#)

<<https://web.archive.org/web/20160331033728/http://www.nirs.org/factsheets/mdbargefactsheet92804.pdf>>

- o [VA - James River](#)

- <<https://web.archive.org/web/20160331033736/http://www.nirs.org/factsheets/vabargefactsheet92804.pdf>>
- o [DE - Delaware Bay](#)
- <<https://web.archive.org/web/20160331032838/http://www.nirs.org/factsheets/debargefactsheet92804.pdf>>
- o [NJ, NY, CT - Waters Surrounding New York City](#)
- <<https://web.archive.org/web/20160331034044/http://www.nirs.org/factsheets/nybargefactsheet92804.pdf>>
- o [MA - Cape Cod Bay, Massachusetts Bay, and Boston Harbor](#)
- <<https://web.archive.org/web/20160331020332/http://www.nirs.org/factsheets/mabargefactsheet92804.pdf>>
- o [IL, MI, WI - Lake Michigan](#)
- <<https://web.archive.org/web/20160327081932/http://www.nirs.org/factsheets/mibargefactsheet92804.pdf>>
- o [LA, MS - Mississippi River](#)
- <<https://web.archive.org/web/20160331080128/http://www.nirs.org/factsheets/lamsbargefactsheet92804.pdf>>
- o [TN, AL - Tennessee River](#)
- <<https://web.archive.org/web/20160331063817/http://www.nirs.org/factsheets/tnalbargefactsheet92804.pdf>>
- o [NE, KS, MO - Missouri River](#)
- <<https://web.archive.org/web/20160331020303/http://www.nirs.org/factsheets/nemoksbargefactsheet92804.pdf>>
- o [CA - California Coast](#)
- <<https://web.archive.org/web/20160331030740/http://www.nirs.org/factsheets/cabargefactsheet92804.pdf>>
- o [FL - Florida's Atlantic Coastline](#)
- <<https://web.archive.org/web/20160331035101/http://www.nirs.org/factsheets/flbargefactsheet92804.pdf>>

(However, with something as simple as a rushed NRC rubber-stamp amendment, WCS could apply for, and quickly get, permission to *truck* in smaller-sized, "Legal Weight Truck" (LWT) casks to WCS.

This mix of trains/barges and trucks, would mean even more American communities would be exposed to Mobile Chernobyl risks.)

Dirty Bomb on Wheels [security risks would abound](#). This was made clear by the test of an anti-tank missile against an (empty) irradiated nuclear fuel shipping cask at the U.S. Army's Aberdeen Proving Ground in Maryland. The June 1998 test targeted a German CASTOR cask. While certified for storage-only in the U.S. (the cask model is deployed at Surry, VA), it is widely used for transport in Europe. CASTORs have thick die cast iron walls, as opposed to thin walled steel casks in the U.S. That is, CASTORs are significantly more robust, more capable to withstand such an attack. However, even the CASTOR, the Cadillac of shipping casks as some have called it, was severely breached by the anti-tank missile. A hole as big around as a grapefruit or softball was blown clean through the side wall. Had irradiated nuclear fuel been inside, the hole would have created the pathway for release of disastrous amounts of hazardous radioactivity – all the more so, if an incendiary attack were combined with the explosive attack. In short, shipping containers were not designed to withstand such attacks. See:

<https://web.archive.org/web/20150908070611/http://www.nirs.org/factsheets/nirsfctshdrycaskvulnerable.pdf>

### **Risks of "Routine" or "Incident-Free" Shipments Nonetheless Being Like "Mobile X-ray Machines That Can't Be Turned Off," and Risks of Externally Contaminated Shipments**

Even "routine" or "incident-free" shipments of irradiated nuclear fuel carry health risks to workers and innocent passers by. This is because it would take so much radiation shielding to completely hold in the gamma radiation, being emitted by the highly radioactive waste, that the shipments would be too heavy to move economically. So NRC has compromised, and "allows" for or "permits" a certain amount of hazardous gamma radiation to stream out of the shipping container.

NRC's regulations allow for up to 10 millirem per hour (mR/hr) of gamma radiation to be emitted, about six feet (two meters) away from a shipping cask's exterior surface. That's about one to two chest X-rays worth of gamma radiation, per hour of exposure.

Since the radiation dissipates with the square root of the distance, this means that NRC's regulations "allow" for up to 200 mR/hr, at the surface of the cask's exterior. That's 20 to 40 chest X-rays worth of gamma radiation, per hour, which NRC "allows" to stream out, right at the cask's surface.

NRC has done a cost-benefit analysis – the cost, to human health; the benefit, to the nuclear power industry's bottom line – and deemed these exposure levels "acceptable" or "permissible." ("Permissible" or "acceptable" should never be confused with "safe" or "harmless" – exposures to 200 mR/hr, or even 10 mR/hr, still carry health risks. After all, any level of radiation, no matter how small, has long been confirmed to cause cancer. For more information, see: <https://web.archive.org/web/20160325141005/http://www.nirs.org/press/06-30-2005/1>)

The humans actually harmed by these exposures to hazardous radioactivity – related to the industry's NRC-approved, unnecessary shipments, for example – might beg to differ! But of course, any negative health impacts associated with irradiated nuclear fuel shipments will not be closely tracked (or tracked at all) by NRC,

or any other government agency for that matter. NRC and industry almost always downplay the health risks, and would almost certainly deny any connection between such exposures and negative health outcomes.

Six feet away could affect a person standing beside a train track, as the train goes by. Some real world examples of this situation include the Takoma Metro Station near Takoma Park, Maryland – the Red Line Metro Station platform is right beside the CSX railway, which is targeted for trains to haul irradiated nuclear fuel from the Calvert Cliffs, MD and North Anna, VA nuclear power plants, such as bound for WCS, TX.

Although further than six feet away, residences located immediately adjacent to these same CSX rail lines in Tacoma, D.C. mean that those living there could well be exposed to gamma radiation, although at a lower dose rate (again, the dose rate decreases inversely with the square root of the distance). However, residents can be expected to be present in their homes a lot more often than commuters standing on a Metro platform – including during sleep hours, when trains carrying irradiated nuclear fuel could still go by. And of course, residents along these tracks, would also be commuters standing on the platform, leading to multiple exposures in their daily (and nightly) lives, for years on end during a WCS shipping campaign.

Trains pausing next to commuter platforms or residences will prolong these potentially hazardous exposures. Paused trains – even ones carrying hazardous cargos – are commonplace in the U.S. Pauses can sometimes last a long time. Lead cars stuck by paused trains at railroad crossings could mean the occupants of those cars are exposed to gamma radiation. Even a rolling train car would emit a certain dose as it passed by, to lead car occupants stopped nearest the tracks.

Similar situations will arise across the U.S. Innocent passers by, whose daily lives bring them in close proximity to railways or waterways that would be used to ship irradiated nuclear fuel, mean that ordinary people would be exposed to hazardous gamma radiation in some amount greater than zero – perhaps repeatedly, over the course of years during a WCS, TX shipping campaign.

The 200 mR/hr – acceptable – dose rate at the surface of shipping casks would most likely impact workers – locomotive engineers, railway workers, inspectors, security guards, etc.

However, when, in 2003, the Big Rock Point reactor pressure vessel (albeit so-called – low – level radioactive waste, it still serves as a cautionary tale) was shipped by heavy haul truck into Gaylord, Michigan to be loaded onto a train, for its shipment by rail to Barnwell, South Carolina, to be buried in a ditch, neither the nuclear utility, Consumers Power, nor the NRC (nor any other federal or state agency), nor local law enforcement, created a security or safety or health perimeter around the shipping container. As if it were a parade, onlookers were allowed to simply approach the shipping container, walk right up to it, and even touch it. In fact, a parade would probably have had better health, safety, and security precautions in place! (See 2003 written entries, as well as a photo, about this and other incidents that occurred during this single shipment, posted online at:

<https://web.archive.org/web/20151211005008/http://www.nirs.org/radwaste/hlwtransport/mobilechernobyl.htm>) . WCS would involve 4,000 irradiated nuclear fuel shipments into the Andrews, TX parking lot dump; and an equal number out, *if* the waste ever were to leave.

Likewise, Bob Halstead, several years ago, was able to guide a camera crew deep into the heart of a rail yard, just off downtown Chicago, that would be used to temporarily store (albeit, – temporarily – could last for days) train cars holding irradiated nuclear fuel. Security was nowhere to be seen. (Halstead, then serving as transport consultant to the State of Nevada Agency for Nuclear Projects, now serves as the agency’s director.)

Similarly, Rick Hind of Greenpeace U.S.A. guided a Wall Street Journal reporter deep into the heart of underground train tunnels under Washington, D.C. The graffiti and art on the walls showed clearly that the

tunnels are frequented by human beings. (Hind was showing the reporter how insecure such tunnels, even the nation's capital, are to potential security risks, even as hazardous train cargos "including chlorine shipments" pass by.)

In these ways, that 200 mR/hr "permissible" dose rate could impact not only workers, but even members of the public.

In this sense, even "routine" or "incident-free" shipments of irradiated nuclear fuel can be considered as similar to mobile X-ray machines that can be turned off, a phrase describing the concept first expressed by Lauren Olson, a supporter of NIRS.

To make matters worse, there have been large numbers of shipments, externally contaminated with radioactivity, making their actual dose rates much higher "and thus more hazardous" in serious violation of the already compromised "permissible" or "acceptable" levels.

Areva "a key partner in the WCS proposal" at its home base in France, experienced just such a plague or epidemic of externally contaminated shipments. A full 25% to 33% of Areva's irradiated nuclear fuel shipments, into its La Hague reprocessing facility, were externally contaminated, for years on end, above "permissible" levels. This amounted to many hundreds of individual shipments, contaminated above "permissible" levels, over the course of several years. On average, the shipments were giving off radiation dose rates 500 times the "permissible" level; in one instance, a shipment was emitting radiation 3,300 times the "acceptable" level.

Environmental watchdogs and journalists revealed this contaminated shipment scandal. See the WISE-Paris write up, Transport Special - Plutonium *Investigation* n°6/7, posted at <http://www.wise-paris.org/> under Bulletins.

**But such externally contaminated shipments have happened in the U.S., as well. Halstead documented this in a report prepared for the Nevada State Agency for Nuclear Projects in 1996. It is entitled "Reported Incidents Involving Spent Nuclear Fuel Shipments, 1949 to Present." 49 "surface contamination" incidents are documented. This report is posted online at: <http://www.state.nv.us/nucwaste/trans/nucinc01.htm>.**

### **Risk of De Facto Permanent Parking Lot Dumps**

What if so-called interim storage (for "only" 20-40 years, which is already a long time, in most people's books!) becomes much longer term, or even *de facto* permanent?

What if future replacements for today's U.S. Representatives from these adjacent congressional districts in NM and TX, decide enough is enough, and the high-level radioactive wastes need to move? Those one or two future U.S. Representatives from here, would then face the daunting challenge of overcoming the inertia, or even active opposition, of the other 433-434 Members of the U.S. House of Representatives, who might be just fine with the high-level radioactive wastes staying at WCS forevermore (it's not in *their* congressional district, after all!) "which is how long they remain hazardous by the way.

In 2008, under court order, the U.S. Environmental Protection Agency acknowledged that commercial irradiated nuclear fuel remains hazardous for a million years into the future. This is actually an underestimate. Take Iodine-129, as but one example. Its half-life is 15.7 million years. It will remain hazardous for at least ten half-lives, or 157 million years. I-129 is in high-level radioactive waste, too.

A 2013 U.S. Senate bill “ forerunner to current versions of the legislation in Congress “ added to the risks of "interim" storage sites becoming *de facto* permanent parking lot dumps, by stating a preference for co-location of pilot interim storage alongside large-scale, non-priority interim storage, and even the permanent repository (that is, burial dump).

Also, the waiver of any connection or "linkage" between development of centralized interim storage and progress toward opening a repository only increases the risk that stored wastes will simply be allowed to remain in centralized, so-called “interim,” surface facilities indefinitely into the future. In other words, they could become *de facto* permanent parking lot dumps.

U.S. Senator Jeff Bingaman (D-NM), Chairman of the Energy and Natural Resources Committee, warned against this de-linkage in 2012. In fact, the requirement for a permanent disposal repository being opened and ***operating*** was, and still is, essential and foundational in the Nuclear Waste Policy Act, as Amended, the benchmark law on commercial irradiated nuclear fuel management. This was, and still is, a safeguard against interim storage sites becoming *de facto* permanent surface “disposal,” or parking lot dumps.

Note that linkage requires an *operating* repository, not just a licensed one, nor just a proposed one by someone, for someday, somewhere, some way. Remarkably, current DOE projections for the opening of a permanent burial dump are by 2048, 31 years from now, although they don’t know who, where, or how!

2048 is 106 years after Enrico Fermi generated the first cupful of high-level radioactive waste of the Atomic Age, in his Chicago Pile-1 at the University of Chicago squash court under the football stadium, on Dec. 2, 1942 as part of the Manhattan Project race for the atomic bomb; 2048 is 99 years after the first civilian, or commercial, irradiated nuclear fuel was generated, at the Shippingport atomic reactor near Pittsburgh, PA. Such remarkable delays in high-level radioactive waste management and disposal are another red flag, warning about WCS’s facility becoming a long-term, or even *de facto* permanent parking lot dump.

### **Risks of Loss of Institutional Control if De Facto Permanent Parking Lot Dumps are Abandoned, Containers Fail, and Release Catastrophic Amounts of Hazardous Radioactivity into the Environment**

DOE warned in its Feb. 2002 Final EIS on the proposed Yucca Mountain, Nevada national burial dump, that loss of institutional control would eventually prove catastrophic. Entropy means that things falls apart, over long enough periods of time. DOE was focused on this happening at nuclear power plant sites, if irradiated nuclear fuel was abandoned there forever. But the same is true here. If institutional control is eventually lost at WCS’s high-level radioactive waste parking lot dump, the containers will eventually fail, and catastrophically release their hazardous, high-level radioactive waste contents into the living environment. Hazardous and even deadly fallout would then flow with the winds and the waters, downwind and downstream, over greater and greater distances over time. Remember, high-level radioactive waste remains hazardous, even deadly, for millions of years into the future.

Such impacts could extend to the immediately adjacent and perhaps even underlying, Ogallala Aquifer. The Ogallala can also be considered downwind and downstream. Aquifers directly under or adjacent to WCS could be in direct communication with the Ogallala. Also, downwind or downstream surface level fallout from WCS could eventually find its way into the Ogallala, through natural flow paths (blowing with the winds, flowing with the rains, deposition onto and into soil, downward flow to aquifers). The Ogallala, North America’s largest, provides essential drinking and irrigation water for millions in Texas, New Mexico, Oklahoma, Kansas, Colorado, Nebraska, Wyoming, and South Dakota. As the water protectors at the Standing Rock Sioux Tribe reservation say on the Missouri River in North Dakota, *Mni Wiconi*, Water Is Life. This was made very clear by recent drinking water contamination disasters in Flint, Michigan; Charleston, West Virginia; the Animas River

in Colorado, New Mexico and Utah; and Toledo, Ohio. A radioactive release into or contamination of the Ogallala would be catastrophic.

Making these risks all the worse, NRC has allowed a quality assurance (QA) failure crisis to persist in the U.S. nuclear power industry for years and decades. These QA failures extend not only to on-site storage casks, but also to the shipping cask and away-from-reactor storage cask realm.

Industry and even NRC whistle-blowers called attention to these QA failure risks 17 long years ago, yet little to nothing has been done to correct them. Industry whistle-blower Oscar Shirani questioned the structural integrity of NRC-approved and industry-utilized storage casks sitting still, let alone traveling 60 miles per hour or faster on the railways. Shirani was backed up in his allegations by NRC Midwest Region dry cask storage inspector, Dr. Ross Landsman, who warned "The NRC should stop the production of the casks, but they do not have the chutzpah to do it. This is the kind of thinking that causes space shuttles to hit the ground."

Such QA failures, shoddy design, and shoddy fabrication, of the storage casks, means that their eventual failure, and release of their deadly hazardous high-level radioactive waste contents, will only happen all the sooner.

Although Shirani and Landsman's revelations were about Holtec casks (targeted for use at the Eddy-Lea Energy Alliance proposed centralized interim storage site in New Mexico, not far from WCS, TX), NRC's incompetence at best, or even collusion with industry, when it comes to cask QA violations, extends to other cask models and designs, including NAC and Areva casks to be used at WCS, TX.

Nuclear Assurance Corporation (NAC) container "to be used at WCS -- QA failures are of specific concern. Last autumn, shoddy welding by NAC led to the bottom literally falling out of an irradiated nuclear fuel assembly transfer caddy, allowing the assembly to strike the bottom of the storage pool at Chalk River Nuclear Labs in Ontario, Canada. Such bad welding calls into question the welds on NAC storage and transport containers as well.

At Davis-Besse atomic reactor on the Great Lakes shoreline near Toledo, Ohio, an Areva design Transnuclear NUHOMS storage cask was loaded with irradiated nuclear fuel, despite local environmental interventions to stop it, after it was revealed the walls of inner canister holding the high-level radioactive waste were ground too thin. But violations of technical specifications for the design and manufacture of casks in the U.S. are as rampant as QA violations.

All this boils down to the risk that de facto permanent abandoned of high-level radioactive waste at the surface, at WCS, could lead sooner rather than later to cask failure, and catastrophic radioactivity release.

NRC, in its Nuclear Waste Confidence Draft Environmental Impact Statement, asserted that whether on-site or away-from-reactor (as at WCS), failing dry casks could simply transfer their contents into a brand new replacement cask. But not a single such transfer has ever taken place in the U.S., dating back to the advent of dry cask storage (at the Surry atomic reactor in Virginia) in the mid-1980s. This, despite the fact that numerous dry casks, as at Palisades in MI, are acknowledged by industry and/or NRC to be defective.

NRC asserted in its DEIS that non-existent "Dry Transfer Systems" could be built at some unspecified future date, with no known source of funding, to accomplish this cask-to-cask transfer, when needed. Despite many thousands of public comments expressing concern about such an overly optimistic, science fiction plan, NRC stood by its Dry Transfer System fantasy in its Final EIS ("Nuclear Waste Confidence" had to be changed by NRC to "Continued Storage of Spent Nuclear Fuel," as critics had effectively changed the phrase to "Nuke Waste Con Game" !)

Frighteningly, DTSs may be a fantasy plan on which NRC and WCS cannot deliver. In that case, abandonment and eventual failure of high-level radioactive waste storage containers at WCS could well lead to the catastrophic releases of hazardous radioactivity that DOE warned about in its Yucca Mountain Final EIS in Feb. 2002!

### **Why Are These Risks Being Taken?**

For no good reason. Certainly not to increase public health, safety, security, or environmental protection, despite WCS and nuclear power industry claims and PR spin to the contrary. Truth be told, it's to transfer liability, costs, and risks, for the highly radioactive irradiated nuclear fuel, from the companies that generated it, and profited from its generation, onto the backs of federal taxpayers. That's a pretty big favor to the companies – in fact, it's unique in all of industry!

Dr. Mark Cooper of Vermont Law School calculated, in December 2013, in his expert witness comments to the U.S. Nuclear Regulatory Commission's (NRC) Nuclear Waste Confidence/Continued Storage of Spent Nuclear Fuel EIS proceeding, calculated that the first 200 years of commercial irradiated nuclear fuel storage will cost \$210 to 350 billion (yes, with a B). (See his expert comments at < <https://web.archive.org/web/20160909042541/http://www.nirs.org/radwaste/exhibitd2013-12-16markcooperfinaldeclaration.pdf>>, as well as the related press release at < <http://www.cleanenergy.org/2013/12/19/waste-disposal-nrc/>>.) His estimate assumed two centralized interim storage sites, one repository, and ongoing on-site storage at nuclear power plants, as needed. It effectively doubled the costs of nuclear-generated electricity, because that cost had never been accounted for. Thus, centralized interim storage, as at WCS, would be yet another significant public subsidy, for the nuclear power industry, on top of more than a half-century of significant public subsidies of various sorts. (See the Union of Concerned Scientists' 2011 report < <http://www.ucsusa.org/nuclear-power/cost-nuclear-power/nuclear-power-subsidies-report#.WK3Iz4WkUZU>>, for a comprehensive overview of the many assorted, unmatched by any other industry, public subsidies the nuclear power industry has enjoyed over the past several decades.)

At NRC public comment meetings in NM and TX in mid-Feb. 2017, WCS CEO Rod Baltzer pushed back against this criticism. He said that the taxpayer is already obligated to pay for irradiated nuclear fuel storage, because DOE signed contracts with utilities in the 1980s, pledging to begin taking out the garbage in 1998. He pointed out that the utilities have sued DOE for breach of contract, and won damages from the U.S. Judgment Fund, which draws taxpayer funding from the U.S. Treasury, not ratepayer funding from the Nuclear Waste Fund.

Baltzer is right on this one point: U.S. taxpayers are hemorrhaging \$500 million per year in these damage awards, as Beyond Nuclear reported way back in 2010 < <http://ieer.org/wp/wp-content/uploads/2010/03/NewWasteDisposalContractsBackgrounderFINAL3.pdf>>.

But our criticism actually still holds. Under the Nuclear Waste Policy Act, as Amended, the nuclear utilities are responsible for interim storage of irradiated nuclear fuel. Taxpayers are responsible for final disposal.

This simple fact formed the basis for an environmental coalition letter to NRC in Oct. 2016, pointing out that the WCS license application is illegal, and that the agency should cease and desist from processing it. (See

<http://www.beyondnuclear.org/centralized-storage/2016/10/26/despite-setbacks-beyond-nuclear-and-allies-continue-to-chall.html> for additional information.)

Current law requires a final disposal repository to be operating (not just licensed), before a centralized interim storage site can be opened. Even then, the centralized interim storage site could only be a federal facility, not a private one (even if that private facility “ in this case, WCS “ has only one customer, the federal DOE).

WCS is seeking an end run around this legal constraint. This is very risky for the U.S. federal taxpayer. The linkage between an operating final disposal repository, and a centralized interim storage site, in the Nuclear Waste Policy Act, as Amended, is to guard against centralized interim storage from becoming a *de facto* permanent, surface storage parking lot dump, the costs, liabilities and risks of which, the U.S. federal taxpayer may get stuck with indefinitely.

This end run around the precautionary linkage between an operating repository, and centralized interim storage, that WCS seeks, would be a huge boon to the nuclear power industry. It would expedite the transfer of all costs, risks, and liabilities for irradiated nuclear fuel, from the utilities that profited from its generation, onto the backs of U.S. federal taxpayers, sooner rather than later -- even before a repository is operating. Long before, actually: the DOE’s most recent estimate, as to when a repository can be opened, is 2048!

Such an accelerated transfer of the costs, risks, and liabilities for irradiated nuclear fuel means the nuclear utilities can walk away from the mess they’ve made all the sooner, removing that headache from their own ledgers.

WCS is clear about those costs, risks, and liabilities. WCS has been careful, making it a licensing condition, that all those costs, risks, and liabilities for the irradiated nuclear fuel would be solely on DOE “ that is, on U.S. federal taxpayers. WCS will accept none of those costs, risks, or liabilities. This of course sets up a moral hazard with a highly radioactive twist. WCS, a private, for-profit company, will have every incentive to cut corners, and take short cuts on safety, in order to save money, and boost its own profits. After all, DOE “ U.S. federal taxpayers “ will be shouldering all costs, risks, and liabilities. If anything goes wrong, it won’t be WCS’s problem “ it’ll be the taxpayers’ problem!

WCS’s laser-like focus on cutting costs and boosting profits is reflected in its own top corporate leadership. Tellingly, its CEO and President, Rod Baltzer; its Senior Vice President and General Manager, Elicia Sanchez; and its Executive Vice President and CFO, Amy Samford “ all are certified public accountants (as opposed to having expertise in such fields as environmental health, safety, or public health protection, for example). See <http://www.wcstexas.com/about-wcs/leadership/> for more information.

*Please note: the U.S. Department of Energy (DOE) held a public comment proceeding that ended on Jan. 27, 2017, re: Private Initiatives for centralized interim storage of commercial irradiated nuclear fuel. As Waste Control Specialists, LLC’s (WCS) scheme to construct and operate a centralized interim storage facility for commercial irradiated nuclear fuel in Andrews County, Texas is a private initiative, our previous comments to DOE, submitted on Jan. 27, are equally relevant to the U.S. Nuclear Regulatory Commission (NRC) during this current environmental scoping public comment period. Therefore, please include these as additional comments below from us, as well, in the present proceeding.*

*See DOE’s dozen questions (**in bold italics**), followed by our public comments in response; where we have written DOE, below, in response to DOE questions, in the DOE public comment solicitation proceeding, please simply apply the comments to NRC re: the present WCS proceeding, as appropriate.*

As stated in its [Request for Information \(RFI\)](#), the U.S. Department of Energy (DOE) had requested:

***In particular, DOE seeks information in the following [dozen] areas...***

**1. What key factors should be considered to ensure that PIs, as part of the overall integrated nuclear waste management system, would provide a workable solution for interim storage of spent nuclear fuel and high-level waste?**

Since a private centralized interim storage facility could easily become a *de facto* permanent parking lot dump, or could one day well be targeted not just for storage but also for permanent disposal (such a preference has been expressed in related legislation on Capitol Hill, that the pilot-, and full-scale, centralized interim storage site also be considered for permanent disposal), the following criteria must be met: scientific (geologic, hydrologic, etc.) site suitability; free, fully informed, consent-based siting; environmental justice, not just for current, but also for all future generations.

In addition, since consolidated interim storage would require unprecedented numbers of shipments (by road, rail, and/or waterway) of highly radioactive irradiated nuclear fuel, through many to most states, such "Mobile Chernobyl" risks must be minimized. (See, for example, [projected nationwide shipping routes to Yucca Mountain, Nevada](https://www.nirs.org/stop-fukushima-freeways/), <<https://www.nirs.org/stop-fukushima-freeways/>> which has been targeted for governmental (DOE) centralized interim storage in the past, and is still targeted for permanent disposal; see also [projected cross-country shipping routes to the PI Waste Control Specialists, LLC facility in Andrews County, West Texas](http://static1.1.sqspcdn.com/static/f/356082/27010338/1462424717363/Transportation+Maps-1.jpg?token=TM%2FbJ6JhFDsgOA%2BtLMiwPmZVELk%3D), <<http://static1.1.sqspcdn.com/static/f/356082/27010338/1462424717363/Transportation+Maps-1.jpg?token=TM%2FbJ6JhFDsgOA%2BtLMiwPmZVELk%3D>> targeted for centralized interim storage.) Long-distance shipments should only happen once, to suitable, consent-based, environmentally just permanent disposal, not to a supposedly interim storage site, from which the wastes will have to move again, multiplying transport risks. Consent should be required for transport corridor communities for such shipments, and transport container safety and security should be guaranteed, requiring significant upgrades to current shipping container integrity standards.

**2. How could a PI benefit:**

**a. the local community and state or Tribe in which an ISF [Interim Storage Facility] is sited?**

**b. neighboring communities?**

Certainly pro-nuclear Republican U.S. Senators, during related Energy and Natural Resources Committee hearing in summer 2013, have joked openly about the "incentives" (legalized bribes, and other "inducements," such as promises of jobs, for low income, often people of color communities; however, as Keith Lewis of the uranium mining and milling devastated Serpent River First Nation of Ontario put it, "There is nothing moral about tempting a starving man with money.") that cut to the heart of tempting communities to consider "consenting" to "host" *de facto* permanent parking lot dumps. But what about the harms to communities, states, Tribes and neighboring communities that would be caused by *de facto* permanent parking lot dumps?

For starters, low income people of color communities must be taken off the target list, as a basic Environmental Justice principle. To do otherwise would mean radioactive racism. Even people of color communities which are no longer low income should not be targeted, given the historical oppression they have already endured in the United States. Neither should majority white low income communities be targeted.

Radioactive stigma impacts should be addressed and accounted for, from the start. Even if a release of hazardous radioactivity into the environment does not occur, property values will be significantly decreased at and near a centralized interim storage site, as well as along transport corridor routes. Radioactive stigma will even mean that products from the area of the centralized interim storage facility will be avoided by a significant share of consumers, causing economic losses. So too would other economic development be deterred from the region of the *de facto* permanent parking lot dump.

And if a release of hazardous radioactivity does occur, the radioactive stigma impacts to the economy will be all the worse.

Neighboring communities can expect to get the worst of both worlds. The host community will reap the income, tax revenues, and jobs, while neighboring communities will get the short end of the stick -- which would include radioactive stigma impacts, but also the potential for hazardous radioactivity release into air, surface waters, and groundwaters if they happen to be located downwind and downstream.

Native American "Tribes" -- Indigenous Nations -- should not be targeted at all for such hazardous high-level radioactive waste storage facilities. To the contrary, [Indigenous Nations have been disproportionately targeted, for decades, an environmental injustice and form of radioactive racism.](#)

<<https://web.archive.org/web/20160131160214/http://www.nirs.org/radwaste/scullvalley/historynativecommunitiesnuclearwaste06142005.pdf>> Beyond Nuclear and others [pleaded with the Blue Ribbon Commission](#) <[http://static1.1.sqspcdn.com/static/f/356082/27423441/1485184888187/kevin\\_kamps\\_comments\\_to\\_chu\\_brc\\_march\\_26\\_2010.pdf?token=AHoQCYzWrKMPVaBcqZhRodpE2PM%3D](http://static1.1.sqspcdn.com/static/f/356082/27423441/1485184888187/kevin_kamps_comments_to_chu_brc_march_26_2010.pdf?token=AHoQCYzWrKMPVaBcqZhRodpE2PM%3D)> on America's Nuclear Future (BRC), from its opening meeting onwards, to no longer target Indigenous Nations. [President Obama's Women's History Month, 2009 proclamation honoring Grace Thorpe](#) <<http://static1.1.sqspcdn.com/static/f/356082/27179664/1470334615933/Obama+proclamation+on+Grace+Thorpe.pdf?token=lfrAmjYj63dTU2nsBLlsvi4qOCA%3D>> of the Sauk and Fox Nation in Oklahoma for her work to stop centralized interim storage sites targeted at her reservation community, and scores more, was cited to the BRC. Such comments fell on deaf ears at the BRC, and DOE is still targeting Indigenous Nations, to the present day.

### ***3. What type of involvement if any should the Department [of Energy] or other federal agency consider having with the PI and the community regarding organizational, structural, and contractual frameworks and why?***

Mention of "the Department or other federal agency" is an important reminder that the DOE should not even be conducting this Request for Information proceeding. The second highest recommendation by the BRC was for DOE to be removed from high-level radioactive waste management. This is because DOE has proven, over the course of decades, its incompetence and worse -- that it cannot be trusted by the public, in such vital matters. Such high-stakes matters as defining "consent-based siting" should be carried out by a trustworthy and competent replacement for DOE. A competent and trustworthy replacement for DOE would not have even considered PIs for centralized interim storage, since this violates the law, the Nuclear Waste Policy Act, as Amended.

Re: contractual frameworks, of course the consequences of any intentional wrongdoing, or even unintentional negligence, must be the liability of the PI. Otherwise, as Tom "Smitty" Smith of Public Citizen's Texas office has warned, this would ***"invite disaster because the private owners will be cutting costs at every turn to maximize profits."*** For example, Waste Control Specialists (WCS) in Texas has baked-in the contractual requirement, in its application for a license to construct and operate a centralized interim storage site, that DOE would not only hold title to the irradiated nuclear fuel, but would be entirely liable should anything go wrong (such as an airborne release of hazardous radioactivity, or a leak into the groundwater below, which could contaminate the Ogallala Aquifer). This of course means U.S. taxpayers would bear ultimate liability, and pay all costs. The Price-Anderson Act already provides liability protection unique in industry -- but even that isn't good enough for WCS! To remove all liability from a PI is a moral hazard with a radioactive twist, inviting catastrophe through company short cuts on safety, to pad their own pockets.

And of course U.S. congressional committees of jurisdiction, as well as Offices of Inspector General and Investigations, at all federal agencies with jurisdiction (DOE, NRC, EPA, etc.), should all be fully engaged, and do their jobs, to oversee and watchdog any centralized interim storage proposals, during licensing, operations,

and decommissioning. Their duty, of course, is to protect public health, safety, security, and the environment, as well as taxpayer pocketbooks, not to cater to the nuclear power industry's or radioactive waste dumps' lobbyists.

**4. What are the benefits and drawbacks of a PI, compared to a federally-financed capital project resulting in a government-owned contractor-operated (GOCO) interim storage facility?**

As mentioned above under point #3, DOE's name is mud when it comes to radioactive waste management. This includes GOCO endeavors such as the high-level radioactive waste liquid vitrification plant at Hanford Nuclear Reservation, which is many years behind schedule and billions of dollars over budget; as well as the utter failure at the Mixed Oxide Fuel Fabrication Facility at Savannah River Site, South Carolina, one of the worst boondoggles in DOE -- and in fact U.S. federal government -- history. As the BRC recommended as its second highest priority in its Final Report in January 2012, DOE must be replaced with a competent, trustworthy radioactive waste management federal agency.

**5. What assurances to the Government do you think would be appropriate, to ensure that SNF [Spent Nuclear Fuel] stored at a private ISF [Interim Storage Facility], would be managed effectively so as to contain costs to the Government?**

An important assurance would be, that hazardous radioactivity will not be released to the environment! No current or foreseeable PI can make such an assurance. For example, at WCS, NAC [Nuclear Assurance Corporation] dual-purpose storage/transport containers would be used. But such [NAC containers have exhibited major Quality Assurance \[QA\] violations, and other failures](http://www.beyondnuclear.org/waste-transportation/2016/12/21/nac-lwt-poor-qa-compliance-2015-2016.html), <<http://www.beyondnuclear.org/waste-transportation/2016/12/21/nac-lwt-poor-qa-compliance-2015-2016.html>> both historically dating back many decades (as documented in Dr. Marvin Resnikoff's 1987 book "The Next Nuclear Gamble"), but also very recently, as revealed at Chalk River Nuclear Lab in Ontario, Canada. Similarly, Holtec transport/storage containers proposed to be used at the Eddy-Lea [Counties] Energy Alliance in Hobbs, New Mexico have long exhibited uncorrected QA violations, calling into question their structural integrity while sitting still, let alone traveling 60 miles per hour or faster on the railways, as revealed by [industry](https://web.archive.org/web/20160130044911/http://www.nirs.org/radwaste/atreactorstorage/shiranialeg04.htm) <<https://web.archive.org/web/20160130044911/http://www.nirs.org/radwaste/atreactorstorage/shiranialeg04.htm>> and [NRC whistle-blowers](https://web.archive.org/web/20160331064027/http://www.nirs.org/radwaste/atreactorstorage/nrc_holtec.pdf). <[https://web.archive.org/web/20160331064027/http://www.nirs.org/radwaste/atreactorstorage/nrc\\_holtec.pdf](https://web.archive.org/web/20160331064027/http://www.nirs.org/radwaste/atreactorstorage/nrc_holtec.pdf)>

Any contracts signed by DOE's replacement radioactive waste management agency must be strictly fixed cost. Besides the multi-billion dollar cost overruns, and years-long schedule delays, at Hanford and SRS mentioned above, there is also the multi-billion dollar cost overruns, and years-long schedule delays, at the Vogtle 3 & 4 new reactor construction project in Georgia. DOE awarded Vogtle 3 & 4 a whopping \$8.3 billion federal loan guarantee, which means that U.S. taxpayers will be left holding the bag for that full amount, if and when the project defaults on its loan repayment. (In fact, such skyrocketing [cost overruns](http://www.beyondnuclear.org/nuclear-costs/) <<http://www.beyondnuclear.org/nuclear-costs/>> and compounding schedule delays are not only a decades-old pattern with nuclear power plants and radioactive waste management facilities in the U.S., including DOE projects, but [the same is also true internationally](https://www.worldnuclearreport.org/-2016-.html); <<https://www.worldnuclearreport.org/-2016-.html>> remarkably, the public has been asked to bailout even 40+ year old, uncompetitive atomic reactors across the U.S., at ratepayer expense, in NY, IL, [and perhaps even in Texas](http://www.mysanantonio.com/opinion/commentary/article/Headwinds-threaten-Texas-nuke-plants-10872751.php), <<http://www.mysanantonio.com/opinion/commentary/article/Headwinds-threaten-Texas-nuke-plants-10872751.php>> which is quite ironic, given WCS's lead in the race to open a PI parking lot dump.) In short, any to-be-expected cost overruns should be the responsibility of the PI, not of federal taxpayers.

Along similar lines, any PI should be required to be entirely privately financed, not government financed, to protect federal taxpayers' pocketbooks.

**6. What possibilities are there with respect to business models for a PI, and what are the benefits and disadvantages of those models?**

A prior PI that should serve as a cautionary tale was the [Private Fuel Storage, LLC \(PFS\) targeted at the Skull Valley Goshutes Indian Reservation in Utah](http://www.nirs.org/radwaste/scullvalley/skullvalley.htm).

<<https://web.archive.org/web/20160220020229/http://www.nirs.org/radwaste/scullvalley/skullvalley.htm>> In addition to being a flagrant radioactive racism violation of environmental justice principles, PFS also serves as a warning about how so-called interim surface storage facilities can turn into de facto permanent parking lot dumps. PFS was proposed to have stored 40,000 metric tons of commercial irradiated nuclear fuel (the same amount as is proposed at WCS, TX), in Holtec containers (the same model as proposed by the Eddy-Lea Energy Alliance in NM). After 20 to 40 years of so-called "interim" storage (which is itself a very long time to refer to as temporary or interim -- in fact, 40 years is 1/6th as long as the entire history of the United States thus far!), the proposal was to then move the highly radioactive wastes to the permanent burial dump at Yucca Mountain, Nevada. However, President Obama wisely canceled the unsuitable, anti-consent-based, radioactively racist and illegal (it is Western Shoshone Indian land by "peace and friendship" treaty rights) Yucca dump in 2009-2010. Thus, if PFS had opened, and irradiated fuel would have been moved there, there would have been no Yucca dump to send it to after 20-40 years. PFS's Plan B was "return to sender." Thus, 50+ Holtec casks from Maine Yankee would have traveled 5,000-miles round-trip, accomplishing absolutely nothing -- but putting countless millions in transport corridor communities across the country at risk of "Mobile Chernobyls" and "Mobile X-ray Machines That Can't Be Turned Off." Fortunately, despite NRC's high-risk rubber-stamp of the PFS construction and operation license, resistance (including that by [the nationwide environmental justice movement, led by Native Americans](http://www.nirs.org/radwaste/scullvalley/skullvalleygoshutesgroupltr772005.pdf))

<<https://web.archive.org/web/20151020093406/http://www.nirs.org/radwaste/scullvalley/skullvalleygoshutesgroupltr772005.pdf>> was strong enough to stop the parking lot dump from being built and opened.

**7. How could a PI manage liabilities that might arise during the storage period?**

As mentioned in response to DOE questions #s 3. and 5. above, all costs, liabilities, and risks should be borne by the PI companies involved, not by the public. If the PI companies are not willing to bear the burden of all liabilities involved in the centralized interim storage scheme, this is a clear sign that the proposal is too risky to undertake. To undertake it nonetheless, at taxpayer liability (such as called for by WCS in TX), would create a moral hazard with a highly radioactive twist!

**8. What state/local/tribal authorizations/approvals would be needed?**

As mentioned at point #2. above, Native American -- and other low income and people of color communities -- must be taken off the target list to begin with, as a basic matter of environmental justice principles.

But in addition, any targeted so-called "Interim Storage Facility" [ISF] location (including the transport corridor communities involved nationwide) must incorporate free-, fully informed consent-based principles, in addition to being scientifically suitable (geologically, hydrologically, etc.) and geographically sensible (such as re: transport risks; an example of regional inequity is the pattern of East dumping on West -- 90% of the atomic reactors in the U.S. are in the eastern half of the country, and yet all proposed parking lot dumps are in the western half of the country). Such consent-based siting must extend from the local level, to the county, regional, state, and national levels, including all impacted residents and their elected officials at all levels.

Any ISF PI must agree to bear the burden of full liability if anything goes wrong, and must agree to pay all costs associated with the facility -- not to burden the public (whether ratepayer or taxpayer) with any of this.

**9. How can the Government continue to explore or implement the PI concept in a fair, open and transparent manner going forward?**

As mentioned in our response to DOE question #12. below, PI centralized interim storage is illegal under the terms of the Nuclear Waste Policy Act, as Amended. Thus, DOE should not go forward with this private initiative proceeding, or any other, as to do so would violate its legal authority. DOE should cease and desist from any further exploration of the PI concept, and should certainly not enter into PI contracts, as at WCS, TX.

Besides that, any undertaking of this significance should only happen under the strictest terms of the National Environmental Policy Act (NEPA), and also in compliance with the Atomic Energy Act (AEA) and Administrative Procedures Act (APA). This current Request for Information proceeding, by contrast, does not formally comply with NEPA, just as DOE's 2016 "consent-based siting" public comment proceeding did not comply with NEPA. This is unacceptable, and in fact illegal.

***10. What, if any, supporting agreements might be expected between the Government and the host state/tribe/local community associated with a PI?***

As mentioned in response to DOE's questions #3. and 7. above, all liability must remain with the PI companies, not with the federal taxpayer. And as mentioned in response to DOE's question #5. above, the PI companies must meet fixed costs commitments; any cost overruns would then be the private companies' problem, not DOE's (that is, not taxpayers'). And again, DOE and its replacement radioactive waste management agency must agree, once and for all, to stop targeting Native American communities, as well as any other low income and/or people of color community, for *de facto* permanent parking lot dumps.

***11. What other considerations should be taken into account?***

Re: DOE's question #8. above, there is also the issue raised by Allison Fisher of Public Citizen at DOE's "kick off" meeting for defining "consent-based siting," held in Washington, D.C. in January 2016. **What about future generations?** How can current generations of decision makers doom all future generations to radioactive risks, by agreeing to "host" storage and/or disposal (as EPA has acknowledged in its Yucca Mountain regulations, irradiated nuclear fuel and high-level radioactive waste has a million-year hazard, which happens to be three times longer than *Homo sapiens sapiens* has even been a distinct species!). To this important question on intergenerational equity and environmental justice, DOE gave no adequate answer that day, nor has it since.

In addition, DOE must address the risk of so-called interim storage becoming permanent parking lot-like surface storage. In its Final Environmental Impact Statement (FEIS) for the proposed dump at Yucca Mountain, Nevada, published in February 2002, DOE warned that permanent abandonment of irradiated nuclear fuel on-site at the reactors where it was generated would result in catastrophic releases of hazardous radioactivity into the local environment, as dry casks failed over time. DOE must admit, clearly and publicly, as in a PI centralized interim storage EIS, that abandonment of irradiated nuclear fuel at a so-called ISF (Interim Storage Facility) would likewise result, over long enough periods of time, in dry cask failure, and catastrophic releases of hazardous radioactivity into the environment.

Along those lines, this Request for Information proceeding is not compliant with NEPA. DOE must publish a Draft EIS, allow for public comment over an adequate period of time (we suggest a nine-month public comment period), and hold multiple public hearings around the country for the collection of public comment. Public meetings must be held by the replacement agency for DOE in all proposed PI ISF "host communities" -- such as Andrews County, TX; Culberson County, TX; Loving County, TX; and Eddy-Lea Counties/Hobbs, New Mexico. So too must the state capitals of states targeted for PI ISFs, including Austin, TX and Santa Fe, NM, be granted an in-person meeting for public comments. And also the biggest cities in each targeted state, including Dallas/Fort Worth, Houston, etc. in TX, and Albuquerque in NM, be granted public comment meetings. So too must public comment meetings be held in transportation corridor communities across the country.

*12. Are there any alternative approaches to developing non-federally-owned facilities that might be proposed (e.g. how projects would be financed, anticipated regulatory and legal issues, etc.). If so, what are they, are there proposed solution [sic., solutions], and how would the above questions be answered with respect to such approaches?*

PI centralized interim storage is illegal under the terms of the Nuclear Waste Policy Act, as Amended. [See the [letter <http://static1.1.sqspcdn.com/static/f/356082/27307046/1477549767997/2016-10-27+Curran+et+al+letter+to+McCree+re+WCS+application.pdf?token=fWH51zHM0D9hsuAwno5S8espVqw%3D>](http://static1.1.sqspcdn.com/static/f/356082/27307046/1477549767997/2016-10-27+Curran+et+al+letter+to+McCree+re+WCS+application.pdf?token=fWH51zHM0D9hsuAwno5S8espVqw%3D) sent by Diane Curran, legal counsel for an environmental coalition, to the U.S. Nuclear Regulatory Commission; see the coalition's [press release](http://static1.1.sqspcdn.com/static/f/356082/27307338/1477579078047/10+27+16+BN+NIRS+PC+SEED+news+release+FINAL3.pdf?token=UI2WDSYJtvpqVJ08Qv0LKjAu6hU%3D); [see additional information, including extensive media coverage.](http://static1.1.sqspcdn.com/static/f/356082/27307338/1477579078047/10+27+16+BN+NIRS+PC+SEED+news+release+FINAL3.pdf?token=UI2WDSYJtvpqVJ08Qv0LKjAu6hU%3D)] <http://www.beyondnuclear.org/radioactive-waste-whatsnew/2016/10/27/despite-setbacks-beyond-nuclear-and-allies-continue-to-chall.html>] No alternative approaches rectify this fatal flaw. For this reason alone, DOE should cease and desist from pushing it!

#### ADDITIONAL COMMENTS:

1. As Tom "Smitty" Smith of Public Citizen's Texas office has said, "Texans do not consent to the risky plan to store high-level radioactive waste at private sites on an open pad above ground in Texas. Another company near Hobbs, New Mexico -- less than 50 miles away -- is expected to file an application to open a storage site that would accept the rest of the nation's high-level nuclear waste. These twin 'storage sites' likely would create a de facto high-level national waste sacrifice zone. **This proposal invites disaster because the private owners will be cutting costs at every turn to maximize profits.** If there was radioactive contamination our land, air, water, and human health could be harmed for millennia." (emphasis added; [see press release here](http://static1.1.sqspcdn.com/static/f/356082/27307338/1477579078047/10+27+16+BN+NIRS+PC+SEED+news+release+FINAL3.pdf?token=UI2WDSYJtvpqVJ08Qv0LKjAu6hU%3D)) <http://static1.1.sqspcdn.com/static/f/356082/27307338/1477579078047/10+27+16+BN+NIRS+PC+SEED+news+release+FINAL3.pdf?token=UI2WDSYJtvpqVJ08Qv0LKjAu6hU%3D>

2. Private permanent parking lot dumps are high-risk, not only radiologically but also to U.S. taxpayers' pocketbooks. As I have previously said: "**By requiring a permanent deep geological repository to be operating before centralized interim storage [whether private or federal government owned/operated], Congress wanted to prevent the very real danger of a de facto permanent parking lot dump -- a high-level radioactive waste storage site that would be designed for the short-term but be there forever. WCS, for example, is a cynical shell game and taxpayers are sure to lose. Congress was right that liability for the costs for storing commercial irradiated nuclear fuel belong with the generators and should not be shifted onto the backs of the American public.**" ([see press release](http://static1.1.sqspcdn.com/static/f/356082/27307338/1477579078047/10+27+16+BN+NIRS+PC+SEED+news+release+FINAL3.pdf?token=UI2WDSYJtvpqVJ08Qv0LKjAu6hU%3D)) <http://static1.1.sqspcdn.com/static/f/356082/27307338/1477579078047/10+27+16+BN+NIRS+PC+SEED+news+release+FINAL3.pdf?token=UI2WDSYJtvpqVJ08Qv0LKjAu6hU%3D>

3. Regarding the transportation costs and risks of centralized interim storage (whether private or federal government owned/operated):

As Diane D'Arrigo, radioactive waste project director at Nuclear Information and Resource Service, has said, "**Moving irradiated nuclear fuel over roads, rails, and waterways to a supposedly temporary site puts us all at risk and creates only the illusion of a solution.**"

And as Karen Hadden, executive director of the Texas-based SEED (Sustainable Energy & Economic Development) Coalition, has said, "**Due to risks of radioactive contamination from leaks or accidents or potential terrorist actions, nuclear waste should only be moved once, and only when a deep underground**

permanent repository is in place that could safely isolate the dangerous waste for the million years [see immediately below] that it will remain hazardous." (see the press release)

<<http://static1.1.sqspcdn.com/static/f/356082/27307338/1477579078047/10+27+16+BN+NIRS+PC+SEED+nws+release+FINAL3.pdf?token=UI2WDSYJtvpqVJ08Qv0LKjAu6hU%3D>>

In fact, a coalition of environmental groups, including NRDC, NIRS, Nevada Nuclear Waste Task Force, Citizen Action Coalition of Indiana, and Public Citizen, won a major court victory on July 9, 2004, which ordered EPA back to the drawing board on its proposed Yucca Mountain high-level radioactive waste dump regulatory cut-off at 10,000 years post waste burial. In 2008, EPA's revised regulations acknowledged a **one million year hazard** associated with irradiated nuclear fuel and high-level radioactive waste. (Truth be told, there are radioactive poisons in high-level radioactive waste that will remain hazardous far longer than even a million years. Iodine-129, as but one example, has a 15.7 million year half-life. This means it will remain hazardous for 157 to 314 million years!)

4. As the lead proposals for centralized interim storage (*de facto* permanent parking lot dumps) are private initiatives (in fact, there are no proposed federal government owned/operated parking lot dumps), all of the public comments submitted to DOE during its so-called "consent-based siting" public comment period in 2016 still apply. (The lead private initiative is by Waste Control Specialists, LLC in Andrews County, West Texas, followed by the Eddy-Lea [Counties] Energy Alliance in Hobbs, New Mexico (less than 50 miles from WCS); AFCI in Loving County, TX; and Culberson County, TX. Note that not only WCS, but also AFCI, have close connections to Trump's pick for Energy Secretary, former TX governor Rick Perry, representing a blatant conflict of interest and ethical violation.) <<http://www.beyondnuclear.org/radioactive-waste-whatsnew/2017/1/7/radioactive-waste-is-good-for-you-or-how-i-learned-to-stop-w.html>> The following comments submitted by Beyond Nuclear, to DOE, during its public comment period re: "Consent-Based Siting" of CISFs, as well as permanent burial dumps, which commenced on December 23, 2015, are also relevant to this present WCS CISF NRC environmental scoping proceeding. Therefore, please see, and incorporate as if written in their entirety herein, the following Beyond Nuclear comments: several sets of comprehensive Beyond Nuclear comments, <<http://www.beyondnuclear.org/radioactive-waste-whatsnew/2016/8/4/beyond-nuclears-comments-to-doe-on-so-called-consent-based-s.html>> covering various subject matter, including Environmental Justice; Beyond Nuclear's Top 10 List, <<http://www.beyondnuclear.org/radioactive-waste-whatsnew/2016/7/22/beyond-nuclears-top-ten-list-for-comments-to-doe-re-irradiat.html>> as well as its more detailed 2-page, and even more detailed 13-page, versions of comments. <<http://www.beyondnuclear.org/radioactive-waste-whatsnew/2016/5/18/we-do-not-consent-sample-talking-points-you-can-use-to-prepa.html>>

Thank you for considering Beyond Nuclear's comments on the environmental scoping for WCS's proposed CISF.

Sincerely,

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Beyond Nuclear aims to educate and activate the public about the connections between nuclear power and

nuclear weapons and the need to abandon both to safeguard our future. Beyond Nuclear advocates for an energy future that is sustainable, benign and democratic.

**Federal Register Notice:** 81FR79531  
**Comment Number:** 16220

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