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WEST VALLEY

New cap, 850-foot wall completed at N-waste site

ASHFORD — A seven-acre cap and an 850-foot underground wall containing a radioactive waste burial area at the West Valley Demonstration Project have been completed, Department of Energy officials have announced.

The five-acre disposal area, licensed through the Nuclear Regulatory Commission, was used from 1966 to 1981 by Nuclear Fuels Services to store wastes from nuclear fuel reprocessing activities at West Valley.

Another 190,000 cubic feet of nuclear waste was disposed there through 1986 during the early West Valley Demonstration Project cleanup. The dump was closed more than 20 years ago and covered with earth. However, in recent years, the earthen cap was determined insufficient to withstand heavy rains, freezing and thawing.

The new cap was completed in time to shield the dump from the recent snowfall.

The wall and cap — designed to last about 25 years — cost about \$5 million.

They are considered an interim measure as authorities consider options for the long-term management or cleanup of the West Valley Demonstration Project, the dump and a nearby state-licensed nuclear waste landfill.

NewBlaze.com, November 25, 2008

Draft Environmental Impact Statement Available for Public Review

The U.S. Department of Energy (DOE) today announced the issuance of the Draft Environmental Impact Statement (EIS) for the West Valley Demonstration Project in western New York, naming Phased Decision making as the Preferred Alternative. Issuance of this Draft EIS is a significant step forward in cleaning up the site.

The document, entitled "Revised Draft Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center (DOE/EIS-0226-D (Revised)), is a revision of the 1996 Cleanup and Closure Draft EIS.

The National Environmental Policy Act of 1969 requires federal agencies to integrate environmental values into their decision-making process by considering the environmental impacts of their proposed actions and reasonable alternatives for implementing those actions.

DOE and the New York State Energy Research and Development Authority (NYSERDA) are joint lead agencies on this draft EIS. This Draft EIS identifies and assesses the potential environmental impacts of the range of reasonable alternatives proposed to meet DOE's responsibilities under the West Valley Demonstration Project Act and NYSERDA's options for management of the Western New York Nuclear Service Center (WNYNSC). It includes how facilities, materials, and hardware are to be managed or decommissioned in accordance with applicable federal and state requirements and what, if any, institutional controls, engineered barriers, or stewardship provisions would be needed.

The alternatives analyzed include: Sitewide Removal, Sitewide Close-In-Place, and Phased Decisionmaking, along with a required No Action Alternative. DOE and NYSERDA prefer the Phased Decisionmaking Alternative. Other federal and state agencies involved in reviewing the alternatives analyzed in the draft EIS include the U.S. Environmental Protection Agency, the U.S. Nuclear Regulatory Commission, and the New York State Departments of Health and Environmental Conservation.

The Notice of Availability for the document will be published in the Federal Register on December 5, 2008. There is a six-month public comment period that runs from December 5, 2008 to June 8, 2009. All comments received which are postmarked no later than the end of the public comment period will be addressed in preparing the final EIS.

Public hearings will be held during the comment period at three New York locations. The Draft EIS, along with guidance on how to submit oral or written comments, and the dates, times and locations of the public hearings will be announced in the Federal Register, local media, and on the web at <http://www.wv.doe.gov> and <http://www.westvalleyeis.com>.

The WVDP is a DOE managed, contractor operated, environmental cleanup project located on the site of the Western New York Nuclear Service Center, owned by the state of New York and administered by the New York State Energy Research and Development Authority. Located on approximately 200 acres about 40 miles south of Buffalo, the WVDP occupies the site of the only commercial used nuclear fuel reprocessing facility to have operated in the United States.

Source: U.S. Department of Energy

West Valley Work Ongoing

By Sharon Turano sturano@post-journal.com

POSTED: November 25, 2008

ASHFORD - A project to install water control barriers at a disposal area at the West Valley Demonstration Project is progressing, report federal Department of Energy officials.

The \$5 million project is an initiative to ensure continued safe management of radioactive waste as cleanup activities advance at the site, they said.

"The completion of this work is a significant achievement for the WVDP," said Department of Energy West Valley Director Bryan Bower. He said water management measures will prevent clean water from contacting buried waste.

The two-part project included excavation of an 850 foot-long sub-surface trench alongside the landfill. The trench was backfilled with a combination of native soils and bentonite clay that thickens to form a low-permeability barrier.

The "slurry wall" technology is effective at reducing or eliminating water penetration. The wall was installed earlier this year to in order to reduce the potential for lateral movement of groundwater into the disposal area.

The second part of the project - placement of a seven-acre geomembrane cover on the surface of disposal area - will prevent surface water from percolating through the cover. The wall and cover have design-life expectancies of approximately 25 years.

The disposal area, which is inside the boundaries of the West Valley Demonstration Project, has been inactive for more than 20 years.

Although DOE has actively managed the disposal area through routine monitoring and reworking the earthen cap when necessary, these activities are being installed as "best-management" practices to prevent the infiltration of clean surface water into the disposal area.

In addition to the wall and cover, upgrades to the storm water drainage system in the vicinity of the disposal area and additional groundwater monitoring wells are also being installed.

The project is scheduled for completion by the end of this year's construction season.

While the work continues, the Department of Energy is also expected to release this week a revised draft environmental impact statement for decommissioning or long-term stewardship at the site, which is the site of a closed nuclear facility that is being cleaned up by the state and federal governments. A six-month review period will then begin.

WVCTF prepares for public comment on revised EIS

At its monthly meeting on Wednesday, Nov. 19, the West Valley Citizen Task Force (CTF) met to discuss how to most effectively spend its time in preparing public comments on the Revised Draft Environmental Impact Statement (EIS) due to be released on Dec. 3.

The document, which is approximately 1,300 pages, evaluates the reasonable range of alternatives for decommissioning and/or long-term stewardship of the facilities at the West Valley Demonstration Project. The goal of the group is to come to a consensus agreement on public comments and given the depth and complexity of all the issues, time is of the essence.

According to Bill Logue, independent facilitator of the group, "If the draft EIS comes out in December, you have five months to prepare for the comment period and we need to discuss how to plan for this."

Logue then led the CTF through some of the chapters of the report which will need to be addressed such as possible site wide removal of facilities including shipping of radioactive and hazardous waste for disposal, isolation of residual radioactivity; and the closing of facilities.

Additionally, there are many other considerations such as short-term and long-term environmental consequences resulting from decisions made.

Various options were discussed on how the group could organize to cover the various segments of the EIS including meeting as a full group or breaking up into small work group sessions, each discussing particular areas. Logue also asked the CTF to consider what help it might need such as technical presentations and what level of public outreach would be desired. In the end, the group decided to begin meeting twice a month in January to accommodate for the anticipated increase in workload.

In other business:

- With respect to the deer hunting program, Tom Attridge, Program Manager of the New York State Energy Research and Development Authority reported that 13 deer samples have been collected for analysis with the results expected in about a month.
- Logue said that he has started to compile a draft of 2008 CTF accomplishments. An electronic survey was sent to the members with 12 responses so far.

The next regular meeting of the CTF will be on Wednesday, Dec. 17, at 7 p.m. at the Ashford Office Complex in Ashford Hollow. A presentation of the contents of the EIS will be given by DOE and NYSERDA.



Top Story

Water control barrier completed at WVDP disposal area

By NATALIE CONDOR-SMITH
Journal Correspondent

It was not only a huge project to install barriers between buried waste and ground and surface water at the site of the Nuclear Regulatory Commission-licensed Disposal Area (NDA) at the West Valley Demonstration Project, but the area covered was also huge.

In addition to the excavation of an 850-foot ground water barrier wall, a 7-acre geomembrane cover was placed over the burial area—by hand. The cover was laid in sections and then the pieces were welded together. The panels ranged from 60-to-84 feet wide and 90-to-265 feet in length.

At a recent meeting with the Journal and some of the leaders of the project, there were only proud smiles to be seen because of the success of this \$5 million project that took approximately 12 months to complete by the US Department of Energy (DOE). The project was an initiative to ensure continued safe management of radioactive waste as cleanup activities advance at the WVDP.

“The completion of this work is a significant achievement for the WVDP,” said DOE-WVDP Director Bryan Bower.

“The water management measures installed at the NDA will prevent clean water from contacting buried waste. This is part of DOE’s proactive plan for managing the WVDP in a manner that protects workers, the public, and the environment,” he said.

The two-part NDA project included excavation of the 850-foot long subsurface trench alongside the landfill. The trench was backfilled with a combination of native soils and bentonite clay that thickens to form a low-permeability barrier. This “slurry wall” technology is effective at reducing or eliminating water penetration.

The wall was installed earlier this year in order to reduce the potential for lateral movement of groundwater into the disposal area.

The second part of the project was the placement of a seven-acre geomembrane cover on the surface of the disposal area which will prevent surface water from percolating through the cover of the NDA. The wall and cover have design-life expectancies of approximately 25 years.

The disposal area, which is inside the boundaries of the WVDP, has been inactive for more than 20 years. Although the DOE has actively managed the disposal area through routine monitoring and reworking the earthen cap when necessary, these activities are being installed as “best-management” practices to prevent the infiltration of clean surface water

into the disposal area.

In addition to the wall and cover, upgrades to the storm water drainage system in the vicinity of the disposal area and additional groundwater monitoring wells are also being installed. The project was completed this month.

“This is a significant improvement in the overall management of the NDA. By installing the subsurface barrier wall and covering the disposal area with an impermeable cover, water cannot come into contact with the wastes. We see this as a positive step in the overall management of the site.

“In the mid 1990s, we installed a similar cover over the State-Licensed Disposal Area, adjacent to the NDA, which has worked very well to prevent water infiltration. It’s great to see our project partner, the USDOE use this same proven technology to safely manage the NDA,” said Tom Attridge, Program Manager of the New York State Energy Research and Development Authority (NYSERDA).

The WVDP is a DOE environmental cleanup and waste management project conducted in cooperation with the NYSERDA. West Valley Environmental Services (WVES) manages and operates the WVDP under contract to the DOE. The WVES team comprises URS Washington Division, Jacobs Engineering, Environmental Chemical Corporation and Parallax.

More information about the WVDP can be found at www.wv.doe.gov.



FINISHING TOUCHES — A West Valley Demonstration Project work crew welds the geomembrane panel together. *WVDP file photo.*



CLAY WALLS — Excavation of the slurry wall in progress at West Valley Demonstration Project. *WVDP file photo.*

Buffalo News, Thursday, November 27, 2008



West Valley cleanup could take 30 years

*Phased shutdown is one of
four alternatives unveiled in
Department of Energy
Report*

By Douglas Turner

NEWS WASHINGTON BUREAU

WASHINGTON — State and federal agencies are recommending a phased shutdown of the West Valley Nuclear Demonstration Project, a process that will take 30 more years.

Their report leaves many crucial issues unsettled, including which level of government is ultimately responsible for cleaning up the site and where radioactive waste would be shipped.

In a sense, the report punts to the incoming administration of President-elect Barack Obama questions about cost, responsibility and waste disposal that have been argued for decades.

The proposal comes in what the U. S. Department of Energy calls a Draft Environmental Impact Statement, the DOE's first such report on West Valley in 12 years.

About 300 persons are employed at the facility.

Four possible scenarios for the site 30 miles south of Buffalo are recommended:

- Complete removal of all radioactive waste, including debris from decommissioned and razed buildings, a job taking 64 years. This solution is blocked by the absence of a national nuclear disposal facility.
- Doing nothing, an alternative that the report says is unacceptable, but is required by federal regulations.
- Burying the nuclear waste and debris where it is, which is unacceptable to local residents, New York State, and many authorities in Canada who fear the leaching of radioactivity into creeks, Lake Erie and the Niagara River and related water supplies.
- The 30-year “phased decision-making” alternative, which the report says is preferred by DOE and the New York State Energy and Research Authority.

“Phase 1 [of this alternative] would remove major facilities such as the Main Plant Process

Building and lagoons,” the report says. “It would reduce or eliminate human health impacts while introducing minimal potential for generation of new orphan [radioactive] waste — waste for which there is no clear disposition path at this time.”

This “would remove the source area for the North Plateau Groundwater Plume, thereby reducing a source of radionuclides that is a potentially significant contributor to human health impacts,” the statement says.

It also means a source of contamination of groundwater.

That plan would allow up to 30 years for collection and analysis of data and information, with the goal of reducing the technical risks associated with decisions that must be made about West Valley facilities that would remain after the completion of the project.

The environmental statement also could spell defeat for efforts led by retiring Rep. Thomas M. Reynolds, R-Clarence, who wanted the Bush administration to agree that the cleanup and control for the waste center are federal responsibilities.

Despite efforts by Reynolds, and two New York governors, the statement says the federal government will continue to pay 90 percent of the cleanup cost, with the state paying the remaining 10 percent. The text of the report will be available at a time to be announced at the Town of Concord public library, and at DOE reading rooms.

Three public hearings will be held: March 31, at the Seneca Nation of Indians, William Seneca Building, 12837 Route 438, Irving; April 1, Ashford Office Complex, 9030 Route 219, West Valley; and April 2, Clarion Hotel — McKinley Banquet and Conference Center, S3950 McKinley Parkway, Blasdell.

Times will be announced. The comment period on the environmental statement will last six months, ending in June, after which a final decision will be announced.

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East Tennessee makes push for nuclear fuel recycling site

Saturday, November 29, 2008



By:
Dave Flessner ([Contact](#))

Where others see only radioactive waste, engineers at TVA and the Department of Energy envision another source of needed energy.

Most of the potential energy in the nuclear fuel used to generate nearly 30 percent of the electricity in the Tennessee Valley remains untapped in spent fuel pools or dry casks at the Sequoyah, Watts Bar and Browns Ferry nuclear plants, said Sherrell R. Greene, director of Oak Ridge National Laboratory's nuclear technology programs.

"We basically discard over 90 percent of the energy value that is still left in the fuel bundles after they are used," Mr. Greene said. "This spent nuclear fuel is potentially a very valuable resource for our country."

But figuring out how to recycle nuclear fuel safely at an economical cost remains a challenge, Mr. Greene concedes. Although other countries reprocess nuclear fuel, the United States abandoned the technology in 1977 to help curb the proliferation of nuclear weapons that use the plutonium generated in reprocessing fuel.

Critics of nuclear reprocessing complain such technologies are too expensive and create and disperse more dangerous materials than they recycle.

Diane D'Arrigo, radioactive waste project director for the Nuclear Information and Resource Service, grew up near the Nuclear Fuel Services' reprocessing plant in western New York that operated from 1966 to 1972. She said cleaning up the plant's radioactive wastes that could leak into the Great Lakes is projected to cost at least another \$10 billion.

"Reprocessing creates more waste, and the fact that the Department of Energy is even considering repeating this mistake is very depressing," she said.

CLOSING THE FUEL CYCLE

President George W. Bush pushed his Advanced Fuel Cycle Initiative and joined the Global Nuclear Energy Partnership as a way for the United States to develop new and better technologies to reprocess nuclear fuel to reduce the volume of radioactive wastes and generate more energy. The Department of Energy announced in October it favored some type of nuclear fuel reprocessing, but agency officials did not choose among competing technologies.

Oak Ridge is among 13 sites being considered for a reprocessing facility where spent nuclear fuel from America's 104 nuclear plants could be shipped. The Oak Ridge National Laboratory spent \$92 million in fiscal 2008 on nuclear power research.

President-elect Barack Obama has not specified his plans for the global nuclear partnership. He said during his presidential campaign that he favors more nuclear power despite his opposition to the Yucca Mountain repository in Nevada as a storage site for nuclear wastes.

Frank von Hippel, a former advisor to President Jimmy Carter who stopped previous reprocessing programs three decades ago, said he thinks the current partnership program will end in an Obama administration.

“The emphasis on the United States building a nuclear reprocessing facility should die, and I believe it will die under President Obama,” said Mr. von Hippel, co-director of the program on science and global security at Princeton University’s Woodrow Wilson School. “There is no urgent reason to do this and, for now, I believe we can safely store spent fuel in dry casks at the reactor sites until we have better and safer technologies.”

TVA, DOE PARTNERSHIP

U.S. Rep. Zach Wamp, R-Tenn., a member of the House subcommittee on Energy and Water, said he favors nuclear reprocessing and thinks East Tennessee can play an important role in developing the technology at the Oak Ridge National Laboratory. Any reprocessed fuel could generate power for TVA at an existing plant or potentially at a proposed fast reactor plant on the Clinch River, the site of an abandoned DOE breeder reactor project from the 1970s, he said.

Rep. Wamp prefers any reprocessing facilities be built in either South Carolina or Idaho, rather than in Oak Ridge.

“If you really want to reduce our carbon footprint, the single greatest step is nuclear energy,” he said. “The only liability is what do we do with spent fuel. The Oak Ridge National Laboratory can demonstrate at the micro level the reprocessing of that fuel. TVA can demonstrate on the macro level how that can be done within an energy system.”

TVA and the Department of Energy signed a memorandum of understanding in April to work on the development and testing of new technologies.

Jack Bailey, a senior vice president of TVA and chairman of a Nuclear Energy Institute task force working on standards for a reprocessing demonstration project, said the industry is working toward a one-step licensing process for new plants similar to what the Nuclear Regulatory Commission is using for new nuclear reactors.

Mr. Bailey said reprocessing nuclear fuel can reduce the volume and toxicity of spent nuclear fuel while recapturing more of its energy. Spent fuel from America’s nuclear plants now would fill a football field 10 yards deep, but it could be reduced to wastes filling only one end zone, he said.

“We’re not talking about a lot of volume, considering we’ve been producing nuclear power for more than 30 years,” he said. “But it could be a much smaller volume if we are able to reprocess the fuel.”

Mr. Bailey said the United States developed the technology to reprocess nuclear fuel back in the 1940s and 1950s, but it was commercialized by French and Japanese companies after the United States halted any reprocessing efforts to try controlling nuclear proliferation.

The United States halted such reprocessing because it created plutonium, which could be used to make nuclear weapons.

“The world is doing it without us and we can’t stop them, so we need to figure out the best way to do it and move that forward,” Mr. Bailey said. “Let’s not be a laggard; we need to be a leader.”

As a federal corporation, TVA uniquely is positioned to work with the Department of Energy on the project, Mr. Bailey said. The proposed fast reactor at Clinch River could be built and paid for by the DOE to use reprocessed fuel. But TVA might buy the power and operate the facility, he said.

Such proposed plants would generate about 350 megawatts each, or about one third the size of a nuclear reactor at Sequoyah or Watts Bar, officials said.

NUCLEAR FUEL CYCLE

* Enrichment — The process of increasing the ratio of uranium-235 atoms to uranium-238 atoms to make a more stable

mixture usable as nuclear fuel in atomic reactors

* **Reprocessing** — The process of separating the usable from the unusable constituents of spent nuclear fuel after the fuel pellets have been used in a reactor to generate heat and ultimately electricity.

* **Waste storage** — 57,380 metric tons of radioactive uranium from America's 104 reactors primarily is stockpiled at the plants, either submerged in open pools of water or sealed in steel and concrete casks. DOE has designated Yucca Mountain in Nevada as a permanent waste repository and was to begin storing wastes there in 1998, but a series of legal challenges and environmental reviews have blocked such storage.

WHAT'S NEXT

* At 7 p.m. Tuesday, the U.S. Department of Energy will conduct a hearing on nuclear fuel reprocessing alternatives for the Global Nuclear Energy Partnership at the New Hope Center, 602 Scarboro Road, in Oak Ridge. Oak Ridge is one of 13 sites being considered for a GNEP facility, which could include a fuel recycling center, a fast reactor or a research center.

* At 7 p.m. Wednesday, Princeton Professor Frank von Hippel will speak on why he thinks nuclear reprocessing is too risky during a presentation at the University Center Auditorium at UT in Knoxville.

* **Jan. 20** — President-elect Barack Obama will be sworn into office. The new administration is expected to begin considering options for nuclear waste storage and reprocessing.

* **Early 2009** — Congress is expected to decide on a budget request of \$302 million for the Department of Energy's Advanced Fuel Cycle Initiative for fiscal 2009 and considers research and operating budgets for nuclear fuel options for fiscal 2010.

► West Valley

Six-month period to comment on radioactivity cleanup to start soon

By Rick Miller
Olean Times Herald

WEST VALLEY - Officials still aren't sure how to handle a decades-old radioactive waste site, but they want area residents to comment with their ideas.

Next month, the U.S. Department of Energy will release a Draft Environmental Impact Statement (DEIS) on the 200-acre West Valley Demonstration Project cleanup and a preferred alternative.

The DEIS will be available after Dec. 5 when official notification will be published in the National Register, according to a Department of Energy (DOE) statement. A six-month comment period will be held, during which public hearings on the proposed "phased decision-making" as the preferred alternative will be held. Brian Bower, DOE site director at West Valley, said the phased decisions would allow some cleanup to go on, without committing to projects on the site that might be too expensive or dangerous.

The objective of the work described in the DEIS is "to prepare the site for closure," Mr. Bower said.

The West Valley Demonstration Project is on the site of the nation's first and only commercial nuclear fuel reprocessing plant. It operated from 1966 and shut down in 1972 after Nuclear Fuel Services decided to expand production. It never re-opened. The company blamed costly environmental regulations.

A legacy of radioactive waste remains on the site, from high-level radioactive residue in underground tanks to an underground plume of strontium 90 that is leaching toward a creek.

In 1981, Congress passed the West Valley Demonstration Project Act through the efforts of then-Rep. Stan Lundine and the late Sen. Daniel P. Moynihan that provided funding for the cleanup of the site in the town of Ashford. To date, more than \$2 billion has been spent on the cleanup. The major portion of the cleanup involved the solidification of 600,000 gallons of highly-radioactive liquid wastes stored in huge underground steel tanks. The high-level liquid was mixed with melted glass and solidified inside more than 200 10-foot-tall steel canisters. The canisters are stored in a shielded area of the Process Building. Low-level radioactive liquid waste was mixed with concrete and removed from the site - much of it by rail.

In recent years, the DOE and New York State Energy Research and Development Authority (NYSERDA) were unable to agree on the pace and extent of the cleanup of the site. New York state filed a lawsuit against the Department of Energy to force the DOE to clean up the site. In 2006, they began to collaborate on a process called "The Way Ahead," that included both short-term and long-term steps to take toward eventual cleanup and long-term monitoring of the site. That led to the work on the DEIS, which does not provide for a complete cleanup of the site, but seeks to address more immediate issues.

Mr. Bower said the DEIS will call for the DOE to "capture the leading edge of the

strontium 90 plume that is working its way across the site" from the main process building toward Buttermilk Creek, a tributary of Cattaraugus Creek that empties into Lake Erie.

The preferred alternative calls for capturing the North Plateau strontium plume before it leaves the West Valley site. Mr. Bower said the plume varies in depth from 25 to 30 feet. There have been efforts to intercept the radioactive plume in the past. A "pump and treat" system is located near the middle of the plume.

At one point, the plume surfaces in a ditch several hundred feet from the main process building that makes its way to the creek. By the time any runoff reaches the creek, it has been diluted to the point where it cannot be measured.

A pilot study is underway, Mr. Bower said, to line the ditch with a material that will strip the strontium 90 from the water. That project will begin in the spring.

The source of the contamination can't be addressed until the main process building is decontaminated and demolished, since it originated from a leak inside the building in the 1960s.

"Removal of the building will let us get at the material (contamination)," he said.

Before the building can be decontaminated and demolished, however, the canisters containing the highly-radioactive solidified glass must be moved to dry temporary storage facility to be built on the site. The canisters will remain there until the federal repository at Yucca Mountain, Nev., is approved to begin accepting the nation's radioactive wastes.

There is also a preferred plan for the tank farm that held the highly radioactive liquid wastes. The DOE hopes to continue to dry the carbon steel tanks out and monitor them. At one time, the DOE proposed to fill the tanks with a grout-like cement to keep any remaining radioactivity. Others want the tanks cut up and removed along with the other high-level radioactive wastes.

Mr. Bower said drying the tanks removes any imminent risk to the tanks. That will provide time to decide what long-term solution is best, he said.

The DEIS will propose a two-phase clean-up of the site. At the end, everything will be removed from the site except the tank farm, the federal and state low-level burial grounds, and the North Plateau strontium 90 plume, Mr. Bower said.

How long will it take to finalize the DEIS after the six-month public comment period that ends June 8, 2009?

Mr. Bower said he hopes it will take a year or less before a Final Environmental Impact Statement and a Record of Decision can be issued.

The DEIS, and instructions on how to submit oral or written comments, and the dates, times and locations of the public hearings will be announced in the Federal Register, and on the Internet at <http://www.wv.DOE.gov> and <http://www.west-valleyeis.com>.

► Contact reporter Rick Miller at rmiller@oleantimesherald.com

Department of Energy completes year-long cap project to prevent leakage

By Rick Miller
Olean Times Herald

WEST VALLEY - The U.S. Department of Energy (DOE) recently completed a year-long project to keep water from infiltrating the Nuclear Regulatory Commission-licensed disposal area at the West Valley Demonstration Project.

A 7-acre cap and 850-foot slurry wall were installed in a \$5 million project to keep groundwater and surface water from infiltrating radioactive waste buried in the disposal site.

Brian Bower, West Valley site director for the Department of Energy, said the cap "is a significant achievement" and demonstrates DOE's proactive position in addressing potential problems at the West Valley site.

The cap is a geomembrane cover over the burial area and surrounding area, which the DOE began in the fall of 2007 and completed recently.

The burial area is adjacent to the New York State Energy Research and Development Authority (NYSERDA) low-level radioactive waste burial area, which has been covered by an identical geomembrane for several years.

The geomembrane is resistant to ultraviolet rays from the sun, puncture resistant and sheds water. Like the measures taken at the NYSERDA burial site, the cap and barrier wall are interim measures, Mr. Bower said. NYSERDA officials are proposing to monitor its site over the next 30 years before making any decisions on removing the waste.

The disposal area was in use from 1966 to 1981 by Nuclear Fuel Services, which operated the commercial spent nuclear fuel reprocessing plant - the only one in the U.S. - and received radioactive wastes containing more than 250,000 curies - a measure of radioactivity. Also, from 1982 to 1986, the disposal area received an additional 1,500 curies of waste at the start of the West Valley Demonstration Project.

The disposal area contains materials that include nuclear fuel solvent, contaminated fuel reprocessing equipment, 42 nuclear fuel assemblies encased in concrete and other radioactive material. No waste has been placed in the area since 1986.

Like the NYSERDA burial area, the NRC-licensed disposal was originally capped only with packed earth and clay. Over the years, rainwater degraded the cap and allowed water to come in contact with the buried wastes. Groundwater also flowed into the burial areas. In the past, water had to be pumped from both burial sites and treated to remove radioactive elements.

The new geomembrane cap prevents clean surface water from coming into contact with the radioactive waste in the disposal area, Mr. Bower said.

"We worked with the state and took a lesson from their cap," he said. "I hope we have a similar success."

The 850-foot groundwater barrier was installed along two sides of the disposal site to prevent groundwater infiltration during heavy rains and snowmelt when the water table is high.

Contact reporter Rick Miller at rmiller@olean-timesherald.com



December 2, 2008

Enviros: Ship all nuke waste away from West Valley

*By Jay Gallagher
Albany Bureau Chief*

ALBANY -- The state and federal government should scrap plans to leave some nuclear waste on the site of a closed fuel-reprocessing plant in West Valley, Cattaraugus County, for the time being, and instead dig it up and ship it elsewhere, according to a report released today.

Although unearthing tons of waste and shipping it away would cost almost \$10 billion and take decades, it is still better and cheaper than leaving the waste in the ground, where it is likely eventually to leak into Lake Erie, according to the report. Such an occurrence could end up costing as much as \$27 billion in damage, according to the report.

The study by Synapse Energy Economics of Massachusetts, funded with \$90,000 in taxpayer money from Sen. Catharine Young, R-Olean, is at odds with a recent report from the federal Energy Department, which has a proposal to spend \$1 billion to clean up some waste over the next 12 years but defer a decision on what to do with the rest of the waste for as long as 30 years.

The Energy Department is expected to decide what to do within a year.

The federal government has spent more than \$2 billion and the state \$250 million since 1972 trying to clean up the site, which housed a company that reprocessed nuclear fuel for six years before closing in 1972. It also took radioactive waste from nuclear power plants from 1963 to 1974. About 2 million tons of radioactive waste and dirt is stored on the site.

A hangup in removing the waste has been that there is as of yet no federal repository to send the spent fuel to. Much of the waste will remain radioactive and dangerous for thousands of years.

But leaving it in West Valley is dangerous because "it is sitting on geologically unstable plateau near an active stream" that eventually drains into Lake Erie, said William Steinhurst of Synapse Energy Economics, which conducted the study. He said the waste has the potential to pollute lakes Erie and Ontario.

The site, in the Town of Ashford, is about 30 miles southeast of Buffalo.

Bryan Bower of the federal Energy Department said the agency is now working on projects that will remove material that poses an imminent danger, including radioactive dirt that has been moving underground. He said it is prudent to wait longer -- as much as 30 years -- to decide what to do with the waste that doesn't pose an immediate threat.

"The disposal areas take up many acres, and it will be expensive to clean it up," Bower said. "We want to make sure we get the decisions right."

Tom Attridge, the New York State Energy and Research Authority project manager at West Valley, pointed out that the short-term plan also includes taking down the main building where the reprocessing took place as well as removing a water-treatment facility associated with it.

As for the rest of the waste, he said, "We want to continue to look at what to do with those facilities."

But the site needs to be cleaned up completely as soon as possible, an activist said.

"The decision to clean up the site needs to be made now -- not some time in the future," said Judith Einach of the Coalition on West Valley Nuclear Wastes.

Attridge said today he had just started to review the environmentalists' report.

The authors of the report said they plan to brief federal and state officials over the next few days on their recommendations.

Citizens Group Issues Report on West Valley Cleanup

Chris Caya

BUFFALO (2008-12-02) Several citizens groups released the first-ever study Tuesday on cleaning-up the nuclear waste buried at West Valley.

Scientists say the former nuclear reprocessing facility 30-miles south of Buffalo sits on geographically unstable land. They say due to erosion at the site, which is upstream of Lake Erie, the public is inadequately protected against the highly radioactive material.

Nuclear Information and Resources Director Diane D'Arrigo says digging up the waste now is, overall, the safer option. D'Arrigo says overtime the radioactive material will leak and contaminate more soil and water.

"Digging up the waste now, before it spreads, is overall the most cost effective and safer for Western New York,"

The Department of Energy has conducted studies which favor leaving the waste buried at West Valley because it's more cost effective.

The citizen group says removing the waste will be cheaper than maintaining the sites for thousands of years. It says it won't be satisfied unless all of the waste is removed.

The West Valley Demonstration Project in Cattaraugus County used to house a commercial nuclear fuel reprocessing operation. The operation shut down in 1972, leaving behind contaminated buildings and buried waste.

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Report Recommends Above-Ground Nuclear Storage

December 2, 2008 5:53 a.m. EST

AHN, All Headline News

David Goodhue - AHN Reporter

Buffalo, NY (AHN) - Leaving nuclear waste buried on site can cost almost \$20 billion more than excavating it and transporting it to another facility, according to a study funded by the state of New York.

The report looked specifically at the long-term costs of cleaning up the West Valley Nuclear Waste Site near Buffalo, N.Y. Investigators compared the costs of leaving the radioactive waste buried for 1,000 years versus digging it up.

The study concluded that, over 1,000 years, digging up the waste costs \$10 billion, while leaving it buried costs between \$13 and \$27 billion.

The study's authors recommended that the U.S. Department of Energy and state agencies explore above-ground storage of nuclear waste at stable sites. These sites should have effective security and erosion controls with a lifespan of more than five times the age of our nation, the report says.

The report, "The Real Costs of Cleaning Up Nuclear Waste: A Full Cost Accounting of Cleanup Options for the West Valley Nuclear Waste Site, was funded by the state of New York through grants and conducted by Synapse Energy Economics, Tufts University, SUNY Fredonia and Radioactive Waste Management Association.

Politics on the Hudson

Study: Send West valley nuke waste elsewhere

December 2, 2008

The state and federal government should scrap plans to store nuclear waste on the site of a closed fuel-reprocessing plant in West Valley, Cattaraugus County, and instead dig it up and ship it elsewhere, according to a report released today.

Although digging up tons of waste and shipping it away would cost almost \$10 billion and take more than 60 years, it is still better than leaving the waste in the ground, where it is likely eventually to leak into Lake Erie, according to the report.

The study by Synapse Energy Economics of Massachusetts, funded with \$90,000 in taxpayer money from Sen. Catharine Young, R-Olean, is at odds with a recent report from the federal Energy Department, which concluded it's better and cheaper to leave the waste where it is.

The Energy Department will decide what to do within six months.

The state has already spent \$250 million trying to clean up the site, which housed a company that reprocessed nuclear fuel for six years before closing in 1972.

A hangup has been that there is as of yet no federal repository to send the fuel to. Much of the waste will remain radioactive and dangerous for thousands of years.

This entry was posted on Tuesday, December 2nd, 2008 at 2:03 pm by [Jay Gallagher](#).

Buffalo News, Tuesday, December 2, 2008

12/02/08 12:44 AM

Good morning, Buffalo

A quick look at what's happening today

Now that financial bailouts have gotten us used to thinking in the billions, maybe there won't be so much sticker shock when the first-ever accounting report on the full cost of the West Valley nuclear waste cleanup is released this morning at a press conference in the Mahoney State Office Building in Buffalo. According to the Center for Health, Environment & Justice, the price tag will range from \$10 billion to \$27 billion. The study also determined that the current Department of Energy scheme to keep the wastes buried on-site is based on false premises. Digging them all up seems to be the only alternative. The study's authors plan to meet with the DOE, state agencies and Gov. David Paterson's office to discuss their findings.

12/02/08 12:40 PM

Removing West Valley waste is best option, new study says

By Stephen T. Watson - News Staff Reporter

Permanently burying radioactive material at the West Valley nuclear waste site is an expensive and risky option that must be rejected, a new study produced by a coalition of scientists and economists argues.

Excavating and removing the nuclear waste from the site is costly in the short term but cheaper and much safer for residents of Western New York over the long run, according to the first study to look at the full cost of cleaning up the West Valley site.

The group of scientists, environmentalists and public officials released the study this morning and discussed its findings at a news conference at the Mahoney State Office Building in downtown Buffalo.

The study was funded by state legislative grants and produced by Synapse Energy Economics of Cambridge, Mass.

The site, located 30 miles south of Buffalo, opened in the 1960s as the country's first facility for the commercial reprocessing of nuclear waste.

The West Valley Nuclear Demonstration Project closed in 1972 and representatives from the state and federal governments and the community have spent the ensuing decades debating how best to clean up the radioactive waste at the site.

Last week, a draft report from the federal Department of Energy recommended a phased shutdown of the site over the next 30 years.

But the scientists and environmentalists who spoke at this morning's news conference said the report makes clear that leaving any radioactive material at the site could harm the environment and area residents.

Leaving waste at the site that will remain radioactive for hundreds or thousands of years opens up the risk of exposure through the air, soil erosion or groundwater contamination, they argued.

Over 1,000 years, excavating the West Valley site would cost \$9.9 billion, but leaving the waste buried could cost between \$13 billion and \$27 billion over that time, depending on whether a catastrophic release of radiation occurs, the study found.

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- 2008 The Buffalo News.



December 3, 2008

Study: Leaving nuclear waste at plant risks leak into Lake Erie

Jay Gallagher
Albany Bureau

The state and federal government should scrap plans to leave some nuclear waste on the site of a closed fuel-reprocessing plant in West Valley, Cattaraugus County, for the time being, and instead dig it up and ship it elsewhere, according to a report released yesterday.

Though unearthing tons of waste and shipping it away would cost almost \$10 billion and take decades, it is better and cheaper than leaving the waste in the ground, where it is likely eventually to leak into Lake Erie, according to the report. Such an occurrence could cost as much as \$27 billion in damage, the report said.

The study by Synapse Energy Economics of Massachusetts, funded with \$90,000 in taxpayer money from state Sen. Catharine Young, R-Olean, is at odds with a recent report from the U.S. Energy Department, which has a proposal to spend \$1 billion to clean up some of the waste in the next 12 years but defer a decision on what to do with the rest for as long as 30 years.

The Energy Department is expected to decide what to do within a year.

The federal government has spent \$2 billion and the state \$250 million since 1972 in trying to clean up the site, which housed a company that reprocessed nuclear fuel for six years before closing in 1972. It also took radioactive waste from nuclear power plants from 1963 to 1974. About 2 million tons of radioactive waste and dirt is stored on the site.

A hang-up in removing the waste has been that there is as of yet no federal repository to which to send the spent fuel. Much of the waste will remain radioactive and dangerous for thousands of years.

But leaving it in West Valley is dangerous because "it is sitting on a geologically unstable plateau near an active stream" that eventually drains into Lake Erie, said William Steinhurst of Synapse Energy Economics. He said the waste has the potential to pollute lakes Erie and Ontario.

The site, in the town of Ashford, is about 30 miles southeast of Buffalo.

Bryan Bower of the Energy Department said the agency is working on projects that will remove material posing an imminent danger, including radioactive dirt that has been moving underground. He said it is prudent to wait longer - as much as 30 years - to decide what to do with the waste that doesn't pose an immediate threat.

"The disposal areas take up many acres, and it will be expensive to clean it up," Bower said. "We want to make sure we get the decisions right."

Tom Attridge, the New York State Energy and Research Authority project manager at West Valley, noted that the short-term plan includes taking down the main building where the reprocessing took place as well as removing a water-treatment facility associated with it.

As for the rest of the waste, he said, "We want to continue to look at what to do with those facilities."

But the site needs to be cleaned up completely as soon as possible, an activist said.

"The decision to clean up the site needs to be made now, not some time in the future," said Judith Einach of the Coalition on West Valley Nuclear Wastes.

Attridge said yesterday that he had just started to review the environmentalists' report.

The authors of the report said they planned to brief federal and state officials during the next few days on their recommendations.

WBFO News

Study Says Leaving West Valley Waste is Dangerous

Eileen Buckley

BUFFALO, NY (2008-12-03) A new study says leaving radioactive waste at the former West Valley nuclear site is a high risk and extremely expensive. Details of the study were released in Buffalo Tuesday.

The study says leaving buried waste at West Valley will endanger public health and the Great Lakes for tens of thousands of years. Economists and scientists involved in the study say over time it could cost more than \$27 billion. New York State and the federal government must make a decision by the end of this year on final clean up of West Valley. It closed in 1972. But decades later, buried waste and contamination remain.

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Nuclear cleanup to cost billions

State-funded study puts almost \$10 billion price on effort at West Valley

By **BRIAN NEARING**, Staff writer

Click byline for more stories by writer.

First published: Wednesday, December 3, 2008

While it will cost taxpayers billions to clean out dangerous radioactive waste from a defunct nuclear fuel reprocessing plant, storing it there would cost billions more over the centuries — and risk contamination of Lake Erie.

That was the conclusion of a state-funded report on the 3,300-acre West Valley nuclear site, closed since the early 1970s and once the nation's only commercial center for reprocessing spent nuclear fuel.

Released Tuesday, the report comes during a growing national debate about stepping up nuclear power as a way to cut the greenhouse gases that cause global warming. Critics continue to question the fate of spent fuel, which is dangerous for thousands of years.

The report by Cambridge-based Synapse Energy Economics claimed it will cost nearly \$10 billion to clean radioactive waste from West Valley over the next 60 years and ship it to a federal dump that does not exist yet.

But leaving the waste where it is — about 30 miles from Buffalo— would cost up to \$13 billion to keep contained over the next 1,000 years. The report said the task could be technologically difficult in an area prone to erosion. It could cost up to \$27 billion if radiation escapes the area a century from now and gets into creeks that flow into Lake Erie, endangering the drinking water supply.

"No generation has the right to impose such terrible hazards on future generations," said Barbara Warren, executive director of the Albany-based Citizens Environmental Coalition, one of the grassroots groups that sought the study.

West Valley operated from 1966 to 1972, when it was closed as unsafe and inefficient. The New York State Energy Research and Development Authority and the U.S. Department of Energy are partners in the decontamination and decommissioning of the site.

The cleanup, which was authorized in 1980 by President Jimmy Carter, has been long delayed. The federal government issued its first suggested cleanup report in 1996, and followed that up in 2005. Another report was issued last week by the Energy Department,

This latest analysis recommended a phased shutdown, a process that will take 30 years. It leaves many key issues open, including which government is responsible for cleanup, and where the radioactive waste would be shipped.

The report was paid for by a \$90,000 state grant arranged by Sen. Cathy Young, an Olean Republican whose district includes West Valley.

The federal report on West Valley can be found online at <http://www.westvalleyeis.com>

Brian Nearing can be reached at 454-5094 or by email at bnearing@timesunion.com.

POSTED ON DECEMBER 3, 2008:

Nuclear reprocessing gets its foot in the door

Atomic Fantasy

By Stratton Lawrence

With attention focused on Santee Cooper's efforts to build a new coal-fired plant in the Pee Dee region, a plan for two new \$18 billion nuclear reactors in Fairfield County has progressed relatively quietly. Power company SCE&G, which is partnering with Santee Cooper to develop the reactors, is hoping to increase customer rates by 37 percent to help pay for them.

Environmental groups hesitate to speak out against nuclear power, a carbon-emissions-free source of energy unlike coal-burning plants, but you'd be hard-pressed to find any informed tree-hugger testifying about the merits of reprocessing nuclear waste into new fuel.

On Thurs. Dec. 4, the U.S. Department of Energy (DOE) hosts a public hearing in Graniteville, S.C. on the possibility of doing just that.

Proponents tout reprocessing as a way to complete the circle. Nuclear waste still contains plenty of energy after it's used in a power plant, so at face value, separating the plutonium and uranium out and reusing it seems logical. That process, however, generates new waste streams, thus increasing the volume of radioactive waste (though not the potency), raising proliferation risks, and, if history is any indication, requiring massive expenditures to clean up the mess it makes.

Throughout the Cold War, huge amounts of nuclear waste were reprocessed to extract weapons-grade plutonium and other elements for the military. The Savannah River Site (SRS) outside of Aiken was a major location for this process. Over 30 million gallons of waste are now buried there. Plutonium was found in the groundwater as early as 1981, and at least nine of the 49 tanks buried there — several partially under the water table — have leaked. Both DOE and the S.C. Department of Health and Environmental Control officials have referred to the SRS tank farm as the greatest environmental risk facing our state.

In a report to DOE last February, the National Academies named SRS among four major nuclear sites in need of cleanup, with tank waste at that site listed as a high-priority, "very expensive and long-term problem." The report states, "Existing knowledge and technologies are inadequate for (DOE) to meet all of its clean-up responsibilities in a safe, timely, and cost-effective way."

Much of that waste is the result of military reprocessing to create nuclear bombs throughout the Cold War. In 1992, President George Bush began phasing out reprocessing facilities, leaving one of SRS' two reprocessing "canyons" as the only facility still operating in the U.S. today. President George W. Bush, however, created the Global Nuclear Energy Partnership (GNEP), which has received hundreds of millions of dollars in funding to research commercial reprocessing, although the partnership's budget was significantly cut by Congress in 2008 to \$179 million.

A Toxic History

The only commercial reprocessing facility in the U.S. operated from 1966 to 1972, in West Valley, N.Y., near Buffalo. Gwyneth Cravens refers to it in her 2007 book, *Power to Save the World*, a treatise in support of nuclear power.

"The waste, small in volume, was eventually immobilized in glass and put in interim storage," writes Craven, of West Valley. "The company running the plant decided that environmental regulations made it unprofitable, and it closed ... Two other reprocessing plants were built in the U.S. but never used."

One of those two unused plants is in S.C., directly adjacent to SRS. President Jimmy Carter halted its construction in 1977, when he issued a directive ending commercial reprocessing projects due to proliferation fears.

Just last week, on Nov. 25, DOE issued a Draft Environmental Impact Statement for the cleanup of West Valley, over 35 years since operations ceased there. Without the estimated \$7 billion clean-up, the onsite radioactive contamination will seep into Lakes Erie and Ontario.

In 2006, GNEP began a search for new reprocessing sites. SRS is one of 11 potential locations, and it has the strong support of Sen. Lindsay



New York's west valley reprocessing plant shut down in 1972 after six years in operation; 35 years later, an expensive clean-up is underway
Courtesy of Friends of the Earth

Graham (R-S.C.) and Reps. James Clyburn (D-S.C.) and Gresham Barrett, (R-S.C.).

"The French have figured out how to significantly reduce their nuclear waste, and they aren't smarter than we are," Clyburn says. "If we can reduce our waste, we can have onsite storage irrespective of what happens at Yucca Mountain."

Yucca is a proposed national nuclear waste storage facility in Nevada, but public opposition and escalating costs have kept progress stagnant. Both France and Japan have reprocessing programs, but once the recycled fuel is used, it is then shipped back for storage at the reprocessing facility. The United Kingdom and Russia are both phasing out reprocessing programs due to problems with where to store the waste.

Opponents liken reprocessing to a very expensive shell game, in which waste is reused but not reduced, and is essentially just moved around. They worry a SRS reprocessing site would become a de facto nuclear waste dump.

"The whole thing is just one big scam. It's not recycling at all," says Tom Clements, the southeastern nuclear campaign coordinator for the environmental-advocacy group Friends of the Earth. "It just makes the waste problem a lot worse because it creates liquid waste streams. The end result of reprocessing is a waste of a lot of money and the creation of an environmental nightmare at every facility where it's proceeded. We just aren't going to allow a West Valley to happen here in South Carolina."

Clinton Wolfe, the executive director of Aiken-based Citizens for Nuclear Technology Awareness, says the notion that reprocessing will create more waste stems from the Cold War days, and that new technologies allow us to recycle more of the chemicals and wind up with less highly radioactive waste. According to Wolfe, 95 percent of nuclear waste's energy content remains when we typically store it away, making reprocessing the economical and environmental thing to do. And if the waste stays at SRS, Wolfe says, "That's fine. And even if it goes somewhere else in the country, first of all, we'd like to see a commitment to reprocessing."

Wolfe's organization backs any project that furthers nuclear research and brings projects and money to SRS, where 15,000 Aiken-area residents are employed.

Clements says Wolfe's approach is a short-sighted one that benefits a narrow group financially, while everyone else bears the burden of a potential cleanup to a site already contaminated beyond the scope of the government's ability to rectify.

"The lifeblood of DOE is new, capital intensive projects, and they have created a kind of fiefdom around the country of communities that are dependent on a continuous input of money," says Clements. "SRS boosters will try to get anything, as long as it means money flowing into the area."

Rep. Barrett recognizes and supports that need, and considers the reprocessing program a forward-thinking approach, says spokeswoman Colleen Mangone.

"(He) understands the desire of the SRS community to bring new missions to the site. He is confident that will be expressed during the public comment period, and he will continue to work toward that goal," she says.

Money may be reprocessing's biggest hurdle. A 2007 study by the Keystone Center, underwritten by the nuclear industry's lobbying body, the Nuclear Energy Institute, found that "reprocessing of spent fuel will not be cost-effective in the foreseeable future." Estimates range from \$20 billion to \$50 billion to build a facility, and \$700 billion for a national program. The recycled fuel would require "fast reactor" power plants not currently in existence in the U.S. And while John McCain mentioned reprocessing in each of the three presidential debates, it's unlikely that President-elect Barack Obama would actively pursue such an expensive and controversial technology.

The only S.C. politician to speak out in recent months against reprocessing is Rep. John Spratt. He suspects that SRS would likely emerge as a top location if it's pursued, but believes the cost and waste disposal problems will end the debate for now. Spratt also points out the proliferation risks of reprocessing — the reason it was ceased nearly four decades ago.

"In truth, it develops more plutonium-239, which is weapons-ready and doesn't have the disadvantage of being so radioactive that it can't be handled," says Spratt. He says he's not opposed to exploring the possibilities if new technologies arise, but suspects pursuing reprocessing before waste disposal is in place is like putting the cart before the horse.

A mere 20 pounds of plutonium is needed to make a nuclear bomb, and with commercial facilities handling large amounts, Friends of the Earth's Clements worries that even if we controlled the substance in the U.S., we'd be sending the wrong message to other countries considering reprocessing.

Gov. Mark Sanford's Climate, Energy, and Commerce Advisory Committee issued a statement this year tepidly supporting reprocessing, but only if an evaluation shows it to be cost-effective. It clarifies the committee's support as "contingent on a plan for the shipment of the waste out of state to an operating facility that is actively receiving nuclear waste for long-term disposal."

Anywhere a nuclear waste facility or storage site is proposed, there's bound to be a heavy dose of not-in-my-backyard bellowing. But SRS has been housing nukes in our backyard for decades, and there may be enough supporters with split atoms in their eyes to keep them coming for decades more.

Public comment on a nuclear reprocessing plant in S.C. will be taken until Dec. 16. E-mail GNEPTechDemo@nuclear.energy.gov.

12/4/2008

Cleanup at western NY nuke site debated

By Carolyn Thompson
Associated Press Writer



December 3, 2008

BUFFALO, N.Y. (AP) — Federal energy officials wrestling with the decades-old question of what to do with the West Valley nuclear site are recommending a phased-in approach that would remove contaminated buildings and soil soon, while deferring for up to 30 years the larger question of whether all waste should be removed.

A revised Draft Environmental Impact Statement released this week compares alternatives for the future of the Cattaraugus County site, which from 1966 to 1972 housed the nation's first commercial nuclear reprocessing facility.

The preferred "phased decision making" alternative commits to eight to 12 years worth of work that state and federal agencies agree should be done, and allows time to further study whether the 3,300-acre site should be completely decontaminated or if buried waste should be closed in and the site managed for generations to come.

"This does indicate a very sound approach to looking at the problems at West Valley and moving forward. There is work that can be done," said Bryan Bower, DOE's West Valley Demonstration project director. "There's nothing that's forcing the decision to be made today regarding those other areas. They're safe."

The release of the impact statement begins a six-month public comment period, but it was already being challenged Tuesday by environmentalists, scientists and residents who said complete decontamination of the site 30 miles south of Buffalo is the only safe alternative given its erosion-prone geology.

The biggest concern is that radioactive waste will seep into nearby creeks, make its way into Lake Erie and Lake Ontario and contaminate drinking water supplies.

Groups including the Center for Health, Environmental & Justice, Citizens' Environmental Coalition and Nuclear Information & Resource Service want the DOE to commit to removing the waste this year, rather than defer the decision.

"The current DOE plan is penny-wise and pound foolish," said state Sen. Catharine Young, who secured state funding to analyze the costs of digging up and removing the waste vs. closing it in.

That study, conducted by Synapse Energy Economics Inc. of Boston and released Tuesday, estimated the cost of complete excavation at \$9.9 billion. Onsite buried waste would cost between \$13 billion and \$27 billion over the "first 1,000 years" that the radioactive waste would remain dangerous, the study found.

"It will be less expensive over the long term to excavate the waste and remove it from the site than it is to keep it buried. And not only is it cheaper, but it's much less risky to populations in Cattaraugus, Erie and Niagara counties," said William Steinhurst, one of the study's authors.

A major obstacle to that plan, however, is that there is no federal repository for the high-level waste, nor is there a place for some of the low-level waste buried at West Valley, Bower said.

That could change over time, and the phased approach would allow for that.

That could change over time, and the phased approach would allow for that.

In the meantime, pressing areas would be addressed, Bower said.

"The original 1960s reprocessing plant would be removed in its entirety and the contaminated soil around it, millions of cubic feet of soil, would be removed from the site," Bower said. "The wastewater treatment lagoons will be removed, all those other facilities that are no

longer needed would be removed."

What would remain, at least for the time being, would be four huge buried waste tanks which once held high-level liquid waste and two underground disposal areas.

Cleanup at the site has been ongoing since the 1980 West Valley Demonstration Project Act passed by Congress directed DOE to use the site to demonstrate a method for solidifying high-level liquid waste, and to decontaminate and decommission facilities used in the effort. The law made the state responsible for 10 percent of the costs, and the DOE responsible for the rest.

With the solidification of more than 600,000 gallons of high-level liquid radioactive waste completed in 2002, the state and federal governments have been trying to decide how to wrap up the project.

A final decision is expected in 2009.

OLEAN TIMES HERALD

Wednesday,
December
3, 2008
7:09 PM
EST

Residents can now offer input on cleanup

By Rick Miller
Olean Times Herald

WEST VALLEY - If people have something to say about the handling of a former radioactive waste disposal site, now is their chance.

Area residents will have six months during which to comment on the Draft Environmental Impact Study (DEIS) for the Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project.

The DEIS is a revision of a 12-year-old Draft Environmental Impact Statement for the Completion of the WVDP and Closure or Long-Term Management of Facilities at the Western New York Nuclear Service Center.

In preparing the latest DEIS, the U.S. Department of Energy (DOE) and the New York State Energy Research and Development Authority (NYSERDA) considered four alternatives: No action, sitewide removal, sitewide close-in-place, and phased decision making. The latter is the preferred alternative favored by DOE and NYSERDA because it allows them to work on smaller procedures they agree on, rather than approving the full project at once.

There will be three public hearings on the DEIS March 31 at the William Seneca Building on the Seneca Nation of Indians Cattaraugus Territory near Irving; April 1 at the Ashford Office Complex on Route 219 in Ashford Hollow; and April 2 at the Clarion Hotel, McKinley Parkway in Hamburg. Times will be announced in the future.

People can also comment on the DEIS on the Internet at www.westvalleyeis.com, or via mail to: Catherine Bohan, EIS Document Manager, West Valley Demonstration Project, U.S. Department of Energy, PO Box 2368, Germantown, MD 20874; or via toll-free fax: (866) 306-9094.

West Valley was the site of the country's only commercial nuclear fuel reprocessing plant. It opened in 1966, and shut down for a planned expansion by Nuclear Fuel Services Inc. in 1972. It never reopened. In 1981, Congress passed the West Valley Demonstration Project Act to safely solidify 660,000 gallons of high-level radioactive waste and clean up the 200-acre site.

In 2002, the project completed solidifying the high-level radioactive liquid waste into 275 canisters of glass. They are stored in a shielded area of the main process building.

Three years ago, the Department of Energy and NYSERDA were so far apart concerning their views on the future of the WVDP that the state filed a lawsuit in Federal District Court in Buffalo in a bid to force the federal government to fully fund cleanup activities at the site in the town of Ashford.

In the past 18 months, the DOE and NYSERDA have cooperated on what they called "The Way Forward." Federal and state officials still have differing views regarding the long-term hazards the site poses.

The Environmental Impact Statement proposes to install a barrier to halt the spread of an underground plume of radioactive Strontium 90 that originates beneath the main process building, and continue decontamination of the building to a demolition-ready status. The 275 canisters containing the solidified liquid radioactive waste that are temporarily stored there will be moved to a proposed new on-site facility for storage until they can be moved to a federal repository - Yucca Mountain, Nev. - at a future date. The main process building would then be fully decontaminated before being demolished so the source of the plume - 25 to 30 feet beneath the surface - can be cleaned up. The remainder of the plume would be allowed to decay in place.

The EIS also calls for drying the huge underground tanks that once held the highly-radioactive liquid waste, but continue to monitor them for up to 30 years before a final decision is made whether to remove them or fill them with cement and leave them in place.

The NYSERDA low-level radioactive waste disposal area and Nuclear Regulatory Commission (federal) disposal area would be maintained and monitored for up to 30 years before a decision is made whether to dig up and remove the waste from the site is made. Both sites are covered with a thick impermeable membrane and other barriers to keep water from further infiltrating the trenches in which the wastes are buried.

The NYSERDA low-level radioactive waste disposal area and Nuclear Regulatory Commission (federal) disposal area would be maintained and monitored for up to 30 years before a decision is made whether to dig up and remove the waste from the site is made. Both sites are covered with a thick impermeable membrane and other barriers to keep water from further infiltrating the trenches in which the wastes are buried.

(Contact reporter Rick Miller at rmiller@oleantimesherald.com)

The Buffalo News : City & Region

Wednesday, December 3, 2008

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Michael P. Wilson, Fredonia State College professor of geosciences, points out areas where buried radioactive waste could be released into soil or groundwater.

Derek Gee/Buffalo News

12/03/08 07:11 AM

W. Valley study urges removing all waste

By Stephen T. Watson
NEWS STAFF REPORTER

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Excavating and removing all the radioactive material from the West Valley nuclear waste site is costly in the short term but cheaper and safer for area residents in the long run, a new study of the site cleanup found.

The study's authors say permanently burying nuclear waste at the Cattaraugus County facility would lead to higher costs and risks of radiation poisoning.

"It is significantly less expensive over the long term to excavate the waste and remove it from the site than it is to keep it buried on the site," William Steinhurst, a senior consultant with Synapse Energy Economics of Massachusetts, said at a news conference Tuesday in downtown Buffalo.

The study is billed as the first of its kind to assess the full cost of cleaning up the site.

It was released one week after the federal and state governments put out a draft report with their own ratings of the options for the site cleanup.

This statement — from the Department of Energy and New York State Energy Research and Development Authority — favors a phased shutdown of the facility that would clean up part of the site but leave some radioactive material.

The site, located 30 miles south of Buffalo, opened in the 1960s as the country's first facility for the commercial reprocessing of nuclear waste.

Much of the waste on the site will remain radioactive for hundreds of years and could expose residents to air, soil and groundwater contamination, according to the study by researchers at Synapse, Fredonia State

College, Tufts University and Radioactive Waste Management Associates.

That's why the study recommends the full excavation and removal of waste from the site, even though the work could take 70 or more years and cost \$9.9 billion all told.

Removing the material and remediating the site could return the land to agricultural use, the report states.

Leaving waste on the site, however, may be cheaper in the short term but would force the government to closely monitor the site for centuries to come.

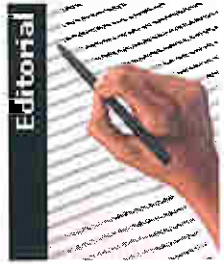
The cost of maintaining the site while the waste is buried there could reach \$13 billion to \$27 billion — in the worst case — over the next 1,000 years.

More likely is a release of radiation into the soil or groundwater and downstream into Buttermilk and Cattaraugus creeks and the Lake Erie and Lake Ontario watersheds, said Michael Wilson, a professor in Fredonia's department of geosciences.

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The nuclear option

First published: Thursday, December 4, 2008

A state report this week that estimated it would cost \$10 billion to clean up radioactive waste on a site in Western New York should be a sobering reminder that the United States has a long, long way to go before it truly achieves safe nuclear power. It's a message that needs to be heard not just by New Yorkers, but federal lawmakers, regulators, and President-elect Barack Obama.

The report looked at the 3,300-acre West Valley nuclear fuel reprocessing site south of Buffalo, closed in 1972 for being unsafe and inefficient. Leaving the waste on-site, the report found, would be even more expensive and leave open the risk of a radiation leak.

The report, it is worth noting, comes after a summer of sky-high oil prices and a presidential campaign that both helped put the idea of a huge expansion of the United States' nuclear power on the front burner.

Republican John McCain talked of building 45 more nuclear plants by 2030, and chided Mr. Obama for not being a bigger proponent of nuclear energy. Sen.

McCain touted the safety record of the nuclear power in rather homespun terms:

"My friends, the United States Navy has sailed ships around the world for more than 50 years with nuclear power plants on them and we've never had a single accident."

And then, just after Sen. McCain made that statement, the Navy reported that one of its nuclear submarines had been leaking small amounts of radioactive water as it traveled around the globe.

To his credit, Mr. Obama didn't entirely take his opponent's bait, maintaining that he supports nuclear power but stressing that it needs to be "safe and clean." He also noted that big issues remain to be addressed, including one that has dogged the nuclear power industry from the beginning: What to do with all the radioactive waste, which remains dangerous to people and the environment for thousands of years.

More than a quarter-century after Congress called for a safe method of nuclear waste disposal, we still don't have one. The current plan of choice — burial in Yucca Mountain in Nevada — is still being reviewed, and its safety debated.

Yet the campaign got the talk going and it's unlikely to stop, particularly if energy prices end their momentary slide and start pushing upward again.

The costs of cleaning up West Valley should be a sobering reminder that even without a major accident, nuclear power as we know it today is neither cheap nor safe.

And the juxtaposition of Sen. McCain's declaration that the Navy has never had a nuclear accident with a revelation days later that the Navy did, indeed, have one should be a warning that political ideology can't trump science or reality. And the reality is, our science isn't there. Not yet.

The Issue:

An old nuclear site in New York could cost \$10 billion.

The Stakes:

It's a reminder, and a warning, that safe nuclear power is still a dream.



Top Story

WVDP Draft Environmental Impact Statement available for public review

The U.S. Department of Energy (DOE) recently announced the issuance of the Draft Environmental Impact Statement (EIS) for the West Valley Demonstration Project in Western New York, naming Phased Decision making as the Preferred Alternative. Issuance of this Draft EIS is a significant step forward in cleaning up the site.

The document, entitled "Revised Draft Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center (DOE/EIS-0226-D (Revised)), is a revision of the 1996 Cleanup and Closure Draft EIS.

The National Environmental Policy Act of 1969 requires federal agencies to integrate environmental values into their decision-making process by considering the environmental impacts of their proposed actions and reasonable alternatives for implementing those actions.

DOE and the New York State Energy Research and Development Authority (NYSERDA) are joint lead agencies on this draft EIS. This Draft EIS identifies and assesses the potential environmental impacts of the range of reasonable alternatives proposed to meet DOE's responsibilities under the West Valley Demonstration Project Act and NYSERDA's options for management of the Western New York Nuclear Service Center (WNYNSC). It includes how facilities, materials, and hardware are to be managed or decommissioned in accordance with applicable federal and state requirements and what, if any, institutional controls, engineered barriers, or stewardship provisions would be needed. The alternatives analyzed include: Sitewide Removal, Sitewide Close-In-Place, and Phased Decisionmaking, along with a required No Action Alternative. DOE and NYSERDA prefer the Phased Decisionmaking Alternative. Other federal and state agencies involved in reviewing the alternatives analyzed in the draft EIS include the U.S. Environmental Protection Agency, the U.S. Nuclear Regulatory Commission, and the New York State Departments of Health and Environmental Conservation.

The Notice of Availability for the document will be published in the Federal Register on December 5. There is a six-month public comment period that runs from December 5 to June 8, 2009. All comments received which are postmarked no later than the end of the public comment period will be addressed in preparing the final EIS. Public hearings will be held during the comment period at three New

York locations. The Draft EIS, along with guidance on how to submit oral or written comments, and the dates, times and locations of the public hearings will be announced in the Federal Register, local media, and on the web at <http://www.wv.doe.gov> and <http://www.westvalleyeis.com>. The WVDP is a DOE managed, contractor operated, environmental cleanup project located on the site of the Western New York Nuclear Service Center, owned by the state of New York and administered by the New York State Energy Research and Development Authority. Located on approximately 200 acres about 40 miles south of Buffalo, the WVDP occupies the site of the only commercial used nuclear fuel reprocessing facility to have operated in the United States.

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THE BUFFALO NEWS CITY & REGION

Monday, December
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12/06/08 06:32 AM

DONATION

West Valley watchdog group gives documents to college

FREDONIA — Residents and activists who have closely monitored the West Valley nuclear waste site for decades have donated a large cache of documents to Fredonia State College.

The watchdog Coalition on West Valley Nuclear Wastes is giving the extensive collection of primary materials to the college's archives and special collections. The collection includes 90 cubic feet of paper documents dating back to the 1960s, when the facility in the Town of Ashford, Cattaraugus County, opened.

They include government and corporate papers, coalition correspondence and research materials. Over the years, the documents were housed in various locations throughout the region, including the homes of coalition members.

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The college office that is holding the documents received a \$12,000 state grant to process the collection.

Future donations of materials will be made to ensure the collection remains current even as government officials, scientists and residents debate how best to clean up waste at the long-closed site.

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For more information contact: Michael Barone, 716-673-3323 or barone@fredonia.edu

The Coalition on West Valley Nuclear Wastes Donates Primary Documents to SUNY Fredonia

One-of-a-kind collection offers the most complete documented history of nuclear processing and storage available anywhere in the U.S.

FREDONIA, NY (12/05/2008; 1334)([readMedia](#))-- The Coalition on West Valley Nuclear Wastes has donated 90 cubic feet of primary documents to the Archives and Special Collections at SUNY Fredonia. The materials, pertaining to the West Valley Nuclear Demonstration Project, have been collected and maintained over the last four decades by the Coalition, an activist group of primarily Cattaraugus and Erie County citizens.

Currently headed by Judith Einach of Buffalo and Joanne Hameister of East Aurora, the Coalition has documented the activities at the West Valley site since it opened in the early 1960s in the Town of Ashford, N.Y., located in Cattaraugus County, roughly about 30 miles south of Buffalo.

"This collection is the most complete documented history available anywhere about nuclear reprocessing and storage," said Randy Gadikian, director of library services at SUNY Fredonia. "It documents the successes, failures and risks that are entailed in operating such a project, and for the first time, this information is available for public review." The collection includes national and international government documents, corporate documents, Coalition meeting minutes, correspondence and comments, campaigns and collected research, and materials from related organizations. While the majority of the materials are paper documents, the collection also contains audio/visual materials and artifacts, among other media.

The primary goal is to preserve these materials and make them available to researchers at the local, national and international level. "Our mission has always been to be a watchdog," said Hameister. "But because we have taken our mission seriously, we are considered a significant stakeholder - and not necessarily an adversarial one - in some of their decision making."

The West Valley Project was established by the State Office of Atomic Development to commercialize the reprocessing of spent nuclear fuel from power reactors. In 1972 the plant was shut down and radioactive waste was stored underground in steel tanks and unlined burial trenches.

As significant as the collection is, it may now be of even greater relevance following the announcement earlier this week of a state-funded study which determined that all of the waste should be removed from the site. The study - the first of its kind to assess the full cost of cleaning up the site - concluded that permanently burying the waste materials on the site would lead to higher long-term costs in addition to the risk of widespread radiation poisoning.

Economists and scientists involved in the study estimate that the costs to excavate the waste would be \$9.9 billion, compared to \$13 to \$27 billion to leave it buried onsite, depending on whether or not a catastrophic release of the waste occurs. One of those scientists is Dr. Michael P. Wilson, a professor of geosciences at SUNY Fredonia who has been providing expert research and testimony relating to this issue since 1986. His research has confirmed the extreme risks and dangers present at the site.

"The nuclear wastes at West Valley will remain radioactive for tens of thousands of years, and will eventually be consumed by erosion and discharged downstream to Lakes Erie and Ontario," Dr. Wilson said. While his research shows that it will likely occur in less than 3,000 years, it is possible, he says, that it could occur in as little as 200 to 300 years. "It would have to be a pretty big leak," Dr. Wilson acknowledges, "but the wrong kind of erosion could produce exactly that."

"The risks are very real," Gadikian agrees. "When you consider that about 60% of the Canadian population alone is situated in the provinces of Ontario and Quebec - northeast and downstream of West Valley - the potential for a catastrophic event is clearly present. The ability to thoroughly research this topic finally exists, and it exists at SUNY Fredonia." SUNY Fredonia's Archives and Special Collections received a \$12,000 grant through the Documentary Heritage Program of New York State Archives to process the collection, which was donated to the university in May. The Archives team, which includes contractor Scott Richmond, will work

to preserve the various document formats, manage the collection and provide access to researchers.

"The Coalition's collection and the West Valley materials are significant to both our region and the world," Reed Library Archivist Jeremy Linden added. "They also provide a great resource to SUNY Fredonia's academic mission. The contents are relevant to numerous disciplines across campus, from physics and political science to history and journalism, and offer our students and faculty a unique set of research and educational opportunities."

Prior to their arrival at Reed Library, the documents were located all over Western New York. While much was kept in an East Aurora storage unit, items were also housed in members' homes. Future materials will be added to the collection in five-year increments to ensure that documentation of the Coalition and the West Valley site continues into the future. # # #

Business First of Buffalo - December 5, 2008
<http://buffalo.bizjournals.com/buffalo/stories/2008/12/01/daily57.html>



Friday, December 5, 2008 - 2:49 PM EST

West Valley archives go to SUNY Fredonia

Business First of Buffalo - by [Alicia Kline](#) Business First

Thousands of documents related to the **West Valley Nuclear Demonstration** project in Cattaraugus County will now be housed at a single location at **Fredonia State College**.

The Coalition on West Valley Nuclear Wastes, an activist group, has donated a range of documents to the college's Archives and Special Collections department at the Daniel A. Reed Library. The materials contain 40 years' worth of information about the West Valley site and include national and international government documents, corporate documents, Coalition meeting minutes correspondence and comments, DVDs, videos, audiotapes and photographs, the college said.

So far, archivists have processed about one-third of the documents, library archivist Jeremy Linden said.

"It's quite a bit of material and it really does cover a broad spectrum," he said. "The contents are relevant to numerous disciplines across campus, from physics and political science to history and journalism, and offer our students and faculty a unique set of research and educational opportunities."

A \$12,000 grant from the Documentary Heritage Program of New York State Archives will help archivists process the documents, which previously had been scattered throughout Western New York, the college said. The full collection to date should be ready for public viewing by June, 2009, but certain documents could be shown before then, Linden said.

When it became active in 1966 in the town of Ashford, the Western New York Nuclear Services Center reprocessed spent nuclear fuel from power reactors. It shut down in 1972 and the radioactive waste was stored underground in steel tanks and unlined burial trenches.

It was announced this week that a state-funded study determined that all waste should be removed from the site.

Comments for Programmatic Environmental Impact Statement on the Global Nuclear Energy Partnership (GNEP)

by Leonor Tomero [[contact information](#)]

December 10, 2008

This statement was presented by Leonor Tomero, director for nuclear nonproliferation, at the Department of Energy's December 9 hearing on the Global Nuclear Energy Partnership (GNEP) Programmatic Environmental Impact Statement (PEIS).

STATEMENT TEXT

The alternatives assessed in detail under the PEIS do not meet the objectives of GNEP – namely the goals of contributing to solve the problem of nuclear waste and decreasing the risk of nuclear proliferation as it relates to nuclear energy – and do not take into account the costs and realistic time-frames of most alternatives while failing to include a detailed study of more promising alternatives.

Many of the alternatives assessed would likely exacerbate, not reduce, the proliferation risks of nuclear energy.

Reprocessing, which is considered in most alternatives discussed in the PEIS, increases the risk that bomb-grade material will fall into terrorist hands. By engaging in steps that remove many of the necessary barriers that prevent terrorists from acquiring material for a bomb and increasing the production of nuclear-weapons-usable material (or material that could be easily converted to pure plutonium), reprocessing increases the risk that this dangerous material will fall into the hands of terrorists. As long as the plutonium remains in spent fuel, it is extremely difficult to steal because of the intense radiation emitted by the fission products in the spent fuel.

France, the United Kingdom and Japan have accumulated over 192 metric tons of plutonium from commercial reprocessing (including foreign-owned plutonium), enough for 24,000 nuclear weapons. The Royal Academy of Sciences of the United Kingdom confirmed in 2007 its 1997 assessment that the plutonium should be disposed of safely given the growing risk of terrorism. As nuclear terrorism remains one of the gravest threats to U.S. security, the United States should pursue policies that will reduce the stocks of plutonium, rather than produce additional plutonium (or material that could be easily separated to yield nuclear weapons-usable plutonium, such as the U-Pu mix or the Pu-minor actinides mix).

Reprocessing weakens U.S. non-proliferation efforts, which is not addressed in the PEIS, and the Proliferation Assessment has not been released yet, despite promises that it would be released in the same time-frame as the PEIS.

Focus on reprocessing and fast reactor technology significantly undermines U.S. and international efforts to prevent the spread of reprocessing and uranium enrichment technologies to other countries. GNEP's vision of supplier countries that would be allowed to reprocess has already encouraged other countries to seek this technology. In addition, the position that a handful of countries, including the United States, can engage in this process while all other countries should forego these technologies because of the risk that they could use them to produce material for nuclear weapons directly undermines decades of nuclear non-proliferation efforts. As an example, the United States successfully helped convince countries such as Brazil, Germany, South Korea and Taiwan not to reprocess. As a result, today, Japan is the only non-weapon state that reprocesses. Since 2006 when GNEP was announced, South Africa and South Korea have both expressed

interest in acquiring reprocessing technology, and the United States has been cooperating with South Korea on these technologies for the past year pursuant to GNEP.

In addition, while the proposal to use CANDU reactors to burn the spent fuel from light-water reactors would not produce plutonium, it would promote the use of CANDU reactors which are generally considered less-proliferation-resistant than light-water reactors since CANDUs do not have to be shut down to be re-fueled and thus efforts to unload spent fuel rods for the purpose of reprocessing would be harder to detect and monitor.

The alternatives assessed in the PEIS do not appropriately assess the cost of the proposed alternatives.

A 1996 National Academy of Sciences report concluded that reprocessing and plutonium re-use would cost tax payers at least an additional \$100 billion for waste disposal. The Department of Energy has not released any lifecycle cost estimate for reprocessing and plutonium re-use since a 1999 report that estimated the lifecycle cost of reprocessing and plutonium re-use in fast reactors at \$280 billion. The economics of reprocessing do not justify a change from the current "once-through" fuel cycle practice.

GNEP envisions the deployment of dozens of fast reactors. These fast reactors are more expensive than the proliferation-resistant light water reactors that the United States and most countries with nuclear power currently use, and pose more safety risks to operate. The U.S. nuclear industry has not expressed willingness to share in the costs of, or make any investments in, reprocessing, thus the costs would be borne entirely by taxpayers and rate-payers.

The alternatives assessed in the PEIS do not contribute to solving the nuclear waste problem.

The alternatives that include the separation of materials through reprocessing – the re-use of some of the material in fast reactors and/or light-water reactors – do not provide a viable solution to the problem of nuclear waste and will create additional waste streams compared to the no-action alternative. The PEIS acknowledges that low-level waste will result from many of the alternatives proposed but does not propose where to store or dispose of this waste stream. Similarly, many of the proposed alternatives would separate the highly radioactive fission products Cesium and Strontium and propose to dispose of these fission products in a permanent geological repository or store them for 300 years (the PEIS does not provide a proposal of where these would be stored, though they would likely be stored at the reprocessing facility). Re-using plutonium in light-water reactors does not reduce the radioactivity of the waste compared to a once-through cycle (with no reprocessing).

In addition, the PEIS fails to consider the waste streams produced by reprocessing such as Iodine-131 and Iodine-133 and Iodine-129, which in the case of France are dumped into the North Sea. The promise that reprocessing and plutonium re-use in fast reactors will reduce the radiotoxicity of the nuclear waste is still an illusion as safe and economically-viable fast reactor technology is still decades away at best despite years of international research.

The PEIS considers for its 2010-2060 timeframe alternatives that are not yet available on a commercial scale.

Fast reactors and high-temperature gas cooled reactors still need significant research and development. In the case of fast reactors, most in the world have been shut down because of safety and operating problems, high costs and local opposition. Congress terminated plans to build the Clinch River fast breeder reactor in Tennessee in 1983 after costs increased to \$8 billion, compared to the original projected costs of \$400 million. However, several PEIS alternatives assume the deployment of dozens of these reactors (for example using 40% fast reactors).

Even the more proven technologies such as the available reprocessing technology have been failures. In 1972, the only operating reprocessing plant in the United States, located in West Valley, New York, was shut

down after only six years of troubled operation in which it reprocessed the equivalent of only four months worth of the spent fuel currently produced by U.S. nuclear power plants. It left major environmental contamination, the commercial reprocessing part of which is costing over \$5 billion to clean-up.

DOE plans for rapid deployment have been criticized. Both a 2007 National Academy of Sciences report and a 2008 Government Accountability Office report criticized the Department of Energy's premature plans for reprocessing and fast reactors. In addition, a 2007 Keystone report – endorsed by representatives from the Nuclear Energy Institute and nuclear utilities including Exelon, Entergy, Southern Nuclear, GE Energy-Nuclear, Duke Energy and FPL – concluded that GNEP “is not a strategy for resolving either the radioactive waste problem or the weapons proliferation problem” and that “critical elements of the GNEP are unlikely to succeed.”

The PEIS dismissed and failed to consider seriously more promising alternatives.

By focusing on either technology that requires significant research and development or existing technology that does not reduce the radiotoxicity of nuclear waste but increases the cost, safety and proliferation risks of disposal, the PEIS dismissed more cost-effective, safer, more proliferation-resistant and less contaminating alternatives, such as the once-through fuel cycle without reprocessing and fast reactor research and development, interim dry-cask storage on-site and the development of renewable sources of energy. Several of these alternatives could be used immediately without further research and development.

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Leonor Tomero is the Director for Nuclear Non-Proliferation at the Center for Arms Control and Non-Proliferation where her work focuses on nonproliferation, nuclear weapons, nuclear reprocessing, North Korea, and nuclear terrorism. Tomero is also a Senior Fellow at the Institute of International Law and Politics at Georgetown University. She has published letters and articles in the Washington Post, Foreign Policy, TomPaine.com, and Hartford Courant and is frequently quoted in national print, TV, and radio media.

Buffalo News, Wednesday, December 10, 2008

West Valley Closing Data Released

Wednesday, December 10, 2008 8:53

Source: Buffalo By Kathy Kellogg

The U.S. Department of Energy has released key information required to close the West Valley Demonstration Project and Western New York Nuclear Service Center.

The information, contained in a Phase 1 decommissioning plan on the facility, includes technical measures, including models that would be used to measure radiation levels that will be allowed after the cleanup, and it calls for future studies and analysis to support the decommissioning.

The DOE announced Friday that the plan was sent to the U.S. Nuclear Regulatory Commission for comments and is available for public inspection.

The announcement follows the recent DOE release of a draft environmental impact statement -- the framework for the phased shutdown of the facility, which currently employs about 300.

The closing options, which could take 30 more years, include the following:

- * The preferred option -- the two-phase decommissioning, including removal of the main plant process building, vitrification facility, the source of a highly radioactive groundwater plume, wastewater treatment facility lagoons, ancillary buildings, foundations, slabs and pads.

- * Complete removal of all radioactive waste, including debris from decommissioned and razed buildings, a job taking 64 years. This solution is blocked by the absence of a national nuclear disposal facility.

- * Doing nothing, an alternative that the report says is unacceptable but is required by federal regulations.

- * Burying the nuclear waste and debris where it is, which is unacceptable to local residents, New York State and authorities in Canada who fear the leaching of radioactivity into creeks, Lake Erie, Niagara River and related water supplies.

If the preferred alternative is selected, the newly released technical data will define "how clean is clean" once the main plant and other major facilities have been removed, West Valley Demonstration Project Director Bryan Bower said. But if another alternative is selected, the Phase 1 decommissioning plan will have to be adjusted or scrapped.

The plan is the result of joint meetings between the DOE and the NRC. Energy Department officials say that because the removal action meets commission standards and requires no exemptions, it will not be subject to public comment. Bower, however, said the Energy Department will respond to any letters received on the topic.

That view is not shared by the West Valley Citizen Task Force, a trained community group that has

been in place for more than a decade to review the environmental impacts and plan an advisory role in the long-term cleanup and management at the site.

The U.S. Nuclear Regulatory Commission is expected to respond within three or four months, requesting further information or changes in the plan. Technical analysis of any Phase 2 activities on the remaining decommissioning and long-term management of the facility will be addressed at some later time.

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Study urges Department of Energy (DOE) to consider waste excavation at WV site

By MITCHELL LAW
Journal Reporter

A study produced by Synapse Energy Economics, Tufts University, SUNY Fredonia and Radioactive Waste Management Association concluded that nuclear waste cleanup at West Valley can be more costly and unhealthy for the public if an option is chosen to bury waste on-site as opposed to the alternatives.

The study took into account the cost of burying the waste versus the cost of digging it up. It also compared health risks to leaving waste in the ground as opposed to excavating it and moving it to another site.

The study was funded by the state of New York through a grant sponsored by Senator Catherine Young (R-Olean).

Several people spoke in a telephone conference to the news media recently, explaining the results of this study.

The study is introduced at a pivotal time, because DOE recently released their Revised Draft Environmental Impact Statement (EIS) for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center.

The Draft EIS discusses the four alternatives for the Decommissioning or Long-Term Stewardship of West Valley. Both the DOE and NYSERDA favors the phased decision making alternative.

Phased decision making is a two phase process.

The first part of the decision making approach is the removal of a number of facilities, remove the source area for the North Plateau Groundwater Plume and allow up to 30 years for collection and analysis of data and information on major facilities or areas.

"Looking out even over the next 1,000 years shows that leaving behind buried waste on-site is the more expensive choice by many billions of dollars, and is the more risky choice for residents of Cattaraugus County and its neighbors along Lake Erie," stated William Steinhurst, Ph.D., senior consultant at Synapse Energy Economics, Inc.

According to the study, waste excavation costs \$9.9 billion while leaving waste buried on-site costs between \$13 billion and \$27 billion.

Steinhurst asserted that the DOE and other state agencies should explore other options for the waste cleanup at West Valley, relocating the waste to a "more stable site."

Steinhurst also said that the study was conducted using a bare bones budget for cleanup efforts and will only last for 200 years.

"Those costs are treated in a way that assumes those costs for future generations are, in effect, of no importance," he added.

Others are concerned not only about the costs but the implications to human society and the health of not only those who live nearby the waste burial site, but upstream.

"The nuclear wastes at West Valley, radioactive for tens of thousands of years, will be consumed by erosion and discharged downstream to Lake Erie and Lake Ontario in less than 3,000 years and may be dangerously exposed in less than 200 or 300 years as evidence by formation of gullies, retreat of plateau edges, reshaping of stream profiles, observation of soil cracks and groundwater seepage, and upstream migration of waterfalls in the gullies," said Michael P. Wilson, Ph.D., professor of geosciences at SUNY Fredonia.

According to the DOE revised draft EIS which was released recently, the site-wide removal alternative

(Continued on Page 2)

Waste excavation at WVDP...

(Continued from Page 1)

has the highest non-radiological health risk to the public which refers to traffic accidents while in transport.

However, the EIS states, "considering that the transportation activities would occur over a period of time from about 10 to 60 years and that the average number of annual fatalities in the United States is about 40,000 per year, the traffic fatality risks under all alternatives would be very small."

Furthermore, the EIS admits that "the site-wide removal alternative would have minimal long-term impacts.

Long-term in the EIS refers to about 10,000 years or longer.

Site-wide removal may yet be chosen as part of phase II. Phase II has not yet been decided. Furthermore, the phased decision making approach is only the preferred alternative. The final EIS has not been written.

Currently the draft EIS is available for public review for a period of six months ranging from Dec. 5, 2008 to June 8, 2009.

The entire EIS can be found online at www.westvalleyeis.com.

Located about 35 miles south of Buffalo, the WVDP is a DOE-managed, contractoroperated, environmental cleanup and waste management project located on approximately 200 acres of the Western New York Nuclear Service Center, owned by the State of New York and administered by the New York State Energy Research and Development Authority. West Valley Environmental Services (WVES) manages and operates the WVDP under contract to DOE. The WVES team is comprised of URS Washington Division, Jacobs Engineering, Environmental Chemical Corporation (ECC), and Parallax.

Further information about the West Valley Demonstration Project can be found at www.wv.doe.gov.



The Department of Energy (DOE) and the New York State Energy Research and Development Authority (NYSERDA) Announce the Availability of the Draft Environmental Impact Statement for Decommissioning and/or Long Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center (Draft Decommissioning and/or Long Term Stewardship EIS)

DOE and NYSERDA announced the availability of the Draft Decommissioning and/or Long-Term Stewardship EIS in the *Federal Register* on December 5, 2008. The public is invited to submit comments on the Draft EIS by June 8, 2009.

The Draft EIS is available at www.westvalleyeis.com and at www.gc.energy.gov/NEPA, or upon request, by writing to Catherine Bohan, EIS Document Manager, West Valley Demonstration Project, U.S. Department of Energy, Ashford Office Complex, 9030 Route 219, West Valley, NY.

Comments on the Draft EIS can be submitted by e-mail at <http://www.westvalleyeis.com>; by faxing toll-free to 866-306-9094, or by U.S. mail to P.O. Box 2368, Germantown, MD 20874. Please mark all envelopes, faxes and e-mails: "Draft Decommissioning and/or Long-Term Stewardship EIS Comments."

Review copies of the Draft EIS are available at:

Concord Public Library
18 Chapel St.
Springville, NY

WVDP Public Reading Room
Ashford Office Complex
9030 Route 219
West Valley, NY

U.S. Department of Energy
Room 1E-190, Forrestal Bldg.
1000 Independence Ave. SW
Washington, DC

The public is invited to participate in three public hearings to exchange information and to submit both oral and written comments on the Draft EIS:

- **Tuesday, March 31, 2009**, Seneca Nation of Indians, William Seneca Building, 12837 Rte 438, Irving, NY;
- **Wednesday, April 1, 2009**, Ashford Office Complex, 9030 Route 219, West Valley, NY;
- **Thursday, April 2, 2009**, Clarion Hotel – McKinley's Banquet and Conference Center, S-3950 McKinley Parkway, Blasdell, NY.

Additional information, including the hearing time and agenda, will be announced prior to the hearings.

Nearly 1,000 potential claimants of WVDP to receive information

By NATALIE CONDOR-SMITH
Journal Correspondent

Almost 100 envelopes were stuffed with benefit information and sealed at the meeting of the West Valley Nuclear Compensation Support Group on Friday, Nov. 21.

With the help of Joanna Janik, caseworker for the Buffalo office of the Energy Employees Compensation Resource Center, the group stuffed the envelopes in hopes of making people aware of the compensation they can receive if they are a current or former employee, a surviving family member of a former employee and any subcontracted employees who worked at the West Valley Demonstration project.

"All the information also applies to other Western New York sites," said Sue Klein, a group member whose husband died after working for many years in the warehouse at the West Valley Demonstration Project.

These sites include Ashland Oil, Bethlehem Steel, Bliss &

Laughlin Steel, Carborundum Company, Electro Metallurgical, Hook Electrochemical, Lake Ontario Ordnance Workers, Linde Air Products, Linde Ceramics Plant, Seaway Industrial Park, Simonds Saw & Steel, Titanium Alloys Manufacturing; and Utica Street Warehouse.

If anyone works or has worked, or has a family member who works or worked, at WVDP and has questions, they can send an e-mail to wvncsg@yahoo.com. In addition, if anyone knows of someone who worked at the facility from the 1960s to 2002, the group asks that they come to the meetings.

Additional help and information for anyone who worked at the WVDP, including individuals who worked at any of the sites noted above, can be obtained from Joanna Janik's office of the Energy Employees Compensation Resource Center at 832-6200 or 1-800-941-3943. E-mail: newyork.center@rrohio.com.

The next meeting of the group will be at 6 p.m. on Friday, Jan. 9, 2009 at the Concord Town Hall.



Others Have Opinions On Future Of West Valley Nuclear Site

By Sharon Turano sturano@post-journal.com

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ASHFORD - In addition to a federal study proposing the future clean-up of the West Valley Demonstration project, other studies have been done too, some with local connections.

The federal Department of Energy's Bryan Bower said a phased decision making the agency recommends includes eight to 12 years of work at the site of a former nuclear fuel reprocessing plant being cleaned up by the state and federal governments. He said if the DOE's preferred alternative becomes a record of decision, the main process building would come down and soil underneath it would be removed and shipped off-site for disposal. Lagoons and a waste water treatment system, along with a remote handled waste. A vitrification facility would also be removed. Two disposal areas would be covered and monitored and high-level waste tanks would be maintained in a dry condition, said Bower. He said a ground water source area would be removed and work would be done on a water plume believed to prevent it from spreading. The phase one work would cost more than \$1 billion, he said. Within 30 years, the DOE and state would then make a second decision regarding the disposal areas, tanks and plume, while technology is updated and monitoring continues.

"We would be collecting information to make a better phase two decision," he said.

"It's not prejudicing what the decision will be," said Bower about the federal agency's preference. He said an issue considered before making the preference is that if all waste were to be removed, there would not be disposal capabilities for it at this time.

The New York State Energy Research and Development Authority reports the 15-acre state-licensed disposal area for which it is responsible should be monitored for 30 years while it remains in place. The area has been covered and sub-surface barrier walls have been put in place around it.

"We've seen that all of that has been very effective," said Tom Attridge of NYSERDA. After 30 years the decision would be reconsidered. Attridge said not much can happen during 30 years that would pose a risk to health or the environment. An Independent Expert Review Team, he said, was hired to also study and report state concerns that can be viewed at nyserda.org. New York State owns the property on which the site is located, but the federal government is conducting the clean-up of 200 acres of the site. The state pays 10 percent of clean-up efforts, with the federal government picking up the rest. The 15-acre state-licensed disposal area, adjacent to the site, is cared for entirely by the state.

Judy Einach of the Coalition of West Valley Nuclear Waste, a volunteer watch dog group, said the group's

members want to make sure smart decisions are made regarding the site. Ms. Einach said four public advocacy groups including hers saw a need to do their own study. She said state Sen. Catharine Young secured funding, and Synapse Energy Economics of Massachusetts was hired along with Professor Michael Wilson of the State University of New York at Fredonia, Dr. Frank Ackerman of Global Development and Environment Institute of Tufts University, Dr. Marvin Resnikoff and Emily Brown of Radioactive Waste Management Association.

"The bottom line of the study is that it's cheaper to dig up the waste stored in the ground at the nuclear site and move it off-site than leave it in the ground and take the chance that over time, it will be unable to safely control," she said. She said that is different from the federal Department of Energy Study, which, she said does not make a decision, but rather, takes the decision making process in steps.

"We're saying make the decision now that this site will be fully cleaned for people to live on and to farm," she said. While Ms. Einach said there is still some technology lacking to do all of that, if a decision is made to move the waste, she said, that within 100 years, the site will be safe for anyone. The clean-up recommended in the study is expected to cost \$9.9 billion. The study will next be used to educate elected officials, the state and the public so they can be aware of its results prior to visiting Department of Energy hearings on their proposed plan. SUNY Fredonia Professor Michael Wilson said the study also states that if radiation escapes from the site and affects other water supplies, a hypothetical alternate water supply is listed as Chautauqua Lake as a temporary supply.

"The nuclear wastes at West Valley will remain radioactive for tens of thousands of years, and will eventually be consumed by erosion and discharged downstream to lakes Erie and Ontario," Dr. Wilson said. While his research shows that it will likely occur in less than 3,000 years, it is possible, he says, that it could occur in as little as 200 to 300 years.