

POLICY ISSUE NOTATION VOTE

October 28, 2005

SECY-05-0200

FOR: The Commissioners

FROM: Luis A. Reyes
Executive Director for Operations

SUBJECT: EFFORTS BY WESTERN NUCLEAR, INC., TO ACQUIRE
OFF-SITE PROPERTIES IN CONJUNCTION WITH
DECOMMISSIONING ITS URANIUM RECOVERY SITE AND
THE NEED FOR INSTITUTIONAL CONTROLS

PURPOSE:

To inform the Commission of the actions taken by Western Nuclear, Inc. (WNI), to acquire the offsite properties in the Red Mule Acres subdivision, and discuss and recommend actions to resolve the remaining ownership and institutional control issues.

SUMMARY:

WNI is a uranium recovery licensee whose facility is located at the Split Rock site in Jeffrey City, Wyoming. WNI is required to remediate groundwater contamination at the site under 10 CFR Part 40, Appendix A (hereinafter Appendix A). WNI had proposed to use institutional and engineered controls on offsite properties, to protect human health from site-derived constituents, in lieu of active corrective action. In SECY-02-0183, dated October 11, 2002, the staff recommended that it require WNI to make a good-faith effort to purchase the properties. If unsuccessful, WNI would need to provide durable and enforceable institutional controls for the properties it could not purchase, and install an alternate water supply before license termination.

CONTACT: William von Till, NMSS/FCSS
(301) 415-6251

In a Staff Requirements Memorandum (SRM) dated November 19, 2002, the Commission agreed that WNI should make a good-faith effort to purchase the properties, noting, that if this goal was not achievable, WNI would have to provide both durable and enforceable institutional controls. The SRM provided additional comments and conditions.

WNI has not met the conditions established by the Commission in the SRM dated November 19, 2002. WNI has neither acquired all of the properties nor has it established institutional controls for the one property it could not acquire. However, both the staff and the U.S. Department of Energy's (DOE's) Office of Legacy Management have concluded that WNI has completed a good-faith effort to acquire the remaining property. In addition, DOE has requested several additional actions before site transfer, and WNI has verbally agreed to these actions. Consistent with these actions, the staff recommends that: (1) WNI should make one final offer to purchase the property or real estate rights immediately before site transfer; (2) If unsuccessful, WNI should include funds equivalent to the final offer in its long-term surveillance payment; and (3) With staff review and approval, WNI should relocate offsite monitoring wells; redefine the long-term care boundary to include all wells currently located offsite; or provide for institutional controls to provide DOE access to the wells and enforce use restrictions.

BACKGROUND:

WNI is a uranium recovery licensee whose facility is located at the Split Rock site in Jeffrey City, Wyoming. WNI is required to remediate ground water contamination at the site under Appendix A. In SECY-02-0183, dated October 11, 2002, the staff sought the Commission's approval of the staff's approach for addressing WNI's proposal for termination of its license, including the use of certain institutional controls as alternatives to the requirements in Appendix A. WNI had proposed to use institutional and engineered controls on offsite properties, to protect human health from site-derived constituents, in lieu of active corrective action. The staff recommended that it require WNI to make a good-faith effort to purchase the properties. If unsuccessful, WNI would need to provide durable and enforceable institutional controls for the properties it could not purchase, and install an alternate water supply before license termination (Option 2).

In an SRM dated November 19, 2002, the Commission approved this recommendation with comments and conditions. The Commission agreed that WNI should make a good-faith effort to purchase the properties, noting, that if this goal were not achievable, WNI would have to provide both durable and enforceable institutional controls. In the SRM, the Commission directed the staff to:

1. Retain flexibility in its consideration of approaches, as outlined in the Uranium Mill Tailings Radiation Control Act;
2. Provide a schedule for addressing termination of WNI's license;
3. Advise the Commission if information becomes available that impacts the use of Option 2 as the basis for developing requirements for termination of WNI's license;
4. Evaluate the use of water used for ranching and agriculture;

5. Contact the Wyoming Department of Environmental Quality (WDEQ), provide it with the Commission's preliminary conclusions, and request concerns and comments from the State of Wyoming; and
6. Engage DOE with regard to funding the installation of an alternate water supply.

In a memorandum to the Commission dated July 16, 2003, the staff addressed Items 1, 2, 3, 5, and 6 above. The staff did not address Item 4 in that memorandum because of the staff's ongoing review of WNI's March 7, 2003, "Supplemental Ground Water Modeling Report." The staff noted that the outcome of that review would not affect the Commission's preliminary conclusions in the SRM, nor the comments provided by DOE and Wyoming Department of Environmental Quality. In this memorandum, the staff stated that it would provide future updates as the technical review progressed and the interaction with WNI evolved. Such an update was provided in SECY-05-0047, dated March 23, 2005.

DISCUSSION:

As discussed in SECY-05-0047, WNI has acquired all but one of the offsite properties (referred to herein as "Lot 1") in the Red Mule Acres subdivision. A summary of WNI's efforts to acquire the offsite properties is provided in Enclosure 1. Based on an analysis of the information supplied by WNI, the staff has concluded that WNI has completed a good-faith effort to acquire the properties.

DOE had expressed reluctance to being put into a position to install an alternate water supply for Red Mule Acres residents, should it ever become necessary, as proposed in WNI's October 1999 site closure plan. In its submittal dated February 10, 2005, WNI modified that proposal. WNI proposed to provide a well and pipeline for domestic water to the edge of Lot 1 from a location outside of the proposed long-term care area and where the water quality is, and will be, better than that currently used by the owners of Lot 1. The proposed well and pipeline would be installed before license termination and site transfer to DOE, so DOE would not have a future obligation to do so. Easements would be provided and an appropriate amount for maintenance would be added to the long-term care payment at license termination.

In a letter dated May 9, 2005, the staff consulted with DOE concerning WNI's good-faith effort and WNI's modified proposal for an alternate water supply. DOE responded in a letter dated July 13, 2005 (Enclosure 2). The letter states, in part, that based on the information presented, DOE agrees that WNI has made a reasonable effort to acquire the one remaining property. Regarding the proposed alternate water supply, DOE stated that it sees no value in having WNI provide such a supply. Additionally, DOE made the following points:

- U. S. Nuclear Regulatory Commission (NRC) should remove Lot 1 from the long-term surveillance boundary based on a reassessment of the likelihood of the contaminants reaching and impacting the groundwater at this property; or retain the property within the boundary and agree that the funds transferred to the Federal government should be adjusted to include the amount of WNI's final offer made to the property owners.

- If NRC cannot make a determination that this property can be removed from the long-term surveillance area, WNI should make one final attempt to purchase the property or the real estate rights that affect the ground water use restriction before providing the additional funds to the U.S. Treasury at the time of site transfer.
- Some of the monitoring wells are currently outside the site's proposed long-term surveillance boundary. DOE would like to see the site boundary redrawn to include all wells that will be in the long-term monitoring plan. Ownership or institutional controls should convey to DOE to provide access for monitoring, maintenance, and well replacement and to enforce the appropriate use restrictions within the boundary.

The staff shared DOE's letter with WNI. Staff conducted a telephone conference with WNI on August 1, 2005, for the purpose of obtaining WNI's reaction to DOE's positions. WNI had no objection to any portion of DOE's letter.

Regarding the inclusion of Lot 1 within the long-term care boundary, the staff has concluded that it is prudent to retain this property within the boundary. If future groundwater monitoring demonstrates that this property will not be impacted, staff would entertain a request, at that time, to revise the boundary. Regarding the offsite monitoring wells (there are four), the staff has requested that WNI reassess the placement of these wells or provide for the controls, as discussed in DOE's letter. In response, WNI has stated that it wants to acquire more monitoring data before it decides on an approach for these wells.

Regarding Item 4 of the November 19, 2002, SRM, the staff has concluded that there should be no adverse impacts to human health, or the environment if water inside the proposed long-term care boundary were to be used for agricultural or livestock purposes.

WNI has not met the conditions established by the Commission in the SRM dated November 19, 2002. WNI has neither acquired all of the properties nor has it established institutional controls for the one property it could not acquire. However, both the staff and DOE have concluded that WNI has completed a good-faith effort to acquire the remaining property. In addition, DOE has requested several additional actions before site transfer and WNI has verbally agreed to these actions. Therefore, the staff has developed two options.

Option 1: Continue to require WNI to provide durable and enforceable institutional controls for the remaining property, and install an alternate water supply before license termination.

Pros:

- Establishing institutional controls and an alternate water supply before license termination would eliminate any future problems with these actions by the Federal government, should these actions become necessary.

Cons:

- Any durable and enforceable institutional controls will require the consent of the property owners. The property owners have demonstrated that it is highly unlikely that they would agree to such controls at a reasonable price.

- Negotiations regarding such controls would further delay license termination.
- The property owners have rejected WNI's offer to provide an alternate water supply and DOE sees no value in WNI establishing provisions for a future alternate water supply.
- The application for alternate concentrations limits (ACLs) cannot be approved until the institutional control issues are resolved. A groundwater corrective action program is required until ACLs are approved. This corrective action program is costly.

Option 2: Take the actions described in DOE's letter of July 13, 2005: (1) WNI would make one final offer to purchase the property or real estate rights immediately before site transfer; (2) If unsuccessful, WNI would include funds equivalent to the final offer in its long-term surveillance payment; and (3) With staff review and approval, WNI would relocate offsite monitoring wells; redefine the long-term care boundary to include all wells currently located offsite; or provide for institutional controls to provide DOE access to the wells and enforce use restrictions.

Pros:

- Finalization of the ACL application, cessation of the groundwater corrective action program, and license termination activities can proceed.

Cons:

- Some delays may be experienced in establishing acceptable institutional controls if all the monitoring wells cannot be located within the long-term care boundary.

RESOURCES:

Option 1:

Estimated full-time equivalent (FTE) 0.5 each Fiscal Year (FY)

Budget Years: FY06 and FY07

Work Impacts: Anticipated amendments for new in situ leach satellite facilities and anticipated ACL applications would need to be prioritized, if and when received.

Resources Currently Budgeted: None. The staff's last budget submission assumed that these issues would be resolved and the ACL application would be approved in FY05. In FY06 and 07, NMSS will be able to absorb the resources within its budget by reallocating resources from lower priority activities.

Schedule: Refer to Enclosure 3.

Option 2:

Estimated FTE: 0.3 each FY

Budget Years: FY06 and FY07

Work Impacts: Anticipated amendments for new in situ leach satellite facilities and anticipated ACL applications would need to be prioritized, if and when received.

Resources Currently Budgeted: None. The staff's last budget submission assumed that these issues would be resolved and the ACL application would be approved in FY05. In FY06 and 07, NMSS will be able to absorb the resources within its budget by reallocating resources from lower priority activities.

Schedule: Refer to Enclosure 3.

The information on resources and schedule reflect the current environment and if a significant amount of time (greater than 30 days) passes or the Commission provides the staff direction that differs from or adds to the staff's recommended action(s), this section of the paper would need to be revisited after issuance of the draft SRM.

COMMITMENTS:

The staff's commitments and schedule for both options are provided in Enclosure 3.

RECOMMENDATIONS:

That the Commission:

1. Agrees that WNI has made a good-faith effort to acquire all of the offsite properties; and
2. Approves Option 2.

The Commissioners

-7-

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objections. The Office of the Chief Financial Officer has reviewed this paper and has no objections.

/RA/

Luis A. Reyes
Executive Director
for Operations

Enclosures:

1. Summary of Efforts to Acquire Off Site Properties
2. DOE Letter of July 13, 2005, Re: "Efforts of Western Nuclear, Inc. to Acquire Institutional Controls within Long-Term Surveillance Boundary" (ML052100370)
3. "Staff Commitments and Schedule for Options"

**SUMMARY OF EFFORTS BY WESTERN NUCLEAR, INC.
TO ACQUIRE OFFSITE PROPERTIES IN THE RED MULE SUBDIVISION**

In a submittal dated February 10, 2005, Western Nuclear, Inc. (WNI) provided documentation of its good-faith efforts to acquire the offsite properties in the Red Mule Acres Subdivision in Jeffrey City, WY. This documentation included:

- A summary of the acquisition costs of the parcels;
- Individual appraisals of the parcels by a Wyoming General Certified Appraiser;
- A subdivision plat map for Red Mule Acres and a map of the adjoining properties;
- A printout from the county assessor's office of the market value for Lot 1;
- Correspondence from the legal counsel for the owners of Lot 1 setting forth the owners' demands for sale of Lot 1 to WNI;
- Correspondence from representatives of WNI setting forth alternative offers from WNI; and
- Copies of the deeds for the 11 acquired properties, together with contracts and/or title policies and/or closing statements setting forth the acquisition costs.

A summary of the acquisition costs is provided in the table on the next page.

Table 1 - Acquisition Costs

Lot/Parcel Number	Appraised Value/ Acquisition Cost	Transaction Date	Lot/Parcel Number	Acquisition Cost	Transaction Date
1	\$37,000 N/A	N/A	8 (Part)	\$3,250/ \$23,500	9-13-04
2	\$40,000/ \$135,000	8-31-04	8 (Part)	\$1,200/ \$18,000	12-13-04
3	\$2,300/ \$2,750	10-17-03	032	\$32,500/ \$87,775 + 79 acres	4-30-04
4	\$25,000/ \$10,000	6-18-04	028	\$22,000 Exchange for Lot 13	2-26-04
5	\$20,000/ \$21,000	10-25-02	027	\$30,000/ \$29,900	10-26-00
6	\$32,500/ \$46,000	12-18-02	012	\$25,000 \$40,000	12-15-03
7	\$2,300/ \$22,500	12-27-04			

Notes:

1. Lots 1 - 8 are located in the Red Mule Acres Subdivision. Parcels 012, 027, 028, and 032 are located immediately east of the subdivision.
2. Lots 1 - 8 are of similar size ranging from 4.3 acres to 5.4 acres. Lot 1 is 4.7 acres.

WNI provided more detail for the transactions involving Lots 2, 4, and 6 because they were owner-occupied parcels and closest in value to the value of Lot 1. Lot 2 was acquired for \$135,000 and the former owners were allowed to retain and move any improvements. The owners of Lot 1 were offered \$175,000 for a similar arrangement. In addition, the owners of Lot 1 would receive a 20 acre parcel overlooking a river.

The property of Lot 4 became run-down, as it was unoccupied since 1999. The property was appraised in October 9, 2001. The property was acquired by WNI in 2004 for \$10,000 from the conservator of the associated estate after court approval.

Lot 6 was acquired for \$46,000. In comparison, WNI offered the owners of Lot 1 \$195,000 for an outright purchase.

Parcel 032 (40 acres), located immediately east of Red Mule Acres, had a new and much larger home built on the property between the date of the appraisal and the date of WNI's acquisition. The original home had been destroyed by fire in 2002. The property also included a new machine and welding shop. Thus, the property was more valuable in 2004 than in 2001. WNI acquired the property by granting the sellers 79 acres in exchange for the 40 acres and a cash payment of \$87,775.

In a letter dated November 24, 2004, WNI made final proposals to the owners of Lot 1 after several months of negotiations. The owners were offered four distinct proposals:

1. Outright purchase for a cash payment of \$195,000.
2. Purchase of the property by WNI for \$66,000, with the sellers retaining a non-alienable life estate. The sellers would pay the taxes on the property during the life estate, with a reversionary interest to WNI if taxes were unpaid for a period of two years. The sellers could remove any and all property, including the home, at any time during the life estate.
3. WNI would trade 20 acres for the 4.7 acres comprising Lot 1, in addition to a cash payment of \$175,000. The sellers could move any or all improvements.
4. WNI would acquire all the subsurface (from six feet down) underlying Lot 1 for \$50,000. The owners would agree to abandon the present well and never drill nor allow the installation of a future well. WNI would, at its cost and expense, provide a well and a pipe for domestic water to Lot 1 from a location to the east of Lot 1, which is located outside the proposed long-term care area and where the water quality is at background. WNI would provide an easement to the owners for the pipeline and well.

The owners' response to the above-listed proposals was a proposal for a \$600,000 compensation package, which would result in the construction of a new home overlooking a river. In a letter to the legal counsel for the owners dated February 3, 2005, WNI concluded negotiations with the owners without reaching an agreement.



**Department of Energy
Office of Legacy Management**

Docket: 40-1162

JUL 13 2005

Gary Janosko, Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Efforts of Western Nuclear Inc. to Acquire Institutional Controls within Long-Term Surveillance Boundary

Dear Mr. Janosko:

This is in reply to your May 9, 2005, letter to me and our subsequent discussions at the National Mining Association meeting in Denver on May 23. The U.S. Department of Energy's (DOE's) policy for Title II sites is that they should transition to DOE with all land or institutional controls needed to secure the disposal cell and site contaminants for the duration of time that these contaminants remain a hazard, which is usually in perpetuity.

At the Western Nuclear Inc. (WNI) site in Split Rock, Wyoming, the company has worked closely with the NRC to model the spread of ground water contaminants and has predicted the localized spread of uranium eastward until it reaches equilibrium with background concentrations. DOE would like to better understand how the model accounted for the reported variability in background uranium contamination, but, based on the information presented, we are prepared to address the issues raised in your letter.

Regarding WNI's efforts to acquire properties predicted to be within the path of uranium-contaminated ground water, DOE agrees with NRC that, based on the information presented, WNI has made a reasonable effort to acquire the one remaining property. DOE recommends that either the NRC remove this property from the long-term surveillance (LTS) boundary based upon a reassessment of the likelihood of the disposal cell contaminants reaching and impacting the ground water at this property, or retain the property within the boundary and agree that the funds transferred to the federal government should be adjusted to include the amount of the final offer made to the property owner. If NRC cannot make a determination that the LTS boundary be reduced by the area of this property, DOE would request that WNI make one final attempt to purchase the property or a real estate right which affects the ground water use restriction prior to providing these additional funds to the U.S. Treasury at the time of site transfer. In the event the property acquisition cannot be completed prior to transfer of the site to DOE, and the federal government must acquire the property in the future in order to prevent the residential use of ground water contaminated due to the disposal cell, we would have offset the cost to the taxpayers for that future acquisition.

19901 Germantown Road, Germantown, MD 20874

2597 B 3/4 Road, Grand Junction, CO 81503

3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV 26507

626 Cochrans Mill Road, P.O. Box 10940, Pittsburgh, PA 15236

1000 Independence Ave., S.W., Washington, DC 20585

REPLY TO: Grand Junction Office

JUL 13 2005

DOE thus concludes that WNI has offered at least fair market value for the final property, and we are comfortable that the federal government would not have to pay any more than the amount of WNI's final offer. Alternatively, we would also be satisfied if NRC redrew the LTS boundary excluding the subject property based on our understanding of the ground water fate and transport. DOE does not see the value in having WNI provide an alternate ground water supply to the boundary of the subject property as a means to offset the inability to acquire the property or acquire a use restriction. Such an alternate supply would quite likely not yield water of a quality that meets the drinking water standard for uranium due to the high background concentrations in the area, and maintenance costs could easily exceed installation costs during the hundreds of years predicted for the disposal cell contaminants to migrate to the subject property.

Additionally, some of the wells that may be included in the LTS monitoring program are currently outside the proposed site boundary. DOE would like to see the boundary redrawn to include all wells in the long-term monitoring plan, which we understand WNI is developing in coordination with NRC. Ownership or institutional controls should convey to DOE to provide access for monitoring, maintenance, and well replacement and to enforce the appropriate use restrictions within the LTS boundary. All other wells should be properly decommissioned and plugged prior to transfer to DOE.

We believe these positions are consistent with DOE's efforts to assure that Title II sites transfer to DOE with sufficient land or institutional controls to provide protection of human health and the environment and to control exposure to site contaminants. In this case, contaminated ground water may have an impact beyond the proposed licensed area boundary (if the property in question is carved out of the site boundary), but the selection of the background uranium concentration appears to have been so conservative that this potential impact may not even be measurable at the location of the subject property that WNI has not been able to acquire. DOE believes that monitoring will be in place upgradient of the subject property to provide significant advance warning of uranium-contaminated ground water migration, such that sufficient time will be available to acquire the necessary institutional control in the future.

If you have questions regarding the DOE position or would like to discuss it with us, please contact Tom Pauling at 970-248-6048.

Sincerely,

for 
Raymond M. Plienness, Acting Director
Office of Land and Site Management

cc:

R. Nelson, NRC

D. Geiser, LM-2

T. Pauling, LM-50

S. Schiesswohl, LM-30

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STAFF COMMITMENTS AND SCHEDULES FOR OPTIONS

Option 1: Continue to require Western Nuclear, Inc. (WNI) to provide durable and enforceable institutional controls for the remaining property, and install an alternate water supply before license termination.

<u>Commitment</u>	<u>Relative Date</u>
1. Respond to February 10, 2005, submittal	SRM + 30 days
2. After WNI takes needed actions and responds to the U.S. Nuclear Regulatory Commission (NRC), staff review WNI response and prepare a Commission paper with options/recommendations	SRM + 270 days

Remaining actions and schedule would be dependent on WNI's success in establishing institutional controls and installing an alternate water supply.

Option 2: Take the actions described in U.S. Department of Energy (DOE's) letter of July 13, 2005: (1) WNI would make one final offer to purchase the property or real estate rights immediately before site transfer; (2) If unsuccessful, WNI would include funds equivalent to the final offer in its long-term surveillance payment; and (3) With staff review and approval, WNI would relocate offsite monitoring wells; redefine the long-term care boundary to include all wells currently located offsite; or provide for institutional controls to provide DOE access to the wells and enforce use restrictions.

<u>Commitment</u>	<u>Relative Date</u>
1. Respond to February 10, 2005, submittal	SRM + 30 days
2. After WNI takes needed actions and responds to NRC, staff will review; issue license amendment, if required (License amendment would likely require an environmental assessment (EA) with review by the State)	SRM + 210 days ¹
3. Issue draft EA for alternate concentration limit (ACL) amendment	SRM + 240 days
4. Issue final EA	SRM + 330 days
5. Issue ACL amendment	SRM + 345 days
6. Terminate license	Fiscal year 07

¹ This date depends on the ability to relocate the offsite wells within the currently proposed long-term care boundary. If hydrologic conditions prevent relocation of any or all of the wells, additional time will likely be required to purchase the additional properties or acquire the needed institutional controls.