THOMPSON & PUGSLEY, PLLC.
1225 19th Street, N.W., Suite 300
Washington, D.C. 20036
202.496.0780
Fax: 202.496.0783

ANTHONY J. THOMPSON
ajthompson@athompsonlaw.com
Admitted in D.C. and Virginia

CHRISTOPHER S. PUGSLEY
cpugsley@athompsonlaw.com
Admitted in MD

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United States Nuclear Regulatory Commission
Attn: Dominick Orlando, Project Manager
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental
Management Programs
11545 Rockville Pike
Rockville, MD 20852

Dear Mr. Orlando:

Western Nuclear, Inc. (WNI), current holder of United States Nuclear Regulatory Commission (NRC) Source Material License No. SUA-56 for the former Split Rock conventional uranium milling facility in Jeffrey City, Wyoming, hereby submits this memorandum to demonstrate that both the factual and regulatory prerequisites have been achieved so that:

(1) NRC Staff may proceed with the license termination process and commence discussions with the United States Department of Energy (DOE) so that final costing under 10 CFR Part 40, Appendix A, Criterion 10 can be determined; and

(2) Final land transfer documents may be completed and real property transactional issues addressed with DOE and the United States Army Corps of Engineers (USACE).

As will be shown below and by this memorandum, WNI is formally requesting that NRC Staff terminate NRC License No. SUA-56.

During a previous public meeting with NRC Staff regarding the Split Rock license termination process, WNI offered to provide a detailed memorandum describing the past regulatory requests and approvals involving NRC Staff and WNI for the Split Rock site to provide NRC Staff with the bases to proceed with any necessary remaining administrative action to move the license termination process forward. As memorialized in this memorandum, WNI has obtained all prerequisite regulatory approvals to proceed with final evaluation and approval of DOE's second draft long-term surveillance plan (LTSP).

Over the past several months, WNI and NRC Staff have engaged in a series of discussions regarding statements made in DOE's second draft LTSP with respect to the concentrations of nitrates that have been deemed to be above the NRC-approved alternate concentration limits (ACL) limits for such concentrations past the point of compliance (POC). These statements resulted in a submission by WNI dated July 29, 2013, providing NRC Staff with additional language to include in a proposed final LTSP. This language directed NRC Staff to the purposes of 10 CFR Part 40, Appendix A, Criterion 5(B)(5) and its ACL provisions mandating protection of human health and the environment at the point of exposure (POE). This language further directed NRC Staff to WNI's combination of site-specific groundwater model and institutional controls that supported NRC Staff's approval of the constituent-specific ACLs demonstrating that the purposes of Criterion 5(B)(5) were indeed satisfied. After several discussions regarding these factors and the applicability the Uranium Mill Tailings Radiation Control Act of 1978's (UMTRCA) site closure period of two hundred (200) and, to the maximum extent practicable, one thousand (1,000) years to groundwater at the Split Rock site, it was determined that WNI would review the NRC administrative record and provide NRC Staff with a memorandum regarding previous regulatory requests from WNI and approvals received from NRC Staff to demonstrate an approach for going forward with the license termination process.

Initially, before addressing the current NRC administrative record associated with License No. SUA-56 and the Split Rock site's license termination process, it is important to reiterate the legal foundation upon which NRC Staff approved the unique and comprehensive site closure plan proposed by WNI. As stated in the Introduction to 10 CFR Part 40, Appendix A, the Commission is accorded *flexibility* in determining how the requirements of Appendix A's Criteria are satisfied. Satisfaction of these criteria can be accomplished in one or two ways: (1) compliance with 10 CFR Part 40 and its Appendix A Criteria or (2) a licensee-proposed "alternative." Indeed, in the Introduction to Appendix A, the Commission states the following:

> "Licensees or applicants may propose alternatives to the specific requirements in this appendix. The alternative proposals may take into account local or regional conditions, including geology, topography, hydrology, and meteorology. The Commission may find that the proposed alternatives meet the Commission's requirements if the alternatives will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and nonradiological hazards associated with the sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by the requirements of this appendix and the standards promulgated by the Environmental Protection Agency in 40 CFR part 192, subparts D and E."

An "alternative" will be approved by the Commission if the licensee can demonstrate that the "alternative" is at least as protective as the requirements in Appendix A's Criteria. *See* 42 U.S.C. § 2114(c); *see also* 10 CFR Part 40, Appendix A, Introduction. It is WNI's position that, by its approval of the ACL application package and other associated approvals which will be discussed below, NRC Staff made the necessary determinations cited above, regarding alternatives to specific requirements.

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Furthermore, NRC Staff has the legal authority to terminate the license without approving an LTSP. The general license provisions of 10 CFR 40.28(b) state, in part, the following:

> "If the LTSP has not been formally received by the NRC prior to termination of the current specific license, the Commission may issue a specific order to the intended custodial agency to ensure continued control and surveillance of the disposal site to protect the public health, safety, and the environment. The Commission will not unnecessarily delay the termination of the specifie lieense solely on the basis that an acceptable LTSP has not been received."

10 CFR § 40.28.

Considering the previous approvals, WNI asserts that administrative issues legally are not an impediment to lieense termination (and should not be in this case), as the Commission is entitled to resolve such issues after license termination.

After a careful review of some critical documents in the massive NRC administrative record for License No. SUA-56 and the Split Rock site's license termination process, WNI has concluded that previous regulatory approvals constitute an adequate basis for proceeding with the license termination process. In an effort to properly lay the foundation for a final determination that the Split Rock site can proceed to final site closure and license termination, this memorandum will address each of the elements and their approvals leading up to DOE's drafting of an LTSP (two versions)[1] and the past three (3) years of discussion leading towards license termination actions.

Western Nuclear Inc.'s Overall Plan of Action

Prior to discussing the specific aspects of the overall Split Rock site approvals from NRC Staff, it is important to provide some background information on the methodology used by WNI to arrive at the site's current regulatory status. This memorandum will include a discussion of the following items, which taken together, result in alternatives to NRC's Appendix A Criteria for site closure and the ability to proceed towards license termination: (1) site-specific groundwater modelling; (2) ACLs approved pursuant to Criterion 5(B)(5) and a no substantial threat findings per Criterion 5(B)(3); and (3) institutional controls/property acquisitions.

Site-Specific Groundwater Model

Beginning in 1999, WNI initiated the process that eventually would result in NRC Staff's approval of its site-specific groundwater model and accompanying protective measures. On October 29, 1999, WNI submitted a Site Closure Plan and a Site Groundwater Characterization and Evaluation Report (together with subsequent supplements the "1999 Site Closure Plan"), in which it was determined that the potential impact of 11e.(2) byproduct material in groundwater at the site was the only remaining issue to be addressed. In order to properly understand what would be needed from a regulatory perspective to complete final site closure, WNI deemed it

[1] *See e.g.*, ML12109A081 (April 12, 2012).

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appropriate to establish the groundwater parameters at the Split Rock site so that the appropriate long-term surveillance boundary (LTSB) could be defined and the potential future uses of groundwater under specific properties within that LTSB could be determined for potential property acquisitions and/or durable, legally enforceable institutional controls (IC).

The Split Rock site groundwater model was predicated on development of a comprehensive, passive control-oriented approach to ensure that the final LTSB would be large enough to ensure that 11e.(2) byproduct material in groundwater at the site would not migrate past the boundary in compliance with the UMTRCA-mandated standard of 200 years and, to the maximum extent practicable, 1,000 years.

WNI's consulting groundwater expert, Lou Miller, prepared a detailed groundwater characterization and evaluation (model) in the 1999 Site Closure Plan noted above which, in Section 4.0, detailed a preferred "alternative" approach to addressing groundwater concerns at the site utilizing durable institutional controls and an alternate water supply in conjunction with NRC-approved ACLs and an *alternative* under Criterion 5(B)(3) for constituents that did not fit precisely within the paradigm of an ACL.

With respect to the Southwest Valley, the proposed "alternative" characterized groundwater chemistry and proposed within the scope of the requested ACL POC wells, that the pre-existing well WN-21 be a POC well. As was the case with the Northwest Valley wells, it was concluded by WNI that Southwest Valley wells would provide "ground water quality measurements that are significantly greater than the average concentration of the net groundwater flux from the valleys and will provide prompt detection should non-protective conditions occur." 1999 Site Closure Plan at 99. The constituents evaluated for the Southwest Valley were the same as those evaluated for the Northwest Valley.

These conclusions were supported by WNI's groundwater modeling which determined that with respect to all constituents of concern (COC), "virtually any value at the POC wells would ensure protection of human health since there will be no human receptors for any groundwater constituent from the tailings impoundment." As is discussed below, WNI's groundwater model included the assessment of potential alternatives, including the use of ACLs, for the Northwest and Southwest Valleys (addressing all source terms) and reached conclusions that supported the development of a new LTSB. This modelling also included independent evaluations of worst-case assumptions to show that even very conservative evaluations demonstrate that there will be no future adverse impacts from groundwater to environmental receptors at the POE. *See* Final Site Survey Report at 106.

As a result of this groundwater modelling, WNI concluded that it would be appropriate to revise the previous LTSB to include a larger amount of surface and subsurface area, including the groundwater in the subsurface, in order to assure compliance with the aforementioned UMTRCA site closure period for containment of 11e.(2) byproduct material. This 1999 Site Closure Report was submitted to NRC Staff for review on October 29, 1999, and was supplemented several times thereafter.[2] On April 6, 2001, NRC Staff sent WNI a letter in which

[2] Several of these supplements can be found at ML010380246 (February 1, 2001); ML030870403 (September 27, 2003); ML043170665 (November 10, 2004); ML052360565 (August 17, 2005).

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a complete licensing review schedule was presented, including the presentation of answers to requests for additional information (RAI) and a draft and final environmental assessment (EA) for completion of the requested licensing actions in the 1999 Report. In 2003, NRC informed WNI via telephone conference that the groundwater model and proposed LTSB had been accepted, which laid the groundwork for the development of appropriate ACLs and institutional controls/property acquisitions. This conclusion is supported by the language of the TER for the approval of ACLs which states:

> "[c]ompared to the previous steady-state models presented in the original amendment application (WNI, 1999), NRC staff concludes that modeling performed in the final study is inherently more reliable and should improve the predictions of the evolution of the downgradient uranium plume.... Nevertheless, NRC staff concludes that mechanisms either retarding or removing uranium from solution are present, and that the licensee's choice, in terms of a Kd is reasonable for its intended purpose. NRC staff also finds the evidence supports the licensee's contention that uranium concentration in the Red Mule wells did not originate from the tailings plume. Furthermore, the licensee is conservative in not including levels of uranium from the Red Mule site in its definition of true background, although all evidence indicates that the plume has not reached those wells. On the basis of this review, the staff finds the latest modeling study discussed in the reference (WNI, 2003) adequately supports the extent of the long-term boundary (see Figure 2)."[3]

United States Nuclear Regulatory Commission, *Technical Evaluation Report: Alternate Concentration Limits, Western Nuclear, Inc. Split Rock Site, Jeffrey City, Fremont County, Wyoming* at 10 (September 11, 2006) (hereinafter "2006 TER").

The TER further supports the approval of the *groundwater model* when it states:

> "[t]o assess the impact of the proposed ACLs, WNI modeled ground water flow using MODFLOW 2000, and contaminant transport, using MT3D, in March 2003 (WNI, 2003). ***NRC concurred with this set of models on July 24, 2003***.[4]

2006 TER at 1 (emphasis added).

Further, DOE would not have presented two (2) versions of a draft LTSP, as well as confidential long-term surveillance and monitoring (LTSM) cost estimates, without having based such plans on an approved LTSB. The approved LTSB is based primarily on the approved groundwater model identified in the above-referenced 2006 TER. Based on the documented evidence

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[3] The transmittal letter associated with the ACL approval specifically states, "As described in the TER, NRC staff reviewed facility operations and the environmental setting, ***ground water flow and contaminant transport modeling***, hazard and exposure assessments, monitoring, and mitigation." United States Nuclear Regulatory Commission, Letter to Lawrence J. Corte, President, Western Nuclear, Inc. from Gary S. Janosko, Chief, Fuel Cycle Facilities Branch, Division of Fuel Cycle Safety and Safeguards (September 28, 2006) (ML0622910216) (emphasis added).

[4] *See* 2006 TER at 1.

discussed above, NRC formally accepted WNI's site-specific groundwater model on July 24, 2003, which is the foundation for the remainder of this memorandum and supports the conclusion that NRC has formally approved all aspects of site closure. *See id.*

Alternate Concentration Limits

In its 1999 Site Closure Plan, WNI outlined two "alternative" approaches for addressing concerns, including the use of ACLs at the site and a determination that site-derived constituents are not capable of posing a substantial present or potential threat to human health or the environment pursuant to Criterion 5(B)(3).

With respect to the use of ACLs for site-derived constituents including nitrates, Footnote 1 to a February 1, 2000 memorandum provided to NRC Staff states:

> "The ACLs that have been proposed by WNI are somewhat atypical in that they address more than one source term. As explained in greater detail in the Site Closure Plan, constituents from mill tailings at the Split Rock site have, over the years, become associated with aquifer solids. These constituents are expected to slowly re-mobilize from aquifer solids into the groundwater over time. Thus, seepage from tailings is not the only source of groundwater constituents, as is assumed to be the case for the typical ACL application."[5]

As a result of these atypical conditions and taking into account the aspects of the groundwater model offered by WNI to explain the viability of its then-newly proposed LTSB, the February 1, 2000 memorandum stated:

> "to the extent that WNI's proposal does not fit precisely the paradigm of a typical ACL application it could be considered a licensee-proposed *alternative* to NRC's requirement, as provided for under Section 84(c) of the Atomic Energy Act (AEA), 42 U.S.C. § 2114(c)." (emphasis added).[6]

The need for the proposed "alternatives" approach is demonstrated by the difficulty in establishing site-specific POC wells due to the unique site-specific conditions.[7] These unique conditions include the fact that a secondary source term exists where tailings seepage constituents became associated with aquifer solids and will continuously re-mobilize in the future. In other words, certain COCs (including specifically nitrates) built up in the secondary source term beyond the POC. This result is due to the fact that the Split Rock site's tailings impoundment was leaking tailings constituents from the time of its construction in the late 1950s because of "favorable hydrogeologic conditions for rapid tailings water infiltration" well before

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[5] *See* Footnote 9 *infra.*

[6] *See id.*

[7] The entire groundwater control and corrective action plan contained in Criterion 5 of Appendix A did not even come into existence until long after seepage containing current COCs, including specifically nitrates, already had passed the subsequently determined POC. Circumstances that presumably led to NRC stressing the need for "flexibility" in interpreting Appendix A Criteria in its Introduction thereto as noted above.

the promulgation of groundwater quality criteria in 10 CFR Part 40, Appendix A, Criterion 5, including those for ACLs and the UMTRCA amendments allowing for "alternatives." This factor led to the potential for COCs in concentrations exceeding ACL values determined for site POC wells established at a much later date.

Further, WNI cited NRC's ACL Guidance which suggests that POEs located a distance from a proposed POC(s) will be adequate if the licensee offers enough evidence that groundwater between the POC and POE will not be used. This further justifies the use of the *alternative* for an ACL for nitrates at WNI's Split Rock site, since NRC has determined that the use of durable, legally enforceable ICs on the properties between the POC and POE is appropriate.[8] These conclusions were later supported by a December 19, 2002 Commission decision (not publicly available)[9] concluding that institutional controls indeed can be durable and enforceable and that they can be used when closing licensed sites. *See also* Draft NUREG-1496 at vol. I, p. 7-17 and vol. II, p. F-20 (April, 1994).[10] Taken together, WNI's entire package serves as an "alternative" to Appendix A's Criteria requirements for final site closure and license termination, including those for ACLs.

As noted above, this report also addressed the potential alternative to ACLs--the exclusion of detected constituents on a site-specific basis, if the Commission finds that the constituents are not capable of posing a substantial present or future hazard to public health and safety or the environment. Under 10 CFR Part 40, Appendix A, Criterion 5(B)(3), the Commission is specifically authorized to exclude certain constituents from further corrective action utilizing multiple stringent criteria, all of which were analyzed in WNI's groundwater characterization and model for the Split Rock site. WNI concluded that no human receptors will be impacted due to the acquisition of fee title to property for transfer to DOE, durable institutional controls on the properties preventing use of site groundwater for domestic drinking purposes, and the aforementioned NRC-approved, site-specific groundwater model showing no migration of site-derived COCs, including specifically nitrates, past the POE during the UMTRCA-mandated closure period.

WNI's ACL license amendment application was submitted to NRC Staff for review in 1999 and was supplemented subsequently in response to requests for additional information (RAI). In 2005, WNI sought approval from NRC Staff to cease active pump-and-treat activities due to their futility, so that it could reclaim its final site evaporation pond and complete surface reclamation. NRC Staff informed WNI that it would not be able to issue such an approval, because 10 CFR Part 40, Appendix A, Criterion 5 does not permit the agency to approve a

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[8] The 2006 TER also states that "[b]ased on modeling predictions and mitigative measures (i.e., ICs, monitoring, and trigger values), NRC staff finds that the ACLs with ICs are protective of human health and the environment." 2006 TER at 1. This is further evidence that the ACL approval issued on September 28, 2006, embodies approval of the entire site-specific closure package for the Split Rock site.

[9] This reference was included in NRC Staff's September 11, 2013 letter to WNI's President, Lawrence J. Corte entitled *Groundwater Issues at the Split Rock Site and Request for Additional Information.*

[10] This reference is also offered in WNI's February 1, 2000 memorandum to Thomas H. Essig at page 6, footnote 15. *See* Letter from Lawrence J, Corte, Vice-President and General Manager, Western Nuclear, Inc. to Thomas H. Essig, Chief, Uranium Recovery and Low-Level Waste Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards (January 17, 2000).

cessation of groundwater corrective action unless and until site groundwater is remediated to Commission-approved background or an ACL is approved. At that time, WNI had submitted a preliminary application for a specific exemption under 10 CFR Part 40.14 to cease pump-and-treat activities at the site.[11] This application was the subject of RAIs when WNI voluntarily withdrew it in anticipation of the imminent approval of its proposed ACLs.

Then, in September of 2006, NRC Staff issued its approval of WNI's requested ACLs for the Split Rock site. NRC Staff's approval/record of decision included an EA and a TER. The EA specifically addressed the primary purpose of the ACLs which was "to remove the drinking water exposure pathway on private or government-owned properties within the LTSB for the 1,000-yr compliance period." *See* United States Nuclear Regulatory Commission, *Environmental Assessment for Amendment to Source Materials License SUA-56 Groundwater Alternate Concentration Limits* at 3 (August 2006) (ML062130387) (hereinafter 2006 EA). NRC Staff issued this 2006 EA for WNI's requests under the 1999 Site Closure Plan and several supplements prepared and submitted from the year 2000 to 2005 in August of 2006. This EA identified as the "Proposed Action" the establishment of ACLs for six (6) constituents of concern, including nitrates, and the use of durable, legally enforceable institutional controls restricting groundwater use within the LTSB with the primary purpose of removing the drinking water exposure pathway within the LTSB and protecting ground and surface water beyond the LTSB for the UMTRCA-mandated site closure period. While noting the characteristics of WNI's groundwater model, the EA states that "[t]hrough ground water flow and containment transport modeling, WNI demonstrated that the ACLs would result in levels that meet water quality standards at the POE or are consistent with NRC-approved background concentrations. 2006 EA at 3. This statement is consistent with the overall modeling conclusions reached by WNI that POC values could be calculated at any level and the potential groundwater exposure at the POE still will be adequately protective of human health and the environment.

Chapter 2 of the 2006 EA also discussed the range of alternatives that were reviewed but not selected when WNI's ACLs were approved. Each of these alternatives included either some form of pump and treat or active maintenance approach and/or the inclusion of institutional controls or the no-action alternative. None of these potential alternatives included any aspects of the "alternative" proposed by WNI in its submissions listed in Section 1.0 of the EA and, indeed, the "proposed action" closely resembles the "alternative" proposed by WNI in its submittals. The remainder of the EA essentially concurs with the groundwater modeling used by WNI in its submittals.

Based on the data, information, analyses, and conclusions in the administrative record, WNI believes that NRC has established the foundation upon which it can proceed with the license termination process. As stated above, WNI's submittals from 1999 to 2005, as well as the analytical documents issued by NRC Staff, including the approval of ACLs, an effective *alternative* thereto for nitrates in conjunction with inextricably linked ICs and the approved groundwater model demonstrate that *alternatives* were properly before NRC Staff for its evaluation and approval. The groundwater model, the ACLs, the effective *alternative* for nitrates, and the conclusions that COCs will not reach the POE in levels either below site background or below Wyoming water quality standards, specifically address the fact that COCs

[11] *See* ML051640016 (June 10, 2005).

will not exceed protective values at the POE. WNI believes that by approving the site modeling and the durable institutional controls demonstrating that no COCs will affect human *health within or at the final LTSB, an alternative to an ACL for nitrates already has been approved.*

The 2006 EA concluded that, "NRC Staff has determined that impacts associated with the proposed action are not significant and does not warrant the preparation of an Environmental Impact Statement." *Id.* at 20. By approving the 1999 Site Closure Plan, its supplements, and associated ACLs in August of 2006 and obtaining the Commission's concurrence on the process of acquiring the final property within the LTSB in 2005 and the concept of using institutional controls generally in 2002 and specifically for the Split Rock site in 2005, NRC's series of approvals for the site demonstrate that all elements of the proposed "alternative" referenced by WNI have been accepted.

Institutional Controls/Property Acquisitions

As a general matter, the use of ICs for the Split Rock site can be addressed from a broad, agency-wide conceptual level and a site-specific level. In the case of the former, in 2002, the Commission approved the use of ICs at sites to prevent human exposure to site-derived constituents in, amongst other things, 11e.(2) byproduct material. This conclusion was further supported by several instances of NRC Staff and other agency documents. Two examples of this include the October, 2000 DOE Draft Long-Term Stewardship Study and NRC's presentation at the 2003 NMA/NRC Uranium Recovery Workshop.[12] Copies of these items are attached as exhibits.

In the case of the latter or Split Rock-specific ICs, the aforementioned February 1, 2000, memorandum also addressed the viability of fee property ownership and institutional controls as durable and enforceable property mechanisms to assure that WNI's proposed Site Closure Plan would be adequate to protect public health and safety and the environment upon license termination for the UMTRCA-required closure period. As stated in the 2006 TER:

> "WNI's proposed use of ICs constituted an alternative to the provisions of 10 CFR Part 40, Appendix A. On December 19, 2002, the Commission approved the use of ICs to prevent human exposures to site-derived contaminants for the duration of the 1000-yr performance period (NRC, 2002). ***WNI finalized all IC arrangements in January 2006***. In addition to the ICs, NRC is requiring a ground water and surface water monitoring network to track ground water contamination and assess model predictions."

2006 TER at 1 (emphasis added).

Initially, WNI referred to AEA Section 83 regarding transfer of 11e.(2) byproduct material to the long-term custodian and noted that the Commission can waive transfer of fee title to property containing 11e.(2) byproduct material now or within the LTSB if it is determined that such transfer "is not necessary or desirable to protect the public health, safety, or welfare or to minimize or eliminate danger to life or property." Then, WNI referred to AEA Section 84 which

[12] *See* attached to this memorandum cover pages and inserts to both reports.

provides the Commission flexibility in determining the transfer requirements, including the land ownership status, for properties to be located within the final LTSB. More specifically, AEA Section 83(b)(1)(B)(4) states, "In exercising the authority of this paragraph, the Commission shall take into consideration the status of ownership of such land and interests therein and the ability of the licensee to transfer title and custody thereof to the United States or a State."

As stated in NRC's ACL approval, the primary purpose of the ICs was to eliminate potential human exposure to site derived constituents in 11e.(2) byproduct material in groundwater at the Split Rock site.[13] As stated above, WNI's proposed site closure plan included a redefined and enlarged LTSB which resulted in the inclusion of multiple private properties within such LTSB. As a result, NRC Staff and WNI commenced discussions on the appropriate manner in which to assure that human exposure to such constituents is eliminated or restricted. In a SECY paper dated October 11, 2002, and as discussed in the ACL TER, it was recommended that WNI should attempt to acquire fee simple title to all private properties within the LTSB and, if this was not possible, attempt to impose durable, legally enforceable ICs to restrict groundwater use for domestic purposes (while allowing for some livestock or agricultural use). More specifically, Option 2 of SECY-02-0183 stated, "[t]he 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."[14] In a telephone conference with NRC Staff dated January 9, 2003, WNI was informed by NRC Staff that the Commission would be requiring WNI to make a good faith effort to acquire fee title to the affected properties within the LTSB and that, if this was not possible, durable, legally enforceable ICs would be required to prevent human exposure to the groundwater under their properties.[15] Indeed, in an SRM dated November 19, 2002, the Commission approved the recommendation (Option 2) which effectively provided WNI with express Commission approval of the use of ICs on properties within the LTSB if a good faith effort to acquire fee simple title was unsuccessful. Thus, the remaining action was to attempt a good faith effort to acquire fee title to the properties within the LTSB.

Per the Commission's Order in SRM-SECY-02-0183, WNI then proceeded to acquire fee simple title to the majority of the properties within the LTSB other than those already subject to durable, legally enforceable ICs. At that time, the exception were the Red Mule properties, which later became the subject of a new SECY paper to the Commission. As a result of the acquisition of fee simple title to all but one of these properties[16] and NRC Staff's aforementioned approval of the proposed LTSB and groundwater model, the issue of ICs and their use within the LTSB was removed from consideration, as WNI could transfer fee title to DOE without encumbrance or cost with the only remaining IC issue for the Commission was a final Red Mule property.

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[13] *See also* Footnote 4 *infra.*

[14] *See* Footnote 15 *infra* at 1.

[15] *See* Letter from Harley W. Shaver to Susan Frant, NRC Branch Chief, Uranium Recovery Section (March 27, 2003); Affidavit of John H. Licht (Notarized March 24, 2003).

[16] *See* United States Nuclear Regulatory Commission, SECY-05-0200, *Efforts by Western Nuclear, Inc. to Acquire Off-Site Properties in Conjunction with Decommissioning Its Uranium Recovery Site and the Need for Institutional Controls*, (October 28, 2005) *citing* SECY-02-0183, (October 11, 2002).

Per SECY-05-0200, NRC Staff provided the Commission with options regarding the remaining Red Mule property, including a recommended option which recognized that WNI had made a good faith effort to acquire fee simple title to that Red Mule property and that it should make one last effort to acquire such property per a 2005 recommendation from DOE and, if unsuccessful, provide funds equivalent to its last good faith offer in its Criterion 10 contribution. It is worth noting that NRC Staff also stated in this SECY paper that the ACL application could not be approved without final resolution of the IC issues. Thus, the ACL approvals issued in 2006 necessarily mean that the IC issues had been resolved to the Commission's and NRC Staff's satisfaction. WNI then engaged in its final good faith effort and acquired the requisite fee title to the final Red Mule property.

Moreover, this SECY paper provided the Commission with a license termination schedule concluding in 2007 that assumed that the final action would be approval of WNI's requested ACLs. This schedule expressly notes that all other factors requiring NRC Staff and/or Commission approval already have been completed. SECY-05-0200, *Staff Commitments and Schedules for Options.*

Additionally, as recently as September 11, 2013, NRC Staff specifically noted that "NRC did indeed grant WNI authorization for an alternate approach to complying with Appendix A. Specifically, NRC authorized WNI to use ICs on private property in lieu of active remediation of contamination to limit doses to members of the public. *That fact is not now in question. NRC is satisfied that WNI has established acceptable ICs.*"[17]

Requested Action

As discussed above, the required licensing actions for proceeding with license termination for NRC License No. SUA-56 have been approved by NRC. The explicit approval of WNI's groundwater model, as modified after multiple interactions with NRC Staff in the attached correspondence, via WNI/NRC Staff telephonic interaction and the NRC Staff decision documents on ACLs demonstrates that the subsurface conditions leading to the requirements for alternate approaches such as ICs within the LTSB have been accepted by NRC. The aforementioned NRC decision documents on ACLs demonstrate final approval of this requested action. The attached documentation showing the various approvals for the use of ICs, the Commission-approved methodology for using ICs (i.e., good faith effort to acquire fee title to the properties within the LTSB) demonstrates that the "alternate" approach to acquiring fee title using ICs was approved. As a result, WNI asserts that these approvals and the issuance by DOE of two (2) draft LTSPs based on these approvals necessitates movement by NRC towards termination of NRC License No. SUA-56. Therefore, by this memorandum, WNI requests that NRC terminate WNI's license.

[17] *See* United States Nuclear Regulatory Commission, *Letter to Mr. Lawrence J. Corte from Andrew Persinko, Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate*, (September 11, 2013) (emphasis added) (ML13241A105).

WNI continues to seek active interaction with NRC Staff, DOE and the USACE with respect to final costing of the LTSP so that a final determination of the 10 CFR Part 40, Appendix A, Criterion 10 payment for LTSM can be made. Thus, WNI respectfully requests that NRC Staff attempt to schedule a meeting with these entities after completion of its acceptance review of this memorandum so that this process can be expedited. WNI appreciates the opportunity to submit this memorandum and will be happy to answer any further questions NRC Staff may have on its contents. Thank you for your time and consideration in this matter.

Respectfully submitted,

Anthony J. Thompson, Esq.
Christopher S. Pugsley, Esq.
Thompson & Pugsley, PLLC
1225 19th Street, NW
Suite 300
Washington, DC 20036
COUNSEL TO WESTERN NUCLEAR, INC.

Dated: July 8, 2014