

## **APPENDIX E**

# **GUIDANCE TO THE U.S. NUCLEAR REGULATORY COMMISSION STAFF ON THE LICENSE TERMINATION PROCESS FOR LICENSEES OF CONVENTIONAL URANIUM MILLS**

## **E1.0 BACKGROUND**

The Atomic Energy Act of 1954, as amended, contains the statutory requirements for the transfer of the title and custody to byproduct material and any land used for the disposal of such byproduct material from a uranium mill licensee to either Federal or State control, before termination of the licensee's specific license. These requirements are codified in 10 CFR Part 40, at Section 40.28, "General license for custody and long-term care of uranium or thorium byproduct materials disposal sites." Section 40.28, along with pertinent requirements stated in Appendix A to 10 CFR Part 40 (hereafter Appendix A), provides for the completion of certain licensing actions before the transfer of the land and byproduct material to the United States or the State where the disposal site is located for long-term care.

This document gives the U.S. Nuclear Regulatory Commission (NRC) staff specific directions to be applied in the course of the license termination process for Uranium Mill Tailings Radiation Control Act of 1978 Title II sites that are under NRC jurisdiction. For the license termination of Title II sites that are under Agreement State jurisdiction, guidance is provided in the Office of State and Tribal Programs SA-900 Procedure (NRC, 2001). The license termination process, including the roles of the respective agencies and organizations involved in this process, is discussed in general. Various relevant issues are addressed in greater detail. This is the initial version of this guidance document, and as specific uranium mill licenses are terminated and title to the land and byproduct material is transferred to the appropriate government agency, future revisions are likely to be necessary. These revisions will address not only issues yet to be identified, but also will provide any additional necessary clarification of issues discussed herein.

## **E2.0 ROLES OF INVOLVED ORGANIZATIONS**

### **E2.1 NRC**

In accordance with Section 83c of the Atomic Energy Act, as amended, NRC determines whether the licensee has met all applicable standards and requirements or whether a licensee-proposed alternative meets the standards. This will involve NRC review of licensee submittals relative to the completion of decommissioning, reclamation, and, if necessary, ground-water cleanup.

In addition, the staff should review the site long-term surveillance plan submitted by the custodial agency, for both NRC and Agreement State sites. On NRC acceptance of the long-term surveillance plan, NRC terminates the specific license and places the long-term care and surveillance of the site by the custodial agency under the general license provided at 10 CFR 40.28.

A final NRC responsibility is the determination of the final amount of long-term site surveillance funding. Criterion 10 of Appendix A specifies a minimum charge of \$250,000 (1978 dollars), revised to reflect inflation, which may be escalated on a site-specific basis because of

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surveillance and long-term monitoring controls beyond those specified in Criterion 10 of Appendix A. Detailed discussion of the bases used in developing the minimum charge and any escalated costs appears in Section E3.4 (below).

### **E2.2 Uranium Mill Licensees**

Before license termination, licensees are required by license conditions to complete site decontamination and decommissioning and surface and ground-water remedial actions consistent with decommissioning, reclamation, and ground-water corrective action plans.

Licensees must document the completion of these remedial actions in accordance with procedures developed by NRC. As discussed in Section E3.1 (below), this information will include a report documenting completion of tailings disposal cell construction, as well as radiation surveys and other information required under 10 CFR 40.42.

Because the long-term surveillance plan must reflect the remediated condition of the site, the licensee will work with the custodial agency in preparing the long-term surveillance plan. Most likely, this will involve supplying the custodial agency with appropriate documentation (e.g., as-built drawings) of the remedial actions taken and reaching agreements (formal or informal) with the custodial agency regarding the necessary surveillance control features of the site (e.g., boundary markers, fencing). It is the custodial agency responsibility to submit the long-term surveillance plan to NRC for approval. However, the licensee may elect to help prepare the long-term surveillance plan, to whatever degree is agreed between the licensee and the custodial agency.

Finally, the licensee provides the funding to cover long-term surveillance of the site, in accordance with Criterion 10 of Appendix A. NRC will determine the final amount of this charge on the basis of final conditions at the site.

After termination of the existing license and transfer of the site and byproduct materials to the custodial agency, the licensee remaining liability extends solely to any fraudulent or negligent acts committed before the transfer to the custodial agency, as provided for in Section 83b(6) of the Atomic Energy Act, as amended.

### **E2.3 Custodial Agency**

Section 83 of the Atomic Energy Act, as amended, states that before termination of the specific license, title to the site and byproduct materials should be transferred to either (1) the U.S. Department of Energy (DOE); (2) a Federal agency designated by the President; or (3) the state in which the site is located, at the option of the State. It is expected that the DOE will be the custodial agency for most, if not all, of the sites.

It is the responsibility of the custodial agency to submit the long-term surveillance plan to NRC for review and acceptance. Provisions and activities identified in the final long-term surveillance plan will form the bases of the custodial agency long-term surveillance at the site. The NRC general license in 10 CFR 40.28(a) becomes effective when the licensee's current specific license is terminated and the Commission accepts the long-term surveillance plan. Custodial agencies are required, under 10 CFR 40.28(c)(1) and (c)(2), to implement the provisions of the

long-term surveillance plan. These activities could include not only those reflected in the long-term surveillance plan, but also activities voluntarily committed to by the custodial agency.

## **E2.4 States**

As discussed in Section 2.3 (above), the State in which the disposal site is located has the option of becoming the custodial agency. This “right of first refusal” may be exercised either on a site-by-site basis or generally, covering all sites within the State’s limits. This option should be exercised early enough in the license termination process so that termination of the specific license and transfer of the site to the appropriate custodial agency are not delayed unnecessarily. Written confirmation of a State decision should be documented in a letter to the DOE, from the governor of the State, or another State official to whom the authority for this decision has been appropriately delegated. A copy of this letter must be sent to NRC.

The NRC has exclusive jurisdiction over both the radiological and non-radiological hazards of 11e.(2) byproduct material (NRC, 2000).

## **E3.0 THE LICENSE TERMINATION PROCESS**

A licensee considering termination of its source material license should have in place an acceptable (by NRC) site decommissioning and reclamation plan and, if necessary, an acceptable ground-water corrective action program. This section describes the termination process that follows an NRC licensee completion of decommissioning, reclamation, and ground-water corrective action in accordance with the approved plans.

### **E3.1 Licensee Documentation of Completed Remedial and Decommissioning Actions**

#### **E3.1.1 Documentation of Completed Surface Remedial Actions**

To ensure a timely and efficient NRC review, when reclamation of the tailings disposal cell is completed, the licensee should submit to NRC, for review, a report detailing the conduct and completion of the reclamation construction activities. This Construction Completion Report would consist primarily of a summary of quality assurance/quality control records and as-built drawings. A licensee may refer to the reports prepared by the DOE to document completion of remedial actions at Title I Project sites as guidance in developing its Construction Completion Report. However, some of the information presented in DOE reports (e.g., original design calculations) has been meant to ease the staff review rather than to meet documentation requirements.

If a Construction Completion Report or similar report is not submitted, it will be necessary for the staff to conduct a detailed technical review to meet its responsibilities under Section 83c of the Act. This review could involve several site visits and significant confirmation testing and would likely involve staff in the following technical disciplines: geotechnical engineering, surface water and erosion protection, radon barrier design, and soil radiation cleanup. Accurate quality assurance/quality control records and photographs kept by a licensee during cell construction will be important input into the staff determination that reclamation has been conducted and completed in accordance with the approved plan.

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If the NRC determines, as part of its review of the Construction Completion Report or during a site inspection, that a licensee has neglected to compile quality assurance/quality control records or has inadequate records, it may require the licensee to conduct appropriate sampling of those portions of the completed cell that are in question (e.g., of the radon barrier). If a licensee is unwilling or unable to comply, the staff or NRC contractors will conduct the sampling, and the costs involved will be included in the licensing and inspection fees assessed under 10 CFR 170.31. In addition, if a requirement to maintain quality assurance/quality control records is part of an approved reclamation plan, a licensee's lack of such records may be interpreted as a violation of the relevant license condition. This situation will be evaluated as part of the NRC inspection program. Appropriate NRC action would be taken in such instances.

### **E3.1.2 Documentation of Completed Site Decommissioning**

Licensees are also required, under 10 CFR 40.42(j), to document the results of site decommissioning, which is done by conducting a radiation survey of the premises where the licensed activities were carried out. The results of this survey, the contents of which are specified at 10 CFR 40.42(j)(2), are submitted to NRC for review. A licensee has the option of demonstrating that the premises are suitable for release in a manner other than that specified at 10CFR 40.42. Additional documentation pertinent to site decommissioning and soil cleanup may be required by a specific license condition.

### **E3.1.3 Documentation of Completed Ground-Water Corrective Actions**

Criteria 5A–5D, along with Criterion 13, of Appendix A incorporate the basic ground-water protection standards imposed by the U.S. Environmental Protection Agency (EPA) in 40 CFR Part 192, Subparts D and E (48 FR 45926, October 7, 1983). These standards apply during operations and before the end of closure. At a licensed site, if these ground-water protection standards are exceeded, the licensee is required to put into operation a ground-water corrective action program (Criterion 5D of Appendix A). The objective of the corrective action program is to return the hazardous constituent concentration levels to the concentration limits set as standards.

For licensees with continuing ground-water cleanup, NRC approval is required for the termination of corrective action. A licensee should submit appropriate ground-water monitoring data and other information that produce reasonable assurance that the ground water has been cleaned to meet the appropriate standards. This may include an application for alternate concentration limits if the licensee concludes that some alternate concentration limits for certain constituents are necessary. The staff will review alternate concentration limits in accordance with the most current version of the NRC staff technical position, "Alternate Concentration Limits for Title II Uranium Mills: Standard Format and Content Guide, and Standard Review Plan for Alternate Concentration Limit Applications" (NRC, 1996).

## **E3.2 NRC Review of Completed Closure Actions**

On receipt of the Construction Completion Report, decommissioning report, ground-water completion report, or alternate concentration limit monitoring data, the staff will review the document for completeness and level of detail. Given a favorable finding, the staff will then

review the content of the report for documentation that the action has been conducted in accordance with the license requirements and regulations. If that is the case, NRC will notify the licensee by formal correspondence, and, if the licensee so requests, amend the specific license, by deleting applicable license requirements for reclamation, decommissioning, or ground-water cleanup, and identifying requirements for any disposal cell observational period and/or environmental monitoring. The staff may conduct site inspections, examining first-hand the closure actions taken, including the quality assurance/quality control records.

Additionally, the staff should conduct a final construction completion inspection, which is expected to consist of a site walk-over and an examination of construction records. No independent verification of completed actions (e.g., confirmatory coring of the radon barrier) is expected, except on a case-by-case basis, as discussed previously.

With respect to construction of the tailings cell, the staff review of the Construction Completion Report, coupled with site inspections, will ensure that disposal cells are constructed in accordance with the approved design and plan (e.g., a summary of quality assurance/quality control records shows the appropriate number of material lifts have been placed).

The staff will rely on site inspections as the primary means of determining acceptable implementation of the licensee's approved decommissioning plan, especially in regard to soil cleanup. These inspections will consist of (1) reviews of procedures, (2) evaluations of procedure implementation, (3) evaluations of records and quality assurance, and (4) limited gamma surveys and soil sampling. In this way, the staff will gain the needed level of confidence in the licensee's performance to support its evaluation of the final decommissioning survey report. Confirmatory sampling, either by NRC or its contractors, should be conducted at sites for which additional confirmation beyond inspections is necessary. Specific criteria will be employed to identify those sites requiring confirmatory sampling.

### **E3.3 Observation Periods**

#### **E3.3.1 Following Completion of Surface Remedial Actions**

The length of an observation period following completion of surface remediation will be determined on a site-specific basis, with a minimum period of 1 year, commencing at the completion of the erosion cover. Licensees should report significant cell degradation (e.g., the development of settlement or erosional features) occurring during this period.

Sites employing a full self-sustaining vegetative cover (Criterion 4 of Appendix A) may have an observation period of at least 2 years, and possibly as long as 5 years, based on specific site conditions and the requirements of 10 CFR Part 40, Appendix A.

A *de facto* observation period may exist at most sites where cleanup of ground-water contamination continues following the completion of surface reclamation (i.e., construction of the tailings disposal cell).

### E3.3.2 Following Ground-Water Remediation

The reviewer should examine (1) ground-water completion reports, (2) ground-water corrective action reports, or (3) alternate concentration limit applications to verify that ground-water quality corrective actions have produced a stable water quality and that ground-water monitoring and analysis have been done to confirm the concentration of these contaminants in the ground water and to verify that they meet applicable standards. This should be done at the end of the 1-year stability ground-water monitoring period.

Ground-water stability monitoring and confirmation of constituents of concern will be acceptable if:

- (1) A one-time measurement of all constituents of concern has been collected and analyzed from all point-of-compliance wells. A constituent of concern is one that is (a) either (i) currently identified in 10 CFR Part 40, Appendix A, Criterion 13; or (ii) is not listed in Criterion 13, but is placed in a license condition as part of the staff review of the Corrective Action Plan; and (b) has been identified in the tailings liquor. NRC has flexibility to add other constituents not identified in Criterion 13. However, in identifying this second set of constituents, the staff should ensure that any additions are made based on a sound technical and regulatory basis. New constituents should be added in a timely manner, either when the corrective action plan is accepted for review, or at some time during the lifetime of the corrective action program. New constituents will not be required at the time of the license termination monitoring submittal.

Some examples of sound technical bases for new constituents follow:

- (a) For the Homestake/Grants and United Nuclear Corporation/Churchrock sites, the NRC staff, the DOE, and the EPA will work together to develop an interagency policy on closure and postclosure issues that will comply with the statutory and regulatory missions and requirements of all three agencies. For the Cotter/Canon City and UMETCO/Uravan sites, the State of Colorado is the primary regulatory authority and the NRC has a more limited role. Once all applicable NRC requirements are met, the NRC will have no basis for denying a request to terminate any specific license. However, before the NRC terminates any license for a site that is on the National Priority List or that is subject to continuing regulation by the EPA, the NRC will inform the DOE of the pending action, and where possible, will provide additional time for the DOE to resolve site issues it may have with the EPA.
- (b) Trends in ground-water contamination show that after several years of decreasing contamination, the levels of contamination begin to rise again.
- (c) Surrogate parameters that cover a family of constituents show an increase in the concentration in ground water. Therefore, the staff may require licensees to monitor for all constituents found in that family.

- (d) Some constituents used in the milling process, but not listed in Criterion 13, such as ammonia and nitrate, must be addressed.

Constituents should not be added just because an individual state regulatory body is concerned about that constituent. Having a state identify a constituent as one of concern to the state is not necessarily a proper basis for NRC to include that constituent.

- (2) The results of the one-time measurement sampling should be compared with the pre-operational applicable standards as specified in Criterion 5(C) or the license. All hazardous constituents must be shown to meet the standards specified in Criterion 5(C) or the license. If this measurement is taken sometime before license termination (3 or more years), the reviewer should ensure that recontamination has not occurred. This may be done by taking additional measurements or making analytical calculations.
- (3) The stability monitoring data should be inspected for any trends in increasing ground-water concentrations for those constituents of concern in the ground water that were being cleaned up by the corrective action plan.

If the staff reviews result in acceptance of confirmation and stability monitoring, the staff may conclude that:

- (1) The licensee has monitored all previously identified constituents of concern at the points of compliance.
- (2) The post-corrective action plan stability monitoring shows that the constituents of concern that were remediated will remain below compliance or alternate concentration limit standards.
- (3) The one-time sampling for constituents of concern shows that constituents of concern are below, and will remain below, relevant standards in 10 CFR Part 40, Appendix A, Criteria 5B(5) and 5B(6).
- (4) All ground-water corrective action programs have ceased operation.
- (5) All identified constituents of concern for which compliance sampling is being conducted have been returned to the concentration limits set as standards.

### **E3.4 Long-Term Site Surveillance Funding**

Before termination of the specific license, NRC will set the final amount of the long-term site surveillance charge to be paid by the licensee in accordance with Criterion 10 of 10 CFR Part 40, Appendix A. The NRC process for determining this amount will include consultations with the licensee and the custodial agency. This charge must be paid to the United States general treasury or to the appropriate state agency before the specific license can be terminated.



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Notify NRC and custodial agency 2 years before estimated date of license termination. When a licensee has completed site reclamation, decommissioning, and, if necessary, ground-water corrective action, and is ready to terminate its specific source material license, it must formally notify NRC of its intentions. Such notification should be accompanied by a completed NRC Form 314, "Certificate of Disposition of Materials" or approved alternate.

### **E3.4.1 Bases for Determination of Surveillance Charge**

The basic criterion for tailings disposal is to avoid dependance on perpetual human care and on-going maintenance to preserve the isolation of the tailings. NRC, in Criterion 1 of Appendix A, concludes that:

The general goal or broad objective in siting and design decisions is permanent isolation of tailings and associated contaminants by minimizing disturbance and dispersion by natural forces, and to do so without ongoing maintenance.

However, as further indicated in Criterion 1, for practical purposes, specific design and siting considerations must involve finite time limits. For this reason, Criterion 6 contains longevity standards for design of disposal cells.

In order that the isolation of the tailings and associated contaminants can be preserved to the extent possible, the Atomic Energy Act, as amended, provides that title to the byproduct material and associated land be transferred to the care of the United States, the State, or the tribe, as discussed previously. NRC has interpreted such long-term custody by a governmental agency, whether Federal or State, as "a prudent, added measure of control" (NRC, 1980), so that land uses that might contribute to the degradation of the cover or lead to direct human exposures can be prevented.

In the "Final Generic Environmental Impact Statement on Uranium Milling" (NRC, 1980), NRC staff developed the bases for the long-term surveillance charge, given the intent that no ongoing active maintenance of site conditions should be necessary to preserve waste isolation. In the final generic environmental impact statement, the following actions are assumed for the "passive monitoring" approach to surveillance of the site are as follows:

- (1) An annual visual inspection of the site, either as a site visit or a visual inspection from an aircraft, should be conducted.
- (2) No maintenance of equipment or facilities, no fence replacement, no sampling, and no airborne environmental monitoring would be expected.
- (3) Essentially, the only costs for continued surveillance/maintenance would consist of time spent in preparing for the inspection, travel to the site, conduct of the inspection, and annual report writing.
- (4) Minimal NRC oversight would be required.

Passive monitoring, thus, would not involve such activities as irrigation, hauling of fill, regrading, or seeding.

Finally, as discussed previously, licensees will contribute the funds necessary to cover the costs of long-term surveillance of their sites. The charge assessed is a one-time fee, which will yield interest on the funds, assuming a 1-percent annual real interest rate, sufficient to cover the annual costs of site surveillance. The final generic environmental impact statement contains more detailed discussion regarding the determination of this interest rate.

### **E3.4.2 Determination of Surveillance Charge Amount**

On the basis of the assumptions discussed in Section E3.4.1 (above), NRC developed the minimum long-term surveillance charge of \$250,000 (1978 dollars) as stated in Criterion 10 of Appendix A. It is this charge, adjusted to account for inflation, that the licensee is required to pay into the general treasury of the United States, or alternately, to the appropriate State agency (if the State is to become the long-term site custodian). The methodology the staff will use to determine the adjusted surveillance charge that accounts for inflationary increases since 1978 includes (1) using the Consumer Price Index available at the time the licensee requests termination and (2) applying the rate of increase for the last month for which it has been calculated to any following month leading to license termination. For example, in June 1996, NRC determined the final surveillance charge for the TVA/Edgemont site. In doing this, the staff used the April 1996 Consumer Price Index and applied the rate of increase between March and April to the following months.

Criterion 10 allows for the escalation of this minimum charge if, on the basis of a site-specific evaluation, the expected site surveillance or control requirements are determined to be significantly greater than those specified in Criterion 12 of Appendix A (i.e., annual inspections to confirm site integrity and determine the need, if any, for maintenance or monitoring).

Escalation could result from a licensee's proposal of alternatives to the requirements in Appendix A, as allowed under Section 84c of the Atomic Energy Act, as amended. For example, a licensee could demonstrate by analysis that the only mechanism for achieving a minimum disposal cell design life of 200 years at its site is through the use of ongoing maintenance. NRC may approve such a design if it finds that the design will achieve a level of stabilization and containment for the site concerned, and a level of protection of public health and safety, and of the environment, that is equivalent to, to the extent practicable, or more stringent than, the level of protection that would be achieved by meeting NRC requirements. However, the licensee would likely be required to place additional funds in the long-term surveillance charge to cover the costs of the ongoing maintenance.

Another situation that may lead to the escalation of the minimum charge is the recognition that some degree of active care (e.g., vegetation control, maintenance of erosional control measures) is necessary to preserve the as-designed conditions of the site. This need should become apparent in the course of site observations during the reclamation and observational periods.

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In any case, any escalation in the minimum charge will be discussed with the licensee and long-term custodian, before license termination. Any final variance in the funding requirements will be determined solely by NRC.

A situation may arise in which the custodial agency wants to have commitments in the long-term surveillance plan that are beyond those required in Appendix A and that NRC does not determine are necessary. In such a case, the amount of the long-term surveillance charge would not be affected (NRC, 1990, "Detailed Comment Analysis," Comment 1.2). The custodial agency must identify a mechanism for funding these additional self-imposed requirements.

### **E3.4.3 Payment of Long-Term Surveillance Charge**

Licensees may pay the final site surveillance charge to the NRC or the custodial agency. If paid to NRC, the funds will be deposited, in accordance with the Miscellaneous Receipts Act, in the U.S. General Treasury. A custodial agency receiving payment from the licensee will need to document receipt and subsequent deposition of the payment. Copies of such documentation should be sent to NRC.

### **E3.5 Preparation of the Long-Term Surveillance Plan**

While surface remediation and ground-water cleanup activities are ongoing, it is in the best interest of the licensee to contact the custodial agency with regard to that agency preparation of the site long-term surveillance plan. The custodial agency responsibilities under the general license are defined in the long-term surveillance plan, the required contents of which are provided at 10 CFR 40.28 and in Criterion 12 of Appendix A, as follows:

- A legal description of the site to be transferred and licensed
- A detailed description of the site, as a baseline from which future inspectors can determine the nature and seriousness of any changes {licensees may reference previously submitted information, to the extent applicable, in providing this description [10 CFR 40.31(a)]}
- A detailed description of the long-term surveillance program, including (1) the frequency of inspections and reporting to the NRC; (2) the frequency and extent of ground-water monitoring, if required; (3) appropriate ground-water concentration limits; and (4) inspection procedures and personnel qualifications
- The criteria for follow-up inspections in response to observations from routine inspections or extreme natural events
- The criteria for instituting maintenance or emergency measures

In addition to these regulatory requirements (also see Appendix D of this standard review plan), NRC will also require that the long-term surveillance plan contain documentation of title transfer of the site from the licensee to the custodial agency. This requirement does not apply to sites

located on tribal lands, since transfer does not occur for such sites (Criterion 11F of Appendix A).

Because the long-term surveillance plan must reflect the remediated condition of the site, it is expected that the existing licensee will work with the custodial agency to prepare the long-term surveillance plan. As discussed in Section E2.2 (above), this will likely involve supplying the custodial agency with appropriate documentation (e.g., as-built drawings) of the remedial actions taken and reaching agreements (formal or informal) with the custodial agency regarding the necessary surveillance control features of the site (e.g., boundary markers, fencing).

As the likely custodial agency for most, if not all, of the sites, the DOE has developed a generic long-term surveillance plan shell. For sites under the long-term care of the DOE, significant portions of the long-term surveillance plan will not change from site to site (e.g., criteria for follow-up inspections and for instituting maintenance or emergency measures). Therefore, the staff may focus its review on the site-specific information in the long-term surveillance plan. This information would include site-specific activities that are not to be reflected in the long-term care charge, but are voluntarily committed to by the custodial agency.

### **E3.6 Termination of the Specific License/Issuance of the General License**

Actual termination of a licensee-specific license and the subsequent placement of the site under the general license provisions of 10 CFR 40.28 will involve a number of separate actions to be completed by the NRC. Significant internal coordination (and external, if Agreement State licensees are involved) will be required so that these actions will be completed in an efficient and timely manner, thereby ensuring that the byproduct material and any land used for the disposal of such byproduct material remain under NRC license throughout the process.

#### **E3.6.1 NRC Determination Under Section 83c of the Act**

Under Section 83c of the Atomic Energy Act, as amended, NRC must determine whether all applicable standards and requirements have been met by the licensee in the completion of site reclamation, decommissioning, and ground-water corrective action before a licensee's license can be terminated. Necessarily, this determination will rely primarily on NRC reviews and acceptance of the documentation presented by the licensee. In addition, NRC site closure inspection activities, potentially including limited confirmatory radiological surveys, will provide supplemental information for NRC determination.

#### **E3.6.2 NRC Review and Acceptance of the Long-Term Surveillance Plan**

A long-term surveillance plan is required before termination of the specific license and placement of the site and byproduct material under the 10 CFR 40.28 general license. Review and acceptance of the long-term surveillance plan is the sole purview of NRC. Lack of NRC acceptance of a site long-term surveillance plan can delay termination of the specific license.

NRC staff acceptance of a long-term surveillance plan will be documented in written notification to the custodial agency, and, separately, by noticing the action in the *Federal Register*.

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### **E3.6.3 Issuance of a Specific Order Under 10 CFR 40.28**

If NRC has not received an acceptable long-term surveillance plan for a reclaimed site ready for transfer to the custodial agency, the agency has two options available to it. First, if appropriate, the Commission may choose not to terminate the existing license for a short period of time, while awaiting an acceptable long-term surveillance plan. Alternately, under 10 CFR 40.28, NRC may issue a specific order to the custodial agency to take custody of the site and to commence long-term surveillance, while the agency prepares the long-term surveillance plan for final NRC approval.

NRC would require substantial basis to support issuance of an order. The basis would include an understanding of the circumstances leading to the custodial agency inability to take the site. Factors that the NRC would consider include whether:

- (1) Adequate notice (at least 16 months) has been provided by the existing licensee to allow the custodial agency to effect title transfer to the land and byproduct material.
- (2) Sufficient time (at least 2 years) has been allowed for the custodial agency to prepare, and the NRC to review, the long-term surveillance plan.
- (3) NRC has reviewed the Construction Completion Report, decommissioning report, and ground-water cleanup report and has conducted the final license-termination inspection and found that the closure actions were completed in an acceptable manner.
- (4) Site degradation has occurred, and whether appropriate repairs have been completed.
- (5) The required long-term surveillance funding payments have been made to the U.S. General Treasury or to the designated state agency.
- (6) The custodial agency has an acceptable rationale for delaying inclusion of the site under the general license.

In cases in which the DOE or another presidentially designated Federal agency will be the long-term custodian and is unable to take custody of the site because of lack of funding, NRC may still order the agency to take custody. The intended custodial agency will have at most 1 year (i.e., the time by which an annual site inspection is to have been completed) in which to obtain the funds through the necessary appropriations process.

### **E3.6.4 Transfer of Site Control to the Custodial Agency**

Given a determination that all applicable standards and requirements have been met and acceptance of the site long-term surveillance plan, NRC will need to complete the following remaining relevant licensing actions: (1) terminating the specific license by letter of termination addressed to the specific licensee, or concurring in the Agreement State termination of the specific license; (2) placing the site under the general license in 10 CFR 40.28; (3) noticing, in the *Federal Register*, the completion of these licensing actions; and (4) informing appropriate

Federal and State officials directly of the termination of the specific license and the placement of the site under the general license.

The long-term custodian, for its part, should be prepared to accept title to the land and byproduct material. These final actions should be completed within a relatively short period of time (i.e., within a week).

## **E4.0 ADDITIONAL ISSUES**

### **E4.1 Uranium Mill Tailings Radiation Control Act of 1978, As Amended, Title II Sites on Tribal Lands**

For Uranium Mill Tailings Radiation Control Act of 1978,, as amended, Title II disposal sites on tribal lands, long-term surveillance will be accomplished by the Federal government. The custodial agency is required to enter into arrangements with NRC to ensure this surveillance. The Uranium Mill Tailings Radiation Control Act of 1978, as amended, does not state explicitly which Federal agency is responsible for the disposal site. In addition, because these sites are located on tribal lands, no title transfer will occur.

Currently, the only site on tribal lands is the previous Western Nuclear, Inc., Sherwood uranium mill, located on the Spokane Indian tribe reservation in eastern Washington State. The Western Nuclear, Inc. Sherwood license was terminated in early 2001. Under long-term care, arrangements for the Sherwood site involve a site access agreement between the Indian tribe and DOE. DOE is allowed to conduct the required site surveillance and the site is accessible to NRC.

### **E4.2 Exclusive Jurisdiction**

The Commission has determined that NRC has exclusive jurisdiction over both the radiological and non-radiological hazards of 11e.(2) byproduct material (NRC 2002). Notwithstanding this determination, the NRC staff intends to work with the states on issues related to a licensee's completion of remedial actions and preparation for license termination. Although the NRC will, to the extent possible, accommodate a state's interest or perspective, it retains the right to terminate a specific license should a licensee have completed closure activities in accordance with NRC-approved closure plans. Where the issues involved are not those of direct NRC concern, NRC will address such issues with the states or other federal agencies on a case-by-case basis.

Currently, four sites (two NRC licensees: the United Nuclear Corporation/Church Rock site and the Homestake Mining Company/Grants site; and two Agreement State licensees: the Cotter Corp./Canon City and the UMETCO/Uravan sites, both in Colorado) are on the Superfund National Priorities List. For these sites, NRC will work with states and Superfund administering agencies to determine if it is appropriate to terminate the licenses.

## Appendix E

### E5.0 REFERENCES

NRC. "Termination of Uranium Milling Licenses in Agreement States." STP SA-900 Procedure. Washington, DC: NRC, Office of State and Tribal Programs. December 2002.

———. SECY-99-0277. "Concurrent Jurisdiction of Non-Radiological Hazards of Uranium Mill Tailings." Washington, DC: NRC. August 2000.

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———. SECY-90-282. "Rulemaking Issue (Affirmation): Amendments to 10 CFR Part 40 for General Licenses for the Custody and Long-Term Care of Uranium and Thorium Mill Tailings Disposal Sites." Washington, DC: NRC. August 1990.

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