



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

September 23, 2020

Tashina Jasso, Site Manager
U.S. Department of Energy
Office of Legacy Management
2597 Legacy Way
Grand Junction, CO 81503

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION STAFF RESPONSE TO U.S. DEPARTMENT OF ENERGY QUESTIONS REGARDING AN ALTERNATIVE PROPOSAL TO MEET THE REQUIREMENTS OF TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* APPENDIX A CRITERION AT TEXAS URANIUM MILL TAILINGS RADIATION CONTROL ACT TITLE II SITES

Dear Ms. Jasso:

I am writing in response to your letter, dated February 26, 2018, in which you discussed an alternative proposal to meet the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 40, Appendix A Criterion 11c to obtain subsurface rights for the Panna Maria, Ray Point and Conquista Uranium Mill Tailings Radiation Control Act (UMTRCA) sites in Texas (Agencywide Documents Access and Management System (ADAMS) Accession Number ML18060A089). U.S. Nuclear Regulatory Commission (NRC) staff discussed the letter with U.S. Department of Energy (DOE) staff upon receipt of the letter in 2018, and we agreed that, because the circumstances outlined in the letter would vary markedly depending on the site, NRC staff would not respond to the letter until a site was nearing license termination where these issues could be discussed in a specific context. On March 4th and 5th, 2020, NRC and DOE staff met in Texas. During that meeting, you requested that the NRC staff respond to the letter at this time, as the Panna Maria site was nearing license termination.

The letter raises two issues. The first issue raises questions related to oil or gas leases at several Texas Title II sites licensed by the Texas Commission on Environmental Quality that already exist within the site boundary. These pre-existing leases may allow oil and gas developers access within the boundary of the DOE owned and managed property and other equipment. DOE is concerned that this potential oil and gas use within the property boundary may not be protective of land use or disposal cell integrity and could increase DOE's costs to manage the site. The second issue pertains to land access outside the DOE boundary to oil bearing zones beneath the site (horizontal wells) in the Eagle Ford pay zone, approximately 10,000 feet beneath the surface.

Your letter also asked for NRC responses to three specific questions regarding the requirement for a specific license if a developer wanted to exploit the oil or gas resources at these sites. Our responses to your three questions are included below.

In a discussion with the NRC on May 13, 2020, DOE further asked if NRC would determine if general conclusions about the safety of drilling near such a site (such as extracting oil at a depth of 10,000 feet below a tailings impoundment) could be developed rather than NRC and DOE having to review each request to drill separately. During the discussion NRC staff stated that it would explore the idea and respond separately to DOE. Title II of UMTRCA, at Section 202(b) and NRC regulations at 10 CFR 40 Appendix A, Criterion 11C require that, prior to the termination of any license issued by the NRC, title to the land, including any interests therein (other than land owned by the United States or by a State) which is used for the disposal of any byproduct material, as defined by section 11e.(2), shall be transferred to the United States, or the State in which the land is located, at the option of such State. Criterion 11C further requires that an applicant or operator make a serious effort to obtain these rights. Thus, the "interests" described in your letter, i.e., the oil and gas leases currently present on an operating or decommissioning uranium milling site, would need to be transferred to the United States government (DOE in this case) along with title to the land prior to termination of the license, unless it is determined that those interests are not necessary for the protection of the public health and safety. In addition, NRC regulations establish that these interests (i.e., surface and subsurface estates), once they are transferred to DOE, can be used if it can be shown that the use will not endanger the public health and safety. However, the NRC would need to issue a specific license to allow the use of the surface or subsurface estates in such a circumstance.

Therefore, if after an unsuccessful, serious effort to obtain those interests, the licensee can demonstrate that the transfer of the interests at the Panna Maria site (i.e., the oil and gas leases in the Eagle Ford pay zone) are not necessary to ensure the site can be maintained in a safe manner, they would not need to be transferred to DOE and thus, their use would not need to be licensed by NRC. It would be the responsibility of the current Texas licensee to make this demonstration to Texas, NRC and DOE as part of the license termination process. If, for example, a particular subsurface estate is necessary to the long-term safe isolation of the material, the subsurface estate would need to be acquired and transferred to the long-term steward. NRC regulations do provide for alternate approaches to our regulations and it may be possible to substitute outright ownership of the subsurface estate with another durable ownership interest or institutional control that ensures that the tailings are maintained safely (as is being done at the Western Nuclear Incorporated site in Wyoming) where a serious effort did not successfully obtain those interests. In addition, even if acquisition of these property interests is necessary to ensure the safe maintenance of the site, an oil and gas developer could still potentially access the subject oil and gas production area through a narrower property interest, especially in light of directional drilling technology. After license termination, DOE and NRC can also consider proposals for such activities, again subject to a specific NRC license upon demonstration that the use of the subsurface estate would not endanger the public health and safety and DOE approval.

For the situation where there is a pre-existing lease on a site and the developer wishes to access the property and drill for oil or gas, somewhat different criteria apply. While the site is specifically licensed, the licensee and regulator must ensure that the material is managed safely. After license termination, if a developer claimed that it required access to the DOE property to drill, as noted above, the developer would need DOE's approval, demonstrate that the proposed operation would not endanger public health and safety and would need to apply to the NRC for a specific license making the demonstrations in 10 CFR 40.28 (d). The NRC would work with DOE to ensure that the specific license contained requirements that address any DOE concerns, as well as the applicable regulatory requirements.

Below are responses to your specific questions.

1. If subsurface rights were not transferred to DOE, would the owner of those rights be subject to NRC licensing to enter DOE property to access those rights?

Yes. Subsurface rights would need to be transferred to DOE prior to license termination unless it could be demonstrated that they could not be obtained with a serious effort and are not necessary for the protection of the public health and safety and the environment.

2. Would NRC oversee the actions of an oil and gas operator working on the DOE site under an NRC license?

Yes, but only to the extent that the operator is in compliance with the conditions of the specific license, which would focus on the impacts of the proposed activities on the long-term safe isolation of the material.

3. Would NRC concur in the application of a binding surface waiver in lieu of the licensee making a serious effort to acquire the subsurface rights?

No. 10 CFR 40, Appendix A, Criterion 11 states that while government ownership of subsurface interests like mineral rights may not be necessary to protect public health and safety, the applicant/operator would still need to demonstrate a serious effort to obtain such subsurface rights. Before the NRC could consider a surface waiver, the licensee must make the serious effort to obtain the subsurface rights. However, once this demonstration is made, NRC would consider other approaches, including a surface waiver. However, the licensee would still need to demonstrate that the subject property right is not necessary for the long-term safe isolation of the material.

In summary, we believe that the issues identified in your letter can be addressed, but the licensee and the Texas regulatory authority are responsible for ensuring that the site meets all of the applicable criteria before proposing that the license can be terminated. NRC and DOE can assist in this effort but should not assume responsibility for the site unless and until both agencies are satisfied with the site condition and that all necessary requirements necessary to ensure the safe maintenance of the site are in place.

In accordance with 10 CFR Section 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning the NRC comments please feel free to contact me at 301-415-6749 or at Dominick.Orlando@nrc.gov.

Sincerely,

Dominick A.
Orlando

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Uranium Recovery and Materials
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Office of Nuclear Material Safety
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DEPARTMENT OF ENERGY QUESTIONS REGARDING AN ALTERNATIVE
PROPOSAL TO MEET THE REQUIREMENTS OF 10 CFR APPENDIX A
CRITERION A AT TEXAS UMTRCA TITLE II SITES DATE: September 23, 2020

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