May 26, 2021

Office of Administration
Mail Stop: TWFN-7-A60M
ATTN: Program Management, Announcements and Editing Staff
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Submitted electronically to: UNC-ChurchRockEIS.resource@nrc.gov

RE: Draft Environmental Impact Statement for U.S. Nuclear Regulatory Commission (NRC) on the United Nuclear Corporation Church Rock Project

Dear Ms. Waldron,

On behalf of the New Mexico Environment Department (NMED), attached please find our comments on the November 13, 2020, Draft Environmental Impact Statement (DEIS) for the United Nuclear Corporation (UNC) Church Rock Project in McKinley County, New Mexico. This National Environmental Policy Act (NEPA) review process for the NRC license amendment builds on more than a decade of work under the Superfund program to properly dispose of contaminated mine waste from the UNC Northeast Church Rock mine site, which is located on Navajo Nation land and land held by the United States in trust for the Navajo Nation.

Strong intergovernmental coordination is essential to continued progress in addressing legacy uranium mining waste and contamination in New Mexico and on tribal lands. NMED appreciates the extensive engagement between federal, state and tribal government agencies that supported the Nuclear Regulatory Commission’s development of the DEIS.

NMED is familiar with the Navajo Nation’s April 12, 2021, comment letter to the Nuclear Regulatory Commission in which President Jonathan Nez states the Nation’s position, “that all [Northeast Church Rock] radioactive mine waste registering above USEPA’s action level should be removed from the community.” New Mexico will readily participate in any future discussions between USEPA, NRC and the Navajo Nation to revisit the selected locations for the final disposition of Northeast Church Rock mine waste, if such a process unfolds.

Thank you for providing the opportunity to comment and granting two comment period extensions.

Sincerely,

James C. Kenney
Cabinet Secretary
Attachments (2)

cc: Michael S. Regan, Administrator, USEPA  
Lynn Trujillo, Cabinet Secretary, New Mexico Indian Affairs Department  
Courtney Kerster, Director of Federal Affairs, Office of Governor Michelle Lujan Grisham  
Rebecca Roose, Deputy Cabinet Secretary of Administration, NMED  
Sandra Ely, Director, Environmental Protection Division, NMED  
Jonathan Nez, President, Navajo Nation  
Valinda Shirley, Executive Director, Navajo Nation Environmental Protection Agency
Introduction

The U.S. Nuclear Regulatory Commission (NRC) has issued for public comment a draft Environmental Impact Statement (EIS) for United Nuclear Corporation (UNC) license amendment request. UNC is requesting authorization to amend its license (SUA–1475) to dispose of approximately one million cubic yards of mine waste from the Northeast Church Rock (NECR) Mine Site at the existing UNC Mill Site in McKinley County, New Mexico.

The NECR Mine Site is a former uranium mine operated by UNC. After extensive uranium mineral exploration in the 1950s and 1960s, mining development began at the NECR Mine Site in 1967 and ended in 1982. While the mine operated, it served as the principal mineral source for the UNC uranium mill. The NECR Mine Site is located less than one-mile northwest of the UNC Mill Site. The NECR Mine Site is located on Navajo Nation land and land held by the United States in trust for the Navajo Nation. After the mine was shut down, residual materials, including low-grade uranium ore, waste rock, and overburden wastes remained at the site. UNC undertook various closure activities at the NECR Mine Site between 1986 and 1994 pursuant to the mining lease.

The proposed action is to amend UNC’s Source Material License, SUA–1475, to allow UNC to transfer and dispose approximately one million cubic yards of NECR mine waste on top of the tailings impoundment at the UNC Mill Site. This amendment also would revise the NRC-approved tailings reclamation plan and revise the reclamation schedule at the NRC-licensed UNC Mill Site. The proposed schedule for UNC to complete the disposal of the NECR mine waste would be approximately four years if the NRC grants the license amendment. As part of the proposed action, this draft EIS includes activities that would occur outside the NRC-regulated UNC Mill Site boundary, but that are necessary to conduct the proposed disposal activities at the UNC Mill Site.

The New Mexico Environment Department (NMED) generally concurs with the proposed action to transfer and dispose of the NECR mine waste on top of the UNC tailings impoundment at the Mill Site, although as stated above, the State of New Mexico stands ready to engage in any discussions that may occur regarding identifying other sites for final disposition of the NECR mine waste. The proposed action will move the NECR mine waste to a location on private land that is already impacted by legacy uranium operations. NMED has been providing comments on workplans and draft designs related to the development of the proposed action prior to and following the development of the 2011 Action Memorandum for Non-Time-Critical Removal Action and a draft Record of Decision in 2013 under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)\(^1\) for the NECR Mine Site. The U.S. Environmental Protection Agency (USEPA) and cooperating agencies formed a Design Advisory Team (DAT) at the start of UNC/NECR Remedial Design activities in 2016 in order to coordinate the review process. The DAT includes representatives from NMED, USEPA Regions 6 and 9, NRC, U.S. Department of Energy, Navajo Nation Environmental Protection Agency, Technical Assistance Services for Communities, and the Red Water Pond Road Community Association.

\(^1\) 42 U.S.C. §§ 9601-9675.
NMED has participated in DAT activities, including monthly project status conference calls and technical review of design documents and other supporting documentation. NMED technical staff reviewed the preliminary draft EIS and provided comments to USEPA in July 2020 to ensure the draft EIS and license amendment appropriately addresses groundwater protection. The November 13, 2020, draft EIS addresses all previous NMED comments and is consistent with NMED’s March 8, 2013, letter of support for the selected remedy under CERCLA (Attachment 2). However, upon review of the draft EIS, NMED has significant concerns about the proposed handling of the radioactive waste for this project.

Comments

1. **UNC must improve monitoring of radioactive waste during transportation to the Mill Site and engage in further study and comparison of the two alternative transfer methods.**

NRC must require improved monitoring of radioactive material during the transfer of material by either truck (proposed action) or conveyor system (secondary Alternative 1B). In addition to the monitoring systems outlined in the draft EIS, the final EIS must include the use of state-of-the-art air monitoring instrumentation with Wi-Fi and alarm setting continuous air monitoring capabilities (e.g., Bladewerx SabreBPM² Portable Beta [Alpha] CAM). NRC must also establish a baseline by conducting monitoring prior to commencing transfer activities along the proposed transfer route. All monitoring data must be readily available for public review. Without this critical monitoring, New Mexico and tribal citizens may be subjected to health effects from the transfer; NRC must ensure all potential human and environmental targets in the area are protected from any air effects of this action.

Furthermore, before selecting either the proposed action or the secondary Alternative 1B, NRC must further analyze and compare these two transfer methods. The draft EIS does not fully explain the pros and cons of each transfer method with respect to: (a) risk of accidents during transport and associated emergency response protocols; (b) risk of air releases from the material during transport; and, (c) length of time for project completion, which directly impacts nearby residents. See the discussion on “Public and Occupational Health Impacts” related to transfer of the material and radiological exposure in Sections 4.13.1.2 and 4.13.2 of the draft EIS. Given the incomplete analysis in the draft EIS, NMED was unable to fully evaluate the two alternative transfer methods in terms of environmental and public health impacts. After further study and discussion with interested parties, including NMED, Navajo Nation and local residents, NRC must ensure the final EIS explains how the selected transport method will best protect both workers and the public from negative health impacts associated with transport and disposal of the material. The final EIS should also identify and require compliance with the Navajo Nation’s Radioactive and Related Substances Equipment, Vehicles, Persons and Materials Transportation Act of 2012 should the proposed action include transporting uranium mine waste within the formal Navajo Nation Reservation to the White Mesa Mill.

2. **The draft EIS must better address ongoing exposure to radioactive material by local residents and must ensure their health and safety is protected.**

In the draft EIS, UNC has stated that they would limit the annual average radionuclide concentrations of uranium (U-234, U-238, Th-230, Ra-226, Rn-222, and Pb-210) in the air at the nearest downwind
boundary monitoring locations to the NRC air effluent limits in 10 CFR Part 20, Appendix B, Table 2 (see
EIS page 7-2). There are 34 home sites located within approximately 3.2 km (2 miles) of the proposed
project area. Seven residences are located 0.29 miles from the north boundary of the NECR Mine Site.
The draft EIS states the annual public dose from continuous exposure would be limited to 0.5 mSv [50
mrem] and also that the dose in any unrestricted area would not exceed 0.002 rem (0.02 millisievert) in
any one hour (see EIS page 7-3.) To ensure the latter exposure limits are met, the final EIS must include
the design and ongoing utilization of dosimetry and instrument surveys to ensure that the 0.002 rem in
any-one-hour limitation is not exceeded.

3. UNC must expand security for all radioactive material storage sites to avoid unsafe storage,
vandalism or releases.

The information in the draft EIS regarding security only refers to the UNC Mill Site’s construction support
facilities that oversee security but does not define or explain how these facilities or security coverage
will be used (EIS, page 2-10). The UNC Mill Site must maintain security at all locations where radioactive
materials, including Principle Threat Waste, are stored, to safeguard against unsafe storage, vandalism
and releases in addition to inadvertent trespass by the local public.

4. The proposed action threatens minority and low-income populations in New Mexico, who
have already suffered disproportionately high adverse human health and environmental
effects from uranium mining waste, and must comply with Executive Order 12898 requiring
that all federal agencies achieve environmental justice for vulnerable populations who would
be disproportionately affected by programs of the United States.

Although the proposed action will transfer the NECR mine waste to a location off of Navajo lands to
private land that is already impacted by legacy uranium operations, this private land is a small parcel
completely surrounded by Navajo land and in close proximity to the Red Water Pond Community that is
currently impacted be the NECR mine waste.

Legacy uranium mining and milling waste has long presented risks to public health and the environment
in the State of New Mexico that are disproportionately greater than such risks to the general population
of the United States. New Mexico is one of the poorest states in the country, with nearly 20 percent of
the population falling below the poverty line and an average household income of $48,059, compared
with the national average of $63,179.² Many of these low-income households are in rural areas that
suffer disproportionately from aging infrastructure and associated public health risks.

In addition to the high adverse human health and environmental effects from nuclear energy and
weapons programs of the United States, the communities of McKinley County, New Mexico, face a
number of other health challenges that are likely to exacerbate the risk and impact of potential
exposure to nuclear waste, including the following:

a. According to the federal Health Resources Services Administration,3 McKinley County has been designated as Medically Underserved Areas/Populations (MUA) with a rural designation. The MUA index score is 37.8 for McKinley County. A score below 62 on the 100-point scale is the threshold for the federal MUA designation.

b. Exacerbating the shortage of healthcare services, according to the New Mexico Department of Health Indicator Based Information System,4 updated through 2017, McKinley County has a disproportionately high rate of food insecurity at 26 percent of the population. Compare this rate with the state food insecurity rate of 15.5 percent and the national rate of 12.5 percent.

c. McKinley County, moreover, presents the state hotspot for invasive pneumococcal disease, ranking as the top county in New Mexico with a disease rate of 120.4 cases per 100,000 population. The state rate is 33.2 while the national rate is 25 cases per 100,000 population. These statistics may be a predictor of the prevalence of COVID-19 in New Mexico: on November 22, 2020, the New Mexico Department of Health5 reported that McKinley County had the third highest number of COVID-19 cases in New Mexico with 6,180. In a county of just 71,367 (according to 2019 U.S. Census Bureau data), that is a COVID-19 prevalence rate of 8,659 cases per 100,000 population in McKinley County.

The proposed action must comply with Executive Order 12898 requiring that all federal agencies achieve environmental justice for vulnerable populations who would be disproportionately affected by programs of the United States. Remedial actions must ensure the highest level of safety for this vulnerable population and for all New Mexicans.

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3 US Health Resources and Services Administration: [https://data.hrsa.gov/tools/shortage-area/mua-find](https://data.hrsa.gov/tools/shortage-area/mua-find)
4 State of New Mexico Indicator-Based Information System (NM-IBIS): [https://ibis.health.state.nm.us/](https://ibis.health.state.nm.us/)
Attachment 2: NMED 2013 Letter of Concurrence
March 8, 2013

Carl Edlund, Director
Superfund Division
US Environmental Protection Agency Region 6
1445 Ross Avenue
Dallas, TX 75202

RE: Concurrence with the Proposed Plan and Record of Decision for the Surface Soil Operable Unit for the United Nuclear Corporation Superfund Site (NMD030443303)

Dear Mr. Edlund:

The New Mexico Environment Department (NMED) has reviewed the Proposed Plan and draft Record of Decision for the Surface Soil Operable Unit (SSOU) for the United Nuclear Corporation (UNC) Superfund Site. NMED concurs with the selected remedy, Alternative 2: On-Site Disposal at the UNC Site within the Tailings Disposal Area, for the disposal of North East Church Rock (NECR) Site mine waste. The waste acceptance criteria for mine waste that will be disposed at the UNC Site Tailings Disposal Area are 200 pCi/g or less of Ra-226 and/or 500 mg/kg or less of uranium. Principal Threat Waste from the NECR Site will not be disposed at the UNC Site.

NMED is aware that EPA has studied multiple disposal alternatives for the NECR mine waste and supports the UNC SSOU Proposed Plan alternative of disposal of NECR waste within the tailings disposal area of the UNC Superfund Site as it provides the most expeditious and cost effective approach for returning the NECR site to unrestricted use. NMED anticipates that if EPA issues the Record of Decision, UNC will then amend their license with the Nuclear Regulatory Commission (NRC) and NMED will have an additional opportunity, through the NRC process, to review and comment on detailed design documents, as the draft Record of Decision does not contain detailed design specifications for the locations and final configurations of disposal cells.

As EPA has established a timeframe to issue the Record of Decision, NMED is submitting this concurrence letter; however, upon NMED’s review of the draft Record of Decision, multiple
minor issues were identified. Mr. Earle Dixon, the State’s Remedial Project Manager for both the UNC and NECR Sites, will contact Ms. Janet Brooks, EPA Region 6 Remedial Project Manager, to discuss these issues. None of the issues identified or any resolution to these issues should impact the State’s concurrence.

NMED appreciates the opportunity to work with EPA regarding this Record of Decision and looks forward to providing EPA with additional support on the UNC and NECR Sites. Please contact me at 505-827-2855 or Earle Dixon of my staff at 505-827-2890 if you need additional information from NMED or have any questions.

Sincerely,

F. David Martin
Secretary, NMED

cc: Janet Brooks, EPA Region 6 Remedial Project Manager
    NECR and UNC Site Files
    SOS Read File