From: Linda Richards <atomiclinda@gmail.com>

Sent: Friday, October 29, 2021 4:20 PM

To: NRC-EJReview Resource

Subject: [External_Sender] Docket ID NRC-2021-0137-0001

I know many of you at the NRC believe that nuclear power is the best option for the future due to the climate crisis. But I do not think this presents an ethical option.

I first heard of the trauma and loss of the Dine people due to uranium mining in 1986. I listened to many wives and widows of the Navajo, Pueblo and Hopi Native American uranium miners ask for help. These women spoke about how their loved ones were not told of the dangers of what they were mining but later became ill or even died due to the exposures. Many of these miners were studied without their knowledge by the Public Health Service and not told of their lung cancers so they could be used as guinea pigs for setting later radiation health safety standards.

Unfortunately, it was not just the miners who were harmed but due to economic decisions, the landscape of the Navajos sacred lands were desecrated by uranium pollution. It has been a nightmare for the people to then discover by their own effort and study of radiation just how harmed and polluted their land is and will be for generations because of uranium mining. Radiation exposure also reduces immunity and creates comorbidities that may make exposed populations even more susceptible to COVID 19 and other pandemics. This case cries for redress. But instead, uranium mining companies and the US government continue to threaten Navajo Nation sovereignty.

Much of this intergenerational tragedy is recorded and available in documented, peer-reviewed journals and academic published literature. This unjust history can be found in hundreds of books. Books like *Downwind* by Sarah Fox to the *Navajo People and Uranium Mining* by Doug Brugge et al outline and confirm the stories I was told at Big Mountain. Studies have been compiled of the diseases and harms and birth defects. Many academics have already proven, time and time again, that the US government and the companies under its purview withheld knowledge of known radiation harms from both miners and communities. Radiation health safety standards and regulations do not take into account all the emotional, mental, spiritual and cultural harms caused by contamination nor the environmental justice aspects including the disproportionate or cumulative effects on subsistence cultures, indigenous peoples, women and children (Markstrom and Charley 2006; Folkers 2021; Mitchell 2021; Hamblin & Richards 2015, 2021; Richards 2013, 2014; Shrader-Frechette 2013, 2017; Pritikin 2020).

These actions were unethical and negligent. The Navajo Nation has asked for all the pollution to be removed from their lands but it remains still festering on the Navajo Nation. The actions of first the Atomic Energy Commission and later US agencies like

the NRC continue to violate the human rights of Navajo communities intergenerationally.

The US Nuclear Regulatory Commission and the US courts system continue to perpetuate this abuse of Native peoples with the threat of the Church Rock and Crownpoint ISL mining permit. As Perry H. Charley explains in his work, along with physical disease and harm, there are spiritual, mental and emotional wounds caused by radiological contamination (Markstrom and Charley 2006).

Please stand up for justice. All people deserve a healthy uncontaminated community, and ISL mining has shown to irrevocably contaminate water in the communities where it was used. Radiation is never "remediated." The Navajo Nation continues to struggle with the legacy of uranium mining from the uranium used to power the reactors that made the first plutonium.

Please intervene to support the call for health and environmental justice for all people.

- The NRC must follow the Biden Administration's promise to deliver environmental justice.
- The NRC's mission requires the agency to consider and address environmental justice more fully and deeply. Women and girls, especially in subsistence communities are much more at risk from radiation harm than the commonly used referent male. Providing protection of public health and safety must include ensuring that the most vulnerable communities are not disproportionately impacted by radiation, heavy metals and all the other negative impacts from psychological worry to genetic harm that occur due to the nuclear industry.
- The NRC must consider the environmental justice impacts as cumulative and look at the entirety of the full nuclear fuel chain and its burdens on communities, from prior nuclear weapons tests to uranium mining, milling, conversion, enrichment, and fuel fabrication to energy production, waste storage, treatment, transportation, and disposal.
- The NRC should look to the 17 Principles of Environmental Justice in defining what environmental justice means for the agency by actually addressing environmental injustices, including environmental burdens disproportionately held by low-income communities and communities of color, and it also means including stakeholders that have typically been excluded from the decision-making process.
- The NRC must take this opportunity to update the NRC's Commission Policy Statement on the Treatment of Environmental Justice and must create an inclusive process that recognizes and hears from impacted communities and does not ignore public input.
- The NRC must incorporate environmental justice beyond the National Environmental Policy Act (NEPA). to address the health and safety sections of the atomic energy act,

which have been neglected in support of the nuclear industry and need to address environmental justice.

- The NRC must improve how it analyses environmental justice in its NEPA reviews.
- The NRC should expand mechanisms to gather public input on local, state and regional levels and involve underrepresented communities in decision making.
- The NRC should create mandatory training for its staff on environmental justice and related topics such as diversity, equity, and inclusion.

Please prevent more damage to the Navajo Nation spirit and health and other underserved communities that have been victimized and abused by NRC decisions and lack of democratic healthy and transparent open operations. The harms from every aspect of the nuclear fuel chain from mining to storage impact indigenous peoples disproportionately due to economic and prejudicial factors worldwide. The US has set this tone with impunity.

The NRC is deeply discredited by your lack of acknowledgment of the harm caused to people by your actions and decisions. Your organization must take action to make amends and repair relations in ways that may benefit all people everywhere to realize the promise of the UN Human Rights Commission's recent decision that there is a human right to a clean environment. You must make rights real or they become meaningless, for all of us, for you and your family, too. Please be just.

Sincerely,

Dr. Linda Marie Richards

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Additional Readings

Caulfield, Catherine 1989. *Multiple Exposures. Chronicles of the Radiation Age.* New York: Harper & Row.

Folkers, Cynthia. 2021. Disproportionate Impacts of Radiation Exposure on Women, Children, and Pregnancy. Taking Back our Narrative. *Journal of the History of Biology* (54):31–66 https://doi.org/10.1007/s10739-021-09630-z.

Fox, Sarah 2014. *Downwind. A People's History of the Nuclear West.* Lincoln: University of Nebraska.

Hamblin, Jacob and Linda Richards 2015. Beyond the Lucky Dragon. Japanese Scientists and Fallout Discourse in the 1950s. Special Issue. Nuclear Peril in International

Contexts. *Historia Scientiarum. International Journal of the History of Science Society of Japan* (25/1 August): 36–56.

Hamblin, Jacob Darwin and Linda M. Richards, "Connecting to the Living History of Radiation Exposure" *Journal of the History of Biology* vol 54, issue 1, Introduction p.1–6 (April 2021). https://doi.org/10.1007/s10739-021-09634-9

Mitchell, M. X. 2021. The Cosmology of Evidence: Suffering, Science, and Biological Witness After Three Mile Island. *Journal of the History of Biology* (2021) 54:7–29 https://doi.org/10.1007/s10739-021-09627-8

Markstrom, Carol A. and Perry H. Charley 2006. Psychological Effects of the Technological Human Caused Environmental Disasters. Examination of the Navajo and Uranium. In: Doug

Brugge, Timothy Benally, and Esther Yazzie Lewis (eds.): *The Navajo People and Uranium Mining.* Albuquerque: University of New Mexico Press: 89–115.

Pritikin, Trisha 2020. *The Hanford Plaintiffs. Voices from the Fight for Atomic Justice.* Lawrence: University Press of Kansas.

Rice, James. 2015. Downwind of the Atomic State. US Continental Atmospheric Testing, Radioactive Fallout, and Organizational Deviance, 1951–1962. *Social Science History* (39/4): 647-676 URL: https://www.jstor.org/stable/10.2307/90017485

Richards, Linda 2013. Fallout Suits and Human Rights. Disrupting the Technocratic Narrative. *Peace and Change Journal of Peace History* (38/1): 56–82.

Richards, Linda 2014: *Rocks and Reactors. An Atomic Interpretation of Human Rights.*PhD Thesis, Oregon State University.

Shrader-Frechette Kristen 2013. Technocratic Threats to Human Rights: Pollution Wolves in Scientific Sheep's Clothing. Why Environmental Risk Assessors and Policy Ignore the "Hard Issues" of the Human Rights of Pollution Victims. In C. Holder and D. Reidy (eds.) *Human Rights: The Hard Questions.* Cambridge: University Press: 246–268.

Shrader-Frechette, Kristen 2017. How Some Scientists and Engineers Contribute to Environmental Injustice. US National Academy of Engineering. *The Bridge* (47/1): 36–44.

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