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NEPA Document Manager
U.S. DOE Environmental Management Los Alamos Field Office
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Los Alamos, NM 87544

By email to: emla-nepa@em.doe.gov

Re: Comments on the scope of the Environmental Assessment for Chromium Plume Interim Measure and Final Remedy, Los Alamos National Laboratory, Los Alamos, New Mexico

Dear Document Managers,

Nuclear Watch New Mexico (NWNM) respectfully submits these comments on the needed scope of the *Environmental Assessment for Chromium Plume Interim Measure and Final Remedy, Los Alamos National Laboratory, Los Alamos, New Mexico* (hereinafter "Cr EA"). We would appreciate their serious consideration by the Environmental Management Los Alamos Field Office (EM-LA) and look forward to a comprehensive response.

*Our mission statement: Through comprehensive research, public education and effective citizen action, **Nuclear Watch New Mexico** seeks to promote safety and environmental protection at regional nuclear facilities; mission diversification away from nuclear weapons programs; greater accountability and cleanup in the nation-wide nuclear weapons complex; and consistent U.S. leadership toward a world free of nuclear weapons.*

We work on contemporaneous budget, environmental and policy issues concerning nuclear weapons facilities. We have publicly and vocally pressed the National Nuclear Security Administration (NNSA) to diversify its missions away from nuclear weapons programs and move more toward critically needed programs, such as nonproliferation efforts, other new national security priorities (for example, port security), and pure science and energy efficiency programs. Through detailed budget analyses, we hope to demonstrate that Los Alamos National Laboratory (LANL) can move towards comprehensive cleanup of the LANL site and still contribute to the economy of New Mexico.

The U.S. is flirting with the initiation of another nuclear arms race, the first since the end of the Cold War. The Department of Energy's plan is to rebuild the nuclear weapons complex for continuing nuclear warhead production throughout the 21st century, including new designs. The National Environmental Policy Act (NEPA) requires a hard look at all reasonable alternatives to preferred federal proposals.

We appreciate public involvement in the NEPA process. We also support safe, monitored storage of radioactive wastes as a matter of national security and environmental protection. However,

this should not be interpreted as support for more nuclear weapons, plutonium pit production, nuclear power, or the generation of more nuclear wastes. In our view, the best way to deal with the environmental impacts of nuclear waste is to not produce it to begin with.

Specific Comments

“Adaptive Site Management” Cannot Replace Actual Alternatives

Under Alternative #1, EM-LA would use Adaptive Site Management (ASM) to select and implement remedies to remediate the hexavalent chromium plume. “The goal of ASM is to create a framework of structured and continuous planning, implementation, and monitoring that accommodates new information and changing site conditions to develop effective and efficient cleanup strategies.” (Slide 10)

It’s been nearly 20 years since the chromium plume was discovered. DOE must have a actual alternative, or two, to address the plume by now and must give an alternative that includes “structured and continuous planning, implementation, and monitoring that accommodates new information and changing site conditions to develop effective and efficient cleanup strategies.”

It is difficult and pointless for the public to comment on an “All of the Above” alternative. This would be a land application, so the New Mexico Environment Department might be interested.

An Alternative that Pumps or Trucks Treated Water to the Head of Sandia Canyon Must Be Analyzed

EM-LA must include an alternative that pumps or trucks treated water to the head of Sandia Canyon to the location where the chromium-contaminated water was released. This could flush chromium out of the 3-mile section of the canyon upstream from the plume. This might give an indication of how much chromium is in the plume and surrounding areas. The point is to decisively deal with the chromium contamination at the source instead of continuously pumping and treating for potentially a few centuries.

The Time is Long Past Considering Monitored Natural Attenuation as an Option unto Itself

The plume was discovered 20 years ago. Chromium was dumped into Sandia Canyon for decades until 1972. The plume remains. Doing nothing should not be an option, especially given New Mexico’s increasing aridity and decreasing water supplies. Moreover, we assert that the Department of Energy has a moral obligation to make the sole source aquifer for some 250,000 people safe from the threat of further chromium contamination.

The True Dimensions of the Plume Must Be Determined

As a prerequisite, the true three-dimensional extent of the plume must be determined. Again, the plume was discovered 20 years ago. It is unconscionable that EMLA and LANL still don’t know the true extent of the plume.

Are more monitoring wells needed to the east and south? Has chromium contamination crossed the San Ildefonso Pueblo boundary? What is the mechanism for cooperation with San Ildefonso Pueblo? Is the depth of the plume truly known? Is quality assurance robust enough to trust monitoring well data?

Moreover, we assert that gradations of chromium contamination should be mapped as well. We believe it not enough to depict a plume with just 50 parts per billion. Increments of 10 ppb should be displayed down to, say, 20 ppb. This gives a better picture of the true extent of the plume and provides better advance warning to safeguard drinking water supply wells.

Description of Harmful Human Health Impacts

The draft environmental assessment should have a good description of the negative health impacts of chromium, particularly hexavalent chromium, correlating to different amounts of parts per billion.

EMLA-NMED Relationship

The Draft environmental assessment should make clear the relationship between EMLA and the New Mexico Environment Department. What are the respective roles of NMED's Hazardous Waste Bureau and DOE Oversight Bureau? Does EMLA fully recognize NMED's regulatory authority? When needed, what is the process for dispute resolution between EMLA and NMED? What is the likelihood of any possible related litigation over chromium groundwater contamination remediation?

Resources

The draft environmental assessment should give some description of costs to date, estimated future costs, the anticipated time duration of the project, and the number of workers needed.

General Comments

An unconscionable amount of taxpayer money is typically expended for nuclear weapons research and production at LAN. Please analyze the impacts of diverting these funds away from comprehensive cleanup of the chromium plume at LANL to directly support production of nuclear weapons.

The LANL Cr EA Must Be Completely Free of Predetermination

This process must be completely unprejudiced by the fact that hundreds of millions of dollars are spent on nuclear weapons research and production at LANL.

Purpose And Need Must Be Thoroughly Addressed

Please explain the impacts of scoping comments from the public on the draft EA.

The Proposed Alternatives Must Be Clarified and Added To

The alternative of applying treated treated water to the head of Sandia Canyon to possibly flush the canyon where the chromium was originally released into the environment must be analyzed.

All Impacts of Construction and Well-drilling Must Be Analyzed

Environmental Justice – Both Economic and Ethnicity Analyses Are Needed

DOE must address the following questions for all alternatives:

How many jobs will be created for local residents? How long will these jobs last?

Will people be brought in from outside of the area to work at these facilities? If so, what positions will they fill? Where do the economic benefits end up?

Analyses Must Protect Those Most at Risk

Many federal standards for protection of human health, such as limits on how much residual radiation will be allowed in contaminated soil, are based on "Reference Man." He is defined as a hypothetical adult Caucasian male who is 20 to 30 years old, 154 pounds in weight, five feet seven inches tall, and is "Western European or North American in habitat and custom." He does not represent other humans, including women, children, and embryos/fetuses, that are more sensitive to the harmful effects of radioactive, toxic, and hazardous materials. All analyses must address the risk to a pregnant woman farmer, her fetus, and her other children under age 18, rather than "Reference Man." As a matter of reproductive and environmental justice, the most potentially vulnerable human beings must be protected.

Environmental Monitoring and Reporting Requirements Must Be Met

All requests from the New Mexico Environment Department (NMED) must be considered by EMLA as alternatives and must be analyzed as such. For instance, NMED recently requested that EMLA stop injecting treated water into the chromium plume. NMED is requesting land-application. EMLA must analyze all impacts of land applying the treated water as well as all impacts of injecting the water into the ground and/or the plume.

Analysis of Climate Change Impacts Required – “Just-Do-It”

The DOE NEPA Lessons Learned Quarterly for June 2009 states, “Given the advances in climate science, extensive litigation, and potential regulation, there is little doubt that DOE will need to analyze the reasonably foreseeable effects of greenhouse gas (GHG) emissions in its NEPA documents.” On February 18, 2010, the Council on Environmental Quality released draft guidance to the public for comment about how “Federal agencies can improve their consideration of the effects of GHG emissions and climate change in their evaluation of proposals for Federal actions under the NEPA.” While the guidance is being developed, the Office of NEPA Policy and Compliance recommends taking a “just-do-it” approach to considering GHGs in NEPA analyses. DOE should do so in this EA process.

Update Impacts to Endangered Species

Please analyze any potential impacts to endangered flora and fauna.

Cumulative Impacts from Past, Present and Reasonably Foreseeable Actions

NEPA requires DOE to address the cumulative impacts on the 50-mile radii surrounding DOE facilities and missions. DOE must be specific about potential impacts to water, air and soil, environmental justice, transportation, economics (including tourism), emergency preparedness, and waste generation.

Update the Status of Compliance with All Applicable Federal, State and Local Statutes and Regulations

Include all international agreements, and required Federal and State environmental permits, consultations, and notifications.

Promptly Place All CR EA Related Documents Online

At the request of the public, DOE has posted documents specifically related to the NEPA processes online. These websites facilitate better public participation and comments. DOE has an

excellent recent history concerning NEPA action websites, and this practice must be made consistent across all DOE sites.

In order for the public to make meaningful and informed comments on the draft CR EA, all reference documents must be available when the comment period on the draft begins. In our experience, the cited reference documents form the baseline foundation for all DOE NEPA processes, but yet the Department is often negligent in making those reference documents available in a conveniently accessible and modern fashion.

Potential Impacts on Land-Use Plans Must Be Analyzed

Include policies and controls, and visual resources. Please describe all future land use plans.

Thank you in advance for your consideration of these scoping comments. Again, we look forward to the NNSA's comprehensive response.

Respectfully,

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