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May 9, 2020

Michael Weis
Los Alamos Field Office Manager
NNSA Los Alamos Field Office
Comments: LANL SWEIS SA
3747 West Jemez Road
Los Alamos, NM 87544

Submitted by email to: lanlsweissa@nnsa.doe.gov

RE: Los Alamos National Laboratory, Sitewide Environmental Impact Statement, Supplemental Analysis

Dear Mr. Weis,

On behalf of the New Mexico Environment Department (NMED) and the New Mexico Energy, Minerals and Natural Resources Department (EMNRD), attached please find our comments on the March 2020 draft supplemental analysis of the 2008 Sitewide Environmental Impact Statement Supplemental Analysis (SWEIS) for expanded pit production at Los Alamos National Labs (LANL).

Please do not hesitate to contact me to discuss further.

Sincerely,

Digitally signed by James Kenney
Date: 2020.05.09 21:43:51 -06'00'

James C. Kenney
Cabinet Secretary

cc: Courtney Kerster, Director of Federal Affairs, Office of Governor Michelle Lujan Grisham
Sarah Cottrell Propst, Secretary, Energy, Minerals and Natural Resources Department
Rebecca Roose, Director, NMED Water Protection Division
Stephane Stringer, Director, NMED Resource Protection Division

Attachment

Introduction

In the March 2020 draft supplemental analysis of the 2008 SWEIS, NNSA's preliminary conclusion is to "…implement elements of the Expanded Operations Alternative in the 2008 LANL SWEIS, as needed, to produce a minimum of 30 war reserve pits per year during 2026 for the national pit production mission and to implement surge efforts to exceed 30 pits per year to meet NPR and national policy." NNSA further stated that the March 2020 draft supplemental analysis of the 2008 SWEIS "…evaluates the potential impacts of implementing elements of the Expanded Operations Alternative for pit production and considers new circumstances or information relevant to environmental concerns through a comprehensive review of existing NEPA analyses to determine if additional NEPA analysis is required per DOE's NEPA regulations in 10 CFR 1021.314. For all resource areas, the analyses verified that the potential environmental impacts would not be different, or would not be significantly different, than impacts in existing NEPA analyses identified in Section 1.4 and reevaluated in Section 3.0.

NNSA concluded it has "…preliminarily determined that the proposed action does not constitute a substantial change from actions previously analyzed, and there is no significant new circumstances or information relevant to environmental concerns."

Comments

1. **DOE and NNSA must account for cumulative impact from failing to prioritize legacy contamination clean-up at Los Alamos.**

   As stated, the scope of the March 2020 draft supplemental analysis of the 2008 SWEIS is to identify (1) if there have been substantial changes related to pit production activities at LANL compared to those analyzed in the 2008 and (2) if there have been significant new circumstances or information relevant to environmental concerns bearing on the 2008 LANL SWEIS proposed action or its impacts (10 Code of Federal Regulations [CFR] 1021.314). The DOE and NNSA concluded "…that there is no significant new circumstances or information relevant to environmental concerns."

   In 2008, DOE and NNSA acknowledged that compliance with settlements, like the 2005 Consent Order, were not to optional and addressed it in the SWEIS. In 2016, DOE entered signed a compliance order on consent with NMED. This legally binding document, like the 2005 Consent Order, is not optional. However, DOE and NNSA did not address this document as a "…new circumstance or information relevant to environmental concerns…" in the March 2020 draft supplemental analysis of the 2008 SWEIS.

   Further, the March 2020 draft supplemental analysis of the 2008 SWEIS does not discuss the November 2019 settlement between DOE and the State of Idaho related to Idaho National Labs. In that settlement, DOE agreed to allocate fifty-five percent (55%) of all transuranic waste shipments received at the Waste Isolation Pilot Plant (WIPP) for Idaho National Labs. By prioritizing waste shipped from the State of Idaho to the WIPP, DOE will need to store remediated legacy waste at LANL and/or delay remediating legacy waste at LANL or both. DOE and NNSA did not address this risk which contradicts the conclusion that there is "no significant new circumstances or information relevant to environmental concerns."

   DOE and NNSA failed to account for these settlements or explain the impacts from these settlements in the draft EIS and the overall conclusion.

2. DOE and NNSA must utilize its fully appropriated congressional budget on legacy contamination remediation activities to protect New Mexicans.

While the March 2020 draft supplemental analysis of the 2008 SWEIS is largely silent on funding for environmental remediation of legacy waste, the 2008 SWEIS is not. Throughout the 2008 SWEIS, DOE and NNSA stated that activities related to LANL remediation were contingent on funding from Congress.

In February of this year, the President released his proposed federal fiscal year 2021 budget. With respect to LANL, the President's budget contained over $100 million cut for remediating environmental legacy waste at LANL. Subsequently, DOE explained that the $100 million reduction in the President's budget was not a cut but reflective of the carryover budget from the prior federal fiscal year. This means that over $100 million in Congressionally appropriated funding for LANL remediation was not spent in federal fiscal year 2019. Therefore, one cannot conclude that Congressional appropriation is indicative of DOE and NNSA timely addressing environmental risk.

To support its conclusion in the draft SWEIS, DOE and NNSA needs to provide a detailed accounting of its appropriated and expended environment management budgets at LANL since 2008. This data was not included in the draft 2020 SWEIS.

3. LANL must ensure compliance with all applicable regulatory requirements and must improve their record of non-compliance.

DOE and NNSA activities are subject to various regulations including various federal and state statutes and state regulations as well as several compliance orders, including the 2016 Compliance Order on Consent and the Federal Facilities Compliance Order. DOE and NNSA must continue to assure compliance with these requirements to protect public health and the environment. To the extent the law allows, NMED will continue to take into account DOE's and NNSA's compliance history in determining whether to issue permits, permit modifications, establishing permit conditions, etc. Given DOE's and NNSA's reduced budget for environmental management at LANL, the March 2020 draft supplemental analysis of the 2008 SWEIS failed to quantify and address this risk.

4. DOE and NNSA did not discuss and/or quantify various environmental legal matters that could have a material impact on its conclusion.

As discussed in the March 2020 draft supplemental analysis of the 2008 SWEIS, DOE submitted a request to modify the NMED WIPP Hazardous Waste Facility Permit to differentiate between the way waste volumes was defined versus the way the WIPP Land Withdrawal Act waste volume (175,564 cubic meters) was calculated and tracked. In December 2018, the NMED approved the DOE's request to modify the existing WIPP Hazardous Waste Facility Permit and in January of 2019 DOE fully implemented the change in the method of tracking, reporting, and recording the volumes of generated waste. It is important to note that also in January 2019 this modification to the WIPP Permit was appealed. There has been no action on this appeal by the courts.

5. Construction activities must have air quality permits, if applicable, and reasonable measures must be taken to control emissions of ozone precursors, nitrogen oxides, volatile organic compounds, and fugitive dust.

While Los Alamos County is currently in attainment for all New Mexico and National Ambient Air Quality Standards (NAAQS), 2018 certified ozone design values in adjacent Rio Arriba and Sandoval counties are within 95% of the ozone NAAQS. Pursuant to State Statute 74-2-5.3.A. NMSA, NMED is required to develop a plan for ozone mitigation in areas for which design values exceed 95% of the standard. This will be accomplished through our Ozone Attainment Initiative (OAI) that will include both voluntary and mandatory measures to reduce emissions of ozone precursors, nitrogen oxides and volatile organic compounds. All reasonable measures should be employed to reduce emissions of nitrogen oxides and volatile organic compounds associated with this project to avoid adverse impacts to air quality.

Any construction activities associated with this project may cause temporary increases in dust and emissions from earthmoving, construction equipment, and other vehicles. Areas disturbed by these activities within and adjacent to the project area should be reclaimed to avoid long-term problems with erosion and fugitive dust. To ensure air quality standards are met, applicable local or county regulations requiring noise and/or dust control must be followed.

All asphalt, concrete, quarrying, crushing, and screening facilities contracted in conjunction with the proposed project must have current and proper air quality permits.

6. Construction activities must have a NPDES Construction General Permit, if applicable.

The U.S. Environmental Protection Agency (EPA) administers the National Pollutant Discharge Elimination System (NPDES) program under Section 402 of the Federal Clean Water Act (CWA) in the State of New Mexico. Any "construction activity" that will disturb, or that is part of a common plan of development or sale that will disturb, one or more acres of land and discharges stormwater to waters of the U.S. must obtain NPDES Construction General Permit (CGP) coverage. The CGP was re-issued January 11, 2017 effective February 16, 2017 and includes requirements for endangered species and historic properties, and additional state and tribal requirements in Part 9 of the permit.

Among other things, the CGP requires that a Stormwater Pollution Prevention Plan (SWPPP) be prepared for the site and that appropriate Best Management Practices (BMPs) be installed and maintained both during and after construction to prevent, to the extent practicable, pollutants (primarily sediment, oil & grease and construction materials from construction sites) in storm water runoff from entering waters of the U.S. This permit also requires that permanent stabilization measures, and permanent storm water management measures be implemented post construction to minimize, in the long term, pollutants in storm water runoff from entering these waters. In addition, permittees must ensure that there is no increase in sediment yield and flow velocity from the construction site (both during and after construction) compared to pre-construction, undisturbed conditions.

7. Best management practices must be employed to protect sources of drinking water supply.

The primary concern related to the potential impact of this project on drinking water supplies is water quality degradation and contamination.

There are four regulated public groundwater wells within 1 mile of facilities, technical areas (TA), or road modifications identified in the March 2020 draft supplemental analysis of the 2008 SWEIS. All wells belong to the Los Alamos Municipal Water System (NM3500115). These are:

A. Otowi Well #1. Static water depth 691 ft below ground surface (bgs). Approximately 4600 ft northeast of proposed road modifications at NM-4/E Jemez Rd intersection (separated by two local drainage divides).

B. Pajarito Mesa Well #1. Static water depth 753 ft bgs. Approximately 460 ft upgradient of proposed road modifications at NM-4/E Jemez Rd intersection.

C. Pajarito Mesa Well #2. Static water depth 868 ft bgs. Approximately 2600 ft downgradient of proposed waste support area at TA-54.

D. Pajarito Mesa Well #5. Static water depth 1241 ft bgs. Approximately 5000 ft downgradient of east boundary of TA-50.

The draft EIS-SA acknowledges that surface-water quality could experience short-term impacts from construction activities through erosion and sedimentation intensified by stormwater runoff (Table 3-1, p. 27). However, the local public water system relies solely on groundwater for drinking water supply wells. Construction is not anticipated to impact groundwater quality because liquid effluent discharges to permitted outfalls are not projected to increase. Other potential threats to water quality are accidental spills during repackaging, transport, or disposal of transuranic or low-level radioactive waste.

Administrative controls, stormwater and erosion mitigation, pollution prevention plans, and best management practices are identified in the March 2020 draft supplemental analysis of the 2008 SWEIS as strategies to minimize the project's impact on water resources. Hydrogeologic relationships on the Pajarito Plateau also decrease the likelihood of negative impacts to a regional aquifer that serves as the primary municipal water supply in the area. The regional water table is relatively deep (600-1200 ft) and infiltration from the surface is impeded by the Bandelier tuff, a volcanic rock unit with hydrologic and geochemical properties that slow the downward movement of contaminants. However, the presence of chromium, perchlorate, explosive compounds (RDX and TNT), organic solvents, and radionuclides in the regional aquifer (DOE/EIS-0380, 2008) demonstrates that it is not impervious from surface contamination.

Based on effective implementation of mitigation strategies and best practices along with hydrogeologic characteristics of the regional aquifer, this project is unlikely to have a significant impact on regulated public water systems. However, groundwater resources on the Pajarito Plateau are not invulnerable and lapses in BMPs could have deleterious effects on drinking water supplies for those living and working in Los Alamos County and the surrounding area. Continued groundwater monitoring at LANL and vicinity during the implementation of this project is strongly encouraged.

8. The March 2020 draft supplemental analysis of the 2008 SWEIS does not fully investigate potential negative impacts on existing solid waste management units.

With regard to Section 2, page 15, the upgrade of existing facilities and construction of new support facilities could potentially have negative impacts on existing solid waste management units or areas of concern in the vicinity. The document does not, however, fully investigate and discuss these potential impacts.

9. Increased pit production will generate extra waste and DOE and NNSA will likely have to request permit modifications to increase their hazardous waste storage capacity.

Section 3.3.5, page 55 indicates that low level waste and chemical waste will exceed the 2008 SWEIS estimates for the plutonium facility but not for the entire facility. DOE and NNSA will needed extra storage capacity at TA-55 and NMED approved the permit modification request in May 2017. Increased pit production will generate extra waste and DOE and NNSA may have to request permit modifications to increase their hazardous waste storage capacity. Mixed waste is currently stored at

LANL beyond the one-year storage allowed by the federal Resource Conservation and Recovery Act (RCRA) under a Federal Facility Compliance Order, Site Treatment Plan. The increased pit production will result in generation and storage of more mixed waste at LANL than currently present.

10. **The DOE and NNSA must include the State of New Mexico Radioactive Waste Consultation Task Force in its transportation planning process for legacy waste removal.**

    For pit production, NNSA would implement the following actions:

    Remove legacy equipment and install new equipment;

    Management and disposition of additional wastes generated; and

    Transport additional materials, parts, and waste.

The transportation planning process for legacy waste removal must include the State of New Mexico Radioactive Waste Consultation Task Force early on to ensure there are no delays or discrepancies in what should and should not be shipped in Type A packaging and further, to ensure the overall safety of the citizens of New Mexico by using Type B packaging when obviously necessary (i.e., gloveboxes or other items potentially contaminated with hazardous/radioactive residues that meet the transuranic waste or Greater than Class C (GTCC) criteria). The DOE and NNSA should implement strict guidelines like those of the Western Governors Association Guide in its RFP/RFI process to ensure that the safest trucking companies are used to transport waste and radioactive materials.

11. **The DOE and NNSA must include current census data in the environmental justice analysis for transportation impacts to disproportionate populations.**

From a transportation impact, DOE and NNSA must identify populations(s) in New Mexico that might bear a disproportionate burden in environmental harms/risks in the current analysis versus the original 2008 analysis. Differences in population must be explained and the NNSA should consider including the computational risk analysis for data derived from the 2020 census.

12. **The DOE and NNSA must include an assumption in its surplus plutonium analysis based on potential court reversal on the method of waste volume calculation that includes potential impacts to transportation regarding pit production and SPD, and the current statutory limitations at the WIPP, existing inventory of legacy waste, and future waste generated for disposition at the WIPP.**

The disposal capacity limits at WIPP are defined by several different laws, agreements, and permits intended for the purpose of regulating both the physical space as well as the physiochemical and radiological aspects of transuranic (TRU) and hazardous waste disposal. The WIPP Land Withdrawal Act (LWA) limits TRU waste disposal capacity to no greater than 6,200,000 ft^3 (175,564 m^3) of defense related TRU waste, a limit that is overseen by the USEPA. The Record of Decision (ROD) for the WIPP limits the amount of remote handled TRU (RH TRU) waste in the WIPP to no more than 250,000 ft^3 (7,079 m^3) of the LWA total.

In the National Academies of Sciences Engineering and Medicine (NAS) Review of the Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant (2020), the report identifies 48.2 metric tons of surplus plutonium that is under consideration or slated for disposition at the WIPP. Based on the current LWA statute limit and on the waste volume decision (currently under appeal in the New Mexico Court of Appeals) the waste exceeds the authorized volume of waste allowed in the WIPP.