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Kieling, John, NMENV

From: Kieling, John, NMENV
Sent: Wednesday, May 18, 2011 8:35 AM
To: Roybal, Julie, NMENV
Subject: RE: EIR Request 3451
Attachments: 3451ER HWB Comments_Draft SEIS_CMRR_5-18-2011.doc

Julie,

Attached are HWB's comments.

John

From: Roybal, Julie, NMENV
Sent: Tuesday, May 17, 2011 4:26 PM
To: McQuillan, Dennis, NMENV; Kieling, John, NMENV; Saums, Glenn, NMENV; Schuman, George, NMENV; Bates, Rita, NMENV; Leavitt, Marcy, NMENV
Cc: Herrera, Dolores, NMENV
Subject: EIR Request 3451

Hello,

Attached is ER request 3451 Supplemental Environmental Impact Statement for the Nuclear Facility Portion of the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory. Please send comments to Julie by May 27.

I have a large binder and lots of maps that you need to look at, I'll send them to George in GW he can pass it on to Glenn in SWQB then back to me so I can pass it on to the others.

I just got a call from Vicki who submitted the ER, she would like to speak to someone regarding complaints from the public about WWTP smelling. I'm going to go visit with Robert George or George to discuss before the public meeting.

Thanks,

Julie~





SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

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DAVE MARTIN
Cabinet Secretary

RAJ SOLOMON, P.E.
Deputy Secretary

TO: Julie Roybal, Resource Protection Division

FROM: John E. Kieling, HWB Acting Chief

DATE: May 18, 2011

RE: **United States Department of Energy (DOE) Draft Supplemental Environmental Impact Statement for the Nuclear Facility Portion of the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory (SEIS), Los Alamos, New Mexico, dated April 2011 and referenced by DOE/EIS-0350-S1 3451ER**

The Hazardous Waste Bureau provides the following comments. Should you have any questions please contact Neelam Dhawan of my staff 476-6042.

1. Section 1.4.1, Scope and Alternatives, page 1-10:

The use of term "No Action Alternative" to indicate construction of CMRR-NF according to the 2004 Record of Decision (ROD) based on the final Environmental Impact Statement (EIS) issued in 2003 is misleading. The "No Action Alternative" suggests continued use of the existing Chemistry and Metallurgy Research (CMR) Facility at Technical Area (TA) 3, rather than the construction and use of a new building at TA-55 based on 2004 ROD.

2. Section 1.4.2, Modified CMRR-NF Alternative, page 1-11:

Under the National Nuclear Security Administration's (NNSA) Modified Alternative proposal, a new Chemistry and Metallurgy Research Building Replacement Nuclear Facility (CMRR-NF) would be constructed and operated at TA-55 adjacent to the already constructed Radiological Laboratory/Utility/Office Building (RLUOB). The Modified CMRR-NF (modified from the alternative selected in the 2004 ROD) would have certain design and construction modifications and additional support activities that address seismic safety, infrastructure enhancements, nuclear safety-basis requirements, and sustainable design principles. NNSA believes that, based on new seismic information available since 2004, the alternative selected previously will not meet the standards for a Performance Category 3 structure required to conduct NNSA mission work.

Implementing the Modified CMRR-NF Alternative requires the use of additional concrete and reinforcing steel for the construction of the building's walls, floor, and roof; additional soil excavation, soil stabilization, and special foundation work also would be necessary. Also, a set of fire suppression water storage tanks would be located within the building rather than connecting with the existing fire suppression system at TA-55. The estimated building footprint will be larger than that of the 2004 CMRR-NF due to requirements for engineered safety systems and equipment for the modified CMRR-NF.

The Modified Alternative includes two construction options: the Deep Excavation Option and the Shallow Excavation Option. Under the Deep Excavation Option, NNSA would excavate the building footprint area down to a depth below the poorly welded tuff layer (that lies from 75 ft-130 ft below ground surface), then fill the excavated site partially with low-slump concrete to form a 60-ft thick engineered building site. Three of the building's four floors would be located below ground. The Shallow Excavation Option would avoid the poorly welded tuff layer by constructing the basement well above that layer in the stable geologic layer, which would allow the building to "float" over the poorly welded tuff layer. Engineered backfill would be used to partially bury the building.

The SEIS states that the preferred construction option has not been selected at this time. There is uncertainty associated with the Shallow Excavation Option and it needs additional technical review. The information provided is not adequate for NMED to comment on the proposed two construction options.

3. Section 2.6.2.1, Construction Activities Associated with the Modified CMRR-NF, page 1-22 to 1-25:

The section lists the technical areas that would be affected by the Modified Alternative analyzed in the CMRR-NF SEIS. TA-50 would be one of the areas affected by the alternative. Since 2004 ROD, additional investigations have been conducted at Material Disposal Area (MDA) C at TA-50. Several new boreholes were drilled and subsurface pore-gas data was collected at MDA C to evaluate the potential effect of subsurface fractures on vapor-phase contaminant concentrations and transport. Similarly, investigations have been conducted at other technical areas since 2004 ROD. The CMRR-NF-SEIS should utilize data collected since 2004 to evaluate potential effects of subsurface contamination and transport on the construction of the Modified CMRR-NF.

4. Section 2.10.1, Comparison of Potential Consequences of Alternatives, page 2-33 to 2-34:

The SEIS states that larger amounts of land will be affected under the modified CMRR-NF proposal than previously estimated during 2003 EIS. Additional land is needed to provide space for additional laydown and spoils area due to larger amounts of construction material needed to support construction of larger building and to store greater amount of excavated material due to larger excavation needed. The modified CMRR-NF would require up to three concrete batch plants. TAs -5, -36, -46, -51, -52, -54, -63, -64, and -72 would be affected either temporarily for construction support or

permanently for road realignments (TA-55), stormwater detention ponds (TA-50 and -63), and the electrical substation (TA-50).

These activities may potentially cause adverse impacts to the Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) located at these technical areas.