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Jm 5/12/2017

From: Murphy, Robert, NMENV
Sent: Thursday, May 04, 2017 3:41 PM
To: 'eschultz@lanl.gov' <eschultz@lanl.gov>
Subject: Questions regarding TA-55 seismic study

Hi Emily,

I am writing responses to the public comments submitted to NMED for Attachment B, Seismic Report for the TA-55 Facility and have a couple of question for you.

1. Can you provide NMED with the date (month and year) that the field reconnaissance of sites at TA-55 was conducted?
2. Can you add any relevant information to my draft response for the following public comment? I have attached Figure 4-9 from the 2008 report.

Public Comment: *Figure 1, the February 29, 2016 "Map of the Pajarito Fault System in the Vicinity of LANL," misrepresents the current knowledge of the seismic setting at LANL. Compare Figure 1 to Figure 4-9 "Mapped Faults in the Los Alamos National Laboratory Area" found in the May 2008, Department of Energy Final Site-Wide [Environmental Impact Statement] for Continued Operations of Los Alamos National Laboratory, Los Alamos, New Mexico, p. 4-22. Attachment 1. Notice the difference the thickness of the Rendija Canyon Fault horsetail to the west of the proposed storage sites. The horsetails indicate that the faulting system is developing.*

DRAFT Response: Figure 4-9 represents only the general fault geometry of the Pajarito Fault system. The variation in thickness of the Rendija Canyon Fault horsetail depicted in the two figures is likely the result of the addition of data to Figure 1 (2016) collected after Figure 4-9 (2004) was produced rather than an indication that the fault system is developing. The Permittees have demonstrated the proposed TA-55-0355 Pad and rooms B13 and G12 are in compliance with the seismic location standards required by Code of Federal Regulations 40 CFR §270.14(b)(11) and 264.18(a), therefore, the Department cannot deny the permit modification request.

Please call me if you have any questions regarding this request.

Thank you,
Robert Murphy
Environmental Scientist
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM 87505
Phone: 505-476-6022
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From: Diaz, Tammy [mailto:tdiaz@lanl.gov]
Sent: Thursday, May 11, 2017 4:27 PM
To: Murphy, Robert, NMENV <Robert.Murphy@state.nm.us>; Briley, Siona, NMENV <Siona.Briley@state.nm.us>; Dhawan, Neelam, NMENV <neelam.dhawan@state.nm.us>
Subject: additional seismic information for TA-55

Hi Robert,

It is my understanding that you and Emily Schultz-Fellenz have discussed the public comments below. The purpose for the level of detail provided by Emily was for your understanding as well as to provide assistance in drafting a response to comments submitted by the public. Just to clarify, Emily's responses are provided in **RED** below.

Emily- Thank you very much for your hard work and assistance. Safe travels!

3. Can you provide NMED with the date (month and year) that the field reconnaissance of sites at TA-55 was conducted?
Field reconnaissance at TA-55 was conducted in the summer of 2008. This field reconnaissance was initially performed in support of memorandum EES16-SHG-2009-002-R1, Evaluation of potential seismic hazards from Holocene-age surface-rupturing faults at Building 185, Technical Area 55, Los Alamos National Laboratory. Select regions were checked again in November 2015 and no changes were identified.
4. Can you add any relevant information to my draft response for the following public comment? I have attached Figure 4-9 from the 2008 report.

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LANL EDITED DRAFT Response: Figure 4-9 represents the general fault geometry of the Pajarito fault system in the vicinity of LANL. The variation in the spatial distribution of mapped surficial traces of the Rendija Canyon Fault horsetail splay at its southern end, depicted in the two figures results from the addition of data to Figure 1 (2016) collected after Figure 4-9 (2004) was produced. Within an open, peer-reviewed journal article (Lewis et al., 2009), a detailed discussion is presented on relationships between surficial geometries of Pajarito fault system elements, and the inferences made from those geometries on developmental patterns and linkages of the elements of the fault system. The Permittees have demonstrated the proposed TA-55-0355 Pad and rooms B13 and G12 are in compliance with the seismic location standards required by Code of Federal Regulations 40 CFR §270.14(b)(11) and 264.18(a).