nuclear watch new mexico

February 1, 2008

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New Mexico Environment Department
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By e-mail to: john.kieling@state.nm.us

Re: Comments on the August 2007 draft Hazardous Waste Facility Permit
Facility: Los Alamos National Laboratory (LANL)
Facility Owner and Co-Operator: U.S. Department of Energy (DOE)
Facility Co-Operator: Los Alamos National Security, LLC (LANS)
EPA ID No.: NM0899910515

Dear Mr. Kieling:

Nuclear Watch New Mexico respectfully submits these comments on the August 2007 draft Hazardous Waste Facility Permit ("Permit") for the Los Alamos National Laboratory. Thank you for considering them. Any quotes herein form the draft Permit are italicized (all pages' line numbers are in the original).

General Comments

Request for a Revised Draft Permit, Negotiations and a Public Hearing

Nuclear Watch New Mexico opposes the draft Permit as currently formulated for the reasons described in these comments (but not necessarily limited to just these comments). We request that the New Mexico Environment Department (NMED) withdraw this draft and prepare a revision that addresses our concerns and those of others. A revised draft should also incorporate needed updated information, which would require the Permittees to resubmit the relevant portions of its application. A new public comment period should then follow the release of a revised draft permit.

Nuclear Watch also requests a public hearing on the draft LANL RCRA permit, whether or not NMED issues a revision is issued. Moreover, pursuant to 20.4.1.901.A.4 NMAC, Nuclear Watch requests that NMED, the Permittees, and interested parties conduct negotiations prior to any notice of public hearing. We are confident that a number of major issues could be resolved in advance.

However, we argue that a revised draft permit incorporating negotiated progress should be released in advance of any public hearing. We contend this would be in the best interests of all parties,

including NMED, as it would hopefully cut to the chase and result in the most efficient process possible toward ultimate resolution and adoption by NMED of a final Permit.

A revised draft Permit should have more explanatory or supporting language that would help enhance public understanding of the Permit. To be specific, the Code of Federal Regulations and other authorities are cited many, many times with sections numbers, etc., which we suspect are nearly incomprehensible to the public (and admittedly to ourselves without laboriously googling for each and every one). Therefore, we suggest that a succinct explanation should be provided within the text at issue that captures the essence of each citation, either within parentheses or as footnotes, with referenced URLs. It is difficult to understand the overall structure or underpinnings of the draft Permit without some understanding of its underlying parts and authorities. Moreover, the draft Permit is devoid of a section listing reference documents, such as CFRs, which we think should be corrected, again with relevant URLs.

Fact Sheet

Assuming that NMED issues a revised draft permit, it then follows that a revised "Fact Sheet" should be released as well. A Fact Sheet accompanied the August 2007 draft, and it was an essential summary of the draft Permit, important for public understanding. However, it was poorly edited, and all typos should be corrected in a revised Fact Sheet.

More importantly, the old Fact Sheet described LANL as only a research facility, and overlooks the production activities that not only have always taken place there, but are now slated to be expanded. This is not just a matter of correcting the historical record, but points to one of our core concerns. DOE plans for its future nuclear weapons complex call for expanding LANL missions, particularly plutonium pit production, and the Lab has now been now designated as NNSA's preferred permanent production site. It is crucial, especially given past historical contamination, that the final LANL RCRA permit has stringent safeguards for, and limitations on, the types and amounts of wastes that are generated and stored under expanding missions and that future disposal units for hazardous ands mixed wastes (such as the ones this draft Permit now seeks to close) be prohibited. We are grateful that this draft Permit is a significant step in that direction (but of course argue that it should be clarified, improved and ultimately strengthened).

The old Fact Sheet describes LANL as being involved in environmental technology and geothermal and solar energy research. Assuming that "environmental technology" means the development of cleanup technologies, please be advised that the "Laboratory Tables" submitted with DOE's annual Congressional Budget Request show that all three programs were stripped of funding years ago. Following the money alone, the fact is that LANL has increasingly relied upon nuclear weapons research and production programs for its institutional funding, which serves to underline the importance of this draft Permit.

Since the National Nuclear Security Administration (NNSA) is a semi-autonomous nuclear weapons agency within the Department of Energy, and "owns" LANL, a revised permit should list NNSA as the "Facility Owner and Co-Operator." Numerous NNSA documents specifically describe the agency as LANL's "landlord," not DOE.

The old Fact Sheet states that the "Administrative Record for this proposed action consists of the Permit application, the draft Permit, this Public Notice, the Fact Sheet, and supporting documentation." P. 18. As a matter of course, the AR should explicitly include the old Permit that

expired in November 1999, but was administratively extended by NMED since then, plus any amendments and revisions that affected the old Permit.

The "Imminent and Substantial Endangerment to Health and the Environment" Still Exists at LANL

Pursuant to the New Mexico Hazardous Waste Act, on May 2, 2002, NMED issued a determination that LANL's inadequate management and disposal of hazardous and mixed wastes posed an "imminent and substantial endangerment to health and the environment" that accompanied a draft Correction Action Order. DOE and the University of California (then LANL's sole manager) sued NMED in both federal and state courts, resulting in the parties negotiating for almost 27 months, from which the public was excluded. As part of the negotiations, NMED withdrew its imminent and substantial endangerment finding. Because of the protracted and expensive negotiations, we are not suggesting that NMED should seek to renew that finding, but we do assert that it still applies in spirit.

If anything, the evidence that a finding of substantial endangerment still applies has only grown more compelling since May 2002, as partially follows:

1. Contaminants have been found in groundwater at LANL that include hexavalent chromium ("chrome 6") at eight times the New Mexico drinking water standard, and pentachlorophenol at six times the federal drinking water standard.

2. The draft Permit anticipates making closure decisions for some large dump sites at LANL. However, truly informed decisions cannot be made because there is still not a reliable monitoring network for groundwater contaminants beneath the Pajarito Plateau, as required by the New Mexico Hazardous Waste Act, DOE Orders and standard industry practice. A revised draft Permit should incorporate new information on drilling methods and prohibit any methods that could mask contaminants. [For more, please see our specific comments in response to Section 11.11.]

3. Potentially major seismic issues have grown more serious. In December 2006, the Defense Nuclear Facilities Safety Board (DNFSB) reported a 50% increase in projected peak ground acceleration from 0.34 g to 0.52 g in the event of an earthquake at LANL. DNFSB December 22, 2006 Weekly Report. Related, numerous DNFSB documents and even DOE's own LANL-specific documents have pointed to the aftermath of potential seismic events, which are fires involving hazardous and radioactive constituents, as the single greatest threat to workers and the public from Lab operations (with the exception of some specific hypothetical terrorist events). A revised draft permit should incorporate new and pending seismic information.

As an illustration of how crucial this information could be, 20.4.1 NMAC §264.18(a) prohibits a RCRA facility from being sited within 3,000 feet of a Holocene fault. Recent seismic mapping indicates that there are Holocene faults present at LANL, but their characterization and distances from specific facilities remain inconclusive. We think that unconscionable given the fact that the Lab has been there for more than 60 years. In our view, the Lab's constant excuses for incomplete information is no longer tolerable (this extends to other issues as well, such as the Lab's incomplete understanding of the hydrogeological conditions that it has been situated on for more than six decades). LANL's priorities need to be forced to change by external regulatory forces because we don't believe that the Lab is capable or willing to do so on its own (despite all that time of self-proclaimed "great science"). NMED should compel the Permit Applicant to provide more precise

and current seismic information in a revised draft Permit. [For more, please see our specific comments in response to Att. A, §A3.]

Greater Clarity Needed

The Permit language and format is often difficult to follow. It is not always clear when the permit governs corrective actions or when the Consent Order's requirements come into play. We believe that greater understanding by the public, the Permittees and perhaps even the Department would be strongly enhanced by a "crosswalk" in tabular form that clearly lists the respective requirements of both the Permit and the Consent Order and their applicability to permitted units. For example, the Permit identifies all of Area G as a permitted unit undergoing closure and that will require ongoing post-closure care and monitoring. However, the Consent Order identifies Area G as a corrective action unit with a schedule for investigation completion dates and the evaluation and implementation of a remedy to be completed by August 31, 2015. We can see a difference here, but surely there will be points of intersection, especially as the 2015 date draws closer.

As the cliché goes, the devil is in the details, but we believe that a relatively simple (but that is not to say necessarily short) crosswalk could greatly help to clarify the details. Surely this would ultimately benefit even the Department in that it could help to prevent disputes later with the Permittees.

We also argue that this table should include any instances when other laws and regulations, and even other regulators, come into play. For example, there could be intersections between Permit and Consent Order RCRA issues and stormwater issues regulated by EPA under the Clean Water Act.

When is Closure Closure?

The August 2007 Fact Sheet (p. 8) states that the Department proposes to permit the storage and safe management of specific hazardous wastes at TA-54, Area G (3,664,150 gallons), and TA-54, Area L (408,480 gallons). On the next page the Fact Sheet states that the permit will close the disposal units at Areas G and L.

We realize that this is not necessarily a contradiction, in that the draft Permit provides for the storage of contemporaneous hazardous wastes, while compelling the closure of the old disposal units. At P. 10, the old Fact Sheet makes clear the

> <u>One-Year Storage Limitation</u> – Wastes shall not be stored at the Facility, or anywhere at the entirety of LANL, for more than one year, even if it is stored for less than one year at two or more storage units.

Thus, given the immense volumes of hazardous wastes contemplated for storage at Areas G and L, we are seeking clarification, hopefully in a revised draft Permit. Our reading of the One-Year Storage Limitation means that the entire annual inventory would have to be cycled out of Area G and L every year, correct? Additionally, given other provisions in the draft Permit for clear container manifests, are we correct in assuming that rather than done in one whole lot, this cycling in and out of hazardous wastes would have to occur on a per container basis, depending on its origination date? And assuming that is correct, how does NMED plan to monitor compliance and enforce as needed?

But we anticipate other problems, mostly with Area G. The Fact Sheet states that hazardous waste storage at Area G will involve seven pads, one storage shed and one building (no corresponding

information is given for Area L). Will they physically be in the way of cleanup? A revised draft Permit should address this.

But that of course depends on what is really meant by closure and cleanup. The August 2007 Fact Sheet stated that TA-54, Area H will also undergo closure under the Permit. Perhaps not coincidentally, since Area H is not contemplated to be permitted to store wastes, LANL has already submitted to NMED five closure plans, with options ranging from what we would describe as "closure lite" ("cap and cover") to full exhumation and offsite transport of hazardous wastes. NMED is to select its preferred remedy, after a public comment period that is scheduled to end on February 4. We will argue for full exhumation to the extent practicable, without fiscal costs being our primary concern.

We don't want to impede the schedule for a closure plan for Area H (its yet-to-be-determined quality is another matter). However, this begs the question of why can't closure plans for Areas G and L be addressed now, which we think a revised Permit should incorporate? This draft of the Permit purports to address their closure plans, but all it actually does is require the Permittees to submit closure plans within 90 days after the Permit goes into effect. NMED knows that Area G has been a major source of public controversy. We contend that the public would be better served with the inclusion of closure plans for Area G and L in a revised draft instead of yet other processes so that the value of the Permit can be judged as a whole. We further note that the previous Permittees, contrary to RCRA regulations, never submitted an Area G closure plan sufficient enough to gain approval by NMED. We believe the onus is upon the Permittees now to submit closure plans for inclusion in a revised draft Permit, which the Department can then incorporate into a revised draft.

The public has every right to fear that closure/cleanup of Areas G, H and L will not be complete or even adequate. Following the simple rule of follow the money, it can be directly inferred that LANL plans only on "cap and cover," or as a colleague of ours humorously puts it "hide and hope." Draft Permit, Att. R depicts ridiculously low costs submitted by the Applicant for "closure" of various pads and buildings at Areas G, H and L, in the tens or hundreds of 1,000s of dollars. First, overhead costs are notoriously high at LANL, and it is likely that only ~50% of those monies would ever be expended in actual closure activities to begin with. Irrespective of that, the amounts of monies indicate that LANL has pre-selected the low-cost cap and cover option. In order to block that predetermination the closures plans for all MDAs should be incorporated into a revised draft Permit.

There Should Also Be No Prior Assumption of "Cap and Cover" By the Department

9.6 DISPOSAL UNITS AND UNITS TO BE CLOSED AS LANDFILLS
The Department will select remedies and issue a statement
21 of basis for the selected remedies for each closed disposal or landfill unit in accordance with
22 Section VII of the Order. The remedy selection is subject to public comment in accordance with
23 20.4.1.901 NMAC and as described in Section VII.D.7 of the Order. The selected remedies that
24 will achieve closure of MDAs G, H, and L shall be protective of human health and the
25 environment and attain the appropriate clean-up levels as specified in Permit Part 11 (Corrective
26 Action).

10.1 POST-CLOSURE CARE
15 The Permittees shall submit an application for a Post-Closure Care Permit no later than 90
16 calendar days from the date that <u>the Permittees determine that the permitted unit will be closed</u>

17 with waste in place, in accordance with 40 CFR §§ 264.117 through 120.

10.1.1 Post-Closure Care Plan
Post-closure
24 activities to be addressed include, but are not limited to:..
31 3. descriptions of the procedures for maintaining and monitoring the waste containment
32 systems in accordance with the requirements of 40 CFR Part 264, Subparts F, K, L, M, N,
33 and X to ensure:
1 4. the integrity of the cap and final cover or other containment systems in accordance with
2 the requirements of 40 CFR Part 264, Subparts F, K, L, M, N, and X…I [Emphases added.]

The language underlined above troubles us. First, clearly it is not the Permittees who determine whether a permitted unit will be closed with waste in place, but instead the Department as §9.6 states. Besides, by virtue of the already discussed Permittees lowball estimates for selected closures, we already know that they have predetermined cap and cover, if they were to have their way.

But what really troubles us is the Department's own language in §10.1 and §10.1.1. We very much hope that language does not in any way indicate a prior assumption by the Department that wastes with be left *in situ* and that a remedy is therefore limited only to some version of cap and cover. We submit that a revised draft should correct and prevent this possible interpretation. Clearly, remedies will have to be selected on a case-by-case basis, as §9.6 seems to imply. [However, we don't believe this contradicts or invalidates our earlier argument that closure plans and remedies should be decided upon in a final version of this permit instead of simply being scheduled for later.]

We were encouraged by the remedies ultimately selected for MDAs V and B, which required comprehensive exhumation and offsite shipments of wastes. We recognize that these MDAs are situated on properties scheduled for transfer of ownership to Los Alamos County, and therefore the remedies were likely more stringent than they otherwise would have been. However, we argue for absolutely no predetermination of any kind in this draft Permit that cap and cover will be the preferred remedy, even for MDAs that will remain on LANL property. Moreover, past completion of the MDA V remedy demonstrates the obvious: the Permittees can remove wastes and provide comprehensive cleanup when compelled to. We think that successful example should be applied to other MDAs as well for the long-range protection of the environment and posterity.

Financial Assurance by the Federal Government

This draft Permit purports to require financial assurance that the federal government will meet its obligation to comprehensively cleanup LANL. In reality it fails to do so. We contend the federal government cannot be trusted solely on the bases of its assurances.

Specifically, this draft Permit states:

12 ***2.14 FINANCIAL ASSURANCE FOR CLOSURE AND POST-CLOSURE***
13 LANS shall establish an instrument(s) for financial assurance no later than 180 days after the
14 closure and post-closure cost estimate(s) are approved by the Department. LANS shall
15 demonstrate continuous compliance with 40 CFR §§ 264.143, 264.145, 264.147, and 264.151 by

providing documentation of financial assurance, as required by 40 CFR § 264.151, in at least the amount of the cost estimates required in Attachment R (Cost Estimates for Financial Assurance). Changes in the financial assurance mechanisms for closure or post-closure care must be approved by the Department pursuant to 40 CFR §§ 264.143 and 264.145. P. 42.

"LANS," of course, is Los Alamos National Security LLC, the relatively new for-profit corporate entity that is now operating LANL under contract. Given the Lab's reputed exorbitant cost-of-business, we strongly doubt that the costs given in Att. R are anywhere near reality, and a new draft Permit should seriously review whether that is the case. But yet more seriously, the current draft Permit has no real provision that requires LANS to actually set aside money as financial assurance for closure performance. "An instrument(s)," what is that? Is it "money in the bank," or is it hollow paper assurances that LANS will so perform, if the annual federal budget allows it to do so (assuming that it is inclined to do so to begin with)? Looming overall is the fact that the American economy is currently imperiled, and therefore the future "faith and good credit" of the federal government could be in doubt. We argue that real money should be set aside "in the bank" so that financial assurance is concretely assured.

Moreover, those amounts of monies must not be predicated on the estimates given by the Applicants, since to our mind they are clearly lowballing those costs. Further, we assert that the very fact that they are lowballing those costs to begin with provides additional compelling reason why real financial assurance (i.e., real money) should be set aside.

Interim Status Units Not Addressed in this Permit

1.4.1 Effect of this Permit on Interim Status Units

Interim status units that the Permittees intend to permit in the future are listed in Table O-5 (Interim Status Units Actively Managing Hazardous Waste) in Attachment O (Hazardous Waste Management Units). These interim status units will continue to operate under the interim status provisions in 40 CFR § 270.1(c)(4) and are not regulated under this Permit. Part I, General Permit Conditions, p. 2.

Table O-5, Att. O lists five waste management units in TAs 14, 36 and 39 disposing of high explosives. The first unit is described as "burn" and the others "detonation." As stated above, the Permittees intend to permit these units in the future. When is the "future"? We contend that they should be permitted in a revised draft permit. Why not get them properly permitted soon? Why go through a separate permitting process? Given that the original Permit was set to expire in November 1999 (but has been "administratively extended" by NMED since). Has not more than sufficient time already elapsed for both the Permittees and NMED to get these high explosives waste management units properly permitted?

Open Burning

We request that NMED deny a permit for open burning activities at TA-16-388. We object to NMED permitting the open burning of high explosives and other hazardous materials as a waste management method at any LANL location, including TA-16-388 and TA-16-399. We specifically object to NMED permitting LANL to open burn these materials at the TA-16-388 Flash Pad, especially given that on January 10, 2006 DOE/LANL stated that they do not have a need for that facility.

In 2004, DOE/LANL applied for two new construction permits from the NMED Air Quality Bureau (AQB) for open burning activities at three technical areas at LANL, including the Flash Pad at TA-

16-388. The NMED Air Quality Bureau (AQB) issued Air Quality Permit 2195J for the TA-11 Wood and Fuel Fire Test Site and TA-16 Flash Pad and Air Quality Permit 2195K for the DX-TA-36 Sled Track. Concerned Citizens for Nuclear Safety, Tewa Women United (TWU) and the Embudo Valley Environmental Monitoring Group appealed the permits to the Environmental Improvement Board. On January 10, 2006, DOE/LANL wrote a letter to Richard Goodyear, NMED AQB Program Manager, requesting "the Bureau cancel these permits" because as the result of a review of the open burn activities, LANL "no longer needs to perform the types of testing and activities authorized by the permits." We request that the letter be added to the Administrative Record.

Therefore, we request that NMED deny a permit for the open burning activities at TA-16-388. It appears that LANL applied for the permit in 2003, prior to the change in regulations requiring them to apply for a new construction permit for open burning activities.

We also request that NMED deny a permit for open burning activities at TA-16-399. The draft permit states that "[t]he Permittees shall conduct open burning operations in accordance with this Permit Part, in accordance with 40 CFR Part 264, Subpart X and 40 CFR §§ 268.7(b) and 270, which are incorporated herein by reference, in accordance with Permit Part 12 (TA-16), and Attachment I (Open Burn Unit Management)." The draft permit requires soil monitoring, but does not require groundwater and air monitoring as required in 40 CFR § 264.401 (a) and (c), Subpart X.

If NMED refuses to deny a permit for opening burning activities at TA-16-388 and TA-16-399, then the permit must also include the groundwater and air monitoring requirements found in 40 CFR 264, Subpart X "Miscellaneous Units," specifically § 264.101 (a) and (c) "Environmental performance standards."

If these sites are denied a permit, then they should be covered under the Consent Order, § IV.A.5 "Firing Sites," and should be listed as non-deferred sites for corrective action in Table IV-1. In either case, please provide us with the current deferral or non-deferral status of TA-16-388 and TA-16-399.

NMED's August 2007 Fact Sheet declares, "Applicants are prohibited from treating mixed [hazardous and radioactive] waste at the open burn units." P. 13. What prohibits the burning of purely radioactive wastes?

The August 2007 Fact Sheet also states, "Propane shall be the sole fuel source at TA-16-388," but gives no such limitation for TA-16-399. Why?

Therefore, we request that NMED deny a permit for the open burning activities at TA-16-388. It appears that LANL applied for the permit in 2003, prior to the change in regulations requiring them to apply for a new construction permit for open burning activities.

Older Applications Must Be Updated

LANL has pieced together this draft Permit from older documents that in many cases need to be updated. Maybe LANL's Part A Application was accurate when it was written, but that was at least two years ago. One compelling example is that the Part B Application for the Chemical and Metallurgical Research (CMR) Building is dated 1999. Surely many things have changed at CMR in

nine years. Moreover, the CMR Building is LANL's largest single facility and arguably one of its most unsafe, making the need for updated information all that more important.

NMED Should Pressure NNSA to Require That LANL Follow Nuclear Safety Rules

10 CFR 830.202 requires that all of NNSA's nuclear facilities operate under a "safety basis" that is updated annually. A safety basis is defined as the documented safety analysis and hazard controls that provide reasonable assurance that a DOE nuclear facility can be operated safely in a manner that adequately protects workers, the public, and the environment. 10 CFR 830.202 states that the contractor responsible for the nuclear facility must:

(1) Update the safety basis to keep it current and to reflect changes in the facility, the work and the hazards as they are analyzed in the documented safety analysis; and

(2) Annually submit to DOE either the updated documented safety analysis for approval or a letter stating that there have been no changes in the documented safety analysis since the prior submission; and

(3) Incorporate in the safety basis any changes, conditions, or hazard controls directed by DOE.

LANL nuclear facilities are now operating under a set of safety bases ranging up to 12 years old. The CMR Facility is operating under a 1998 Basis of Interim Operations and associated Technical Safety Requirements (TSRs), PF-4 is operating under a 1996 Final Safety Analysis Report (FSAR) with more recently developed interim TSRs, and the Weapons Engineering Tritium Facility (WETF) is operating under a safety analysis that was approved in 2004, but has undergone none of the required annual updates. LANL has slipped proposing an updated safety basis for Area G TRU waste storage to 2nd quarter FY08. Under the current safety basis (2003), Area G is postulated to have some of the highest-consequence accident scenarios of any LANL nuclear facility, yet funding has not been allocated to implement the new Area G safety basis, should it ever be completed. The Radioactive Liquid Waste Treatment Facility (RLWTF) operates under a 1995 safety basis.

LANL has had many other nuclear safety violations. These can be found in the Defense Nuclear Facilities Safety Board weekly reports for LANL (http://www.dnfsb.gov/pub_docs/lanl/wr_la.html). In October 2006, Area G discovered about three dozen drums that were unvented, a condition which violates the outdated Area G safety basis since it could result in flammable gas buildup. In March 2007, TA-55 declared a TSR violation and stood down operations when gas cylinders were found to lack the multiple restraints required by a specific administrative control. In August 2007, several monthly surveillance requirements for two safety-class confinement doors in the TA-55 basement were found to be absent from the implementing procedure. As a result, these monthly surveillances had not been performed since January 2006. This discovery resulted in a TSR violation. Also in August 2007, CMR declared a TSR violation upon discovering that 31 of about 600 rooms had been omitted from a surveillance procedure to inspect fire sprinkler heads. This surveillance went through CMR's procedure review and validation process and passed an independent verification review without the deficiencies being identified. Receipt of prohibited drums resulted in Technical Safety Requirement violations at WCRR last fall.

We are not under any illusions that NMED has the jurisdiction to in any way compel LANL to update it safety bases. That is why we characterize this section of our comments as "pressure" and not enforce. However, it is clear that these nuclear facilities are being operated without required updated safety bases. It is also obvious that they handle RCRA constituents, and the general purpose of safety bases are to "adequately protect workers, the public, and the environment," which RCRA constituents can threaten.

Specific Comments

1.4.1 Effect of this Permit on Interim Status Units

12 Interim status units that the Permittees intend to permit in the future are listed in Table O-5
13 (Interim Status Units Actively Managing Hazardous Waste) in Attachment O (Hazardous Waste
14 Management Units). These interim status units will continue to operate under the interim status
15 provisions in 40 CFR § 270.1(c)(4) and are not regulated under this Permit.

An enforceable timetable to permit interim status units must be included in the Permit.

TABLE O-2
Permitted Units Undergoing Post-Closure Care

At the time of Permit Issuance (XX-XX-XXXX) there are no units in post-closure care.

What about Acid Canyon and Bayo Canyon?

1.5 EFFECT OF INACCURACIES IN PERMIT APPLICATION

17 This Permit is based on the assumption that the information submitted in the Permittees'
18 Application is true and correct and the Facility and permitted units were constructed and will be
19 operated and maintained as specified in the Application. The Application has numerous iterations;
20 however this Permit is based on the most recent submittal identified as follows:
21 1. the Part A Application dated April 2006;
22 2. the General Part B Permit Application dated August 2003;
23 3. the TA-3-29 CMR Part B Application dated September 1999;
24 4. the TA-16 Part B Permit Application dated June 2003;
25 5. the TA-50 Part B Permit Application dated August 2002;
26 6. the TA-54 Part B Permit Application dated June 2003; and
27 7. the TA-55 Part B Permit Application dated September 2003.
28 Any inaccuracies found in the Application may be grounds for the termination, revocation and re
29 issuance, or modification of the Permit in accordance with 40 CFR §§ 270.41, 270.42, and 270.43
30 which are incorporated herein by reference, and for enforcement action.

The Part A Application (Attachment B in this draft Permit) is dated April 2005 rev.5 with a change dated June 01, 2006. Is this a typo above?

The older Part B Applications, especially the TA-3-29 CMR Part B Application dated September 1999, must be updated for this Permit.

The Permittees shall inform the Department of any deviation from, or changes in, the information
32 contained in the Application that would affect the Permittees' ability to comply with this Permit.
33 The Permittees shall promptly provide this information in writing to the Department

Please define promptly.

1.6.3 Transfer of Land Ownership

20 The Permittees shall not transfer any land that is part of the Facility without submitting a permit
21 modification request to the Department.

We agree that NMED should require a permit for the transfer of any land.

1.8 DEFINITIONS

*15 **Permitted Unit** means a hazardous waste management unit that is: 1) actively managing waste or*
16 in closure or post-closure care; 2) addressed by this Permit; 3) not an interim status unit; and 4)
17 listed in Attachment O (Hazardous Waste Management Units), Table O-1 (Permitted Units
18 Actively Managing Hazardous Waste), or Table O-2 (Permitted Units Undergoing Post-Closure

19 Care), or Table O-4 (Permitted Units Undergoing Closure).

1.10 INFORMATION REPOSITORY

3 The Permittee's Information Repository shall contain the following:
6 2. complete, legible, hard copies (and electronic copies if available) of all documents
7 relating to the Permittee's previous activities which resulted or may have resulted in the
8 generation, management, or actual or potential release of solid waste, hazardous waste, or
9 hazardous constituents, including correspondence, reports, data, photographs, aerial
10 photographs, maps, figures, drawings, tables, attachments, enclosures, and appendices;

First, please define "if available." Electronic scans of all hardcopy documents must be required and must made available online along with the other electronic copies. Electronic Copies are important and must be required for historic documents available. Please require all documents possible. The history of all releases at LANL must be required. This should also include the inventories and amounts of all hazardous constituents that were ever delivered to LANL. This would be important for mass-balance accounting.

11 3. complete, legible, hard copies (and electronic copies if available) of all documents
12 relating the Permittee's Part A and Part B Permit Applications, this Permit, and interim
13 status Closure Plans and Post-Closure Care Plans including, but not limited to, any
14 correspondence, photographs, aerial photographs, maps, figures, drawings, tables,
15 attachments, enclosures, and appendices;

Electronic copies for documents pertaining to the Permit must be made available. Any documents submitted to the HWB with the permit application designated as "Unclassified Nuclear Information (UCNI)" but not included in the repository must have their titles listed in an index in the repository. The titles of any and all other documents that were not made publicly available for 'security reasons' must be listed in an index in the repository.

1.11 GENERAL DOCUMENTS AND INFORMATION TO BE MAINTAINED AT
2 **THE FACILITY**

8 The Permittees shall maintain the information and records referenced in this Permit Section in
9 paper form, or in an electronic, magnetic, or optical form acceptable to the Department.

These records must be kept in electronic form.

1.12 COMMUNITY RELATIONS PLAN

11 The Permittees shall establish and implement a Community Relations Plan to inform the public of
12 investigation and cleanup activities conducted under this Permit and to inform the public of safety
13 issues concerning hazardous wastes and hazardous constituents released at the Facility and beyond
14 its boundary. The Permittees shall post the Plan on the Permittee's web site within 180 days of the
15 effective date of this Permit.

This plan must have input and be approved by interested parties of the community and NMED. This plan should follow the WIPP model for transparency and public involvement and notification.

32 ***1.13 DISPUTE RESOLUTION***

33 In the event the Permittees disagree, in whole or in part, with a condition or disapproval of any
34 submittal, the Permittees may seek dispute resolution.

The public must be involved in any dispute resolution.

2.2.1 Hazardous Waste from Off-Site Sources

14 The Permittees may accept, store, treat or otherwise manage at permitted units at the Facility only

15 those hazardous wastes from the following off-site sources:
16 1. one of the sources listed in Attachment Q (Off-Site Facilities);
17 2. hazardous waste generated by the Permittees at TA-57 (the Fenton Hill site); and
18 3. hazardous waste generated by the Permittees as a result of investigation or remediation of
19 a solid waste management unit (SWMU) or area of concern (AOC) listed in Attachment
20 P (Listing of SWMUs and AOCs).

Waste from off-site sources listed in Attachment Q should not be allowed to come to LANL. LANL has enough waste of its own to worry about and needs to prove that it can handle its own waste first. LANL sites lack of funding as a reason that it cannot dispose of its existing waste in a timely fashion. How can it afford to import off-site waste? Shipments from other DOE sites will only perpetuate the waste shell game.

Speaking of off-site sources, LANL is involved in an off-site sealed source recovery program. LANL has recovered something like 18,000 sealed sources to date. LANL should not be allowed to accept any more sealed sources unless NMED approves a plan to manage these wastes. A disposal path, funding, and a timetable to dispose off-site must be required for all sealed sources, including any already at LANL. We believe these sources would be considered mixed waste. Most of these have no disposal path, hence would end up stored at LANL for more than a year. They must not be permanently disposed of at Area G or any other landfill at LANL.

2.3 LAND DISPOSAL RESTRICTION COMPLIANCE

2 2.3.1 Hazardous Waste Long-Term Storage

3 The Permittees shall not store hazardous wastes beyond one year from the date that the wastes
4 were first placed into storage at a permitted unit unless the Permittees are able to demonstrate to
5 the Department that one of the following conditions exist:
6 1. that such storage is solely for the purpose of accumulating such quantities of hazardous
7 waste as are necessary to facilitate proper recovery, treatment, or disposal;
8 2. that the waste meets all of the applicable LDR treatment standards; or
9 3. that a mixed waste is included in the Site Treatment Plan (STP) under the Federal Facility
10 Compliance Order (FFCO) and such storage is otherwise in compliance with all
11 requirements of the STP and FFCO (40 CFR §§ 268.50(b) and (e)).

If LANL is allowed to store any wastes for more than one year for any reason, LANL and NMED should enter into a compliance agreement that includes a timetable and penalties to dispose of the waste off-site. Public input must be required here.

3 2.4.2 Sampling and Analysis for Hazardous Wastes

26 If the Permittees use an independent contract laboratory to perform analyses, the Permittees shall
27 enter into a written contract with the laboratory that requires the analytical laboratory to operate in
28 accordance with the waste analysis conditions set forth in this Permit. Copies of all such contracts
29 with independent contract laboratories shall be kept in the Facility Operating Record (40 CFR §
30 270.32(b)).

We believe that copies for these contracts should be maintained.

15 2.4.3 Acceptable Knowledge

16 The Permittees may use acceptable knowledge (AK) to characterize waste in lieu of, or to
17 supplement, sampling and analysis. The Permittees shall document all uses of AK, and include in
18 the AK documentation all of the background information assembled and used in the
19 characterization process whether or not the information supports the decision to use AK (40 CFR §
20 270.32(b)). The record must document the resolution of any data discrepancies between different
21 sources of AK. Acceptable knowledge documentation must be maintained in an auditable form in

22 the Facility Operating Record. The Permittees shall assign a traceable identification number to this
23 documentation to facilitate both access to this information and its verification by the Permittees
24 and the Department.
Because of past problems with AK at LANL, documentation should be required.

18 ***2.6.3 Inspection Logs and Records***
6 The Permittees shall maintain paper copies of inspection logs in the Facility Operating Record
7 for a minimum of three years from the date of inspection (40 CFR § 264.15(d)). The Permittees
8 shall maintain unalterable electronic copies of inspection logs in the Facility Operating Record
9 until closure or post-closure certification is approved for a particular permitted unit as specified
10 in Permit Section 2.12.2 (40 CFR § 270.32(b)).
We agree that unalterable electronic copies of inspection logs be maintained in the Facility Operating Record. These should be publicly available online

16 ***2.8 SPECIAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR***
17 ***INCOMPATIBLE WASTE***
12 5. ensure lightning rods are attached to all storage or treatment units;
Lightning protection should be required.

11 ***2.11 CONTINGENCY PLAN***
12 ***2.11.1 Implementation of Contingency Plan***
A discussion is needed of the seismic fragility of the fire water distribution system which can be found in ***Seismic Fragility of the LANL Fire Water Distribution System, LA-14325, March 2007***
From the report ;
...the DRAFT 2007 PSHA is estimated to increase the probability of water distribution system failure by a factor of 2 or less. (Pg. 32)
...results are highly dependent on the length of piping in the distribution system that can break. The results for CMR, RLWTF, TWISP, and WCRRF assume that existing isolation valves will be closed and that all piping that is not essential for supplying the nuclear facility from the distribution system will be removed.

• Up to 48 (CMR) isolation valves per facility may need to be closed to dedicate the water-distribution system to a specific facility and remove leaking branch lines.

• At this time, there is no protocol in emergency response that requires closing isolation valves.

• Closing the isolation valves will negate fire fighting capability at nonnuclear facilities.

• The potential for and consequences of closing the wrong isolation valve were not considered in this assessment. (Pg. 33)

15 ***2.13 COST ESTIMATE FOR FACILITY CLOSURE AND POST-CLOSURE***
16 LANS must establish closure and post-closure cost estimates, prepared in accordance with 40
17 CFR §§ 264.142 and 264.144. Cost estimates must be provided for closure of each unit listed in
18 Attachment O (List of Hazardous Waste Management Units), Table O-1 (Permitted Unit Actively
19 Managing Hazardous Waste) and Table O-2 (Permitted Units Undergoing Post-Closure Care).
20 Cost estimates for post-closure care shall be submitted in conjunction with the associated post21 closure care plan for any unit undergoing post-closure care.
These estimates must be broken out into the estimated amounts required annually, by year. Also the type of closure estimated must be acknowledged.

12 ***2.14 FINANCIAL ASSURANCE FOR CLOSURE AND POST-CLOSURE***

13 LANS shall establish an instrument(s) for financial assurance no later than 180 days after the
14 closure and post-closure cost estimate(s) are approved by the Department. LANS shall
15 demonstrate continuous compliance with 40 CFR §§ 264.143, 264.145, 264.147, and 264.151 by
16 providing documentation of financial assurance, as required by 40 CFR § 264.151, in at least the
17 amount of the cost estimates required in Attachment R (Cost Estimates for Financial Assurance).
18 Changes in the financial assurance mechanisms for closure or post-closure care must be
19 approved by the Department pursuant to 40 CFR §§ 264.143 and 264.145.

We agree that there be an instrument for financial assurance for closure and post-closure. Because the final types of closure have not been decided upon, the cost estimates must include the most expensive type of closure, which would normally be exhumation and removal. If all parties including the stakeholders finally agree to a less-expensive type of closure, then the money would be there and any extra monies could be used for further cleanup.

1 ***PART 3: STORAGE IN CONTAINERS***
2 ***3.1 GENERAL CONDITIONS***

At some point, NMED and LANL should consider using new nanotechnologies for coating containers, especially disposal containers.

22 ***6.2 MANAGEMENT OF OPEN BURNING UNITS***
24 The Permittees shall cover the containment devices (e.g., pans, trays, or flash pads) within eight
25 hours of the last open burn event while awaiting collection of treatment residue.

We agree that LANL should cover the containment devices as soon as possible and that NMED should require this in eight hours.

13 ***9.6 DISPOSAL UNITS AND UNITS TO BE CLOSED AS LANDFILLS***
14 The disposal or landfill units, Material Disposal Areas (MDAs) G, H, and L, are no longer
15 accepting hazardous waste and must undergo closure.

Area G is still accepting LLW and there are plans to expand Area G to a new area called Zone 4. We have even heard of plans to squeeze another new pit into the existing part of Area G. How will these ongoing activities affect the closure of Area G? If the final closure plan is to exhume the waste in Area G, why is waste still being buried there? How can we be assured that there is absolutely no mixed waste currently being emplaced in pits at Area G?

20 The Department will select remedies and issue a statement
21 of basis for the selected remedies for each closed disposal or landfill unit in accordance with
22 Section VII of the Order. The remedy selection is subject to public comment in accordance with
23 20.4.1.901 NMAC and as described in Section VII.D.7 of the Order.

We appreciate NMED's inclusion of public imput.

2 ***10.1 POST-CLOSURE CARE***
15 The Permittees shall submit an application for a Post-Closure Care Permit no later than 90
16 calendar days from the date that the Permittees determine that the permitted unit will be closed
17 with waste in place, in accordance with 40 CFR §§ 264.117 through 120.

We hope that no units will be closed with waste in place. This language should be changed to "*from the date that the Permittees determine that the permitted unit will be closed with waste in place,* unless a remedy has already been selected by NMED*."*

PART 11: CORRECTIVE ACTION
2 This Permit Part addresses corrective action at the Facility where releases of hazardous waste or
3 hazardous constituents to the environment have occurred. Corrective action is divided into two

4 categories, 1) corrective action for permitted units, and 2) corrective action for units covered
5 under the March 1, 2005 Compliance Order on Consent (Order).
Interim storage units must be able to address corrective actions.

11.3.1.1 Detection Monitoring

21 The Permittees shall conduct detection monitoring in accordance with the requirements of 40
22 CFR § 264.98, which is incorporated herein by reference, to ensure the earliest possible detection
23 of contaminants in groundwater. The Permittees shall coordinate such monitoring with the
24 monitoring conducted under the Interim Facility Wide Groundwater Monitoring Plan and any
25 Department-approved watershed-specific Long-term Groundwater Monitoring Plans under the
26 Order.
Public input must be required here.

11.6.2 Other Cleanup Levels

6 For all other cleanup levels, the Permittees may seek approval of a variance from a cleanup level
7 by submitting to the Department a written request for a determination that attainment of the
8 cleanup level is impracticable. The request must include a demonstration that attaining the
9 cleanup level is technically or physically impossible or otherwise impractical using potential
10 corrective action remedies. The request shall include, at a minimum, the following:
11 1. a discussion of the effectiveness of potential corrective action remedies;
12 2. a discussion of whether the proposed variance would result in a present or future hazard
13 to public health or the environment;
14 3. proposed alternate cleanup levels that are practical, based on potential corrective action
15 remedies and a site-specific risk assessment;
16 4. all supporting documentation and analyses; and
17 5. any other information requested by the Department.
18 If the Department approves the Permittee's impracticability demonstration, it will notify the
19 Permittees in writing, and such notice will describe the specific action to be taken by the
20 Permittees.
Public input must be required here.

11.7 PERMIT MODIFICATION FOR CORRECTIVE ACTION COMPLETE

22 The Permittees may submit to the Secretary a request for a Class 3 permit modification to change
23 the status of the unit from "corrective action required" to "corrective action complete."
Public input must be required here.

11.8.2.1 Department-Initiated Interim Measures

3 Upon written notification by the Department, the Permittees shall prepare and submit an Interim
4 Measures (IM) Work Plan at any permitted or interim status unit where the Department
5 determines that interim measures are necessary to minimize or prevent the migration of
6 hazardous waste or hazardous constituents and limit actual or potential human and environmental
7 exposure to hazardous waste or hazardous constituents while long term corrective action
8 remedies are evaluated and implemented.
Public input must be required here.

11.8.3 Emergency Interim Measures

20 The Permittees may determine, during implementation of site investigation activities, that
21 emergency interim measures are necessary to address an immediate threat of harm to human
22 health or the environment.
There must be a mechanism for other entities beside the Permittees to suggest that emergency interim

measures are needed.

11.8.5.3 Risk Assessment

16 The Permittees shall attain the cleanup goals outlined in Permit Sections 11.4 through 11.6. If
17 the Department determines that the cleanup levels included in Permit Sections 11.4 through 11.6
18 cannot be achieved at a site, the Department will require performance of risk analyses to
19 establish alternate cleanup levels.

Please give an example of why a cleanup level may not be achieved.

11.8.6.4.i Threshold Criteria

3 The Permittees shall evaluate each of the remedy alternatives for the following threshold criteria.
4 To be selected, the remedy alternative must:
5 1. be protective of human health and the environment;
6 2. attain media cleanup standards;
7 3. control the source or sources of releases so as to reduce or eliminate, to the extent
8 practicable, further releases of contaminants that may pose a threat to human health and
9 the environment; and
10 4. comply with applicable standards for management of wastes.

We believe that the total removal of the waste should be listed as a consideration and if total removal is not chosen, the reasons must be given.

11.8.6.4.ii Remedial Alternative Evaluation Criteria

12 The Permittees shall evaluate each of the remedy alternatives for the factors described in this
13 Permit Section (11.8.6.4). These factors shall be balanced in proposing a preferred alternative.

These factors should not be given equal weight.

11.8.6.4.iii Long-term Reliability and Effectiveness

15 The remedy shall be evaluated for long-term reliability and effectiveness.

11.8.6.4.vi Implementability

2 The remedy shall be evaluated for its implementability or the difficulty of implementing the
3 remedy. This factor includes consideration of installation and construction difficulties; operation
4 and maintenance difficulties; difficulties with cleanup technology; permitting and approvals; and
5 the availability of necessary equipment, services, expertise, and storage and disposal capacity.
6 The Permittees shall give preference to a remedy that can be implemented quickly and easily,
7 and poses fewer and lesser difficulties.

Implementability should not be an equal factor.

11.8.6.4.vii Cost

9 The remedy shall be evaluated for its cost. Permittees shall give
17 preference to a remedy that is less costly, but does not sacrifice protection of health and the
18 environment.

Cost should not be a factor, but the safest remedies will be total removal of the wastes, which will be the most expensive remedy. How will NMED address this recurring dilemma?

11.10.4.1 Human Health Risk Assessment Methods

13 A risk assessment may be required for human receptors that are potentially exposed to site
14 related chemicals in environmental media.

Please state under what conditions that this may be required.

11.10.5 Ecological Risk Assessment Methods

23 An ecological risk assessment may be required for receptors that are potentially exposed to site
24 related chemicals in environmental media.

Please state under what conditions that this may be required.

11.11.2.3 Water Rotary and Mud Rotary

18 The water and mud rotary drilling methods consist of rotary drilling techniques where water or
19 drilling mud is used as the circulating fluid. If
41 drilling fluids are used as part of well installation, the Permittees must demonstrate that all data
42 acquired from the well is representative of existing subsurface conditions using methods
1 approved by the Department.

Drilling mud or other additives should not be used for monitoring wells. The National Academy of Science, in its review of LANL's groundwater monitoring, has stated, "Additives may be reactive with chemicals of potential concern (COPC)...Typically inappropriate for monitor wells for reactive COPCs." (Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory: Final Report (2007) Pg.51) There is general agreement that the use of bentonite clay and organic additives has compromised the ability of at least some R-wells to yield water samples that are truly representative of the ambient, undisturbed groundwater conditions. Robert Gilkeson, a registered geologist and former advisor to LANL, stated that bentonite clay and/or organic drilling additives had invaded the screened intervals in all of the LANL characterization wells. (Pg. 53)

11.11.3 Well Construction/Completion Methods

2 ***11.11.3.1 Well Construction Materials***

3 Well construction materials shall be selected based on the goals and objectives of the proposed
4 monitoring program and the geologic conditions at the site. When selecting well construction
5 materials, the primary concern shall be selecting materials that will not contribute foreign
6 constituents or remove contaminants from the groundwater.

NMED should know enough now about the geologic conditions at the Lab to specify exactly the well-drilling method to be used. Or at least NMED could narrow it down to 1 or 2 methods.

11.11.7 Documentation

18 All information on the design, construction, and development of each monitoring well shall be
19 recorded and presented on a boring log, a well construction log, and well construction diagram.
20 The well construction log and well construction diagram shall include the following information:
28 8. screened interval(s);

Monitoring wells should be single-screen only. Previous problems in installing well screens at LANL have been reported to include excessively long screens, screens installed at the wrong depths to intercept contaminants, too many screens per well, and screen materials that corrode in groundwater. The use of overly long screens can cause dilution of sampled contaminants. Multiple screens, on occasion as many as nine screens in some LANL wells, can cause dilution or possibly cross-contamination of samples if there is leakage between screens. (Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory: Final Report (2007) pg. 51)

11.12 REPORTING REQUIREMENTS

21 ***11.12.1 General***

22 The purpose of this Section is to provide the reporting requirements and report formats for
23 corrective action activities at all SWMUs, AOCs, and permitted units required under this Permit.

The public, stakeholders and interested parties must be a part of this process.

Attachment A
Attachment A Page 3
LANL's central mission is the reduction of global nuclear danger supported by research that also contributes to conventional defense, civilian, and industrial needs. This includes programs in nuclear, medium energy, and space physics; hydrodynamics; conventional explosives; chemistry; metallurgy; radiochemistry; space nuclear systems; controlled thermonuclear fusion; laser research; environmental technology; geothermal, solar, and fossil energy research; nuclear safeguards; biomedicine; health and biotechnology; and industrial partnerships. LANL is owned by the U.S. Department of Energy (DOE) and is operated jointly by the DOE National Nuclear Security Administration and the University of California.

LANL's central mission is the reduction of global nuclear danger? From the LANL website (http://www.lanl.gov/about.shtml): "Our primary responsibility is ensuring the safety, security, and reliability of the nation's nuclear deterrent."

There is a current public debate about whether having and maintaining nuclear weapons increases or decreases global nuclear danger. Regardless, LANL's central mission is maintaining and certifying the nation's nuclear weapons stockpile. Most of the other programs mentioned above support LANL's central mission of supporting the nation's nuclear weapons stockpile. With the exception "nuclear safeguards" the programs mentioned above that do not support the nation's nuclear weapons stockpile have such small relative budgets that they verge on being only window dressing. Any discussion of LANL's mission without the mention of nuclear weapons is an obvious subterfuge and an admission that LANL is embarrassed of their actual current main mission. If LANL cannot state clearly in this Permit what its central mission is, how are we to believe that anything else in this Permit is not subterfuge? For this reason we request that NMED deny this Permit and we request a hearing. The words "nuclear weapons" must be included in LANL's mission description.

LANL is owned by the U.S. Department of Energy (DOE) and is operated jointly by the DOE National Nuclear Security Administration and the University of California?
In December 2005, the management and operating contract of Los Alamos National Laboratory was awarded to Los Alamos National Security, LLC (LANS LLC) a private limited liability company formed by the University of California, Bechtel, BWX Technologies, and Washington Group International. It took over direct management and operation of the Lab from the University of California on June 1, 2006. This is over one year before the issuance of this draft Permit. If LANL cannot update this important information for this draft permit in a year's time, we ask what other information that the Lab has not updated for this Permit. NMED must deny this Permit so LANL can modify it and update it.

A.3 LOCATION INFORMATION
A.3.1 Seismic Standard [20.4.1 NMAC ¤ 270.14(b)(11)]
LANL is an "existing" facility that met the requirements for interim status under Section 74-4-9 of the New Mexico Hazardous Waste Act and Section 3005(e) of the Resource Conservation and Recovery Act. The U.S. Environmental Protection Agency (EPA) specifically exempted "existing" facilities operating under interim status from the requirement under 20.4.1 NMAC ¤ 270.14(b)(11) to submit a Part B permit application that demonstrates compliance with the seismic standards under 20.4.1 NMAC ¤ 264.18(a) [see 46 FR 2802 and 46 FR 2813 (January 12, 1981)].

This requires that no faults having had displacement in Holocene time are present within 3,000 feet of the Facility.

Page 42: ***A.3 LOCATION INFORMATION***
A.3.1 Seismic Standard [20 NMAC 4.1, Subpart IX, 270.14(b)(11)(i and ii) and 20 NMAC 4.1, Subpart V, 264.18(a)]
The hazardous and mixed waste management unit at TA-3-29 is exempt from the seismic standards in 20 NMAC 4.1, Subpart IX, 270.14(b)(11), and 20 NMAC 4.1, Subpart V, 264.18(a) [1-1-97], because this unit existed prior to January 25, 1985, and July 25, 1990, when the State of New Mexico received hazardous and mixed waste authorization, respectively.
Page 50: *A.3 LOCATION INFORMATION [20.4.1 NMAC § 270.14(B)(11)]*
A.3.1 Seismic Standard [20.4.1 NMAC § 270.14(b)(11)(i and ii) and 20.4.1 NMAC § 264.18(a)]
The OB units at the TA-16 Burn Ground are exempt from the seismic standards in 20.4.1 NMAC § 270.14(b)(11), and 20.4.1 NMAC § 264.18(a) [6-14-00], because they existed prior to November 19, 1980, the effective date of regulation for hazardous waste.
It appears that the most seismically vulnerable buildings are grandfathered exempt because they are old.

Page 61: ***A.3.1.1 Seismology [20.4.1 NMAC, Subpart IX, 270.14(b)(11)(i) and (ii), and 20.4.1 NMAC, Subpart V, 264.18(a)]***
TA-50 is located in Los Alamos, New Mexico; therefore, pursuant to 20.4.1 NMAC, Subpart IX, 270.14(b)(11)(i) [6-14-00], the seismic standard of 20.4.1 NMAC, Subpart V, 264.18(a) [6-14-00], is applicable.
A geologic field investigation, which consisted of exploratory trenching, was conducted within 3,000 ft of TA-50 during the fall of 1992 and summer of 1993. Based on trench stratigraphy, no evidence of Holocene faulting was observed (Woodward-Clyde Federal Services, 1995). Therefore, TA-50 is in compliance with the seismic standards of 20.4.1 NMAC, Subpart IX, 270.14(b)(11)(i) and (ii), and 20.4.1 NMAC, Subpart V, 264.18(a) [6-14-00]. Figure A-5 (LANL, 2002) details regional surface faulting.
This requires that no faults having had displacement in Holocene time are present within 3,000 feet of the Facility. Site-specific seismic investigations for each Permitted facility must be conducted.

Page 71: ***A.3 LOCATION INFORMATION [20.4.1 NMAC § 270.14(B)(11)]***
A.3.1 Seismic Standard [20.4.1 NMAC § 270.14(b)(11)(i and ii) and 20.4.1 NMAC § 264.18(a)]
The hazardous and mixed waste management units at TA-54, Areas L and G, are exempt from the seismic standards in 20.4.1 NMAC § 270.14(b)(11), and 20.4.1 NMAC § 264.18(a) [6-14-00], because these units or the interim status storage capacity existed prior to January 25, 1985, and July 25, 1990, when the State of New Mexico received hazardous and mixed waste authorization, respectively. The mixed waste management units at TA-54 West are exempt from the seismic standards in 20.4.1 NMAC § 270.14(b)(11), and 20.4.1 NMAC § 264.18(a) [6-14-00], because this unit existed prior to July 25, 1990 when the State of New Mexico received mixed waste authorization. Consistent with the criteria provided in 20.4.1 NMAC § 270.14(b)(11)(i), and 20.4.1 NMAC § 264.18(a) [6-14-00], the waste management units at TA-54 existed prior to the effective date of regulations or were approved under interim status; thus, the seismic standards are not applicable.
Page 79: ***A.3 LOCATION INFORMATION [20.4.1 NMAC §270.14(B)(11)]***
A.3.1 Seismic Standard [20.4.1 NMAC §270.14(b)(11)(i - ii) and 20.4.1 NMAC §264.18(a)]

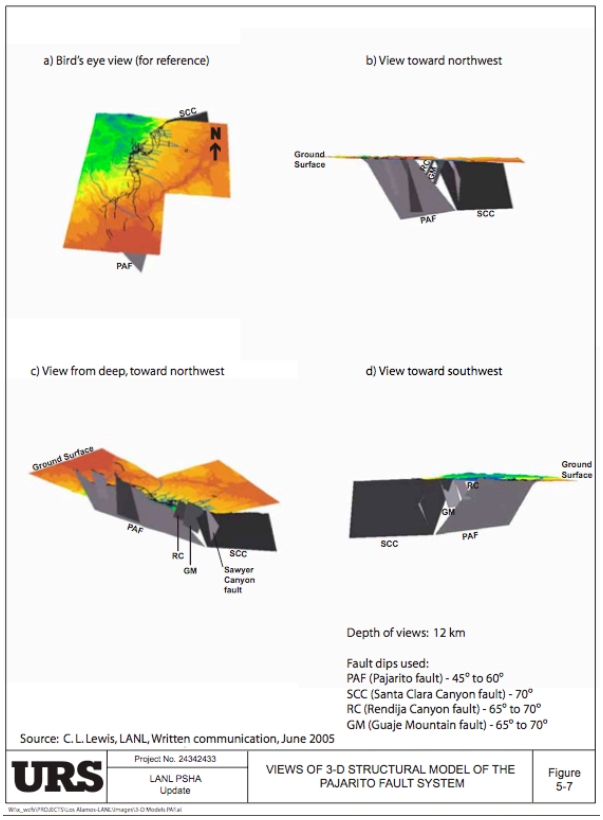
General seismic information for the LANL-wide facility is provided in Appendix A of the LANL General Part B. TA-55 is in compliance with the seismic standards of 20.4.1 NMAC §270.14(b)(11) and 20.4.1 NMAC §264.18(a) [6-14-00]. A geologic field investigation, which consisted of exploratory trenching, was conducted within 3,000 ft of TA-55-4 and TA-55-185 during the fall of 1992 and summer of 1993. Based on trench stratigraphy, no evidence of Holocene faulting was observed (Woodward-Clyde Federal Services, 1995).

We find it hard to believe that no other exploratory trenching has been conducted within 3,000 feet of TA-55 or TA-50 at LANL since 1993. Site-specific seismic investigations for each Permitted facility must be conducted and included in a revised draft Permit. The May 25, 2007 Update Of The Probabilistic Seismic Hazard Analysis And Development Of Seismic Design Ground Motions At The Los Alamos National Laboratory shows Holocene faulting at LANL. For example, page 5-12 states, "However, the paleoseismic record (discussed in the next section, Table 5-5) also strongly supports coseismic rupture of the PAF [Pajarito Fault] and RC [Rendija Canyon] and the PAF and GM [Guaje Mountain] during the Holocene, which indicates to us that this linkage, however new, will likely continue in future earthquake ruptures." And footnote 16 for Table 5-8 states, "Note that although the cumulative evidence strongly favors the occurrence of three separate Holocene events (P1, P2, and P3), evidence for all three as separate events is dependent on ages and correlating events between sites as evidence for all three events has not been identified at any one site." Although we have misgivings about the PSHA, this document must be included in this Permit.

There are known faults just over 3,000 feet of TA-55, but no determination has been made as to their age. There are older documents that show faults even closer. They may be part of the Rendija Canyon fault, which, as stated above, shows strong evidence of Holocene faulting. A final site seismic report for the Chemistry and Metallurgy Research Replacement (CMRR) project is still pending. This report may shed light on the faulting timeline at TA-55 and must be incorporated in this Permit. A new draft Permit must incorporate the latest seismic information.

Further evidence of Holocene activity at LANL can be found in "Geology of the Western Part of Los Alamos National Laboratory (TA-3 to TA-16), LA-13960-MS, December 2002" which states, "The youngest known faulting in the study area occurred in Holocene time on a down-to-the-west fault, recently trenched at the site of a new LANL Emergency Operations Center…" The Emergency Operations Center is about 13,700 feet from TA-55.

Figure 5-7 from the PSHA (attached below) shows that the Pajarito fault dips 45 degrees to 60 degrees. This places the fault directly under TA-55 and TA-50 at some point. What is this distance and how will it affect operations and regulations?



ATTACHMENT B PART A APPLICATION
On page 2 the date is listed as April 2005, rev.5.
Then it was changed 06/01/2006

LANL's central mission is the reduction of global nuclear danger supported by research that also contributes to conventional defense, civilian, and industrial needs. This includes programs in nuclear, medium energy, and space physics; hydrodynamics; conventional explosives; chemistry; metallurgy; radiochemistry; space nuclear systems; controlled thermonuclear fusion; laser research; environmental technology; geothermal, solar, and fossil energy research; nuclear safeguards; biomedicine; health and biotechnology; and industrial partnerships. LANL is owned by the U.S. Department of Energy (DOE) and is operated jointly by the DOE National Nuclear Security Administration and the University of California.
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"Our primary responsibility is ensuring the safety, security, and reliability of the nation's nuclear deterrent."

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Any discussion of LANL's mission without the mention of nuclear weapons is an obvious subterfuge and an admission that LANL is embarrassed of their actual current main mission. If LANL cannot state clearly in this Permit what its central mission is, how are we to believe that anything else in this Permit is not subterfuge? For this reason we request that NMED deny this Permit and we request a hearing. The words "nuclear weapons" must be included in LANL's mission description.

Edwin L. Wilmot, DOE/LASO Manager, is listed twice. He is no longer LANL's DOE/LASO Manager. This application must be updated. This copy of this application is not signed or dated. Is there a signed and dated copy?

Page 9 notes at the top, "Form Approved, OMB No. 2050-0034 Expires XX/XX/02." Has this form expired? This Part A should be updated and resubmitted for this reason.

Page 10 lists TA-14-23 as used for open burn/ open detonation. TA-14 is not listed in the permit. This Part A should be updated and resubmitted for this reason.

Page 11 states that there are 2 units burning 1,000 pounds per burn and 100 gallons per burn/40,000 pounds per burn.

Page 12 lists TA-36-8 as used for open burn/ open detonation. TA-36 is not listed in the permit. This Part A should be updated and resubmitted for this reason.

Page 15, 16, and 18 state that MDAs L, G, and H are "To be closed in accordance with New Mexico Administrative Code, Title 20, Chapter 4, Part 1, Subpart VI [10-01-03]. Permitted status is not requested."

Page 16, Process Codes and Design Capacities Technical Area 54, Area G lists the *PROCESS DESIGN Capacities* in units of volume, gallons and cubic yards. However, section XIV. Description of Hazardous Wastes, lists the wastes in terms of weight, such as pounds. Shouldn't the process capacities and the waste for each area be in the same units?

Page 18 lists TA-39 as used for open burn/ open detonation. TA-39 is not listed in the permit. This Part A should be updated and resubmitted for this reason.

ATTACHMENT D
CONTINGENCY PLAN

A discussion is needed of the seismic fragility of the fire water distribution system which can be found in ***Seismic Fragility of the LANL Fire Water Distribution System, LA-14325, March 2007***
From the report ;
...the DRAFT 2007 PSHA is estimated to increase the probability of water distribution system failure by a factor of 2 or less. (Pg. 32)
...results are highly dependent on the length of piping in the distribution system that can break. The results for CMR, RLWTF, TWISP, and WCRRF assume that existing isolation valves will be closed and that all piping that is not essential for supplying the nuclear facility from the distribution system will be removed.

• Up to 48 (CMR) isolation valves per facility may need to be closed to dedicate the water-distribution system to a specific facility and remove leaking branch lines.

• At this time, there is no protocol in emergency response that requires closing isolation valves.

• Closing the isolation valves will negate fire fighting capability at nonnuclear facilities.

• The potential for and consequences of closing the wrong isolation valve were not considered in this assessment. (Pg. 33)

ATTACHMENT G TA-50 CONTAINER MANAGEMENT

Please update the current use of TA-50.

ATTACHMENT O HAZARDOUS WASTE MANAGEMENT UNITS

TABLE O-4 Permitted Units Undergoing Closure

This table states that the permitted unit includes entirety of MDA-G. Please explain. Also, is Pit 29 the only pit containing hazardous waste?

TABLE Q-1 List of Off-Site Waste Management Facilities that May Return Treatment-Derived Waste or Waste Residuals to the Los Alamos National Laboratory

The types of wastes allowed from these sites must be listed.

TABLE Q-2 List of Off-Site Waste Management Facilities that May Send Waste to Los Alamos National Laboratory

Sandia National Laboratories is listed as the only possible source of off-site waste. Please list the potential wastes under consideration to send to LANL.

ATTACHMENT R COST ESTIMATES FOR FINANCIAL ASSURANCE

These estimates are low and can only show a predetermination for cap and cover. For example, a subtotal of $3,741,618 for closure for TA-54 is estimated. What type of closure these estimates are for must be included.

- End of comments -

Respectfully submitted,

Jay Coghlan, Executive Director

Scott Kovac, Operations Director