nuclear watch new mexico

November 26, 2001

Ms. Elizabeth Withers
NEPA Compliance Officer
Office of the Environment
DOE LAAO
528 35th Street
Los Alamos, NM 87544

Dear Ms. Withers,

Nuclear Watch of New Mexico submits the following comments on the draft Environmental Assessment (EA) (DOE/EA-1364) for Proposed Biological Safety Level (BSL)-3 Laboratory at Los Alamos National Laboratory (LANL).[1]

Comment Period on the draft Environmental Assessment

Nuclear Watch of New Mexico (NWNM) strongly objects to the imposed comment period as a whole and believes that the length of the comment period was far too short for a project with the size of scope as that outlined in the draft EA on the proposed BSL-3 facility. NWNM received notice from your office on November 6, 2001, of the opening of the comment period on October 30, 2001 and ending November 19, 2001.[2] Your letter did not include the draft EA, despite NWNM's submittal of substantial scoping comments to your office on July 10, 2001 and August 2, 2001.[3] NWNM was forced to write to your office to request a hard copy of the EA, which did not arrive until November 12, 2001, a mere 7 days before the close of the comment period.[4]

There has also been extensive public interest to extend the comment period, including two requests to that effect from U.S. Senator Bingaman (D-N.M.). Senator Bingaman stated that "An extension of the public comment period could strengthen the quality of the project and may [*sic*] in the best interest of enhancing the public process."[5] U.S. Representative Tom Udall also requested an extension to the public comment period, saying that "Concerns such as an analysis of … proposed disposal sites from BSL-3 waste are outstanding considerations that must be addressed and the public must be informed."[6] Additionally, your office failed to honor requests from the public to hold a formal public meeting on the draft EA. The Council on Environmental Quality (CEQ) states that

1 Predecisional Draft Environmental Assessment for the Proposed Construction and Operation of a Biosafety Level 3 Facility at Los Alamos National Laboratory, Los Alamos, New Mexico, DOE/EA-1364, October 29, 2001.

2 Personal Correspondence to Jay Coghlan, Nuclear Watch of New Mexico, from Elizabeth Withers, NEPA Officer, DOE LAAO, October 29, 2001.

3 "Nuclear Watch of New Mexico's Scoping Comments to the DOE for the Environmental Assessment on LANL's Proposed Biological Safety Level 3 Laboratory," July 10, 2001. Also "NWNM Addendum to its July 10, 2001 Scoping Comments," August 2, 2001.

4 Personal Correspondence e-mail to Elizabeth Withers, NEPA Officer, DOE LAAO, from Colin King, NWNM. Subject: BSL-3 Draft EA. November 7, 2001.

5 Personal Correspondence to Elizabeth Withers, NEPA Officer, DOE LAAO, from Senator Jeff Bingaman, U.S. Senate, November 16, 2001.

6 Personal Correspondence to Spencer Abraham, Secretary, DOE, from Representative Tom Udall, U.S. House of Representatives, November 19, 2001.

551 West Cordova Road #808, Santa Fe, New Mexico 87505-4100 Ph: 505.989.7342 Fax: 505.989.7352
e-mail: nuclearwatch@earthlink.net website: www.nukewatch.org

"Agencies shall … Make diligent efforts to involve the public in preparing and implementing their NEPA [National Environmental Policy Act] procedures … [and that agencies shall] Hold or sponsor public hearings or public meetings whenever appropriate or in accordance with statutory requirements applicable to the agency. Criteria shall include whether there is: … substantial interest in holding the hearing."[7] This statement by the CEQ legally binds all Federal agencies, including the Department of Energy's (DOE) National Nuclear Security Administration (NNSA). An additional public meeting or hearing would have required your office to extend the public comment period, yet you chose to ignore both the CEQ regulations and the many written requests to hold an additional public meeting. Senator Bingaman wrote in his second letter that "It has become clear to me that the community would like to put forth additional comments to enhance the Environmental Assessment and the project as a whole." He also stated that "It seems that the decision not to extend the public comment period was made without the benefit of comments received during the final days of the planned 21-day comment period."[8]

The unwillingness of your office to honor the requests by the public and Congressional members to hold an additional public meeting and or extend the comment period for the draft EA severely undermines the stated purpose of NEPA.

> It is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to *use all practical means and measures*, … in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.[9]

Furthermore, your decision may have an adverse impact on the quality of written comment from the public. The importance of public input into the NEPA process can be demonstrated by pointing to a recent example when the authors of these comments wrote in their comments to the Draft Site-Wide Environmental Impact Statement (SWEIS) that the hazards of wild fires had not been assessed at LANL.[10] The authors' worst fears came true when Northern New Mexico witnessed the terrible destruction of the May 2000 Cerro Grande Fire. Much of that destruction could have been avoided had LANL fully addressed and implemented a wild fire control and mitigation plan.

The Need for a Programmatic EIS For the NNSA's Chemical and Biological National Security Program

The National Nuclear Security Administration (NNSA), lead agency for the LANL BSL-3 Draft EA, has already initiated a well defined program through its Chemical and Biological National Security Program (CBNP). The CBNP is rapidly growing, for example: "Significant progress was made over the past year; partly because program funding was doubled from the FY99 level" [11] and

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7 CEQ 40 CFR 1506.6 (a), (c) 1.

8 Personal Correspondence to Richard Glass, Manager, DOE Albuquerque Operations Office, from Senator Jeff Bingaman, U.S. Senate, November 19, 2001.

9 (NEPA § 101. (*Emphasis added*)

10 "CCNS Review of the Draft LANL SWEIS, Jay Coghlan and Colin King, June 1998, p. 15.

11 CBNP FY00 Annual Report, NNSA Office of Nonproliferation Research and Engineering, p. 1.

the "CBNP budget increased from $18.5 M in FY 99 to $40.0 M in FY00 and retained that increase for FY01 ($42.1 M)." [12] Nor does the CBNP funding tally appear to capture the total cost for DOE activities with biological select agents. The DOE Office of Inspector General estimates that "the cost in FY 2000 of the Department's biological agent-related activities was in excess of $90 million."[13] In any event, total program funding will no doubt dramatically increase in FY02 following the recent terrorist and anthrax attacks.

This program is not new. As the NNSA states "The CBNP was initiated in 1997" with a clear "mission focus" for which "the development of requirements is a complex challenge involving governmental and non-governmental organizations at national, state and local levels."[14] The NNSA has developed a CBNP Strategic Plan [15] and recognizes that future "*programmatic* challenges" exist.[16] DOE Albuquerque officials have on at least one occasion undertaken "*programmatic* review of pertinent program documents." [17] (Emphases added.) The CBNP is multi-laboratory and spread across the nation. Those facilities identified by the DOE Office of Inspector General as having conducted biological experiments are the Brookhaven, Lawrence Berkeley, Lawrence Livermore, Los Alamos, Sandia-CA, Sandia-NM, Oak Ridge, Pacific Northwest and Idaho Engineering and Environmental National Laboratories.[18] Additionally, "Department laboratories are conducting Work-for-Others programs, Laboratory Directed Research and Development projects, and Cooperative Research and Development Agreement projects involving biological select agents and select agent materials." [19] As further indication of the reach of its potential impacts, the CBNP has already experimented on a large metropolitan and geographical area (Salt Lake City and the Great Salt Lake Basin).[20]

In sum, the CBNP is a large and rapidly growing program to which the NNSA has already committed "irretrievable resources." The program has numerous facilities located across the country that, by virtue of the materials that they work with, can have large potential impacts that could "significantly" affect the "human environment." [21] Yet, in what appears to be a clear violation of the National Environmental Policy Act (NEPA), the CBNP has not undergone public programmatic review. In these comments, Nuclear Watch of New Mexico attempts to make clear that that programmatic review is required.

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12 *Ibid*, p. 45.

13 "Investigation of Department of Energy Activities Involving Biological Select Agents," DOE/IG-0492, February 2001, p. 4.

14 The last three quotes are from the CBNP FY00 Annual Report, NNSA Office of Nonproliferation Research and Engineering, p. 5.

15 *Ibid*, p. 11.

16 *Ibid*, p. 48.

17 "Investigation of Department of Energy Activities Involving Biological Select Agents," DOE/IG-0492, February 2001, p. E-17.

18 *Ibid*, see pp. 16, 17 and 30.

19 *Ibid*, p. 4.

20 CBNP FY00 Annual Report, NNSA Office of Nonproliferation Research and Engineering, p. 167 - 170.

21 The last three quotes are phrases repeatedly used in the National Environmental Policy Act (NEPA) and implementing regulations. NEPA requires federal agencies to evaluate the potential environmental consequences of any proposed "major federal action." NEPA may require the preparation of an environmental assessment or a more comprehensive environmental impact statement. In the case of a proposed program, a broad programmatic environmental impact statement might be required (as Nuclear Watch of New Mexico argues in these comments).

In February 2001 the DOE Office of Inspector General released a report entitled "Inspection of Department of Energy Activities Involving Biological Select Agents." Under RESULTS OF INSPECTIONS, that office concluded:

> [T]he Department's biological select agent activities lacked organization, coordination, and direction. Specifically, the Department's activities lacked appropriate Federal oversight, consistent policy, and standardized implementing procedures, resulting in the potential for greater risk to workers and possibly others from exposure to biological select agents and select agent materials.[22]

As a result of its inspections the DOE IG Office made four primary recommendations to the DOE Under Secretary for Energy, Science, and Environment and the DOE Under Secretary for Nuclear Security [i.e., the NNSA]. The DOE IG Office recommended them to jointly:

1. Identify the types and locations of activities being conducted by the Department involving biological select agents and select agent materials.
2. Initiate actions to ensure: (a) appropriate federal oversight; (b) consistency in policy; and (c) standardization of implementing procedures for biological select agent activities being conducted by the Department. Actions, for example, could include encouraging more interagency cooperation in this area and, similar to the approach taken by the United States Army, supplementing CDC [Centers for Disease Control and Prevention] guidance regarding activities involving biological select agents and select agent materials to address situations unique to DOE.
3. Ensure that required NEPA reviews are conducted prior to the start of biological select agents and select agent materials and revised, as needed, when significant changes occur in the activities.
4. Initiate appropriate action to ensure the Department's laboratories, including those managed by the NNSA, receive timely and consistent information regarding CDC guidelines.[23]

The DOE IG report states that the Acting Director of the NNSA Chemical and Biological National Security Program generally concurred with all four recommendations. Specifically on the issue of NEPA compliance, the DOE IG report says that the "Acting Director stated that the Department is *required* to comply with NEPA. He stated that the Department will 'continue to address biological research within individual laboratory annual planning summaries and *otherwise according to Department requirements'* to ensure that that appropriate consideration is given to NEPA compliance *early in the planning process*." [24] (Emphases added.)

On the subject of "otherwise according to Department requirements," DOE NEPA Implementation Regulations, Sec. 1021.330, "Programmatic (including Site-wide) NEPA Documents," states:

> (a) When required to support a DOE programmatic decision (40 CFR 1508.18 (b) (3)), DOE shall prepare a programmatic EIS or EA (40 CFR 1502.4). (Emphasis added.)

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22 "Investigation of Department of Energy Activities Involving Biological Select Agents," DOE/IG-0492, February 2001, inspection transmittal letter to the DOE Secretary.

23 *Ibid*, p. 25.

24 *Ibid*, p. 27.

(b) A DOE programmatic NEPA document shall be prepared, issued, and circulated in accordance with the requirements for any other NEPA document, as established by the CEQ regulations and this part.

The above referenced 40 CFR 1508.18 (b) (3), "Major Federal action," states

(b) Federal actions tend to fall within one of the following categories: …

(3) Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive.

The above referenced 40 CFR 1502.4, "Major Federal actions requiring the preparation of environmental impact statements," states

(a) Agencies shall make sure the proposal which is the subject of an environmental impact statement is properly defined. Agencies shall use the criteria for scope (Sec. 1508.25) to determine which proposal(s) shall be the subject of a particular statement. Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.

(b) Environmental impact statements may be prepared, and *are sometimes required, for broad Federal actions such as the adoption of new agency programs* or regulations (Sec. 150.18). Agencies shall prepare statements on broad actions so that they are relevant to policy and are timed to coincide with meaningful points in agency planning and decision-making. (Emphasis added.)

The above referenced 40 CFR, Sec. 1508.25, "Scope," states

To determine the scope of environmental impact statements agencies shall consider 3 types of actions, 3 types of alternatives, and 3 types of impacts. They include:

1. Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they: …

(iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

Under "Purpose and Need for Agency Action " the Draft LANL BSL-3 EA says that "DOE conducts bioscience work at LANL in support of its national NNSA security and science missions and in support of the CBNP [Chemical and Biological National Security Program] …NNSA needs BSL-3 laboratory capability located at LANL." Thus, it is self-evident that the proposed LANL BSL-3 is an interdependent part of a larger federal action, which is the NNSA's Chemical and Biological National Security Program. In turn, the proposed LANL BSL-3 laboratory depends upon that program for its justification. It is also self-evident that the CBNP is a major federal action that has the potential to significantly affect the human environment. Just because the CBNP is an ongoing program that has not yet been programmatically reviewed under NEPA does not excuse it now from review. As NEPA states: "Actions include the circumstance where the responsible officials fail to act and that failure is reviewable by courts or administrative tribunals under the Administrative Procedures Act or other applicable law as agency action." [25]

25 40 CFR 1508.18, "Major Federal action."

The Department of Energy declares that "It is DOE's policy to follow the letter and spirit of NEPA; comply fully with the CEQ [Council on Environmental Quality] regulations; and apply the NEPA review process early in the planning stages for DOE proposals."[26] In contradiction, DOE's NEPA history is replete with major violations and failures to act.[27] Our present concern is further heightened by revelations that the NNSA's Chemical and Biological National Security Program has already arguably violated NEPA procedures at two of its facilities, the Chem-Bio Facility under construction at the Oak Ridge National Laboratory (proposed as a BSL-3 facility but without an environmental assessment) and a facility at Sandia-NM (whose original scope of work had significantly changed without related NEPA review).[28]

DOE was forced by citizens to prepare a Stockpile Stewardship and Management (SSM) PEIS for public review of Departmental proposals to consolidate and revitalize its nuclear weapons complex. That 1996 document said:

> This PEIS has been prepared in accordance with section 102(2)(c) of the *National Environmental Policy Act* (NEPA) of 1969, as amended (42 U.S.C. 4321 et seq.), and implemented by regulations promulgated by the Council on Environmental Policy (CEQ) (40 CFR 1500-1508) and DOE regulations (10 CFR 1021). Under NEPA, Federal agencies, such as DOE, that propose major actions that could significantly affect the quality of the human environment are required to prepare an environmental impact statement (EIS) to ensure that environmental information is available to public officials and citizens before actions are taken. *For broad actions,* such as the Stockpile Stewardship and Management Program, *a PEIS is prepared.* [29] (Emphasis added.)

Under the same NEPA requirements it should be noted that the DOE has also prepared a Waste Management PEIS, a Storage and Disposition of Weapons-Usable Fissile Materials PEIS and a Tritium Supply and Recycling PEIS.

From the perspective of required programmatic review under NEPA, Nuclear Watch of New Mexico asserts that there is little difference between the Stockpile Stewardship and Management Program and the Chemical and Biological National Security Program. Both were explicitly new programs involving the significant commitment of irretrievable resources and potentially significantly affecting the human environment. Yet one received programmatic NEPA review and one still has not. We hereby make the claim that the NNSA is required under NEPA to prepare a CBNP PEIS, and the agency should act quickly to do so.

Despite what seem to be clear NEPA requirements, the NNSA may still be loath to undertake a CBNP PEIS. The NNSA should be aware that public comment can be of great direct benefit to the agency. One example is that when DOE prepared a draft LANL Site-Wide EIS in 1998, this writer

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26 10 CFR, Chapter X, Part 1021 - "DOE NEPA Implementing Procedures," Sec. 1021.101 "Policy."

27 This writer has intimate knowledge of 1) DOE's past failure to prepare a new LANL Site-Wide EIS, 2) DOE's past failure to produce a Stockpile Stewardship and Management PEIS, 3) DOE's failure to prepare an Environmental Restoration PEIS, and 4) DOE's past failure to prepare an EIS for LANL's Dual Axis Radiographic Hydrotest Facility. As a co-plaintiff he successfully litigated against DOE on the last two issues.

28 "Investigation of Department of Energy Activities Involving Biological Select Agents," DOE/IG-0492, February 2001, p. 23.

29 Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management, DOE, September 1996, p. S-5.

commented that the risk of wildfire was completely omitted (an incredible omission!). DOE subsequently included in the 1999 Final LANL Site-Wide EIS a risk analysis of a model fire that eerily matched the all-too-real Cerro Grande Fire of 2000. As a result, the lab took some fire prevention measures that, among other things, helped to keep the waste dumps and storage areas at Technical Area-54 from burning. In the informal words of the director of the LANL's fire rehabilitation project the existence of that wildfire risk analysis saved the lab three critical days in determining appropriate emergency response measures while the fire raged. That analysis would not have existed without the NEPA process and related public comment.

Should the NNSA amicably agree to prepare a CBNP PEIS, Nuclear Watch of New Mexico contends that the SSM PEIS can serve as a useful model in a number of ways. First of all, the SSM PEIS provided a forum in which DOE could lay out its rationale and justification for the SSM Program. This is of analogous importance to the CBNP in that one of the major concerns expressed by the public over the proposed LANL BSL-3 facility is the propriety of locating a biological research facility at an institution whose historic mission has been the research and development of deliverable nuclear weapons. At the same time this is an issue that the mere appearance of which can be of international significance. LANL has emphatically and repeatedly denied that its future BSL-3 facility would ever be used for offensive purposes. A CBNP PEIS would help to lay the programmatic foundation for such assurances. Moreover, a CBNP PEIS could help build public and international confidence through discussion of the international treaty framework governing biological select agents and by institutionalizing transparency measures for the entire program under that framework.

Another way that the SSM PEIS can serve as a useful model is that that document served both as a programmatic review and facility-specific review. This is to suggest that in the course of a CBNP PEIS the NNSA could simultaneously prepare the programmatic review that we believe NEPA clearly requires and still move forward as appropriate in the NEPA process for the LANL BSL-3 facility.

A CBNP PEIS can also serve to promote needed interagency cooperation. To again quote the DOE IG Office's second recommendation, the NNSA should:

> 2. Initiate actions to ensure: (a) appropriate federal oversight; (b) consistency in policy; and (c) standardization of implementing procedures for biological select agent activities being conducted by the Department. Actions, for example, could include encouraging more interagency cooperation in this area and, similar to the approach taken by the United States Army, supplementing CDC guidance regarding activities involving biological select agents and select agent materials to address situations unique to DOE.

Related to this, under "Operations" the Draft LANL BSL-3 EA states:

> The BSL-3 facility would be operated according to all guidance and requirements established by the CDC and NIH (CDC 1999)… The CDC is the supporting governmental agency under the HHS responsible for the management of the Laboratory Registration/Select Agent Transfer (LR/SAT) program and would be the main point of contact for LANL's Facility Responsible Official.

In Nuclear Watch of New Mexico's view, the CDC should be designated as a "cooperating agency"

In Nuclear Watch of New Mexico's view, the CDC should be designated as a "cooperating agency" in a CBNP PEIS (and, for that matter, in the LANL BSL-3 EA), and not merely as a "supporting agency." As the lead agency in this NEPA process, the NNSA should request that designation.[30] The NNSA should be advised that to have the CDC's active participation in these NEPA processes would undoubtedly go a long ways towards alleviating public concerns over safety and health issues. In addition, given that the CDC is reportedly chronically underfunded, the NNSA should help financially support the CDC in any role that it might play as a cooperating agency.

Again in reference to the DOE IG's second recommendation (specifically to the phrase "similar to the approach taken by the United States Army") it needs to be noted that the U.S. Army prepared and released in April 1989 a Final Programmatic Environmental Impact Statement on its Biological Defense Research Program (BDRP).[31] Under "Description of the BDRP," the Army states that the "objectives of the BDRP are to develop measures for detection, treatment, protection and decontamination of potential biological warfare threat agents."[32] In a broadly similar mission, the "DOE Chemical and Biological National Security Program (CBNP) was initiated in FY1997 to engage the DOE and its laboratories more fully in the development and demonstration of new technologies and systems to improve U.S. domestic preparedness and response capabilities to chemical and biological attacks."[33] Like the Army's program, the NNSA's Chemical and Biological National Security Program is multi-facility across the nation, with the potential for significant impacts on the human environment. The Army found its PEIS "an excellent approach for considering unscheduled, unidentified future implementing actions that may have environmental impact," [34] acknowledged that the "jurisdiction" of its PEIS was "[n]ationwide," [35] and fulfilled its statutory NEPA obligations through the completion of its PEIS. In Nuclear Watch of New Mexico's view the DOE is under the same NEPA obligation to prepare a PEIS on its Chemical and Biological National Security Program, and should proceed to do so without delay.

The NNSA may perhaps argue that the present national security climate following the September 11 and anthrax attacks does not allow for the "luxury" of a programmatic EIS on its Chemical and Biological National Security Program. Even though we too recognize the increasing need for enhanced national defenses against the threat of chemical or biological attack, Nuclear Watch of New Mexico would argue otherwise. Obviously other governmental programs now exist (even present day activities at LANL) that are addressing current issues. Also obvious is the fact that all federal agencies, even in today's security climate, are still obliged to comply with NEPA. Moreover, as the SSM PEIS illustrates, programmatic review and facility review can still occur simultaneously. Therefore, the preparation of a PEIS is not an insurmountable obstacle to the NNSA's pursuit of a

30 As provided for by 10 CFR (DOE NEPA Implementing Regulations) Sec. 1021.342, "Interagency cooperation" and 40 CFR (CEQ Regulations for Implementing NEPA), Sec. 1506.6, "Cooperating agencies."

31 Although it is not completely clear, apparently the Army's decision to prepare a PEIS was forced by citizen litigation under NEPA in Foundation on Economic Trends v. Weinberger. See Final PEIS on the Biological Defense Research Program, U.S. Army, April 1989, p. 1-7.

32 *Ibid*, p.ES-1.

33 Draft LANL EA, p. 2.

34 Final PEIS on the Biological Defense Research Program, U.S. Army, April 1989, p. ES-3. This is relevant to a future DOE CBNP PEIS because as the Draft LANL BSL-3 EA states "other [DOE] facilities [specifically Sandia and Lawrence Livermore National Laboratories] may consider the construction and operation of BSL-3 facilities in the future." (p. 35.)

35 Final PEIS on the Biological Defense Research Program, U.S. Army, April 1989, cover sheet.

BSL-3 facility at LANL. Further, we contend that NNSA preparation and completion of a CBNP BSL-3 facility at LANL. Further, we contend that NNSA preparation and completions of CBNP PEIS, besides meeting legal obligations under NEPA, will serve to improve the program, specific facilities (such as the proposed LANL BSL-3 facility), interagency cooperation and public relations. We again urge the NNSA to fulfil its NEPA obligations by preparing a programmatic EIS for its Chemical and Biological National Security Program in a timely manner.

Comments Specific to the Draft LANL BSL-3 Environmental Assessment

Purpose and Need Misleading

Los Alamos National Laboratory (LANL) has a fairly lengthy history of conducting biological work at its current biological safety level (BSL) 2 facility. The current BSL-2 facility is part of a complex wide Department of Energy (DOE) National Nuclear Security Administration (NNSA) program called the Chemical and Biological National Security Program (CBNP). Two other laboratories operated by the NNSA, Sandia National Laboratories (SNL) (New Mexico and California) and Lawrence Livermore National Laboratories (LLNL) operate BSL-2 facilities that support the mission of the CBNP. In a January 2000 document, LLNL states that "A window of opportunity for aggressively building LLNL's biology program exists … A foundation for the expanded effort would be national security … [which] motivate why biology is done at LLNL. The collective life-science activities at LLNL currently represent over $50 million in funding …"[36] The draft EA for LANL's proposed BSL-3 facility claims that "LANL's pioneering technologies and capabilities … are unique."[37] LLNL, as well as SNL, could argue just as effectively that their own biological research programs are "unique," and that those programs equally support the strategic mission of the CBNP, as well as other DOE operated laboratories which support the CBNP "detection programs" such as Pacific Northwest National Laboratory.[38] The draft EA misleads members of the public and decision makers when it asserts that programs at LANL are unique. The section entitled "Purpose and Need for Agency Action" or another section of the EA must extensively address how the biological programs are unique at LANL specifically and how these programs are unique within the context of the support to the CBNP that they provide.

The second principal point for the justification of the proposed BSL-3 under "Purpose and Need for Agency Action" is that NNSA does not have "off-site" BSL-3 capable facilities readily at their disposal. The EA must provide an analysis of past NNSA research that has been conducted at off-site facilities. The EA must justify DOE's purpose and need for action by clearly documenting past experiences, cost-analysis of those activities versus activities that would be conducted at the proposed BSL-3 at LANL, and lessons learned from its off-site biological research efforts must be included.

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36 "2020 Foresight, Forging the Future of Lawrence Livermore National Laboratory, the Report of the Long-Range Strategy Project," UCRL-LR-137882, January 2000. http://www.llnl.gov/tid/lof/documents/pdf/238249.pdf

37 Predecisional Draft Environmental Assessment for the Proposed Construction and Operation of a Biosafety Level 3 Facility at Los Alamos National Laboratory, Los Alamos, New Mexico, DOE/EA-1364, October 29, 2001, Section 1.3, p. 9

38 CBNP, p. 24.

Seismic Activity and Structural Integrity of the BSL-3 Facility

LANL seismicity studies indicate that the Rendija Canyon fault runs through Technical Area (TA)-3, the proposed site of the BSL-3 facility. The Rendija Canyon fault has a potential of an earthquake up to 6.5 on the Richter scale.[39] The draft EA does not provide an analysis for seismic activity below 6.0 on the Richter scale, yet it has been indicated by LANL that uncertainties exist in the fault mapping of TA-3, where "subsurface faults could be undetected in the vicinity of the CMR [Chemical and Metallurgy Research] building … [at soil depths] <2 ft for the zone beneath the building."[40] Another stratigraphy study conducted for the Strategic Computing Complex within TA-3 concluded that "A fault or faults with less than about 2 ft of stratigraphic separation might not be detected by the current data sets."[41] These reports also indicate that there are reverse faults which feather out from the Rendija Canyon fault. Furthermore, there is the possibility that the Rendija Canyon fault is at a point where "the cumulative displacement of the Bandelier Tuff on the fault is between 0 and 2 ft."[42] LANL concludes that "TA-3 does have faults with vertical displacements in the range of 1 to 10 feet."[43]

The draft EA is incomplete because it does not include a risk analysis of Rendija Canyon fault activity within the range of <6 on the Richter scale. An event with a 5 on the Richter scale has the potential to cause substantial structural damage to the proposed BSL-3 facility. This magnitude of an event must be examined, particularly for the proposed prefabricated alternative in which "The NNSA may choose to purchase and install ready-assembled prefabricated BSL-3 and BSL-2 modular units …"[44] It is of the utmost importance that LANL do a comprehensive seismicity risk analysis using more realistic event probabilities for events < Richter 6 for the proposed prefabricated alternative.

The draft EA is also incomplete because it does not indicate whether either the prefabricated alternative or the full construction of the BSL-3 facility will meet safety standards for seismicity. A recent example of a LANL facility which failed to meet seismic codes was the Nuclear Materials Storage Facility (NMSF). The roof of the NMSF, which had a 2 to 3 feet of dirt placed on top of it, failed to meet seismic codes.

Furthermore, the draft EA is incomplete because it does not contain a detailed construction plan for the proposed BSL-3 facility. A detailed construction plan is required so that LANL can avoid design and construction deficiencies. Another recent and embarrassing example of poor design and construction can again be seen with the NMSF. After construction of the NMSF, LANL discovered that the docking bay for Safe and Secure Trailers transporting plutonium pits was found to be too

39 Site-Wide Environmental Impact Statement for the Continued Operation of the Los Alamos National Laboratory, Volume 1, Chapter 4, Section 4.2.2.2, Table 4.2.2.2-1.
40 "Stratigraphy and Geologic Structure at the Chemical and Metallurgy (CMR) Building, Technical Area 3, Los Alamos National Laboratory," p. 30.
41 "Stratigraphy and Geologic Structure at the SCC and NISC Building Sites, Technical Area 3, Los Alamos National Laboratory, New Mexico," p. 20.
42 *Ibid.*
43 Site-Wide Environmental Impact Statement for the Continued Operation of the Los Alamos National Laboratory, Volume 1, Chapter 4, Section 4.2.2.2.
44 Draft EA, p. 31.

narrow for the trailer doors to open. This blatant and embarrassing oversight by LANL caused LANL and the taxpayers some $25 million. Had LANL chosen to occupy the NMSF, this problem would also have caused serious safety risks, not to mention security vulnerabilities. Therefore, a detailed design must be provided to the public so that LANL does not experience additional costly setbacks or jeopardize the workers and community it purports to protect.

Facility Safety and Operations

LANL historically has a poor safety record with the materials that it currently handles. On October 9, 2001, a DOE office cited LANL for numerous issues of non-compliance for its implementation of technical safety requirements for the Critical Assemblies LANL operates at the Los Alamos Critical Experiments Facility (LACEF) located at TA-18. The DOE office concluded in its letter of citation that LANL's failure to implement technical safety requirements demonstrated that "Continued violations … indicate that the quality controls necessary to ensure compliance are not adequate," and concludes that "continued violations … that are necessary to ensure safe operations of the Critical Assemblies could, if left uncorrected, lead to a more significant critical event."[45] NNSA activities at LACEF are another unique national security program, yet simple oversight of institutional safety requirements had grave potential to injure workers and the public. LANL was also found to be in non-compliance with the Clean Air Act for 6 consecutive years. LANL demonstrated an unwillingness to correct this dangerous non-compliance until a citizen lawsuit resulted in a court order that forced them to do so.

More recently LANL's Bioscience division (B-division), the future operators of the proposed BSL-3 facility, admitted that they had a shipping incident. On October 26, 2001, a package arrived at the B-division which was marked virulent anthrax. B-division does not currently have a facility that is equipped to handle or contain strains of virulent anthrax. Had the package been improperly marked and opened, virulent anthrax would have entered the facility with potentially deadly consequences to workers.[46]

The draft EA also asserts that "There have been no reported incidents at LANL related to the shipment of biological samples."[47] This is an egregious misstatement of fact, even prior to the October 26, 2001, event. In February 2001 the DOE Office of Inspector General (IG) reported that "A Los Alamos Principal Scientist told [the IG] that the laboratory shipping and receiving department received a shipment of select agent DNA with crushed inner and outer containers."[48] Had there been virulent anthrax or another select agent within this damaged package, workers at LANL or US mail carriers may have been exposed. Such an exposure could have had deadly results.

Though B-division representatives insist that operations at the proposed BSL-3 facility will be safe, the evidence points to many flaws in LANL's safety preparedness which need to be comprehensively addressed in the EA.

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45 Personal Correspondence to John Browne, Director, LANL, from R. Keith Christopher, DOE, Director, Office of Price-Anderson Enforcement, October 9, 2001. http://tis.eh.NNSA.gov/enforce/els/ellanl100901.htm

46 "Glitch Prompts Review of How DNA Samples Are Sent to Lab," *Albuquerque Journal*, November 21, 2001.

47 Draft EA, p. 47.

48 "Inspection of Department of Energy Activities involving Biological Select Agents," February 2001, DOE Office of Inspector General, report *No. DOE/IG 0492*, p. 19.

1. Hazard Control Plans and Safety Documentation

The Draft EA states that "All work with infectious microorganisms in the proposed facility must be approved by the IBC [Institutional Biosafety Committee] and authorized by UC [University of California] management in strict accordance with the following directives: … LANL safety and security documentation (Facility Safety Basis, Facility Safety Plans, Hazard Control Plans, Human Pathogens Exposure Program, and security assessments)."[49] On November 16, 2001, a mere 3 days before the official close of the draft EA comment period, the Federal Project Manager for LANL's BSL-3 facility said that "The preliminary forms of these documents are under preparation and will only be finished and published as formal documents if a decision is made for the BSL-3 facility project to go forward."[50] These documents are the institutional guidelines for the safe operation of the facility, are incorporated into the EA as such, yet they did not exist in a form that was reviewable by the public. Not only does this suggest that LANL still does not have adequate safety plans in place despite having been requested in public scoping for the draft EA,[51] but is in explicit contradiction to the DOE's own Implementing Regulations as well as NEPA regulations set forth by the CEQ. The CEQ states that "No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment."[52] DOE's own regulations written to implement the CEQ document state that "DOE shall make its NEPA documents available … [to] interested groups, and the general public …"[53] The draft EA uses documents that do not exist to demonstrate the facility is safe. That purported safety, however, is left in doubt when those safety documents do not officially exist nor are their draft versions available for the public to provide input, thereby rendering the NEPA process on the proposed BSL-3 facility incomplete.

Hazard and accident analysis along with hazard control plans and other safety plans are required by the DOE, along with other agencies such as the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH) who are responsible for public health and the oversight of facilities such as the proposed BSL-3. DOE recently released guidelines for work with biological organisms. These guidelines mandate a review be conducted on all work involving biological agents and that the facility contractor demonstrate that it has fulfilled all of its safety obligations in accordance with CDC, NIH, and the World Health Organization (WHO). The DOE guidelines specifically require an Institutional Biosafety Committee (IBC). The IBC has the authority to approve or deny research proposals as well as review all safety documents and verify safety requirements and implementation. The guidelines order that the IBC will conduct a review and that "This review should include assessment of containment level, facilities, procedures, practices, and training and expertise of personnel. In addition, this committee should review the site's security, safeguards, and emergency management plans and procedures to ensure that they

49 Draft EA, p. 24.
50 Personal Correspondence to Colin King, NWNM, from Tom Rush, Los Alamos Area Office, Los Alamos, NM, November 16, 2001.
51 "Nuclear Watch of New Mexico's Scoping Comments to the DOE for the Environmental Assessment on LANL's Proposed Biological Safety Level 3 Laboratory," July 10, 2001, p. 3.
52 40 CFR 1502.21.
53 10 CFR 1021.31.

adequately address work with biological etiologic agents."[54] The IBC must play an integral role in the planning and design of the BSL-3 if it is to determine the adequacy of the proposed BSL-3 facility safety and security. This cannot be accomplished if the required safety and security documents do not exist.

LANL has also, in the past, used documents that are not specific to the handling of biological organism to determine safety requirements. The LANL Biological Safety Officer stated that on August 13, 2001, prior to the approval of DOE Notice 450.7, that "at this point in time there are no [DOE] orders that are specific to biological select agents."[55] Additionally, the DOE Office of Inspector General found that the LANL Biological Safety Officer's division "had not conducted the required assessments and evaluations of the laboratory's biosafety program."[56] This is a very disturbing fact that not only puts into question safety procedures within LANL, but also suggests a poor safety review process within the LANL IBC, the very institution that is responsible for determining the adequacy of biological safety procedures at LANL. Before LANL can continue construction of its proposed BSL-3 facility, the DOE must institute a very specific set of guidelines. Those guidelines must include specific functions and responsibilities of IBCs at DOE facilities. The guidelines also must address specific procedures for the creation of hazard control plans and other safety analysis and must state when and who are to prepare those plans/analysis and must be so specific as to address requirements for hazard control plans for every individual biological agent that the DOE plans to research. Requirements for specific hazard control plans and safety analysis are vital because of the many different risks posed by different biological agents. They are also vital because hazard control plans will be used to determine the level of response to an accident within the laboratory.

Emergency Preparedness

The draft EA claims that "LANL occupational medicine and the local medical community would be informed of the microorganisms to be handled in the BSL-3 laboratories and would be aware of the methods of identification and control of associated diseases"[57] This does not fully address the complex issues of local emergency response. LANL is obligated to ensure that local emergency response teams are properly trained to identify a patient's symptoms in order to determine whether those symptoms correspond to organisms at the proposed BSL-3. LANL is obligated to provide all the appropriate equipment, medicine, and facilities that would be needed for local medical personnel to handle and treat patients exposed to those organisms. LANL is also obligated to inform local emergency response teams and medical personnel when they are conducting research on a specific agent, what that agent is, to verify that adequate training has been conducted in the event of an emergency, and to verify that the local medical facilities have the capability to handle an emergency should an accident occur. This means that complete transparency is required between the local medical community and LANL. Furthermore, at least one member of the local medical community who is not affiliated with LANL must at all times be sitting in the Institutional Biosafety Committee.

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54 "The Safe Handling, Transfer, and Receipt of Biological Etiologic Agents at Department of Energy Facilities," DOE Notice 450.7, October 17, 2001.

55 Personal Correspondence to Colin King, NWNM, from Dina Sassone, Biological Safety Officer, ES&H-5, LANL, August 13, 2001.

56 DOE/IG 0492, p. 15.

57 Draft EA, p. 24.

Institutional Biosafety Committee

The Institutional Biosafety Committee (IBC), now required by DOE Notice 450.7, must be a completely transparent organization. LANL says that "LANL's Institutional Biosafety Committee (IBC), which includes both subject matter experts (SMEs) and independent peers is the key to biosafety at LANL."[58] The Implementing Requirements go on to say that "This panel of SMEs and independent peers in biosafety and public health shall provide assurance to Laboratory management, employees, and members of the public that due care is being exercised for operations involving bioagents/biohazards. The existence and composition of the IBC shall be governed by NIH guidelines and shall include researchers from divisions that perform work involving biological operations, occupational medicine and industrial hygiene personnel, community health care providers, and at least two members of the community not associated with the institution or the work."[59]

If LANL is to find acceptance of the proposed BSL-3 facility within the local communities LANL must create an atmosphere of complete transparency for its biological research program. That transparency includes strict compliance with the above Implementing Requirements. Such a transparent environment can only be enhanced by maintaining an autonomous IBC composed of all interested parties. The IBC must always have final decision making powers that supersede all decisions within LANL, NNSA, or the DOE. The IBC must be structured in such a way that members of the general public may petition for a place on the committee. The IBC must always have at least a minimum of 2 members of the general public as well as appropriate members of the local emergency response teams and medical community. The IBC must meet on a monthly basis and their meetings must always remain open to the public. The minutes of the IBC must be posted on the B-division web site in a timely fashion. If these conditions are not met by LANL, all biological work conducted at LANL could become shrouded in secrecy which will only instill further distrust among the public.

Terrorism Risk Analysis

The draft EA claims that "Scenarios involving a deliberate terrorist attack are not considered and evaluated in the same way as potential accidents in a NEPA analysis. These latter events lend themselves to a conventional approach of qualitative and quantitative analyses of probability and consequence, so that the Federal Manager, and members of the public, can see the residual risks posed by the activity to the workers, public, and the environment as required by NEPA."[60] In light of the terrible events of September 11, 2001, and those that followed, a "conventional approach" is not a valid method to determine the risks associated with a facility that will be conducting research on biological agents "historically used for bioweapons."[61] The events of 9/11 demonstrated that terrorists will use very unconventional methods to achieve their goals. Not only is it necessary to assess perimeter security as part of a terrorist risk scenario, but it is also an absolute necessity to assess unconventional risks such as the use of commercial airliners as weapons against facilities like

58 Laboratory Implementing Requirements 402-530-00.1, Section 1, p. 1.
59 *Ibid*., Section 6.1, p. 5.
60 Draft EA, p. 74.
61 *Ibid*., p. vii.

the proposed BSL-3 laboratory. Such analyses would comprise worst case scenario, but the events of the past two months demonstrate that a worst case may be a very probable case. The risk analyses provided in the draft EA is grossly inadequate. LANL perimeter security and its security forces have failed on a number of occasions to protect high risk areas at the laboratory during mock terrorist attacks. The BSL-3 facility, because it handles biological agents "historically used for bioweapons," is immediately at risk to a deliberate terrorist attack designed to penetrate and capture inventories of the microorganisms at the facility. The EA must include a comprehensive risk analysis of a direct assault on the BSL-3 laboratory and must describe measures LANL will undertake to minimize that risk.

> "Accident scenarios," the draft EA claims, "usually envisioned for DOE facilities, that would normally be seen to exacerbate or enhance a release of spread of the hazardous materials, would for the BSL-3 facility potentially render these materials innocuous (heat, fire, and wind). These are not applicable for work with microorganisms and would usually result in microorganisms being killed. Consequently, catastrophic events such as earthquake, fire, explosions and airplane crashes, normally considered as initiating events in DOE accident analyses, were viewed as having the potential to reduce the consequences of release."[62]

The risk analyses, as provided in the draft EA, appear to consider events that happen during daylight hours when microorganisms released from the proposed BSL-3 facility would be quickly killed by ultraviolet (UV) light.[63] Structurally damaging earthquakes, that have the potential to cause containment breaches, are just as likely to occur during the night when no UV rays exist as they are during the day. It is also known that anthrax and anthrax spores survive in windy conditions and once released from their containment can become airborne. The dismissive language under the draft EA's accident scenario also suggests that only explosions or aircraft crashes that occurred within or impacted on the facility were considered. What appears to not have been considered are explosions or aircraft crashes in proximity to the proposed BSL-3 facility that would only cause structural damage, but not fire, which would cause a containment breach. This is a dangerous oversight and a comprehensive accident analysis needs to be conducted for such a scenario. Such scenarios do not have "the potential to reduce the consequences of releases." In the post September 11th world, facilities such as the BSL-3, which are potential terrorist targets or house materials of use to terrorists, risk analysis must be conducted in the most complete and "unorthodox" manner.

Shipping and Receiving

For shipping and receiving biological select agents and materials, the draft EA says that "Samples could only be shipped to LANL by commercial package delivery services, the U.S. Postal Service, other authorized entity, or delivered to the receiving area from an originating point within LANL by a designated LANL employee acting as a courier."[64] The draft EA continues to state that "Current estimates are that shipments to and from LANL would be about 10 to 60 per month."[65] That is compared to "4 in and 2 out per month now."[66]

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62 *Ibid*., p. 69.
63 *Ibid*., p. 61.
64 *Ibid*., p. 27.
65 *Ibid*.
66 *Ibid*.

Such an increase in the volume of shipments containing biological agents to and from LANL greatly increases the chances of accidents. As stated above, there have already been a couple of reported shipping incidents. These incidents have occurred when the volume of shipments have been substantially lower than they would be if the proposed BSL-3 facility were constructed. LANL must demonstrate that it has developed and implemented a hazard control plan to address potential incidents related to the receipt of biological organisms. In February 2000 the DOE's Office of Inspector General found that such a plan was lacking.[67] Such a plan must be implemented immediately, before further consideration of the proposed BSL-3 can move forward. The lack of a hazard control plan for shipping and receiving is a serious oversight, and the potential for a greater number of accidents related to shipping and receiving will be undoubtedly increased with the proposed increase in shipments.

The increase in shipments also increases the vulnerability of packages containing biological agents to terrorist seizure. U.S. Department of Transportation regulations require that the exterior shipping containers holding biological materials, while in transit, be appropriately marked with the red "bio-hazard" symbol. The name of the organism must also be marked. Because these packages are easily identified by their external packaging, they are at risk from terrorists who might attempt to seize the package while it is in transit. This also puts the carrier, whether it is the U.S. Postal Service (USPS) or another entity, at risk. This is a threat that extends much further than LANL, and must be considered by all appropriate agencies. Careful planning and coordination must be conducted by LANL, NNSA, and the DOE with the carriers. Such an effort must also include the labor unions who are responsible for the safety and security of the work forces for the effected carriers.

Individual employees of carriers, including the USPS, are also at risk to damaged packages containing biological agents. The un-preparedness of the USPS and the CDC to quickly respond to the recent cases of anthrax exposure has been dismally demonstrated. If the proposed BSL-3 facility is truly being built for national security reasons, then LANL, NNSA, and DOE must extensively aide agencies, such as the USPS, to develop their own safety and security measures.[68]

Unregulated Microorganisms

LANL proposes in the draft EA that it "… could handle other bacterial or viral infectious organisms not specifically or currently regulated by CDC or other Federal agencies …"[69] The draft EA continues by saying that "Only by prior approval of the LANL Institutional Biosafety Committee (IBC), and after a risk analysis is conducted, would any infectious agent be considered for use in the proposed laboratories."[70] Given the apparent present lack of hazard control plans and adequate safety analyses of the proposed BSL-3 facility, which points to a fundamental lack of preparedness

67 DOE/IG 0492, p. 19.

68 On October 30, 2001, Bill Burrus, Executive Vice President of the American Postal Workers Union, testified to the Senate Governmental Affairs Committee that "The United States Postal Service accounts for approximately 8 percent of America's Gross Domestic Product." Ensuring the safety of the hundreds of thousands of USPS employees and the security of such an important part of the American economy is without doubt a matter of national security. "Burrus Takes Message of Pride and Concern to U.S. Congress," *News Service*, American Postal Workers Union, Volume XXXI, No. 29.

69 Draft EA, Appendix B-1, p. 4.

70 *Ibid*.

or capability of the IBC, which is responsible for these safety plans, how can LANL justify the suggestion that they will safely study organisms unregulated by Federal agencies? What microorganisms would this include and would they potentially be emerging infectious diseases? The draft EA's claim that the BSL-3 facility could study unregulated organisms cannot be justified without examining potential risks associated with those studies in the EA. The EA must also indicate the names of microorganisms that may be considered for research. Furthermore, the DOE IG's interpretation of NEPA would require an additional NEPA review for these organisms. In its February 2000 report, the IG states that "… although a NEPA review had been conducted by Sandia-NM of the original scope of work … significant changes, [as the] introduction of the select agent *Y. pestis EV76*, had been made without an additional NEPA review."[71] According to this interpretation of the NEPA process, LANL must conduct a NEPA review (a public process) each time it introduces a new biological agent for research in any of its facilities.

Respectfully submitted,

Jay Coghlan
Director

Colin King
Research Director

71 DOE/IG 0492, p. 23.