nuclear watch new mexico

Nuclear Watch of New Mexico s Scoping Comments to the DOE for the Environmental Assessment on LANL s Proposed Biological Safety Level 3 Laboratory

Nuclear Watch of New Mexico submits the following comments on the Proposed BSL-3 Laboratory. A summary of conclusions can be found at the end.

The Los Alamos National Laboratory (LANL) Biological division (B division) Draft Bioscience Division Laboratory Supporting Plan of July 31, 2000 states that B division will "… evaluate and potentially establish BSL-3 [Biological Safety Level 3] designation within B division [using a] comprehensive communications plan to engage ... the public in evaluating the proposed project and its impacts." It goes on to state that "this communications plan has been developed." (p. 11) In partial fulfillment of its comprehensive communications plan, LANL has conducted several "poster" sessions in the cities of Los Alamos and Santa Fe. The literature provided at these poster sessions was severely lacking in substance. This information failed to note to the public participating in these discussions that B division already has a biological research laboratory which has been used to conduct research on biological select agents such as attenuated Bacillus anthracus (the bacterium that causes the fatal disease anthrax) . The poster sessions also failed to inform the public stakeholders that the proposed BSL-3 facility will be able to study highly dangerous aerosolized organisms such as strains of fully viable B. anthracus (Bacillus anthracus).

In addition to the lack of forthrightness in the materials provided at the LANL sponsored poster sessions, B division fails to have any readily available materials concerning the proposed BSL-3 laboratory either directly from staff or on B division s web site. Shortly after receiving notice of the comment period on the scope of the Environmental Assessment (EA) for the BSL-3 laboratory, Nuclear Watch of New Mexico (NWNM) requested information on the facility. The National Environmental Policy Act (NEPA) Compliance Officer had no information on the proposed facility. The information requested by NWNM came in the form of web site links and these were received over two weeks later from the Team Leader of the BSL-3 Facility Project. With the exception of one link, all nine links were for sites other than LANL, and thereby failed to comprehensively address what LANL s intentions are for the BSL-3 laboratory. These facts suggest that B division does not in fact have a "comprehensive communications plan." If LANL is to conduct an EA in accordance with NEPA s stated purpose, then LANL and B division must make a greater effort to educate the public stakeholders and provide the public with forthright information on the proposed BSL-3 laboratory.

According to Congress, NEPA s stated purpose is:

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[T]o use all practical means and measures, including financial and technical assistance, 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. (NEPA/10)1. (Emphasis added)

The importance of NEPA/101 and the need for openness through public discussion and input is illustrated by the DOE Office of Inspector General s (OIG) findings. The OIG released a report in February 2001 entitled Inspection of Department of Energy Activities Involving Biological Select Agents. This report states the following:

"The Los Alamos Principal Investigator [interviewed in January 2000] acknowledged that Los Alamos had an extensive biological select agent program involving attenuated B. anthracus, as well as DNA of several biological select agents. We were subsequently advised by another Los Alamos Principle Investigator that Los Alamos was proposing to begin experiments with an infectious form of B. anthracus." (pp. 7-8)

Yet while the studies on B. anthracus were being conducted "[Albuquerque Operations Office] officials were unaware of experiments being conducted at Los Alamos with attenuated B. anthracus and with DNA of several select agents." (p. 7)

The OIG states that "… in the absence of safety and security oversight of these projects by either Albuquerque or NN-20 officials, there appears to have been insufficient Federal safety and security oversight of the NN-20 work involving biological select agents and select agent materials being conducted at the Albuquerque laboratories." (p. 8) This statement is supported by a DOE Albuquerque Operations (AL) investigator looking into these safety and security violations at Los Alamos. This investigator stated that "… he believed that in the absence of [information on projects proposed or under-way] or coordination [of those projects] there is no ability of AL to provide oversight or security. " (p. 9) Before LANL receives the proper permitting from the Centers for Disease Control (CDC) to build a BSL-3 laboratory, they must first demonstrate that they are capable of developing and implementing a comprehensive intra- and inter-departmental/agency communications plan. LANL must be fully accountable to Albuquerque Operations Office, the CDC, and the National Institutes for Health (NIH) in all regards and for all research conducted with biological select agents. DOE, CDC, and NIH must cooperate with each other and the lead agency (the DOE in this case) as stated in the Council for Environmental Quality s Regulations 40 CFR Section 1501.5. In addition:

Upon request of the lead agency, any other Federal agency which has jurisdiction by law shall be a cooperating agency. In addition any other Federal agency which has special expertise with respect to any environmental issue, which should be addressed in the statement may be a cooperating agency upon request of the lead agency. An agency may request the lead agency to designate it a cooperating agency. (CEQ Regulation 40 CFR 1501.6.)

DOE Implementing Procedures Section. 1021.342 "Interagency cooperation" states that "DOE will comply with the requirements of 40 CFR 1501.5 and 1501.6. As part of this

process, DOE shall cooperate with the other agencies in developing environmental information and in determining whether a proposal requires preparation of an EIS [Environmental Impact Statement] or EA [Environmental Assessment]."

The OIG report goes on to say that:

"We were told by the Los Alamos responsible facility official that Los Alamos has no special procedures or specific training regarding their receipt of shipment of select agents. In addition, we were told by the Los Alamos Biosafety Officer that Los Alamos also lacked a hazard control plan for damaged packages containing biological agents received by the Los Alamos shipping department." (p. 19)

There is some indication that this problem may have been addressed, but the authors of the OIG report have severe reservations about the claimed remedy, going on to assert that "We believe that due to the potential safety and health risks associated with biological agents, specific procedures should be developed to handle damaged packages containing biological select agents and select agent materials received by the Los Alamos shipping department." (p. 20) LANL must fully demonstrate that it does indeed have a plan developed; that its shipping and receiving people are adequately trained to respond to an emergency involving any biological select agents; that regular training and drills are conducted to demonstrate the effectiveness of the plan; and that the shipping and receiving department is fully compliant with CDC regulations. Those regulations require "… a BSL-2 facility for receipt and containment of DNA from biological select agents …," (p. 19) and that LANL follow all applicable requirements under 42 CFR Part 72, etc.

The authors of the OIG report recommended that DOE and the National Nuclear Security Agency (NNSA) jointly "Ensure that required NEPA reviews are conducted prior to the start of biological select agent and select agent material activities and revised when significant changes occur in the activities." (p. 25) LANL must set or follow a standard which determines what "significant changes" are, thus determining when a NEPA review is required for continuing studies or a change in research scope. A NEPA review should be completed before any new select agent or select agent material is studied. In an OIG March 13, 2000, Letter Report on work conducted at Sandia National Laboratory, New Mexico, significant changes include: " changes in work location and introduction of the select agent Y. pestis EV76 …" which was not included in the scope of the original NEPA review. (p. 23)

The EA should cover such areas as:

1) The capability of the BSL laboratory to securely contain the material;

2) The technical readiness of the researchers and emergency response teams within LANL, as well as other relevant agencies (the CDC, National Forest Service, National Park Service, the County of Los Alamos, and all applicable Tribal Governments such as the San Ildefonso Tribe) to address a breech of containent within the laboratory;

3) The impact on human health and the surrounding environment should a breech

of containment be severe enough to escape the laboratory;

4) The CDC and AL are kept informed of all ongoing activities involving biological select agents and select agent materials;

5) The protocols for LANL and AL to conduct reviews of its biological safety program on a regular basis (at least yearly).

It is the opinion of NWNM that an EA is insufficient in the light of the information put forth in these comments. DOE NNSA, LANL, and the B division are inadequately prepared to undertake the responsibility of maintaining a BSL-3 facility intended to contain easily aerosolized biological select agents and select agent materials. The OIG report states that:

"We concluded that there was insufficient organization, coordination, and direction in the Department s biological select agent activities. Specifically, the Department s activities lacked sufficient 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 maintained by the Department." (p. 2)

LANL has a very poor track record with respect to its environmental safety and health issues that surround nuclear weapons production. In light of this fact, how can LANL justify the proposed BSL-3 facility without a comprehensive and proven Biological Safety Plan which works hand in hand with the CDC and the public, should an accident occur? We believe that a full EIS is required to develop and lay out that plan, including DOE NNSA responses to public comments on that plan through the NEPA EIS process. The proposed BSL-3 (and the Department wide Chemical and Biological National Security Program) laboratory falls under the CEQ regulations as a Major Federal action and is a new mission for DOE NNSA. An EIS " [is] sometimes required for broad Federal actions such as the adoption of new agency programs or regulations. 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 decisionmaking." (CEQ Regulation 40 CFR Section 1502.4 (b)) According to CEQ Regulation 40 CFR Section 1508.18 "Major Federal action," a " Major Federal action includes actions with effects that may be major and which are potentially subject to Federal control and responsibility." Federal actions include "Adoption of official policy, such as rules, regulations, and interpretations adopted pursuant to the Administrative Procedures Act, 5 U.S.C. 551 et seq.; treaties and international conventions or agreements; formal documents establishing an agency s policies which will result in or substantially alter agency programs." (CEQ Regulation 40 CFR 1508.18 (b) (1)) The CEQ goes on to say that an EIS may examine the proposal "By stage of technological development including federal or federally assisted research, development or demonstration programs for new technologies which, if applied, could significantly affect the quality of the human environment." (CEQ Regulation 40 CFR 1502.4 (c) (3))

The BSL-3 and the DOE NNSA Chemical and Biological National Security Program are felt by NWNM to be actions with unknown consequences and results. Because of the current lack of oversight and security issues within LANL and the Chemical and

Biological National Security Program nation-wide, DOE NNSA must examine the consequences of the biological select agent research, both proposed and currently under-way, as is relevant to CEQ s definition of significant Federal action. "This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Both short-and long-term effects are relevant." (CEQ Regulation 40 CFR Section 1508.27 (a))

These impacts include:

a) "Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

b) The degree to which the proposed action affects the public health or safety.

c) Unique characteristics of the geographic areas such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

d) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

e) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future con sideration." (CEQ Regulation 40 CFR 1508.27 (b) (1), (2), (3), (4), (5), & (6))

DOE NNSA and LANL must examine their BSL-3 laboratory proposal with (but not limited to) these highlights of the CEQ s Regulations. But before they continue with any EA or EIS on the BSL-3 proposal at LANL, DOE NNSA must conduct a programmatic review of all of its Chemical and Biological National Security Program nation-wide. In addition to safety and security oversights at LANL and Sandia National Laboratory, Albuquerque, the OIG cites several other national laboratories for other egregious safety concerns.

The OIG states that the Idaho National Engineering and Environmental Laboratory (INEEL) was conducting research on dead "B. abortus cells received from the Department of Agriculture." (p. 11) INEEL failed to register the organisms with the CDC, in violation of 42 CFR Part 72.

The OIG also cites Sandia National Laboratory, California, for failing to register with the CDC receipt of "A and B strains of botulinim toxin heavy chains and both subunits of ricin." (p. 11)

One of the more egregious citations by the OIG was one in which Brookhaven National Laboratory "submitted a registration application to CDC for receipt of intact botulinim toxin." Brookhaven officials mislead the CDC as to where the toxin was to be studied. (p. 13)

Oakridge National Laboratory, at the writing of the OIG report, was in the process of constructing a BSL-3 laboratory for research on botulinim toxin.

Lawrence Berkeley and Lawrence Livermore Laboratories are conducting research on

attenuated B. anthracus. (pp. 17-8)

The research into biological select agents has developed to such an extent that it is necessary for DOE to conduct a Programmatic EA or EIS, if it is to follow its own Implementing Procedures and CEQ Regulation. In Section 1021.330 of the DOE Implementing Procedures, it is stated that "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)." The facts point out that the biological select agent research conducted at the national laboratories (coupled with the Chemical and Biological National Security Program) has become a new programmatic focus for the DOE and the NNSA facilities within DOE. DOE is under obligation by United States law to conduct the appropriate review of its new or changed programs and to conduct that review under all applicable NEPA Rules and Regulations.

As DOE NNSA proceeds with the EA of its proposed BSL-3 laboratory at LANL, they must not overlook Congress intended purpose of the NEPA process to cooperatively assess proposals by the Federal Government "in cooperation with State and local governments, and other concerned public and private organizations, to use all practical means and measures [to] fulfill the social, economic requirements of present and future generations of Americans." If this is to be followed, DOE NNSA and LANL s B division must make a concerted effort to provide accurate and forthright information to public stakeholders within this NEPA process in a timely and effective manner. This is particularly true for neighboring Pueblos and Tribes.

The BSL-3 laboratory is a significant change in mission for LANL and this change was not addressed in the LANL Site-Wide Environmental Impact Statement of 1999. In light of this fact and others pointed out throughout these comments, it is the opinion of NWNM that it is necessary for a full Environmental Impact Statement (EIS) to be conducted on the proposed BSL-3 laboratory at LANL.

Finally, because national laboratories are conducting similar research in cooperation with the DOE NNSA Chemical and Biological National Security Program, a major programmatic addition was added to the current nuclear weapons program to biological select agent research. In order for this addition to be legally justified, the DOE must conduct a Programmatic review of its biological select agent activities before any more research is conducted or proposed research facilities constructed.

Although the BSL Team Leader was quoted as stating to the director of NWNM that B division would never conduct research for offensive biological weapons, the possibility still remains given the rumored desire of the Bush administration to withdraw from the ongoing negotiations for the verification protocols of the 1972 Chemical and Biological Weapons Convention. The possibility that LANL could indeed conduct offensive biological weapons research in the future is of great concern to the public of Northern New Mexico and beyond and needs to be publicly addressed in a forthright manner. We believe that it is also a bad international precedent to site a biological select agent research laboratory of any kind at arguably the Nation s most premier secret nuclear weapons laboratory.

Summary and Conclusion

1) It is the opinion of NWNM that the EA should provide forthright and indepth information on LANL s current and past involvement in the DOE NNSA Chemical and Biological National Security Research Program including organisms previously studied and citations for LANL s safety procedures;
2) The EA should use this information and communications plan to generate a discussion between LANL and the public stakeholders but in a more comprehensive manner than the poster sessions held earlier by B division. This discussion would be nothing but inade quate if it failed to be a part of the NEPA process;
3) The EA should demonstrate that a plan to facilitate Federal oversight, by both DOE AL and the CDC, has been developed and implemented;
4) The EA should demonstrate that a Biological Safety Plan has been developed and implemented and that this plan includes:
    a) a safety procedure for shipping and receiving biological select agents and select agent material;
    b) a safety procedure is developed and implemented to respond to containment breaches within the BSL-3 laboratory;
    c) a safety procedure is developed and implemented to respond to containment breaches of the BSL-3 laboratory into the surrounding environment;
    d) that all B division supervisors and B division researchers be familiar with and drilled on this emergency response plan;
    e) that this emergency response plan be incorporated by other agencies such as the CDC, National Forest Service, National Park Service, and County of Los Alamos, etc. (The Cerro Grande Fire and the continuing remediation afterwards is being led by an interagency response team. A similar approach must be taken with possible containment breeches within the laboratory and potential impacts on the surrounding environment.)
5) The EA should demonstrate that the BSL-3 laboratory has appropriate security to pre vent unauthorized entry from the outside. This is particularly important to demonstrate given LANL s recent security failures with the W-88 data and the X division hard drives.
6) The EA s scope should be extended by DOE to a Programmatic EA, EIS, or both, fulfill ing DOE s obligations under the NEPA Rules and Regulations.

Respectfully submitted,

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