nuclear watch new mexico

Comments on the Draft Environmental Assessment For the Proposed Consolidation of Certain Dynamic Experimentation Activities at the Two-Mile Complex

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Submitted by
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Submitted to
Ms. Elizabeth Withers
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U.S. DOE/NNSA Los Alamos Site Office

Via fax to 505.667.9998 and e-mail to ewithers@doeal.gov

Dear Ms. Withers,

Nuclear Watch of New Mexico (NWNM) is pleased to submit the following comments on the National Nuclear Security Administration's (NNSA's) draft environmental assessment (hereinafter the "DEA") for its proposed Consolidation of Certain Dynamic Experimentation Activities at the Two-Mile Complex at the Los Alamos National Laboratory. I commonly refer to it in these comments as the DX consolidation plan.

Clearly the NNSA is in a rush job on this DEA. Notification to me was by a letter dated August 27 (postmarked the 28th) for a 21-day comment period beginning on August 28. Your letter further informed me that "[c]omments received after this date [September 18] may not allow sufficient time to give them due consideration." From there I had to request a copy of the DEA, thereby introducing a couple more days' delay. Yet this is for a $70 - 110 million[1] project that proposes to build over 10 years 15 to 21 new buildings for explosive dynamic tests involving, at least in part, special nuclear materials. Further, LANL has been not only been planning, but even implementing, this consolidation plan for over two years.[2] It is therefore unconscionable for the NNSA to provide such inadequate notice and an artificially truncated period of comment to the public. Therefore, I strongly object. In our view, while the NNSA is narrowly complying with its minimal National Environmental Policy Act (NEPA) requirements, it is certainly not complying with the spirit of the law.

An Environmental Impact Statement is required for DX consolidation plans

The CEQ regulation on implementing NEPA procedures, Whether to prepare an environmental impact statement, states:

> In determining whether to prepare an environmental impact statement the Federal agency shall:
>
> (a) Determine under its procedures supplementing these regulations (described in Section 1507.3) whether the proposal is one which:
>
> (1) Normally requires an environmental impact statement, or
>
> (2) Normally does not require either an environmental impact statement or an environmental assessment (categorical exclusion).
>
> (b) If the proposed action is not covered by paragraph (a) of this section, prepare an environmental assessment....(CFR 1500, § 1501.4)

The first entry under DOE NEPA Implementation Regulations for "Classes of Actions That Normally Require EISs" reads "Strategic Systems, as defined in DOE Order 430.1, 'Life Cycle Asset Management,' and designated by the Secretary." [3]

In the "Dictionary" for DOE Order 430.1 there is no definition for "Strategic Systems," nor does there appear to be one in the rest of the Order either (according to my own electronic word search). The "Dictionary" does, however, have a definition for "Strategic Facility Assessment," which is a "review that determines whether a facility is "mission essential" in conjunction with the planned upgrade to the facility." [4]

We contend that such a review with a concluding determination that the DX consolidation plan is indeed strategic has not only already occurred but is also being already being implemented. Section IV. E. of the LANL Ten-Year Comprehensive Site Plan (TYCSP) is entitled "STRATEGIC FACILITY PLANS AND CONSOLIDATION PLANNING." Excerpts of it read:

> Nine strategic facility plans, some of which incorporate consolidation planning, are currently in process… Consolidation planning was started in FY 2000 with major emphasis devoted to this effort in FY 2001. DX Division completed a plan in FY 2001 that shows similar investment and payback [to the ESA Facility Plan]… road improvements were funded for the first phase of the DX plan in FY 2001.[5]

As a brief tangent, we believe that the last clause demonstrates a prejudicial action that indicates that the outcome of this DEA is already predetermined. That is to say that LANL and the NNSA have some years ago made up their minds in advance to proceed with the DX consolidation plan.

To put the LANL TYCSP in perspective, the document describes itself as "the link between long-range planning, proposed projects, and the budget" at the lab. Further, "[c]onsolidation planning efforts, which are a significant type of *strategic* facility planning, are summarized in the Plan chapter of the document." [6] Thus, we believe we have irrefutably established that that the LANL TYCSP is a strategic planning document, and that the DX consolidation plan is an integral part of that document. Therefore the DX consolidation plans clearly fall under a "Strategic Facility Assessment." Further, the

DX consolidation plans are clearly judged to be "mission essential" throughout the body of this DEA. DX activities are described as its "primary function is nuclear stockpile stewardship, with certification responsibility for the substantial majority of the nation's active nuclear weapons stockpile." [7]

Now our argument that an EIS is required under DOE NEPA Implementation Regulations can perhaps be narrowed as to whether it hinges upon the apparent requirement that the DOE Secretary designate the DX consolidation plan as a "Strategic System." First we note an inherent conflict. We believe that DOE has shown an historic pattern in avoiding comprehensive NEPA reviews, sometimes completely failing to do them at all, but more recently relegating them to cursory environmental assessments. Thus, we think it unlikely that the Secretary or his subordinates would designate a major project as a strategic system that would normally trigger a full environmental impact statement when they feasibly see a way to avoid it.

We will back into issue, as there are other factors that add to compel the preparation of an EIS. First of all, there are the significant costs involved. As previously stated the DEA itself portrays the cost of the DX consolidation plan as being in the $70 to $110 million dollar range. Both LANL and DOE are notorious for cost overruns and fiscal mismanagement. We note that the previous big DX project, the Dual Axis Radiographic Hydrotest Facility (DARHT), grew from an original construction estimate of $30 million in the 1980's to over $270 million now and the project has yet to be completed.[8] Given this experience and others (particularly under the management of the University of California at both LANL and the Lawrence Livermore National Laboratory) we are betting that the cost of DX consolidation will far exceed $110 million. [We stand to be corrected if the NNSA, LANL, and UC demonstrate otherwise.] But our point is simple: a more rigorous environmental impact statement is needed to help protect against what could be the prolificate and irresponsible spending of taxpayers' dollars.

Secondly, there is the very nature of the DX experiments itself. Although the NNSA avoids the subject (we believe intentionally so), there will undoubtedly include high explosive experiments that will blow up substances such as highly enriched uranium, plutonium-239, plutonium-242, natural and depleted uranium, plus beryllium, mercury and other highly hazardous constituents. This proposal could be deemed as being "controversial" in the NEPA sense, if only the public knew about it. The fact that public controversy is presently absent is perhaps more a matter of the lack of adequate notification by the NNSA rather than the substance of the issue itself.

The DEA states that there will be future contained firing sites (which is clearly better than open air sites), but yet there is no substantive discussion of what that containment will be. It is fine to cite the DARHT environmental impact statement as a bounding analysis of possible environmental and public/occupational health issues,[9] but this DX consolidation plan involves multiple firing sites, five of which are stated will have containment. Containment of DARHT high explosives tests involving special nuclear materials was the key mitigation issue in the DARHT EIS, an issue that DOE was forced to concede to and deal with only because there was an EIS to begin with (and which had to be compelled by citizen litigation to begin with). Possible mitigation measures are, of course, at the heart of the NEPA process. Yet this DEA does virtually nothing to inform the public and seriously consider what those mitigating containment mechanisms might be (while at the same time stating that there will be a remaining need for open-air tests for the larger explosions). This should be rectified in a comprehensive environmental impact statement.

To return to the matter of whether the DX consolidation plan is a "designated by the Secretary," we believe that this is overwhelmingly implied in the DEA's fundamental rationale for the DX consolidation plan to begin with. For example, under Section 1.3, "Statement of Purpose and Need for Agency Action," the "NNSA has assigned a continuing role to LANL for carrying out NNSA's national security mission. To enable LANL to continue this enduring responsibility requires that NNSA maintain the capabilities and capacities required in support of its national mission assignment at LANL." We believe that this constitutes through the NNSA's statement of purpose and need a Secretarial designation that indeed the DX consolidation plan is a strategic system.

Hence, in consideration of all of the above, Nuclear Watch of New Mexico believes that the DX consolidation plan meets the DOE's own NEPA implementation criteria for an action that normally requires preparation of an EIS. In our view, this environmental assessment should reach the same conclusion and proceed directly into the preparation of a full environmental impact statement.

The format of our remaining comments follows the section-by section format of the DEA. Quotes from the DEA are italicized.

1.2 Background

NNSA's national security mission includes the safety and reliability of the nuclear weapons in the stockpile; maintenance of the nuclear weapons stockpile in accordance with Executive directives; stemming the international spread of nuclear weapons materials and technologies; [and] developing technical solutions to reduce the threat of weapons of mass destruction…

Nuclear Watch of New Mexico has touched upon the current direction of U.S. nuclear weapons policies in many comments.[10] Suffice it to say that things are not as quite as the NNSA portrays. If the NNSA was truly interested in maintaining nuclear weapons safety and reliability then it would not introduce major modifications to a stockpile that has already been extensively proof tested. In our opinion, it would have, instead, given far more emphasis to nuts-and-bolts remanufacturing of exact-as-possible replicas and to critical stockpile evaluation programs. If the NNSA was truly interested in stemming the international spread of nuclear weapons materials and technologies, then it would lead by example in not developing new design nuclear weapons or advanced modifications. Because it is so doing, other nations may well conclude that they must never relinquish their own nuclear weapons, or must acquire them to begin with. As to developing technical solutions to reduce the threat of weapons of mass destruction, we do regard that as an unfortunate necessity. But, in our view, there is currently an overwhelming emphasis by the U.S. government on *counterproliferation* (warfighting, including nuclear, against potential threats) vs. *nonproliferation* (that is largely pre-empting potential WMD threats through diplomacy, binding treaty regimes and providing global leadership by example). We think this will inevitably lead to other nations concluding that they must have their own WMDs as deterrence against the U.S. This will then directly undermine our own national security. We contend this is already being demonstrated by current international events, events that are unfortunately being exacerbated and accelerated by the newly declared (via Presidential directive) policy of pre-emptive strikes when deemed necessary. This DX consolidation plan is, we believe, just one small piece in the overall regressive direction that U.S. nuclear weapons policies are currently undertaking.

Thus we voice our opposition and objection to the "Background" of the DX consolidation plan as the NNSA has chosen to portray it.

1.5 Public Involvement

I reincorporate my introductory comments here objecting to the public notification process and length of comment period provided in this DEA. It is also interesting that in this section it is stated that the "NNSA provided written notification of this NEPA review on June 6, 2002, to the State of New Mexico, [5 named Tribes and Pueblos], and to over 30 stakeholders in the area." I have consistently been writing extensive NEPA comments for over a decade. Therefore, I believe that I am a stakeholder of record, yet I do not get early notification. Further, the DEA states "[w]here appropriate and to the extent practicable, concerns and comments will be considered in the final EA." I assert that the contents of a response to expressed public concerns and comments are at the discretion of the lead agency, but consideration of them is not. The NNSA should strike language implying that consideration of comments is somehow discretionary.

The NNSA can spend $100's of millions on advanced computing, yet LANL cannot consistently provide electronic versions of the NEPA documents that might impact it to the public. This should be corrected. Further, there should be a dedicated LANL NEPA web site that acts as an electronic repository for all NEPA processes involving the Lab.

2.1 Proposed Action

Some apparently contradictory statements are made in the DEA as to whether DX staffing levels will increase or not as a result of the consolidation plan. For example, at p. 12 is the phrase "if staffing levels increase as anticipated." At p. 39 is the phrase "since there is no increase in LANL personnel attributed to the Proposed Action."' Please provide clarification.

2.1.1. Construction

We note that many of the facilities are to be built near "potential release sites" (PRSs) (i.e., areas already contaminated). The DEA offers bland assurances that those PRSs will not be disturbed. More detail needs to be given on exactly how they won't be disturbed. Further, we note at DEA p. 46 that some 16,000 feet of utility trenching may be dug as a result of the DX consolidation plan. What strict assurances are there that trenching will not disturb existing contaminants? Please detail in a comprehensive environmental impact statement.

2.1.1.1 New Shock and Detonation Physics Office Building.

An insufficient description of the mission of this building is given. Please provide more detail in an environmental impact statement.

2.1.1.2 New Collaborative Energetics Research Laboratory Building.

An insufficient description of the mission of this building is given. Please provide more detail in an environmental impact statement. What kind of energetic materials are to be researched? For example, a recent LANL newsletter mentioned superthermites, while stating that "chemical energy provides order-of-magnitude increased power over purely kinetic material." Please be specific as to what classes of materials are to be researched. What are the radiological, hazardous and explosive risks involved with these materials if they are highly experimental and far more powerful?

2.1.1.3 New Characterization of Highly Energetic Materials Laboratory Building.
An insufficient description of the mission of this building is given. Please provide more detail in an environmental impact statement. Again, what kind of energetic materials are to be researched? Please be specific as to what classes of materials are to be studied. What are the radiological, hazardous and explosive risks involved with these materials if they are highly experimental and far more powerful?

2.1.1.4 New Engineering Diagnostics Facility.
An insufficient description of the mission of this building is given. Please provide more detail in an environmental impact statement. Diagnostics of what?

2.1.1.5 New High Bay Laboratory.
An insufficient description of the mission of this building is given. Please provide more detail in an environmental impact statement.

2.1.1.6 New Contained Firing Capability Buildings.
An insufficient description of the mission of these building is given. Please provide more detail in an environmental impact statement. As previously mentioned, an inadequate description of containment measures is given.

2.1.1.7 New Gas Gun Facility Building(s).
An insufficient description of the mission of this building(s) is given. Please provide more detail in an environmental impact statement. What is the purpose of the gas gun(s)? Will special nuclear materials equation-of-state experiments be performed with them?

2.1.1.12. New Classified HE Storage Building.
An insufficient description of the mission of this building is given. Please provide more detail in an environmental impact statement. Would this facility store fully assembled hydrotest devices ready for detonation? What are the hazardous and radioactive materials involved? What are the risks?

2.1.2 Operations
Operations would be expected to continue at or below the Expanded Alternative levels analyzed in the SWEIS (DOE 1999a) after the consolidation of operations at the Two-Mile Complex.
We ask LANL and the NNSA please immediately inform us in the event that operations at any time exceed the level contemplated in the SWEIS.

Further, the DEA is deficient in its lacking of discussion how the DX consolidation plan may or may not be redundant to operations at the Dual Axis Radiographic Hydrotest Facility or the future Advanced Hydrotest Facility. This should be rectified in an environmental impact statement.

Relocation of these operations would not require EPA pre-approval under (40CFR 61) Subpart H (the National Emissions Standard for Hazardous Air Pollutants (NESHAPs) for Radiation (Rad NESHAP). Stack and exhaust monitoring would be conducted as needed at the new locations. Our perspective on this statement is colored by the fact that a federal judge found LANL to be in major violation of the Clean Air Act from 1990 to 1996. The NNSA needs to justify in detail why EPA pre-approval is not

needed. There is no description of stack and exhaust monitoring, thus categorical assertions that stack and exhaust monitoring (in conjunction with LANL's past noncompliance) would be "conducted as needed" simply doesn't cut it. A full environmental impact statement needs to justify this statement.

2.1.4 Schedule

We are flabbergasted that Table 2., "Projected Chronology of Proposed Action Construction and Operations," states that "Design and construct new entrance gate and access roads" and "Design and construct SDP Building" are all to start in FY 2003. Let's see: Nuclear Watch of New Mexico gets notice postmarked August 28 for a comment period that ends September 18 on a draft environmental assessment for actions that have already been implemented before the end of FY 2003 (i.e., October 1). Wouldn't even LANL and the NNSA agree that something smells fishy here, NEPA-wise? We advise LANL and the NNSA that they should enjoin those processes until they have completed an EIS on the DX consolidation plan.

2.2 No Action Alternative, and 2.3.2. Renovation of Existing Buildings without Construction of New Buildings Buildings or Demolition of Outmoded Buildings and Structures.

The NNSA notes how NEPA legally obliges it to consider a No Action Alternative. From there, it goes on to paint a rather dire scenario if the No Action Alternative is pursued. Th renovation alternative was summarily dismissed as not reasonable.

Praise be to heaven that the NNSA complies with NEPA by providing a No Action Alternative. There are also other legal obligations that this country needs to fulfill, some international, more specifically the NonProliferation Treaty (NPT). Activist groups, such as ourselves, have talked themselves blue in the face over the NPT and how the U.S. must provide global leadership by example in strengthening the global nonproliferation regime. These words fall on deaf ears - - the NNSA has been generally nonresponsive to them. The deeply unfortunate trend toward counterproliferation versus nonproliferation has already been noted in these comments. I will further comment that I think that this trend is largely institutionally self-serving to the NSSA and the nuclear weapons labs. Counterproliferation means that the nuclear weapons establishment stays in business providing the weapons that underpin this approach. Genuine multilateral nonproliferation would put that establishment on a diminishing road that would eventually put it out of business.

I am not suggesting that the future of the global nonproliferation regime will rise or fall over this DX consolidation plan. However, it is part and parcel of the broader, and I submit increasingly regressive, direction of current U.S. nuclear weapons policies. To the extent that this DX consolidation plan plays a role in developing advanced modifications or new designs for nuclear weapons (which it probably will) then it is directly aiding and abetting a direction that may well come back to haunt this country. The U.S. could have worked to delegitimize nuclear weapons while enjoying uncontested primacy in conventional forces. Instead, it chose to unwittingly convince other countries that nuclear weapons are the ultimate assurance of sovereignty.

Even I tire of talking about the NPT, so I will instead illustrate the situation through two current quotes. Paul Robinson, Sandia Labs Director (and perhaps the leading theoretician from the nuclear weapons community) recently said:

> In truth, I believe that the NPT was intended more as a confidence-building measure than as a real arms control treaty that we were willing to bet our country's survival on… Why? Because it is a confidence-building measure among friendly countries eager to prove they are not violating it. It was never set up to catch cheaters. That's why I disagree with people who infer that the NPT is a real arms control treaty. It's not. [11]

On the other hand Dr. Mohamed El Baradei, International Atomic Energy Agency Director General, recently observed:

> The U.S. government insists that other countries do not possess nuclear weapons. On the other hand they are perfecting their own arsenal. I do not think that corresponds with the treaty they signed.[12]

Thus, with the makeover of the U.S. nuclear weapons complex and a likely return to industrial-scale production (i.e., the Modern Pit Facility), advanced modifications and possible new-designs, there will be a growing tension in, perhaps a breaking point to, the global nonproliferation regime. As Senator Ted Kennedy observed only yesterday "How can we demand that North Korea and Iran abandon their nuclear weapons programs while we develop a new generation of those weapons ourselves."[13]

Nuclear Watch of New Mexico likes to think that it is pragmatic: in no way do we advocate unilateral disarmament. On the other hand, we fear the long-range implications of the nuclear weapons policies that the U.S. government is pursuing and the NNSA implementing. To bring this discussion back specifically to the issue of the merits of the DX consolidation plan, we think that a "renovate/maintain as needed" alternative while embarking on a path toward diminishing nuclear weapons activities is the reasonable alternative. Instead of summarily dismissing it as unreasonable, the NNSA should fully explore it in an environmental impact statement.

3.2.1 Waste Management
3.2.1.1 Affected Environment, and 3.2.1.2 Proposed Action

This section is disingenuous in that it discusses only depleted uranium as possible radioactive wastes. There is not even an allusion to the special nuclear materials that will surely be involved in future experiments at the Two-Mile Complex. This should be corrected in an environmental impact statement. Analogous to the DARHT EIS (upon which this DEA heavily relies) the NNSA could prepare a classified appendix to deal with all DX consolidation planning matters pertaining to special nuclear materials. In whatever manner, we believe that the NNSA has a legal obligation under NEPA to do so.

Further, there is no discussion of the cleanout processes for containment vessels or other containment forms. There is also no discussion of where and how shot debris analyses will be performed. All of this should be rectified. As a specific, are there any operational links (such as containment vessel washout and shot debris analysis) between the DX consolidation plan and the proposed Chemical and Metallurgical Research Building Replacement Project? With the future Advanced Hydrotest Facility?

The 1979 LANL SWEIS disclosed that up to that time 100,000 kilograms of depleted and natural uranium had been dispersed in dynamic experiments at the Lab. To my memory, the 1999 SWEIS failed

to update that figure. What is the total amount to date of depleted and natural uranium dispersed in dynamic experiments at the Lab?

3.2.2.2 Proposed Action.

Operational emissions may decrease due to increased efficiency with more modern equipment and facilities and due to a reduction in the scope or level of some operational activities. Fine, that would be desirable. However, this is an unsubstantiated assertion made by a cursory environmental assessment. The NNSA should defend and prove that statement in an environmental impact statement.

3.2.11 Socioeconomics

Salaries and benefits account for 880 million dollars. This translated into a 3.8 billion dollar impact on the tri-county region that includes Los Alamos, Santa Fe, and Rio Arriba Counties. In effect, nearly one of every three jobs in the tri-county region was created or supported by LANL. As is said, "show us the money." To go from $880 million to $3.8 billion is one amazing economic multiplier. Prove it. The DEA's listed reference, a two-page fact sheet compiled by LANL,[14] is wholly unsatisfactory. Did the Lab calculate a net economic multiplier, for example factoring in the Hachman Index that shows that for every dollar spent in New Mexico only 44 cents remains in the State (because we lack an extensive consumer products manufacturing base)? Were costs borne by the State and counties, such as roads and regulatory costs incurred by the New Mexico Environment Department, factored in (even as LANL avoids paying gross receipts taxes to the State and counties)? Finally, we note that the economic benefits are highly localized to Los Alamos County alone, as 65% of the LANL tri-county salaries and benefits go there and 89% of Lab procurement (by dollar) occurs just there.

4.0 Accident Analysis

The population dose associated with only DU would produce no latent cancer fatalities (less than 0.0085). The final configuration of the Two-Mile Complex, its operation, and the surrounding populations of workers and members of the public would determine the actual consequences of a DU containment failure at that site. In any event, the toxicological and radiological consequences, including cancer fatalities, to workers and the public are expected to be substantially less than those projected for a similar accident at DARHT.

Again, it is disingenuous for this DEA to imply to the public that depleted uranium will be the only radioactive source of concern. Potential latent cancer fatalities should be calculated in a full-blown environmental impact statement, analogous to what was done in the DARHT EIS.

One striking difference between the DARHT EIS and this DEA is that the final configuration of DARHT was known to the extent that credible accident analyses could be performed. We believe that the above DEA quote is tantamount to an admission that the project's final configuration is not known and hence the actual consequences of an accident involving toxicological and radioactive materials is not known. This, of course, a key NEPA point and its lack is a grave deficiency in this DEA. This should be rectified in a full environmental impact statement. We don't think the reference to the DARHT EIS as the ultimate bounding analysis for the DX consolidation plan is credible given that final configuration is not known and that there is no discussion in the DEA of the quantities of hazardous and radioactive materials involved in the DX consolidation plan.

Our final conclusion is obvious: the NNSA must prepare and complete an environmental impact statement for its LANL DX consolidation plans.

Respectfully submitted,

Jay Coghlan
Director

[1] DEA p. 56.

[2] "Both the ESA [Engineering Sciences and Applications] and DX [Dynamic Experiments] consolidation plans began formal implementation in FY 2001." LANL Ten-Year Comprehensive Site Plan, September 26, 2001, p. IV-16.

[3] DOE NEPA regulations, 10 CFR 1021.400, Appendix D to Subpart D. It is this writer's belief that in July 1996 DOE substituted "Strategic Systems" for "Major Systems Acquisitions," which, at that time, was any project over 100 million in 1992 dollars.

[4] DOE G 430.1-1 Appendix A, 03-28-97 Page A-23

[5] LANL Ten-Year Comprehensive Site Plan, September 26, 2001, p. IV- 15 to 16.

[6] Id., pp. I-1 to I-3. Emphasis on "strategic" added.

[7] DEA Executive Summary.

[8] DOE/IG-0599, Audit Report: Dual Axis Radiographic Hydrotest Facility, May 2003.

[9] Having said that it is fine to cite the DARHT EIS as a bounding analysis, it should also be noted that only a classified appendix dealt with risk issues concerning the use of plutonium and other special nuclear materials in explosive tests. While lifting the injunction against DARHT construction after DOE had completed the EIS the federal judge noted that those risks were serious and real. But, since those proceeding were classified, the public, of course, was left completely in the dark as to what those risks are. We have essentially the same situation in this environmental assessment, where only the potential risks of depleted uranium are discussed.

[10] See, for example, our recent comments on LANL's Chemical and Metallurgical Research Building Replacement Project and the Modern Pit Facility at www.nukewatch.org.

[11] "Pros and cons of new nuclear weapons debated," the National Journal, August 18, 2003

[12] (Financial Review, September 5, 2003)

[13] "Nuclear Research OK'd", Helen Dewar and Walter Pincus, the Washington Post, September 17, 2003.

[14] LANL, "Community Impact Data Profile," http://www.lanl.gov/orgs/cr/2002_Fact_Sheet.pdf