

## **Comments on the draft "Complex Transformation" SPEIS**

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Dear Mr. Theodore A. Wyka,

Nuclear Watch New Mexico (NWNM) hereby submit these comments on the draft "Complex Transformation Supplemental Programmatic Environmental Impact Statement" (SPEIS) to the National Nuclear Security Administration (NNSA), the semi-autonomous nuclear weapons agency within the Department of Energy. Any quotes from the SPEIS and/or its cited reference documents in these comments are italicized, followed by its page number(s) in plain text.

# The SPEIS Inadequately Justifies the Purpose and Need for Complex Transformation; The Entire Proposal Is Premature and Skews Consideration Of All Reasonable Alternatives

NNSA now proposes to continue the transformation of the Complex by further consolidating operations, which could result in the relocation of activities among sites. P. S-1. Operations may be consolidated somewhat under the NNSA's proposal, but the SPEIS completely fails to consider the physical consolidation of sites. Notwithstanding the SPEIS's worthy effort to consolidate special nuclear materials (SNM) operations, the whole proposal still evades Congressional direction, as exemplified in the following Senate Armed Services Committee declaration:

The NNSA has initiated the Complex 2030 study to review the nuclear weapons complex and decide on the design for the complex of the future. The committee is troubled by the scope and timing of the study and the options under consideration. The study does not include any options that would significantly reduce the size of the complex or that would consolidate operations and NNSA sites. The committee urges the NNSA to expand the scope of the Complex 2030 study to look at site consolidation, including the possibility of closing NNSA sites that are surplus to mission needs.<sup>1</sup>

Report 110–77, National Defense Authorization Act For Fiscal Year 2008, P. 619 (or PDF p. 641).

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"Complex 2030" was the predecessor to NNSA's current "Complex Transformation" proposal, to which the Senate Armed Services Committee's remarks remain highly relevant as well. Despite that, NNSA proposes to consolidate from its present eight active major nuclear weapons research and production sites to... its eight active major sites. Perhaps the most egregious example by omission is the fate of the Kansas City Plant, discussed in its own section of our comments below.

This lack of consideration of site consolidation pervades the entire proposal, both on the production and R&D sides, with, for example, NNSA does not currently consider it reasonable to propose closure of any of the NNSA laboratories (see also Section 3.1.4). [Note: There is no Section 3.1.4 in the SPEIS.] However, such consolidation could be proposed in the future depending upon future national security requirements. P. 2-17. This is despite the fact that the Galvin Commission specifically considered closing the Lawrence Livermore National Laboratory (LLNL) in 1994-1995, which it ultimately recommended against. However, we think that consideration of consolidating R&D national labs is even more reasonable now for a variety of reasons.<sup>5</sup>

But here we make a fundamental, threshold point regarding the SPEIS' comment that *such* consolidation could be proposed in the future depending upon future national security requirements. In fact, future national security requirements, which the NNSA nuclear weapons complex is required to support, are quite likely to change.

Time and again this draft SPEIS repeatedly states that "Complex Transformation," and in particular expanded plutonium pit "trigger" production, is driven by President Bush's 2001 Nuclear Posture Review (NPR). However, Congress has specifically required the incoming President to prepare a new Review, saying, "It should be used as a basis for establishing future United States arms control objectives and negotiating positions." The FY 2008 Defense Authorization Act, signed into law this January, also required a bi-partisan commission to recommend by this December the number of nuclear weapons really needed and the related appropriate size and composition of the nuclear weapons complex. The House Armed Services Committee specifically noted that following Bush's 2001 NPR "there is an urgent need for a

With the exception of possibly closing down the Tonapah Test Range for gravity bomb flight-testing, only to have those activities transferred to the Nevada Test Site or the Department of Defense's White Sands Missile Range.

In our view, NNSA switched from "Complex 2030" to "Complex Transformation" because of Congressional rejection of FY 2008 funding for new design nuclear weapons, the so-called Reliable Replacement Warheads (previously NNSA's proclaimed "enabler' for transforming the complex), and Congressional rejection of FY 2008 funding for a "Consolidated Plutonium Center" capable of producing 125 plutonium pits per year for RRW.

To be fair, NNSA does say, but does not yet guarantee, that it will lower the "footprint" of each individual site.

A few quick selected reasons are: Congressional rejection of FY08 funding for new designs under the so-called Reliable Replacement Warheads (LLNL was awarded the first design selection), said rejection likely to be repeated for FY 2009; related, a key November 2002 conclusion by independent experts that the all crucial nuclear weapons components - - the plutonium pit "triggers" - - have reliable lifetimes of a century or more; the NNSA's commitment to remove Security Category I/II special nuclear materials from Livermore by 2012; the overall need of this nation to demonstrate greater adherence to the 1970 NonProliferation Treaty's obligation to disarm nuclear weapons stockpiles; and clear savings for the taxpayer.

debate over the role of nuclear weapons in U.S. strategic posture." In short, it makes no sense for complex transformation, including expanded pit production, to proceed now before a new Nuclear Posture Review, and NNSA's "transformation" proposal should be withdrawn until then. Instead, the agency is pushing hard to achieve its political aims before the Bush clock runs out.

In our view, the draft SPEIS is replete with predeterminations made in the haste of the NNSA's political process to get as far as it can while President Bush is still in office. As an example, the SPEIS declares in response to public scoping comment:

However, unless and until there are significant changes in national security policy, NNSA is required to design, produce, and maintain the nuclear weapons stockpile pursuant to requirements established by the President and funded by Congress. In conjunction with the 2001 NPR, President Bush set an objective of "...achieving a credible nuclear deterrent with the lowest-possible number of nuclear warheads consistent with our national security needs..." In recognition of this objective and the reduction in the U.S. stockpile since the end of the Cold War, this SPEIS qualitatively evaluates changes in the alternatives that would be appropriate if the stockpile is reduced below the level called for by the Moscow Treaty. Accordingly, this SPEIS analyzes alternatives that satisfy requirements of the existing national security policy framework, as well as a capability-based alternative that, while not capable of meeting current requirements, could meet those requirements if the stockpile were reduced below the level called for by the Moscow Treaty. P. S-8.

Again, there is a significant possibility of significant changes in national security policy, specifically nuclear weapons policies, given that Congress has already required two different venues for review of those policies. Notably, both are to be completed after the November presidential elections, pointing to the inappropriateness of making Complex Transformation decisions before then. Concerning the "lowest-possible number of nuclear warheads consistent with our national security needs," that has yet to be reviewed and determined by the incoming Administration. We don't believe that the Moscow Treaty's level of 1,700 to 2,200 nuclear weapons makes that determination, given that those are deployed weapons only. The Treaty fails to address tactical nuclear weapons, the even larger amounts of strategic weapons held in reserve, fails to mandate irreversible dismantlements, and fails to make any cuts permanent.

With respect to this SPEIS qualitatively evaluates changes in the alternatives that would be appropriate if the stockpile is reduced below the level called for by the Moscow Treaty, the SPEIS should simply not make those determinations (perhaps better called predeterminations), and the NNSA should withdraw this SPEIS. Those determinations should and will be the job of the incoming Administration. Nor is the draft SPEIS' range of alternatives necessarily appropriate even if the U.S. nuclear weapons stockpile is reduced below Moscow Treaty levels.

In our view, the clearest example of this is that all the draft SPEIS' formal alternatives, except the so-called "No-Action Alternative," <sup>6</sup> assume that the Los Alamos National Laboratory's (LANL's) level of pit production is raised from 20 to at least 50 pits per year. The lack of need

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As NNSA has stated that its preferred alternative is the production of 50 to 80 pits per year, and that the No Action Alternative is used as a comparative baseline for the purpose of NEPA analyses, we believe it can be disregarded for the purposes of this discussion.

for even that level of production is discussed below in a separate comment section, but is incorporated here as yet more evidence of the lack of adequately stated purpose and need for NNSA's whole Complex Transformation proposal as currently composed.

Here we dwell upon the "Capability-Based Alternative," described as having been *developed to* analyze the potential environmental impacts associated with operation of a Complex that would support stockpiles smaller than required to meet anticipated future national security needs. P. S-51. That is highly prejudicial statement that leads inevitably to this Alternative's pre-emptive rejection by NNSA. It reinforces our point that Complex Transformation must await the incoming Administration, which is already required to review exactly what our nuclear weapons national security needs will be.

We also find it telling that this Alternative is the least expensive to taxpayers and the least environmentally damaging (with the exception of the *pro forma* No Action Alternative), but again it is in effect summarily rejected under the requirements of the outgoing Administration. Nevertheless, even the Capability-Based Alternative assumes the expansion of pit production at LANL from 20 to 50 pits per year, which again is not necessary, and demonstrative of prejudicial action.

Plutonium pit production no doubt receives the most public attention. But the other side of the production coin is operations involving highly enriched uranium (HEU), particularly Canned Subassemblies (CSAs). Under NNSA's preferred "Distributed Centers of Excellence" (DCE) Alternative for HEU operations:

Y-12 would continue as the uranium center providing component and canned subassembly production, surveillance and dismantlement. Independent of this SPEIS, NNSA is completing construction of the HEUMF [HEU Materials Facility] and consolidating HEU storage in that facility; and can proceed with the preliminary design of a UPF [Uranium Processing Facility] that could be located at any of the sites under consideration in this SPEIS. P. S-66.

Other than some ambiguous information regarding projected transportation shipments of CSAs, the SPEIS remains silent on what future production rates might or should be for CSAs, in contrast to specifically stated rates of differing plutonium pit production. However, the SPEIS's supporting "business case" for special nuclear materials consolidation lists Y-12's CSA manufacturing and assembly at "200+" per year. The SNM business case also assumes the startup of operations of a Uranium Processing Facility at Y-12 by 2018. First, the final SPEIS should make clear why or why not 200+ CSAs are needed.

With respect to the Uranium Processing Facility (UPF), again its construction and operation is assumed under the preferred DCE alternative, or an "UPF-like" facility for the Consolidated Uranium Center Alternative (we note again that No-Action is basically a NEPA straw man for

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Formally known as the *Independent Business Case Analysis of Consolidation Options for the Defense Programs SNM and Weapons Programs*, TechSource, Inc., Santa Fe, New Mexico, December 2007, http://www.complextransformationspeis.com/RM 276%20-%20TechSource%202007a.pdf.

SNM business case, p. 3-1.

Ibid, p. 4-12.

comparative baseline purposes, and the Capability-Based Alternative has already been declared to not meet current national security needs, and therefore will be rejected). What is really needed is analytical justification that 200+ CSAs are needed annually, and judgments as to whether a UPF really has to be built.

Why can't, for example, some of the floor space of the HEUMF be used for claimed needed CSA manufacturing and assembly and disassembly, even if this means downblending some HEU stock so as to create more floor space (and in any event downblending of the immense HEU inventory would have permanent security benefits)? In part it is argued that the UPF must be built in order to lower Y-12's overall high security footprint, and therefore save money. However, the HEUMF is already within Y-12's planned consolidated high security footprint, and it does not then automatically follow that the UPF has to be built if part of the HEUMF could be used for CSAs. Further, substantial sums of taxpayers' money could be saved, as the UPF's initial estimated cost of \$1 billion has already mushroomed to \$3.5 billion.<sup>10</sup>

As an example of NNSA's failure to posit a range of all reasonable alternatives for serious consideration, the agency failed to propose an alternative that could be described as a "Responsible Curatorship Alternative" that conforms to both the U.S. Constitution and the international NonProliferation Treaty (NPT). Article VI of the U.S. Constitution mandates that "all treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land." NPT Article VI, effective since 1970, requires its signatories (including the U.S.) to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament..." Complex Transformation clearly does not move the U.S. in that required direction, but instead seeks to indefinitely postpone required disarmament, and even explicitly allow for the development and production of even new-design nuclear weapons.

In sum, we view such a curatorship alternative as:

- Complying with the U.S. Constitution, and therefore by definition an imminently reasonable alternative. Further, it should therefore be considered in all reasonable proposals for the future of the nuclear weapons complex.
- It then follows that NNSA must analyze a Responsible Curatorship Alternative (or the roughly equivalent) that safely maintains the nuclear stockpile while it awaits eventual dismantlement under the NPT.
- Further, NNSA should consider and analyze how a Responsible Curatorship Alternative or the equivalent would encourage declared nuclear weapons states toward the NPT's mandated goal of nuclear disarmament, and encourage non-signatory nuclear weapons states to join the NPT, thereby significantly enhancing global and national security.

Instead, while considering and then quickly rejecting this curatorship alternative, the SPEIS states:

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<sup>&</sup>quot;Proposed Y-12 facility could cost \$3.5 billion, New cost figures dwarf previous estimate," Frank Munger, August 22, 2007 http://www.knoxnews.com/news/2007/Aug/22/proposed-y-12-facility-could-cost-35-billion/

While NNSA acknowledges that aspects of curatorship are an accurate description of how the SSP [Stockpile Stewardship Program] works, NNSA eliminated curatorship from detailed study as a stand-alone alternative because it does not define a programmatic alternative distinctly different from the range of alternatives analyzed in this SPEIS. P. S-57.

The SPEIS then later makes the claim for a number of reasons that, *In summary, a curatorship alternative does not define a programmatic alternative outside the range of alternatives evaluated in this SPEIS.* P. 3-129. We agree that, in part, this is true. However, it is highly dissembling to imply that that is the whole truth, since the agenda of "Complex Transformation" goes so far beyond just a simple curatorship approach to the nuclear stockpile.

Again, we go back to the repeated acknowledgements that NNSA's current Complex Transformation proposal is driven by the Bush Administration's 2001 Nuclear Posture Review (NPR). Amongst other things, that Review called for new-design nuclear weapons and expanded plutonium pit production. As previously and repeatedly stated in these comments, Congress has already required the incoming Administration to complete a new Nuclear Posture Review. For this draft SPEIS to categorically reject in advance a simple curatorship approach to maintaining the nuclear weapons stockpile while it awaits dismantlement is premature and inappropriate. To echo another previous point, the SPEIS should simply be withdrawn and await reformulation and re-submittal by the next Administration.

Related to the above, we believe that the next Administration, depending on who the President is, may likely place a high priority on future rates of nuclear warhead dismantlements. NNSA currently claims to have rapidly accelerated dismantlements, but this may be a specious claim if the present rates of dismantlements are relatively low to begin with. For example, if dismantlements are currently 100 warheads or below per year, what does it really mean to double dismantlements to 200 annually when there are nearly an estimate 10,000 nuclear warheads in the total stockpile (including all tactical and strategic nuclear weapons both deployed and held in reserve)?

The SPEIS is grossly deficient and is not being forthcoming about future accelerated dismantlement rates, which as is reasonable to assume, could be major national security priority. In contrast, it is very clear that the SPEIS is predominantly and overwhelmingly about future production rates for refurbished nuclear weapons, and even more significantly, ultimately about the production of new-design nuclear weapons (see our comment section of why expanded plutonium pit production is not needed below), to the detriment of accelerated dismantlements.

As a case in point, we find it telling that one of the SPEIS's most important supporting reference documents, "TechSource 2007a" (the special nuclear materials "business case") states that the mega-nuclear weapons production facility considered under the SPEIS (the "Consolidated Nuclear Production Center" (CNPC)) will only "have a nominal capacity to dismantle 200

weapons" per year. <sup>11</sup> This definitely smacks of a gross determination by the present Complex Transformation proposal to heavily favor nuclear weapons production, including new-designs, over urgently needed dismantlements. At the contemplated rate of 200 dismantlements per year for the CNPC, which if built would be at great taxpayers' expense, then we have a half-century to go before it could dismantle all existing U.S. nuclear weapons, even assuming no new nuclear weapons production.

We respectfully suggest that kind of prioritization is not in the nation's or the world's best interests.

To conclude this section of our comments, we reiterate that the SPEIS does not adequately define the purpose and need for NNSA's current Complex Transformation proposal. Further, hasty implementation of the present proposal is a political rush job before the November presidential elections and constricts and arbitrarily bounds discussion of all reasonable alternatives. This SPEIS should be simply withdrawn and reformulated for submission once the new required reviews of U.S. nuclear weapons policies are completed under the next President.

## The SPEIS Must Give Projected Costs of Complex Transformation

We assume that NNSA will turn a deaf ear to what we believe is our cogent argument that the SPEIS should not proceed and be withdrawn until a later date. Given that likely rejection, we go on to argue that NNSA should give projected costs for Complex Transformation.

As a statutory matter, normally we would agree that the National Environmental Policy Act (NEPA) does not require federal agencies to give projected estimated costs for their "major federal actions." However, we believe that the NNSA's currently proposed "Complex Transformation" proposal is different in that the agency has chosen to make claimed cost savings integral to its claimed purpose and need. NNSA has, in fact, pitched potential cost savings to both Congress and the public as a central rationale for Complex Transformation. However, any supporting evidence for cost savings is very, very thin. For example, in an April 15, 2008 meeting, upon questioning the NNSA head of the Office of Transformation admitted to Nuclear Watch New Mexico and others that the agency has not compiled the estimated costs of Complex Transformation. NNSA cannot have it both ways - - it cannot claim that Complex Transformation will save taxpayers money if it has not calculated the costs for Complex Transformation.

For the record, a few selected cost-saving claims that NNSA has made about Complex Transformation follow:

"Complex Transformation – Vision of the Future Complex. The future Nuclear Weapons Complex (the Complex) would be smaller, safer and less expensive." <sup>12</sup>

NNSA FY09 Congressional Budget Request (CBR), Volume 1, p. 74.

<sup>11</sup> Independent Business Case Analysis of Consolidation Options for the Defense Programs SNM and Weapons Programs, TechSource, Inc., Santa Fe, New Mexico, December 2007, p. 4-12, http://www.complextransformationspeis.com/RM\_276%20-%20TechSource%202007a.pdf

"Saying that the nation's aging Cold War-era nuclear weapons complex is too big and too costly, the National Nuclear Security Administration's (NNSA) top official announced its proposal to create a nuclear weapons infrastructure that is smaller, safer, more secure and more cost effective... Today's nuclear weapons complex needs to move from the outdated, Cold War complex into one that is smaller, safer, more secure, and less expensive..." D'Agostino said. "I believe this can be done within our existing budget." <sup>13</sup>

"Our goal is to transform the large, costly and inefficient Cold War nuclear weapons complex that cannot meet the full production requirements of our customer into an integrated, modern and cost effective nuclear security enterprise." 14

NNSA's proposed approach to continuing transformation of the Complex builds on existing programs and management structures, so that transformation can be accomplished within currently projected funding levels as much as practicable. The cost and potential environmental impacts of the alternative actions in this SPEIS are primarily associated with the potential construction of new but smaller replacement nuclear facilities. Thus, a wide range of alternative configurations for these nuclear facilities is being evaluated from an economic perspective. NNSA has completed economic studies of the alternatives (TechSource 2007a, 2007b, 2007c, 2007d). P. S-4, parenthesis in the original.

#### S.2 Purpose and Need for Agency Action

- ... The underlying purpose and need addressed in this SPEIS is to:...
- Create a responsive nuclear weapons infrastructure that is cost-effective... P. S-12:

However, one of the SPEIS's supporting documents cited above, "TechSource 2007a" (the special nuclear materials business case), appears to specifically contradict NNSA's claimed costsavings though Complex Transformation. The business case said that Transition will require a campaign mentality and a long, consistent funding horizon. The cash flow figures demonstrate that significant increases from baseline funding will be required to modernize and consolidate the SNM production complex. 15 This is significant given that SNM consolidation is likely to be by far the most expensive element of proposed Complex Transformation. Yet the "funding horizon," which we also interpret to be also "baseline funding," even by NNSA's projections is slated to remain relatively flat, not even taking into account likely increasing federal budget constraints. All of this flies in the face of NNSA claims that Complex Transformation can take place within its existing projected budgets.

Finally, we note that contrary to its claimed cost-savings that NNSA has actually chosen the most expensive alternative as its preferred alternative for plutonium pit production, that is the "Consolidated Plutonium Center" (CPC). As the SNM business case notes, *The CPC options* 

Page 3, http://www.nnsa.doe.gov/docs/congressional/2008/2008-03-12 Smolen Tobey HASC FY09 Budget Testimony.pdf

<sup>&</sup>quot;D'Agostino gives vision of the nuclear weapons complex of the future," December 18, 2007, http://www.nnsa.doe.gov/docs/newsreleases/2007/PR 2007-12-18 NA-07-64.htm

Independent Business Case Analysis of Consolidation Options for the Defense Programs SNM and Weapons Programs, TechSource, Inc., Santa Fe, New Mexico, December 2007, p. xi, http://www.complextransformationspeis.com/RM 276%20-%20TechSource%202007a.pdf

generally have the highest NPV [net present value] in 2060 because they do not consolidate major functions or close major facilities and Building a CPC does not consolidate operations, so it generates no security savings. <sup>16</sup> The latter is contrary to one of Congress' primary motivations for SNM consolidation in order to save long-term security costs.

In short, because NNSA has chosen to make cost-savings a central element for justifying Complex Transformation's purpose and need, as pitched to both Congress and the public, NNSA must then calculate and state projected cost for Complex Transformation in this SPEIS.

#### There Is No Need for Expanded Plutonium Pit Production Under Complex Transformation

Expanded production to the preferred 50/80 alternative, and even LANL's currently sanctioned rate of 20 pits per year, is unnecessary, expensive, environmentally risky, and provocative when we tell other countries they can't have nuclear weapons.

Rocky Flats was producing pits for the W88, a sub-launched missile warhead 30 times more powerful than the Nagasaki bomb, when the Plant was abruptly shut down by 1989 FBI raid investigating environmental crimes. DOE's opening argument in the first half of the 1990's for reestablishing production was that it had no spare W88 pits to tear down in annual checkups for possible defects. However, only one pit per weapon type is destructively analyzed every year.

Despite that, last year LANL produced eleven W88 pits for prompt shipment to the Pantex Plant near Amarillo, TX, the site of final nuclear weapons assembly. The Moscow Treaty requires that deployed nuclear weapons be slashed to 2,200 or under by 2013. Why can't the number of deployed W88s -- estimated in the mid-300's -- be reduced, thereby making spare pits available for annual "stockpile stewardship" analysis? Why manufacture them at all?

LANL plans to re-develop pit manufacturing capability for most other nuclear weapons in the planned future stockpile (up to 7 different nuclear weapons "systems" depending on future decisions). As to these other pit types, the Pantex Plant is specifically authorized to "reuse" up to 350 existing pits per year. Although this is not widely known, it effectively renders moot any need to produce any pits for other than the W88 (which we don't need anyway). As it is, Pantex already stores at least 12,000 existing pits, and the Plant itself boasts that pit "reuse" is far less expensive and environmentally damaging than new pit production.

But NNSA argues in the Complex Transformation SPEIS that pit reuse cannot be a substitute for the production of new pits, an argument that we find largely specious. First, existing pits for the planned stockpile are far more reliable than previously believed. The draft SPEIS declared *Pit reuse can limit the ability to improve the performance margin of the primary, which contributes to longer-term reliability*. P. 2-13. But senior experts, including prominent members of JASON, have argued for years that the easiest way to ensure increased reliability was to add or more frequently replenish the weapons with tritium (a radioactive gas used to "boost" nuclear weapons), which they described as a routine and straightforward operation. As far as we can discern, the SPEIS completely omits this reliability enhancement alternative.

<sup>16</sup> Ibid, pp. viii and x.

Pit reuse can limit the ability to upgrade the intrinsic safety and security features of a weapon. P. 2-13. But the safety and security of U.S. nuclear weapons have far more to do with the conduct of operations involving nuclear weapons. In that vein, there were two recent very serious failures by the Department of Defense, and therefore improvement in operations should be focused on instead of new weapons (which is essentially what NNSA still seeks when it proposes to replace the conventional high explosives of some weapons types with insensitive high explosives). Further, the security of U.S. nuclear weapons relies upon "guards, guns and gates" which must always be rigorously maintained, rather than the inherent designs of the weapons. But most of all, it would be a steep stockpile reduction, a focus on strongly accelerated rates of dismantlements, and a radical shrinking of the nuclear weapons complex that would most directly enhance U.S. nuclear weapons safety and security, none of which NNSA's "Complex Transformation" assumes as a reasonable course of action, much less seriously considers.

The draft SPEIS declares that Should their [pits'] hermetic seal be broken (due to latent manufacturing defects, corrosion, or long term environmental stresses such as temperature and vibration), their reliability could be compromised in a short time. Consequently, judgments about new pit production capabilities and capacities are complex and warrant careful consideration. P. 2-13, parenthesis in the original.

This smacks of speculative grasping at straws to justify 100's of billions of dollars for "Complex Transformation." The 1993 Sandia "Stockpile Lifetime Study" concluded that any manufacturing defects were caught and corrected in the first few years after production. That study also declared that "although nuclear weapons age, but they do not wear out: they last as long as the nuclear weapons community (DOD and DOE) desires. In fact, we can find no example of a nuclear weapon retirement where age was ever a major factor in the retirement decision."

Instead, "Complex Transformation" still largely revolves around the production of new-design nuclear weapons, the so-called Reliable Replacement Warheads, which could well introduce their own manufacturing defects, thereby possibly increasing the chances for resuming full-scale testing (which most agree would be a global nonproliferation crisis). Corrosion is most likely caused by the breaking of the hermetic seals that contain an inert atmosphere, and not vice versa. Concerning environmental stresses, there is no public evidence that in practice they would break the hermetic seals. Should NNSA know otherwise it should present the evidence publicly instead of invoking speculative bogeymen that are self-interested in arguing for 100's of billions of taxpayers money.

We suspect that the real reason NNSA wants expanded pit production is for new nuclear weapons designs, the so-called Reliable Replacement Warheads (RRWs). LANL planned to go into production of up to 50 RRW pits per year by 2012, but Congress rejected all funding for RRW, and from what we saw is very likely to do so again for FY 2009. Given that, even by NNSA's own terms, there is no need for the 50 to 80 pits production rate that it is still pushing for. That is except, of course, that expanded pit production is still all about producing new nuclear weapons, which NNSA has not given up on.

As an overarching issue, at Nuclear Watch's request Senator Jeff Bingaman successfully introduced legislation that required independent expert review of the projected length of

plutonium pit lifetimes. Whereas NNSA had previously accepted that pits lasted 45 to 60 years, in November 2006 those experts concluded they last at least 875 years or more, without specifying any end date. This seriously undermined NNSA's argument for both new-design weapons and expanded pit production. Since the oldest pits in the planned stockpile are now 31 years old, why produce new pits, especially when existing ones can be "reused"?

Finally, and again, decisions implementing expanded production are premature before the already Congressionally required review U.S. of nuclear weapons policies.

## One of the Major Faults of This SPEIS is Its Failure to Include the Kansas City Plant in Complex Transformation

A final environmental assessment (EA) and a Finding of No Significant Impact (FONSI) for building a new Kansas City Plant (KCP) has just been released by the General Services Administration (GSA) and NNSA as cooperating agencies.

In that final environmental assessment it is stated:

Further, while the operations at KCP could be made more efficient at the proposed new KCP facility, a recent analysis has concluded that transferring these operations to a site other than one within the immediate Kansas City area would not be cost effective. (see Section 3.4) Consequently, the non-nuclear operations would remain at either the current KCP or the proposed new KCP facility because (1) KCP downsizing has benefits independent of the rest of the transformation proposal, (2) KCP downsizing decisions would neither affect nor be affected by the transformation decisions around proposed actions or alternatives in the SPEIS, (3) NNSA expects a decision on construction of the new KCP facility to be made prior to any decisions that would be made based on the SPEIS allowing NNSA to take advantage of projected cost savings, and (4) maintaining and downsizing the KCP in the Kansas City area is consistent with previous NEPA analysis and recent cost analysis. KCP draft EA, p. 19.

And

The Kansas City Plant (KCP) was not included in the SPEIS because NNSA concluded that decisions regarding the consolidation and modernization of KCP's activities (the production and procurement of electrical and mechanical non-nuclear components) would not affect or limit the programmatic alternatives analyzed in the SPEIS, or the decisions NNSA makes regarding these alternatives. Neither the EA nor the SPEIS evaluate programmatic alternatives for NNSA's non-nuclear production activities (which include, but are far broader than, the activities performed at the KCP) because NNSA is not proposing any such actions regarding these activities. In other words, NNSA is not considering programmatic alternatives for its broad array of non-nuclear production activities and the facilities it uses for them. The proposed action in this EA is limited to the activities currently conducted at the KCP, the production of electrical and mechanical non-nuclear components. KCP Final EA, p. 146.

Both of these passages are actually noteworthy retreats from NNSA's previous assertions in both Notices of Intent for the KCP environmental assessment and the Complex 2030 SPEIS (superceded by the subsequent Complex Transformation SPEIS) that decisions made elsewhere in the nuclear weapons complex were not expected to affect the Kansas City Plant and vice versa. At that time, this formed the central justification for KCP's exclusion from the Complex Transformation SPEIS. We also note that NNSA further attempted to justify KCP's exclusion in public comments by pointing out that the Plant's mission is "nonnuclear" given that it produces nonnuclear nuclear weapons components. We find that argument to be invalidated by the obvious fact that the Complex Transformation SPEIS does analyze and consider the fate of other declared "nonnuclear" sites, such as the Tonapah Test Range.

Herein, we incorporate by reference our complete and full comments on the draft Kansas City Plant environmental assessment, available at <a href="http://www.nukewatch.org/facts/nwd/NMWM">http://www.nukewatch.org/facts/nwd/NMWM</a> Comments KCP EA.pdf.

In summary, we concluded that:

- The KCP "environmental assessment" should have been a more comprehensive "environmental impact statement."
- The General Services Administration (GSA) and the National Nuclear Security Administration (NNSA) should have ceased prejudicial actions that are already occurring. Instead, the agencies are fast tracking a predetermined outcome with little publicity and no public hearing.
- A more comprehensive environmental impact statement should have considered and decided upon cleanup and future uses of the old Plant. Cleanup is crucial for any possible economic development and future jobs, which Kansas City badly needs.
- A new Kansas City Plant should not be built before new national review of U.S. nuclear weapons policies, which Congress has already required.
- The Kansas City Plant, as one of the NNSA's eight active nuclear weapons sites, should be integral to NNSA's expensive and sweeping proposal to "transform" its nuclear weapons complex under its current Complex Transformation SPEIS. In fact, consolidation of KCP's missions to Sandia/NM was considered in the 1996 Stockpile Stewardship and Management PEIS, to which the present Complex Transformation SPEIS is technically a "supplement," Said consolidation was rejected at that time because it was deemed more expensive and environmentally damaging to move to a new facility. That justification is now mooted since NNSA now explicitly plans to move to a new Kansas City Plant, even if its only eight miles down the road from the old Plant.
- The EA's supporting "Business Case" justifying a new plant only within Kansas City limits is false and should be redone. It looked only at a GSA-owned, stand-alone facility bordering Sandia Lab in Albuquerque, NM, instead of considering likely cost savings from merging KCP's nonnuclear manufacturing operations within Sandia's existing management, security, facilities, infrastructure and capabilities.
- Private development of a nuclear weapons plant should be rejected. First, as a matter of principle, it is distasteful, and should be a function of government not driven by profit. Secondly, it will likely cost taxpayers far more and circumvents the traditional process of Congressional

authorization and appropriations, even as Congress has called for increased consolidation of the nuclear weapons complex.

- Instead of categorically stating that there are no potential terrorist threats at a new Kansas City Plant, NNSA and GSA are obliged to complete a credible analysis of potential "Intentional Destructive Acts" (which include both terrorism and internal sabotage).
- Because of all of the above (and more), NNSA/GSA should withdraw this environmental assessment. NNSA should consider and decide upon the fate of the Kansas City Plant through its current Complex Transformation SPEIS process. However, even that process should await the outcome of pending review of U.S. nuclear weapons policies, which could dramatically reduce the size and nature of the nuclear weapons stockpile. That, in turn, could dramatically reduce NNSA's claimed need for expansive capabilities, eight individual sites, and their respective workloads. At this point, KCP's long-range workload is currently unknown, especially given recent Congressional rejection of new-design nuclear weapons under the so-called Reliable Replacement Warhead Program.

#### **Intentional Destructive Acts**

An unclassified summary of the classified appendix for intentional destructive acts must be released. The SPEIS states

With respect to intentional destructive acts, substantive details of attack scenarios and security countermeasures are not released to the public because disclosure of this information could be exploited by terrorists to plan attacks. Depending on the malevolent, terrorist, or intentional destructive acts, impacts may be similar to or would exceed accident impact analyses prepared for the SPEIS. A separate classified appendix to this Draft SPEIS has been prepared that evaluates the underlying facility threat assumptions with regard to malevolent, terrorist, or intentional destructive acts. P. D-10.

An unclassified version of an analysis for Intentional Destructive Acts was released for the Lawrence Livermore National Laboratory BioSafety Level-3 facility, following a successful lawsuit appeal by Nuclear Watch New Mexico and Tri-Valley CAREs in the 9<sup>th</sup> federal district. That appeal had as its foundation in an earlier ruling by the 9<sup>th</sup> circuit in *NRC v. Mothers for Peace* stating that analyses of Intentional Destructive Acts was inherently required in NEPA processes.

Following the successful *TVC et al v. DOE* appeal DOE issued Department-wide guidance that Intentional Destructive Acts must be considered. Granted, case law has yet to be pushed to the point where it requires that an unclassified summary of a classified appendix on Intentional Destructive Acts must be released. Nevertheless, we assert here that a failure to do so circumvents the two 9<sup>th</sup> circuit appeal decisions and present DOE guidance. We further assert that NNSA must prepare an unclassified summary of Intentional Destructive Acts for the Complex Transformation SPEIS.

## **Specific Comments**

The environmental impacts of the preferred alternative must be prominently displayed in the summary. The SPEIS, especially the Summary, is poorly written and confusing. Preferred alternative should have its own column in the tables at the end of the summary. This includes Table S.3.16-1 — Comparison of Environmental Impacts among Programmatic Alternatives.

Granted, the preferred 50/80 Alternative for plutonium pit production is mentioned in the Consolidated Plutonium Center (CPC) column, but it is buried. Moreover, the specific 50/80 Alternative is not mentioned in all of the Environmental Impacts categories. In sum, the environmental impacts of the preferred alternative must be prominently displayed and not hidden or buried in tables or later chapters.

The ongoing problem of transuranic waste disposal must be truthfully addressed. The Waste Isolation Pilot Project (WIPP) is not depicted in DOE maps of the functional nuclear weapons complex. WIPP is an essential component because that is where bomb production wastes are dumped.

WIPP is currently scheduled to close around 2035, and all subsequent nuclear weapons waste has no declared disposal path. The preferred 50/80 Alternative would generate an additional 575 cubic yards of radioactive transuranic (TRU) waste per year. The draft SPEIS assumes that this increasing TRU waste will be packaged and shipped to WIPP in southern New Mexico for disposal. However, WIPP is already about 40% full from past bomb making and the remaining space is already all accounted for. There is currently no room for added TRU waste. Further, the CMMR is planned to operate for 30 years after WIPP's scheduled closure in 2035, so closure would happen before most of the Bombplex production even occurs.

Please refer to, and include in the SPEIS reference documents, "ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2007, DOE/TRU-2008-3379." Tables 3.1 and 3.2 give the total of 5,272,479.7 ft³ of anticipated volumes and emplaced volumes of TRU waste. The design capacity for WIPP is 175,564 m³ (6,200,000 ft³), as set by the Land Withdrawal Act (LWA). Where the inventory busts the LWA limits is when the "potential" wastes are added -- see Tables 4.1 (CH) and 4.2 (RH).

With future potential wastes, contact-handled wastes exceed the limit by 5,000 m³ and remote-handled wastes by more than 1,500 m³, or a total of 229,545 ft³ over WIPP's limits. Potential waste essentially already exists under the Complex Transformation proposal, and will need a new repository. The new TRU waste from expanded pit production is not included or even mentioned in the above WIPP inventory report.

#### Therefore:

- The Complex Transformation SPEIS must analyze where all radioactive and hazardous wastes from continuing nuclear weapons R&D and production will be permanently disposed of.
- The SPEIS must analyze the impacts of storing TRU waste at the generator sites until they can be shipped to WIPP or a "WIPP-like" facility. Please note that previously touted "Quick-to-WIPP" initiatives at LANL were anything but quick, and that above ground storage there of TRU wastes remain a serious environmental, public safety, and

- Intentional Destructive Acts threat.
- The SPEIS must analyze what happens after WIPP is closed. The SPEIS must analyze where yet more bomb making wastes will go.
- If future Complex Transformation TRU wastes are generated in time to be disposed of at WIPP, potential existing TRU wastes at other sites, which could include environmental restoration wastes, could get bumped out of WIPP. The SPEIS must analyze the impacts of a possible TRU waste shell game that continues indefinitely on into the future.
- Please include in the SPEIS reference documents, "ANNUAL TRANSURANIC WASTE INVENTORY REPORT 2007, DOE/TRU-2008-3379"
- Storing future Complex Transformation TRU wastes in Hardened On-Site Storage (HOSS) facilities must be analyzed for the sake of public safety and mitigating possibly serious environmental threats.

#### Define "WIPP-like facility"

Both TRU waste and LLW would be generated at the CPC [Consolidated Plutonium Center] site. DOE's Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico or a WIPP-like facility would be the destination for TRU waste from all CPC alternative sites. (Pg. A-9)

Please describe what is meant by a "WIPP-like facility." Does it mean a deep salt mine near Carlsbad, NM? Does it mean a facility that takes 20 years to get a permit? Does it mean a facility that the State of New Mexico will never allow to be expanded?

- Please do not include imaginary facilities in this SPEIS.
- Lacking any real disposal facilities, please withdraw, rewrite and re-release the SPEIS.

### Low-Level Radioactive Waste cannot go to LANL's Area G

The 50/80 Alternative will also generate an estimated 1,850 cubic yards of "low-level" radioactive wastes annually. These wastes would be processed at the Solid Waste Management Facility in TA-54 and disposed of on-site at TA-54's Area G. But Area G itself is due to be closed in 2015. There is still time for the public to convince the New Mexico Environment Department (NMED) to require that LANL remove this waste rather than cap and cover and leave it in place as the Lab plans.

However, LANL also plans to expand Area G into "Zone 4," which will be much of the same – unlined dumps above our groundwater aquifer that will likely leave radioactive wastes permanently. The New Mexico Environment Department (NMED) will largely drive future cleanup decisions. However, internal Lab documents already point to predetermination, saying "Many contaminated sites will be remediated to industrial use standards, in part because cleaning up to residential or unrestricted use standards is prohibitively expensive."

Cleanup and disposal that will protect ongoing generations cannot be dictated by today's short-term fiscal considerations. If more money is needed for comprehensive cleanup or better disposal methods, take it from the budget for the Lab's nuclear weapons programs. Don't bury more radioactive and chemical wastes when cleanup costs are already "prohibitively expensive."

- Environmental impacts of past radioactive waste dumping at Area G are unknown because of problems with LANL's monitoring well system due to the use of drilling muds and additives that are known to mask contaminants. No further additional LLW waste should be added to Area G until the legacy waste impacts are known and mitigated.
- No more waste should be dumped at Area G until the actual impacts of past dumping are known

#### All true alternatives for safe storage of waste must be identified and analyzed

Given potential future innovations that could provide safer disposal methods, or the discovery of greater risks at any one site than previously foreseen, it is necessary *ipso facto* that all disposal options be reversible.

- At a minimum, DOE must consider interim "Hardened On-Site Storage" (HOSS) at existing nuclear facilities as a real alternative (further discussion immediately below).
- Should DOE summarily reject HOSS, please explain why.

#### D&D must be analyzed more in depth

Complex Transformation will involve the decontamination and decommissioning (D&D) of many existing contaminated facilities. Large volumes of radioactive and hazardous wastes will be shipped and dumped in a number of sites across the country. The D&D of some of these buildings is mentioned, but the environmental impacts are not analyzed in depth.

- Please list all the buildings that will be D&Ded for the preferred alternative. The cost of D&D of LANL CMR must be included.
- Please include the environmental impacts of the D&D of all unused or replaced buildings.
- Please consider the alternative of storing all waste on-site.
- For all of the alternatives, the SPEIS must describe where that waste will be stored and disposed, and the costs and impacts of such storage and disposal.
- The environmental impact of increased waste going to private waste disposal facilities must be analyzed. Despite the fact that wastes may end up in a private waste facility, those facilities still need environmental impact statements for the communities living near private disposal facilities.
- The full cost of D&D of existing facilities, the cost of designing, constructing, operating, decontaminating, and decommissioning all the facilities must be fully analyzed and the costs described in the draft SPEIS. In the words of the SPEIS' Notice of Intent, how these costs are "economically sustainable" must be fully described and evaluated.
- Please describe the health and environmental impacts of the existing complex as well as the proposed new complex.
- Please project cleanup costs of Complex Transformation.

#### D&D of CMR must be included in this SPEIS

Strangely absent from this SPEIS is any mention of the decontamination and decommission of the old Chemistry and Metallurgy Research (CMR) Building at LANL. The 2004 CMRR ROD decided that, "The existing CMR building would be decontaminated, decommissioned and demolished in its entirety..." Is it absent from this SPEIS because of the cost? The cost of D&D of CMR must be included. The estimated cost of D&D for Y-12 is included and given as \$20 billion. The impacts of D&D of many other buildings around the complex are analyzed. This includes the estimated amounts of wastes and soils to be removed.

It is stated in the SPEIS that CMRR must be built because CMR is too costly to maintain. If the cost of D&D of CMR is compared to the cost of maintaining CMR, there might be a good reason to keep CMR online.

- Please do a cost-benefit analysis of the costs of upgrading CMR, including seismic upgrades, versus the costs of D&D of CMR plus the construction cost of CMRR.
- The impacts of D&D of CMR must be analyzed in this SPEIS.
- Further, the costs of all D&D must be included.

#### State the needed size of the CMRR

The 2004 CMRR Record of Decision (ROD) decided to implement the preferred alternative, alternative 1, which is the construction and operation of a new CMRR facility within TA–55 at LANL. The new CMRR facility would include two buildings (one building for administrative and support functions, and one building for Hazard Category 2 SNM laboratory operations), both of which would be constructed at above ground locations (construction option 3).

Page 2-20 of the CMRR EIS states that the Hazard Category 2 facility would be "approximately 200,000 square feet."

Construction Option 3: This construction option includes a single consolidated SNM-capable Hazard Category 2 laboratory and a separate administrative offices and support functions building. In this option, all Hazard Category 2 and 3 operations would be housed in the single Hazard Category 2 laboratory. The Hazard Category 2 building would contain a total of approximately 200,000 square feet (18,580 square meters) and be constructed with one floor below grade containing the Hazard Category 2 operations, and one floor above grade containing Hazard Category 3 operations.

The reference document, "Independent Business Case Analysis Of Consolidation Options For The Defense Programs SNM And Weapons Production Missions" states that 281,000 square feet are needed for the CMRR-Nuclear Facility (NF) to produce 50-80 pits. (Table 7-2. Level IIB1 Construction and Modification Costs for LANL)

So, it seems that a 200,000 ft<sup>2</sup> CMRR-NF, as originally envisioned in its 2003 EIS, is not sufficient to produce 80 pits per year. The CT SPEIS never gives a square footage for the CMRR.

- Given the central importance of the CMRR-NF to NNSA's preferred 50/80 pit production alternative, NNSA must clearly state the facility's ultimate proposed size.
- If over 200,000 ft<sup>2</sup>, the Complex Transformation SPEIS must conduct adequate NEPA analysis for additional square footage over that analyzed in the CMRR EIS. Further, NNSA needs to specify as to whether further facility-specific NEPA analysis might be necessary.

# Please explain the additional 9,000 ft<sup>2</sup> needed for the CMRR

This SPEIS is confusing as to whether an additional 9,000 ft<sup>2</sup> for CMRR is needed. Various references follow:

S.3.4.1.2.2 Los Alamos Upgrade Alternative to Provide Up To 80 Pits per Year ("50/80 Alternative") The 50/80 Alternative includes completing the previously analyzed CMRR facility, which could require expansion by up to 9,000 additional square feet, to accommodate pit manufacturing operations. (P. S-35)

The 50/80 Alternative would involve expanding the current pit production capabilities in Building PF-4 and completing the CMRR Facility, with the potential addition of approximately 9,000 square feet, to support production of up to 80 pits per year.

. . .

The 50/80 Alternative includes completing the previously analyzed CMRR facility, and could require expansion of it by up to 9,000 additional square feet to accommodate pit-manufacturing operations. (P. 3-37)

Additionally, this alternative includes the CMRR-NF facility, which would be expanded by approximately 9,000 square feet to approximately 209,000 square feet, to accommodate pit manufacturing operations. (P. 5-10)

...For the 50/80 Alternative, the **CMRR-NF** would be constructed and expanded by approximately **9,000** square feet. (P. 5-53)

These alternatives would involve additional process efficiencies and, possibly for the Los Alamos Upgrade Alternative and the Los Alamos 50/80 Alternative, require physical expansion of facilities or construction of additional facilities to provide for the manufacture of more pits than are evaluated in the LANL SWEIS. (P. 1-17, bolded emphases added in all these quotes.)

NNSA is dodging this issue. We don't know what the additional 9,000 square feet is added to or if it is needed.

• Please state if an additional 9,000 square feet is definitely needed in the CMRR-NF for the preferred 50/80 plutonium pit production alternative.

#### An alternative that does not involve the CMRR-NF must be analyzed

All Alternatives, including the No-Action Alternative, include the construction of the CMRR-NF. This makes the CMRR-NF at LANL a predetermined fact.

• Please analyze Complex Transformation without the CMRR-NF.

#### **Keep the Phases straight at CMRR**

The Chemistry and Metallurgy Research Building Replacement, currently under construction, will provide chemistry and metallurgy research, actinide chemistry, and materials characterization capabilities. (Pg. 5-7)

NNSA wishes that the CMRR-NF would be under construction. The part of CMRR that will provide chemistry and metallurgy research, actinide chemistry, and materials characterization capabilities IS NOT UNDER CONSTRUCTION! Construction of the CMRR Nuclear Facility (CMRR-NF) is on hold until after this SPEIS.

• Please correct this factual error

#### **Expanded Plutonium Pit Production Diverts Resources**

Expanded production could block LANL from much needed mission diversification into addressing today's real national security threats, such as nonproliferation, energy independence and global warming. 65% of the Lab's Budget goes to nuclear weapons programs. LANL cut its budget request for nonproliferation programs by 20%. 0 % of the Lab's budget request is for renewable energy R&D.

• Please analyze what LANL could do for real national security if it weren't building unneeded pits.

#### New research concerning nanoclusters must be included

New research from Argonne National Laboratory indicates that plutonium nanoclusters can travel more readily through soil and into groundwater. The SPEIS does not assess the potential for the plutonium waste from past activities; ongoing or future pit production to contaminate soil, air or groundwater in the form of nanoclusters. Thus the risk analysis for plutonium exposure of the public and the environment could be defective.

• Please include an analysis of the health impacts of plutonium nanoclusters.

#### Section 3.2.10 is missing

The General Services Administration (GSA), as the lead agency, and NNSA, as a cooperating agency, are preparing an Environmental Assessment to evaluate the potential environmental impacts associated with relocating the facilities and infrastructure for the non-nuclear production activities conducted at KCP. This SPEIS does not assess alternatives for the activities conducted at KCP (see Section 3.2.10). Page 1-5

A more detailed explanation of why the Kansas City Plant non-nuclear operations are not included in this SPEIS was added (see Section 3.2.10). Page D-11

There is no section 3.2.10. Please re-release this SPEIS with a relevant Section 3.2.10.

#### Radiological Air Emissions must be accurately addressed

The LANL radiological air-sampling network, referred to as AIRNET, measures the environmental levels of airborne radionuclides, such as plutonium, americium, uranium, tritium, and activation products that could be released from LANL operations. Most regional airborne radioactivity comes from the following sources: (1) natural radioactive constituents in particulate matter (such as uranium and thorium), (2) terrestrial radon diffusion out of the Earth and its subsequent decay products, (3) material formation from interaction with cosmic radiation, and (4) fallout from past atmospheric nuclear weapons tests conducted by several countries. Pg. 4-17

The AIRNET stations are routinely turned off due to lack of funding and other reasons.

- Please provide the percentages of items 1-4.
- Please compare the above percentages to the activation products produced by LANSCE.

#### Impacts of Legacy Waste must be analyzed

Overall, the SPEIS fails to address the enormous radioactive and hazardous waste environmental cleanup issues that resulted from the last five decades of nuclear weapons manufacturing. NNSA proposes to proceed with additional pit production and weapons production, but is not addressing or providing adequate funding for cleanup of the horrific existing contamination confronting communities at all existing DOE sites.

• The impacts of leaving legacy waste in the ground while spending money on new facilities must be analyzed.

#### The SPEIS must analyze the impacts to farmlands in Northern New Mexico

The SPEIS claim that there are no prime farmlands in the vicinity of LANL is wrong. Before the Atomic Energy Commission arrived on the Pajarito Plateau in 1943, all this land was prime farmland. LANL is located within the food basket of Northern New Mexico. NNSA has not analyzed the additional amount of water resources that it will use for future Complex related activities at LANL nor the diversion from, and/or contamination of, the water for agricultural activities into the future.

1. NNSA must retract the draft Complex Transformation Supplemental Programmatic Environmental Impact Statement and reassess the LANL impacts to agriculture. Then NNSA must submit the revised draft to the public for review and public comment.

#### The Cumulative Impacts of multiple sites must be addressed

The 50-mile radius analysis of impacts of LANL and SNL overlap.

• The cumulative impacts to the public of these two facilities must be analyzed.

#### **NEPA Categorical Exclusions must be included in the cumulative impacts**

There are probably hundreds of categorical exclusion determinations for operations at the nuclear weapons complex's many sites. These exclusions probably include several D&Ds of vacant laboratory buildings. DOE NEPA regulations state that categorical exclusions should only be implemented if they "do not individually or cumulatively have a significant effect on the human environment" (10 CFR 1021.410).

- Please list all the categorical exclusions at all sites.
- DOE must make the list of categorical exclusions available online and update it regularly.
- Please provide a reason why each of the exclusions should be excluded from NEPA review, and why each does not and together cumulatively have a significant effect on the environment.

#### Complex Transformation must stringently minimize the use of our precious water.

Many DOE nuclear weapons facilities have been historically located next to abundant water sources, but LANL was not. When it was primarily a design laboratory, lack of water was not so large a problem. But now that the Lab is positioned to become the nation's plutonium pit production center, LANL is starting to covet the scarce water resources of the desert Southwest.

• Explain the water conservation programs to be used in Complex Transformation.

#### Hardened On-Site Storage (HOSS) must be considered as an alternative

In our view, radioactive wastes should be safely stored as close to the site of generation as possible and be safeguarded in hardened, on-site storage facilities. HOSS facilities should be considered and analyzed from the perspective that these wastes must be zealously protected from risks posed by wildfire or other natural or man-made disasters. HOSS facilities must not be designed as permanent waste disposal solutions, and therefore should not be constructed deep underground. The wastes must be retrievable, and real-time radiation and heat monitoring at the HOSS facility must be implemented for early detection of radiation releases.

The overall objective of HOSS should be such that the amount of release projected in even serious terrorist attacks should be low enough that the storage system would be unattractive as a target to begin with. Design criteria must include resistance to severe attacks, such as a direct hit by high explosive or an aircraft loaded with fuel and/or explosives.

- Please explain why HOSS was not posed as an alternative in this SPEIS.
- If HOSS is not analyzed in the final SPEIS, please provide detailed reasons for its rejection.

#### Protect those most at risk

Many federal radiation protection standards, such as limits on how much residual radiation will be allowed in contaminated soil, are based on "Reference Man." That is defined as a hypothetical adult "Caucasian" male who is 20 to 30 years old, 154 pounds in weight, five feet seven inches tall, and is "Western European or North American in habitat and custom." However, other groups, including women, children, and embryos/fetuses, are more sensitive to the harmful effects of radiation or toxic materials.

The government's model for setting residual radioactivity standards for cleaning up radioactively contaminated sites (RESRAD) pictures a family on its front panel display, but its standard calculating model converts contamination to radiation dose only for "Reference Man." In the context of clean up and storage of nuclear waste at Department of Energy sites, the risk to

a pregnant woman farmer, the fetus, and her children should be evaluated, rather than Reference Man.

• As a matter of principle, the most potentially vulnerable human beings should be protected, instead of Reference Man.

#### Response to comments must be robust

The response to scoping comments in this draft SPEIS was not so good because the responses to comments are not by topic and "Table D.2-2 — Summary of Scoping" refers back to sections of the SPEIS instead of just responding in Appendix D. We request that the response to comments for this SPEIS be similar to the Response to Comments in the Kansas City Plant final Environmental assessment (DOE/EA – 1592), which in format and devoted length (but not substance) we found to be surprisingly good. Specifically, please include a table in the final SPEIS similar to "Table B-3 – Issue Category Associated With Each Document" in the KCP final EA. We also request treatment similar to the "Issue Analysis of Public Comments" in the KCP EA.

• Please include a Table in the final SPEIS similar to "Table B-3 – Issue Category Associated With Each Document" in the KCP final EA.

Respectfully submitted,

Jay Coghlan, Executive Director Scott Kovac, Operations Director John Witham, Communications Director