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#### VIA ELECTRONIC MAIL

# Re: The need to prepare a Programmatic Environmental Impact Statement in connection with plans to expand plutonium pit production at the Los Alamos National Laboratory in New Mexico and the Savannah River Site in South <u>Carolina.</u>

On behalf of the public interest organizations Nuclear Watch New Mexico, Savannah River Site Watch, the Natural Resources Defense Council, and Tri-Valley Communities Against a Radioactive Environment (collectively "the Nuclear Safety Organizations"), we are writing to notify the Department of Energy ("DOE") and the National Nuclear Security Administration ("NNSA") of the need to prepare a Programmatic Environmental Impact Statement ("PEIS") in connection with the agencies' stated plan to expand the production of plutonium pits for nuclear weapons at the Los Alamos National Laboratory ("LANL") in New Mexico and the Savannah River Site ("SRS") in South Carolina. Because the National Environmental Policy Act ("NEPA") mandates that "[a]gencies shall integrate the NEPA process with other planning *at the earliest possible time* to ensure that planning and decisions reflect environmental values," 40 C.F.R. § 1501.2 (emphasis added), DOE and NNSA must begin the preparation of a PEIS now.

#### **EXECUTIVE SUMMARY**

The Trump Administration's 2018 Nuclear Posture Review called for the expanded production of nuclear weapons for the first time in many years, and specifically called for production of 80 plutonium pits (the cores of nuclear weapons) per year by 2030. To that end,



the Department of Energy ("DOE") and the National Nuclear Security Administration ("NNSA") plan to expand production of plutonium pits at the Los Alamos National Laboratory in New Mexico and to repurpose an incomplete facility at the Savannah River Site in South Carolina. At Los Alamos, this plan will require roughly tripling plutonium pit production in facilities with nuclear safety deficiencies so severe that DOE suspended all nuclear weapons production there for over four years, and which DOE recently found have not been adequately resolved. At the Savannah River Site, this plan will require repurposing a facility that was never designed for plutonium pit production, that is still incomplete, and that has been subject to construction-related fraud. Both aspects of DOE and NNSA's plan to expand plutonium pit production entail serious risks for the environment and public safety. Additionally, these plans will cost at least \$9 billion over the next ten years and at least \$42 billion over the project's duration.

The National Environmental Policy Act ("NEPA") requires federal agencies to take a hard look at proposed actions before committing to a course of action or making any irreversible or irretrievable commitment of resources. NEPA requires agencies to publicly disclose environmental impacts, involve the public in agency decision-making, and to seriously consider all viable alternatives to a proposed action. Thus, agencies must prepare an Environmental impacts. Where agency actions are closely related, they must be considered together in a single Programmatic EIS ("PEIS").

DOE and NNSA have stated that it is their intention to meet the Trump Administration's goal of producing 80 plutonium pits per year by 2030 through the expansion of pit production at Los Alamos and the Savannah River Site. Because the agencies' previous environmental analysis for activities at Los Alamos is badly outdated and does not properly consider the serious and ongoing safety issues that led to a four-year shutdown in nuclear weapons production there, NEPA requires a hard look at the proposed expansion of plutonium pit production at that site through a new or supplemental EIS. Likewise, because the agencies have not prepared any environmental analysis for the proposal to produce plutonium pits at an incomplete facility at SRS that has been subject to construction fraud, NEPA requires the production of an EIS for this activity as well. And because the proposed actions at LANL and SRS are inextricably related aspects of DOE and NNSA's plan to meet the Trump Administration's call for expanded nuclear weapon production, DOE and NNSA must prepare a PEIS to consider these proposed actions together. However, the agencies instead appear to be shirking NEPA's requirements by undertaking activities at LANL and SRS without first preparing the legally required environmental analysis. To come into compliance with NEPA, DOE and NNSA must begin the required PEIS process now.

#### **DISCUSSION**

### I. <u>NEPA.</u>

NEPA is the "basic national charter for protection of the environment." 40 C.F.R. § 1500.1. NEPA's "national policy" is to "encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment . . . [and] enrich the understanding of the ecological systems and natural resources

important to the nation . . . . " 42 U.S.C. § 4321. To guard against environmental damage, Congress required all federal agencies to prepare a "detailed statement" for each "major federal action significantly affecting the quality of the human environment" that includes "the environmental impact of the proposed action" as well as a thorough consideration of alternatives to the proposed action. *Id.* § 4332(c).

In light of NEPA's mandates, the Supreme Court has reasoned that NEPA is "intended to reduce or eliminate environmental damage and to promote 'the understanding of the ecological systems and natural resources important to' the United States." *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 756 (2004) (quoting 42 U.S.C. § 4321).

To achieve NEPA's goals, federal agencies must prepare an EIS for any major federal action with significant environmental effects. 42 U.S.C. § 4332(c). NEPA's procedures are designed to inject environmental considerations "in the agency decision making process itself," and to "help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." *Pub. Citizen*, 541 U.S. at 768-69 (quoting 40 C.F.R. § 1500.1(c)). Therefore, "NEPA's core focus [is] on improving agency decisionmaking," *Pub. Citizen*, 541 U.S. at 769 n.2, and specifically on ensuring that agencies take a "hard look" at potential environmental impacts and alternatives "as part of the agency's process of deciding whether to pursue a particular federal action," *Balt. Gas and Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 100 (1983).

Importantly, the NEPA process "shall serve as the means of assessing the environmental impact of proposed agency actions, *rather than justifying decisions already made*." 40 C.F.R. § 1502.2(g) (emphasis added); *see also id.* § 1502.5 (requiring that NEPA review "shall be prepared early enough *so that it can serve practically as an important contribution to the decision making process* and *will not be used to rationalize or justify decisions already made*." (emphasis added).

An agency must prepare an EIS for every "major Federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332(c). Under NEPA's implementing regulations, "significance" requires consideration of both context and intensity. 40 C.F.R § 1508.27. "Context" considerations include the affected region, interests, and locality, varying with the setting of the action, and include both short and long-term effects. *Id.* § 1508.27(a). "Intensity" refers to the severity of impact, including: impacts that may be both beneficial and adverse; unique characteristics of the geographic area, such as proximity to wetlands, wild and scenic rivers, or ecologically critical areas; the degree to which the effects on the quality of the human environment are likely to be highly controversial; the degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration; whether the action is related to other actions with individually insignificant but cumulatively significant impacts; the degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act; and whether the action threatens a violation of federal law imposed for the protection of the environment. *See* 40 C.F.R. § 1508.27(b).

Under NEPA, to determine the proper scope of an EIS an agency "shall consider 3 types of actions," including connected actions, cumulative actions, and similar actions. *Id.* § 1508.25. Connected actions include those that "are closely related and therefore should be discussed in the same impact statement" because they "[a]re interdependent parts of a larger action and depend on the larger action for their justification." *Id.* § 1508.25(a)(1). Cumulative actions are those that "with other proposed actions have cumulatively significant impacts." *Id.* 1508.25(a)(2). And similar actions "when viewed with other reasonably foreseeable or proposed agency actions have similarities that provide a basis for evaluating their environmental consequences together." *Id.* § 1508.25(a)(3). An agency should analyze similar actions or reasonable alternatives to such actions is to treat them in a single impact statement." *Id.* In such circumstances, a Programmatic Environmental Impact Statement is necessary where "actions are 'connected,' 'cumulative,' or 'similar,' such that their environmental effects are best considered in a single impact statement." *American Bird Conservancy v. Federal Communication Commission*, 516 F.3d 1027, 1032 (D.C. Cir. 2008) (quoting 40 C.F.R. § 1508.25(a)).

## II. DOE and NNSA's Plans for Expanded Plutonium Pit Production

In 2018, the Trump Administration issued a Nuclear Posture Review that, for the first time in many years, called for expanding production of nuclear weapons. *See* U.S. Dep't of Defense, *Nuclear Posture Review*, February 2018, at 1–2.<sup>1</sup> Despite the fact that "[f]or decades, the United States led the world in efforts to reduce the role and number of nuclear weapons," *id.* at 1, the 2018 Nuclear Posture Review reversed this strategy by calling for "a flexible, tailored nuclear deterrent strategy," an apparent euphemism for the development of new nuclear weapons, *id.* at 2; *see also id.* at 63 (noting that the U.S. "has not executed a new nuclear weapon program for decades" and calling for "research and development" and "technology maturation" in order "to design and develop nuclear weapons"); *id.* at 52 (depicting a proposed increase in the nuclear weapons budget to levels not seen since the Cold War).

To support the Trump Administration's call for new nuclear weapons, the Nuclear Posture Review announced the need to "[p]rovide the enduring capability and capacity to produce plutonium pits at a rate of no fewer than 80 pits per year by 2030." *Id.* at 64. The Review further stated that in order to increase production of plutonium pits, which are the core of nuclear weapons, "significant and sustained investments will be required over the coming decade." *Id.* Indeed, the Congressional Budget Office ("CBO") has estimated that DOE's plan to "produce at least 80 plutonium pits per year by 2030" will cost "about \$9 billion from 2019 to 2028." CBO, *Projected Costs of U.S. Nuclear Forces*, January 2019, at 5.<sup>2</sup> Furthermore, NNSA recently estimated that repurposing the MOX Facility at SRS for plutonium pit production will have a "lifecycle cost" of \$27.8 billion, while expanding pit production at LANL will cost between \$14.3 billion and \$18.8 billion—meaning that over the next decades this plan will likely

<sup>&</sup>lt;sup>1</sup> The 2018 Nuclear Posture Review is available online at <u>https://media.defense.gov/2018/Feb/02/2001872886/-1/-</u> <u>1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF</u>

<sup>&</sup>lt;sup>2</sup> This CBO report is available at <u>https://www.cbo.gov/system/files/2019-01/54914-NuclearForces.pdf</u>

cost taxpayers at least \$42 billion. NNSA, *Plutonium Pit Production Engineering Assessment* (*EA*) *Results*, May 2018, at 10.<sup>3</sup>

Producing plutonium pits "entails extensive processing of very hazardous materials, which typically requires a specialized facility." CBO, *Projected Costs of U.S. Nuclear Forces*, at 8 n.13. Plutonium pit production in the United States was performed on a large scale at the Rocky Flats Plant in Colorado until 1989, when an FBI raid investigating safety and environmental violations led to the closure of that facility. *See* Congressional Research Service, *U.S. Nuclear Weapon "Pit" Production Options for Congress*, February 2014, at 18.<sup>4</sup> DOE has declined to attempt to restart operations at Rocky Flats and has instead undertaken a "Sisyphean history" of "failed efforts to construct a building to restore pit production." *Id.* "The United States has not had the capacity to make more than about 10 [pits per year] since 1989." *Id.* 

Currently, the United States has the capacity to produce a very limited number of plutonium pits only at the Los Alamos National Laboratory in New Mexico, a facility with a history of serious safety problems. See DOE Office of Enterprise Assessments, Assessment of the Management of Nuclear Safety Issues at the Los Alamos National Laboratory, April 2019, at 1.<sup>5</sup> Indeed, DOE has recognized "significant weaknesses (i.e. non-compliances with significant impact)" in LANL's management of nuclear safety issues "over the past eleven years." Id. at 2. These "significant weaknesses . . . have allowed identified problems to go uncorrected, problem recurrences to be routinely accepted, and corrective actions to often be delayed for years." Id. at v. These problems led to the production of plutonium pits at LANL being shut down "for over four years." Id. Moreover, DOE has recognized that despite changing the contractor responsible for managing these issues, LANL has made "only limited improvement in addressing longstanding weaknesses" and that many of these safety issues "persist, which can lead to the degradation of nuclear safety." Id. Nevertheless, the Trump Administration's plan is not only to produce plutonium pits at LANL, but to do so at a rate that has not been seen for decades. See DOE, Final Report for the Plutonium Pit Production Analysis of Alternatives, October 2017 at 1 (noting that DOE plans to produce 30 pits per year at LANL, but that it produced only 10 pits per year "in the early 2000s" and that no pits have been produced at LANL since 2012).<sup>6</sup> DOE has acknowledged that its plan to accelerate pit production at LANL has a "high risk level," may cause "significant unmitigated off-site consequences," and that "[r]easonable mitigation strategies" are "unavailable." DOE, Engineering Assessment Report, Pu Pit Production Engineering Assessment, April 2018, at 4-9.7

<sup>&</sup>lt;sup>3</sup> This NNSA Report is available at <u>https://nukewatch.org/newsite/wp-content/uploads/2019/03/FINAL-Pu-Pit-</u> Production-EA-Results-05.14.18\_Unclassified.pdf

<sup>&</sup>lt;sup>4</sup> This Report is available at <u>https://fas.org/sgp/crs/nuke/R43406.pdf</u>

<sup>&</sup>lt;sup>5</sup> This DOE Report is available at <u>https://www.energy.gov/ea/downloads/assessment-management-nuclear-safety-issues-los-alamos-national-laboratory-april-2019</u>

<sup>&</sup>lt;sup>6</sup> A redacted version of this DOE Report is available at <u>http://www.lasg.org/MPF2/documents/NNSA\_PuPitAoA\_Oct2017\_redacted.pdf</u>

<sup>&</sup>lt;sup>7</sup> A redacted version of this DOE Report is available at <u>https://nukewatch.org/newsite/wp-content/uploads/2019/03/Pu-Pit-Engineering-Assessment-Report-Rev-2\_20-April-2018.pdf</u>

Because DOE does not believe that it is possible for LANL to produce plutonium pits at the rate the Trump Administration has proposed, *id.*, DOE and NNSA have also proposed to produce plutonium pits at an as-yet-incomplete Mixed Oxide Fuel Fabrication Facility ("the MOX Facility") at the Savannah River Site in South Carolina. However, the MOX Facility was never designed for that purpose, *id.*, and has proven to be a multi-billion dollar boondoggle.<sup>8</sup>

Since 1991, the SRS mission has revolved principally around the storage or disposal of radioactive material, in particular plutonium from dismantled nuclear weapons. *See* Complaint, *United States of America v. CB&I AREVA MOX Services, LLC*, No. 1:19-cv-00444, ECF No. 1, at 8. In 1999, NNSA entered into a contract for the construction of the MOX Facility at SRS "to convert surplus nuclear weapons-grade plutonium into safe, stable fuel for civilian nuclear power generation." Id. Construction began on the MOX Facility in 2007. *See* Government Accountability Office, *MOX Fuel Fabrication Facility: Briefings in Response to a Mandate in the National Defense Authorization Act for Fiscal Year 2017* ("GAO MOX Report"), November 2017, at 1.<sup>9</sup> However, the MOX Facility project soon ran into dramatic delays and cost overruns. *See id.* (noting that cost estimates rose from \$3.4 billion to \$17.2 billion between 2007 and 2016). After spending at least \$3.4 billion on the MOX facility, *id.*, DOE has recently abandoned any intention to complete the MOX Facility. In November 2017, the Government Accountability Office found that despite DOE spending billions of dollars on the MOX Facility, it was at that time only roughly 30 percent complete. *Id.* at 4.<sup>10</sup>

In addition to stopping work on the MOX Facility after sinking billions of dollars into it, DOE has also recently revealed that the MOX Facility's construction was subject to extensive fraud. Indeed, the government recently brought a False Claims Act case against the MOX Facility contractor and subcontractor, alleging that the contractors defrauded NNSA out of "millions of dollars" by submitting "fraudulent claims, supported by forged and fraudulent invoices, for construction related materials that did not exist." *See* Complaint, *United States of America v. CB&I AREVA MOX Services, LLC*, No. 1:19-cv-00444, ECF No. 1, at 1–2. As such, after spending billions of taxpayer dollars, DOE now has a 30-percent-complete facility plagued by fraudulent construction practices.

Now, DOE and NNSA are considering converting the incomplete MOX Facility into a site for the production of the majority of the plutonium pits that the Trump Administration has stated are necessary. Indeed, of the 80 pits per year that DOE and NNSA say they must produce

<sup>&</sup>lt;sup>8</sup> See, e.g., <u>https://www.aikenstandard.com/news/nnsa-delivered-mox-termination-notice-this-week-construction-expected-to/article\_b907332c-ce40-11e8-b971-ebc9931647b9.html</u> (noting that the MOX Facility was "initially expected to come online in 2016 at a cost of \$4.8 billion" but that "the project's timeline and price tag have seriously bloated" and reporting the termination of the over-budget project).

<sup>&</sup>lt;sup>9</sup> This GAO Report is available at https://www.gao.gov/assets/690/688369.pdf

<sup>&</sup>lt;sup>10</sup> DOE issued a stop work order on May 14, 2018. The State of South Carolina sought to enjoin this decision, reasoning that DOE's intention to instead pursue a dilute-and-dispose approach to plutonium disposal violated NEPA, among other defects, but the Fourth Circuit rejected the State's arguments. *See State of South Carolina v. United States*, No. 18-1684, ECF No. 42 (4th Cir. Jan 8, 2019).

by 2030, 50 pits would be produced at the MOX Facility. *See* NNSA, *Engineering Assessment Report: Pu Pit Production Engineering Assessment*, April 2018, at xi.<sup>11</sup> DOE has acknowledged the significant risks of this plan. *See* DOE, *Analysis of Alternatives*, at 1 (noting the "qualitative risk of reconfiguring a partially completed facility for a new mission in a new location").

Notably, DOE and NNSA are treating the 80 pits per year as a minimum figure, meaning that the agencies would require the ability to produce more than 30 pits per year at LANL and more than 50 pits per year at SRS. *See* NNSA, *Pu Pit Production Engineering Assessment*, at 1-2 ("Plutonium pit production capability will be able to produce *a minimum of 80* [pits per year] by 2030." (emphasis added)); *see also* NNSA, *Final Report for the Plutonium Pit Production Analysis of Alternatives*, October 2017, at 1 ("The pit production requirement is an annual 'at least' production rate").

Troublingly, DOE and NNSA appear to be shirking their duties under NEPA. The agencies previously acknowledged in October 2017 that any approach to meeting the Trump Administration's goal of producing at least 80 plutonium pits per year would "require an environmental impact statement." *Id.* at 57; *see also id.* at 60 ("all alternatives are assumed to require a full EIS"); *id.* at 65 ("All alternatives will likely require an EIS"). However, in April 2018 the NNSA stated that "only a NEPA review is required" for the conversion of the MOX Facility to plutonium pit production, without acknowledging that an EIS is clearly required for such a significant action. NNSA, *Pu Pit Production Engineering Assessment*, at 4-6. And DOE and NNSA have not acknowledged the need to prepare a Programmatic EIS to consider the entirety of the agencies' proposed approach to meeting the Trump Administration's expanded plutonium pit production goals. This approach flouts NEPA's purposes and explicit requirements.

## III. <u>Analysis.</u>

# A. Repurposing the MOX Facility to Produce Plutonium Pits Requires <u>an EIS.</u>

NEPA requires the preparation of an EIS for any "major federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332(c). To determine whether impacts are significant, agencies must consider a project's "context" and "intensity," which is evaluated according to ten factors, 40 C.F.R. § 1508.27, any one of which may necessitate an EIS. *Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 865 (9th Cir. 2005).

To begin with, DOE's plan to repurpose the incomplete MOX facility to produce plutonium pits is a new proposed action that has never previously been analyzed in any NEPA process. Although DOE and NNSA have prepared previous PEISs for earlier plans regarding nuclear weapons fabrication (described further below), no previous NEPA analysis has considered producing nuclear weapon components using the MOX Facility.

<sup>&</sup>lt;sup>11</sup> This NNSA Engineering Assessment is available at

https://www.lasg.org/MPF2/documents/NNSA PuPitEA Rev2 20April2018-redacted.pdf

Moreover, DOE and NNSA's plan to repurpose the incomplete MOX facility plainly will have significant environmental impacts and thus requires an EIS. Beginning with the context, this plan will entail spending billions of taxpayer dollars over many years to conduct highly hazardous fabrication of plutonium pits at an incomplete facility that was never designed for this purpose. Because this plan, which bears directly on the nation's national security interests, entails significant risks to the surrounding environment and local communities, consideration of this project's context plainly indicates that the plan is "significant" within the meaning of NEPA. *See* 40 C.F.R. § 1508.27(a) (requiring consideration of "contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality"). Moreover, the plan to repurpose the MOX Facility to produce plutonium pits plainly implicates many of the significance criteria in NEPA's implementing regulations, any one of which may necessitate an EIS. *See Ocean Advocates*, 402 F.3d at 865.

First, this plan may affect public health or safety, 40 C.F.R. § 1508.27(b)(2), both because the processing of plutonium for nuclear weapons "entails extensive processing of very hazardous materials," CBO, *Projected Costs of U.S. Nuclear Forces*, January 2019, at 8 n.13, and because the fact that the MOX Facility was never designed for the production of nuclear weapon components raises very important questions about whether such activities may be undertaken safely at this Facility. *See, e.g.*, NNSA, *Pu Pit Engineering Assessment*, at 2-39 ("The significant number of samples required to support a 50 ppy plutonium pit mission . . . could increase the material at risk . . . above the current safety basis limits"). Likewise, because the release of radiological or hazardous materials from the Savannah River Site could spread for many miles, the impacts on the neighboring populations could be dire. *See, e.g.*, DOE, *Final Complex Transformation Supplemental Programmatic Environmental Impact Statement*, at 4-374 (acknowledging that members of the public within a 50-mile radius of SRS could be affected by radiation on the site).

Second, this plan may affect "[u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas." 40 C.F.R. § 1508.27(b)(3). For example, DOE's own description of the Savannah River Site notes that it includes "hundreds of individual wetland areas." DOE, *Facts from the Savannah River Site*, at 2.<sup>12</sup> Indeed, "[s]ome SRS surface waters are classified as . . . unique and irreplaceable on a national or eco-regional basis." DOE, *Final Complex Transformation Supplemental Programmatic Environmental Impact Statement*, at 4-356. Likewise, the portions of the Savannah River Site managed by the U.S. Forest Service includes "65,000 acres" of habitat for the endangered red-cockaded woodpecker, indicating that this is an ecologically critical area. U.S. Forest Service, *Savannah River Fast Facts*.<sup>13</sup>

Third, this plan would be "highly controversial," 40 C.F.R. § 1508.27(b)(4), and would be "highly uncertain or involve unique or unknown risks," *id.* § 1508.27(b)(5). To begin with, the extent of work that it would take to repurpose the incomplete MOX Facility remains profoundly unclear, in part because there is a dispute about the status of the construction so far.

<sup>&</sup>lt;sup>12</sup> This DOE Fact Sheet is available at <u>https://www.srs.gov/general/news/factsheets/srs\_overview.pdf</u>

<sup>&</sup>lt;sup>13</sup> This Fact Sheet is available at <u>https://www.srs.gov/general/news/factsheets/usfs-sr.pdf</u>

Thus, the GAO found that the MOX Facility is "about 30 percent complete," while the contractor insisted that it was 74 percent complete. GAO, *MOX Report*, at 4. Meanwhile, as noted above, the United States has recently sued the MOX Facility contractor under the False Claims Act for falsifying reports on what construction activities were actually undertaken. Under these circumstances, the plan to repurpose the MOX Facility to produce nuclear weapons is both "highly controversial" and "highly uncertain" within the meaning of NEPA's implementing regulations. As Senator Lindsay Graham stated regarding repurposing the MOX Facility, "I have no confidence you got a plan. I think you're making this up as you go." Senate Appropriations Committee, Energy and Water Development Subcommittee Hearing on the Proposed NNSA Budget, April 5, 2019.

Fourth, this action "may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources." 40 C.F.R. § 1508.27(b)(8). Indeed, the counties in which the Savannah River Site is located contain numerous areas listed on the National Register of Historic Places.<sup>14</sup> Likewise, the nearby city of Augusta, Georgia also contains numerous areas listed on the National Register of Historic Places.<sup>15</sup> Because a release of radiological or otherwise hazardous materials from the Savannah River Site could spread for many miles, the impacts to historic places within the area that could be affected by a catastrophic accident at a repurposed MOX Facility must be considered in an EIS. *See, e.g.*, DOE, *Final Complex Transformation Supplemental Programmatic Environmental Impact Statement*, at 4-374 (acknowledging that members of the public within a 50-mile radius of SRS could be affected by radiation on the site).<sup>16</sup>

Finally, the proposed repurposing of the MOX Facility to produce plutonium pits "may adversely affect an endangered or threatened species or its habitat that has been determined to be critical." 40 C.F.R § 1508.27(b)(9). SRS and the surrounding area provide habitat for numerous endangered species, including the red-cockaded woodpecker, the wood stork, the shortnose sturgeon, and several species of plants. *See*, DOE, *Final Complex Transformation Supplemental Programmatic Environmental Impact Statement*, at 4-356–57 (listing endangered species near SRS). A release of radiological or hazardous contaminants from a repurposed MOX Facility could have severe adverse impacts on these listed species.<sup>17</sup>

Accordingly, contrary to NNSA's statement that "only a NEPA review is required" for the conversion of the MOX Facility to plutonium pit production. NNSA, *Pu Pit Production Engineering Assessment*, at 4-6, there can be no legitimate dispute that an EIS is necessary.

<sup>&</sup>lt;sup>14</sup> See <u>http://www.nationalregister.sc.gov/aiken/nraiken.htm</u> (listing historic sites in Aiken County); <u>http://www.nationalregister.sc.gov/barnwell/nrbarnwell.htm</u> (listing historic sites in Barnwell County); <u>http://www.nationalregister.sc.gov/allendale/nrallendale.htm</u> (listing historic sites in Allendale County).

<sup>&</sup>lt;sup>15</sup> See <u>https://nationalregisterofhistoricplaces.com/ga/richmond/state.html</u> (listing historic sites in Augusta).

<sup>&</sup>lt;sup>16</sup> Likewise, DOE and NNSA must undertake an analysis of impacts to historic places pursuant to the National Historic Preservation Act, which agencies typically conduct in parallel with NEPA.

<sup>&</sup>lt;sup>17</sup> Likewise, for this reason DOE and NNSA must undertake formal consultation with the United States Fish and Wildlife Service pursuant to section 7(a)(2) of the Endangered Species Act.

# B. Expansion of Plutonium Pit Production at LANL Requires a <u>Supplemental EIS.</u>

Where "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts," an agency must prepare a Supplemental EIS ("SEIS"). 40 C.F.R. § 1502.9(c)(1)(ii); 10 C.F.R. § 1021.314(a). Whether new information is sufficiently significant to necessitate an SEIS "turns on the value of the new information." *Marsh*, 490 U.S. at 374. Where "new information is sufficient to show that the remaining action will affect the quality of the human environment in a significant manner or to a significant extent not already considered, a supplemental EIS must be prepared." *Id*. New information that "raise[s] substantial questions regarding the project's impact [is] enough to require further analysis." *League of Wilderness Defenders v. Connaughton*, 752 F.3d 755, 760 (9th Cir. 2014) (quoting *Klamath Siskiyou Wildlands Ctr. v. Boody*, 468 F.3d 549, 561–62 (9th Cir. 2006)).

DOE and NNSA appear to be moving forward with a plan to produce 30 plutonium pits per year at LANL without preparing any NEPA analysis that considers new information and changed circumstances since the agencies undertook their *Final Complex Transformation Supplemental Programmatic Environmental Impact Statement* in 2008. However, because important new information has come to light regarding the highly questionable safety of producing plutonium pits at LANL, the preparation of an SEIS is clearly necessary.

As NNSA has recognized, "LANL is currently authorized to produce only 20 pits per year." NNSA, *Supplement Analysis of the 2008 Site-Wide Environmental Impact Statement for the Continued Operation of Los Alamos National Laboratory*, April 2018, at Appendix B-3. This is because DOE and NNSA issued a governing Record of Decision in 2009 that authorizes production of pits "to not exceed 20 pits per year." *Id.* at 46. And although NNSA has asserted that it previously evaluated the production of 80 pits per year in 2008, *id.*, the agency's prior analysis did not—and could not—take into account information and changed circumstances that arose after 2008.

As DOE's own Office of Enterprise Assessments found in 2019, the management of nuclear safety issues at LANL has been sorely lacking for many years and is not significantly improving. For example, "significant weaknesses" in the management of nuclear safety issues "have allowed identified problems to go uncorrected, problem recurrences to be routinely accepted, and corrective actions to often be delayed for years." DOE, *Assessment of the Management of Nuclear Safety Issues at the Los Alamos National Laboratory*, at v. These "significant weaknesses" can "allow layers of defense for nuclear safety to degrade to the extent they did leading to the pause in June 2013 of key fissile material operations in the Plutonium Facility at LANL for over four years." *Id.* 

Indeed, in 2013 the director of the LANL laboratory "paused all fissile material operations in the Plutonium Facility . . . due to systemic and recurring weaknesses in the . . . criticality safety program and conduct of operations." *Id.* at 2. Moreover, "[d]ue to the scope and significance of these weaknesses that had been allowed to develop, the mitigation . . . took over four years to be completed for some of the key fissile material operations." *Id.* 

DOE found that LANL suffers from serious and ongoing problems in management of nuclear safety issues. In particular, DOE has found that "insufficient attention is given to ensuring timely and effective correction of nuclear safety issues." *Id.* at 15. Likewise, "84% of the high-significance . . . issues did not have an extent-of-condition review to identify potential recurring or systemic issues"; "55% of the high-significance issues that involved nuclear safety analyses" never received documentation of their causes; and "approximately 46% of 196 high-significance issues had been closed without addressing the underlying cause of the event, and 96% of those issues lacked effectiveness evaluations." *Id.* at 2. "Numerous examples" of insufficient management of nuclear safety issues "revealed practices that allowed nuclear safety issues to be lost, closed by transfer to unrelated issues, closed with promises of future action, *or intentionally closed without taking any corrective action." Id.* at 18 (emphasis added).

And critically, DOE has found that LANL has shown "only limited improvement in addressing longstanding weaknesses" in the management of nuclear safety issues. *Id.* at iv. Ongoing "deficiencies in [issues management] metrics and assessments have allowed poor [issues management] practices to persist." *Id.* at 9. Indeed, DOE found that "significant weaknesses" in the management of nuclear safety issues "at LANL persist, which can lead to the degradation of nuclear safety." *Id.* at iv.

The editorial board of the Albuquerque Journal recently found that this "is a huge issue considering the lab is ramping up production on the devices that act as nuclear bomb triggers." The editorial board stated that "[f]alling short of the bare minimum in the eyes of the DOE is a far cry from where the public expects or needs LANL to be." It further emphasized that "[t]op brass must take the audit's criticisms seriously and demonstrate above-and-beyond efforts" and "make safety the lab's top mission."<sup>18</sup>

Although NNSA prepared a Supplement Analysis ("SA") for the ongoing operation of LANL in April 2018, which concluded that no SEIS was necessary, its discussion of the pertinent nuclear safety issues is wholly inadequate. The SA asserts that "DOE has taken actions to address the criticality safety concerns," and that "[f]ull operations, including pit manufacturing, resumed . . . in August 2016." NNSA, *Supplement Analysis of the 2008 Site-Wide Environmental Impact Statement for the Continued Operation of Los Alamos National Laboratory*, at 96. However, since NNSA issued that Supplement Analysis, DOE's own Office of Enterprise Assessments has found that the deficiencies in the management of nuclear safety issues that led to the four-year shutdown at LANL are, in fact, continuing. *See supra*. Indeed, by finding that improving the management of nuclear safety issues "will be key to safely supporting increased production rates of plutonium pits through 2030," DOE, *Assessment of the Management of Nuclear Safety Issues at the Los Alamos National Laboratory*, at v, DOE itself has revealed that the increased production of plutonium pits at LANL cannot currently be undertaken safely.

Against this backdrop of highly unreliable management of nuclear safety risks, DOE and NNSA's counterintuitive plan to not only continue, but expand, the production of plutonium pits at LANL cannot lawfully be undertaken in the absence of an SEIS. Indeed, NNSA cannot

<sup>&</sup>lt;sup>18</sup> See <u>https://www.abqjournal.com/1316264/lanl-leaders-must-make-safety-the-labs-top-mission.html</u>

credibly claim to have taken any serious look under NEPA at these ongoing nuclear safety issues, because NNSA's last Supplement Analysis was issued in 2018, while DOE's findings of ongoing nuclear safety management deficiencies were issued in 2019. More critically, because NNSA's efforts to improve the management of nuclear safety issues at LANL have clearly not worked, as DOE's own analysis has found, the agencies must take the hard look that NEPA requires at these ongoing deficiencies in nuclear safety management, and at the impacts of, and alternatives to, the proposal to expand plutonium pit production. Under these circumstances, a new or supplemental EIS is clearly necessary.

# C. A Programmatic EIS is Necessary to Consider These Plainly Related <u>Activities.</u>

As explained, NEPA requires agencies to consider multiple actions together in a single Programmatic EIS when those "actions are 'connected,' 'cumulative,' or 'similar,' such that their environmental effects are best considered in a single impact statement." *American Bird Conservancy*, 516 F.3d at 1032 (quoting 40 C.F.R. § 1508.25(a)). Here, the expansion of plutonium pit production at LANL and the repurposing of the MOX Facility to produce plutonium pits at SRS plainly fall within the ambit of "connected," "cumulative," and "similar" actions within the meaning of NEPA, meaning that they must be considered together in a single programmatic EIS.

The expansion of plutonium pit production at LANL and the repurposing of the MOX Facility to produce plutonium pits at SRS are "connected" actions under NEPA. Connected actions "are closely related and therefore should be discussed in the same impact statement" because they "[a]re interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1). Both the proposed expansion of plutonium pit production at LANL and the repurposing of the incomplete MOX Facility to produce plutonium pits at SRS are interdependent parts of DOE and NNSA's plan to fulfill the Trump Administration's stated goal in its 2018 Nuclear Posture Review of producing at least 80 plutonium pits per year by 2030. *See* Dep't of Defense, *Nuclear Posture Review*, at 64. Because the Administration cannot reach the Nuclear Posture Review goal without both proposed actions at LANL and SRS, and because both actions depend on the Nuclear Posture Review for their justification, these actions are "connected" under NEPA and must be considered together in a single EIS.

Likewise, both projects are "similar" because "when viewed with other reasonably foreseeable or proposed agency actions" both "have similarities that provide a basis for evaluating their environmental consequences together." 40 C.F.R. § 1508.25(a)(3). These similarities are clear. To begin with, both projects involve producing plutonium pits for nuclear weapons. Moreover, both projects are being proposed in locations where the safety of producing plutonium pits is highly questionable at best: as described above, LANL suffers from serious and ongoing deficiencies in the management of nuclear safety issues, while the MOX Facility was never designed for fabrication of plutonium pits, is still incomplete, and was the subject of fraudulent construction practices that leave the state and safety of the building highly uncertain. Finally, because both projects entail processing highly hazardous nuclear materials in facilities with serious safety concerns, both projects are likely to have serious and similar nuclear safety issues and environmental impacts. Accordingly, both actions are "similar" under NEPA.

Furthermore, both actions also satisfy the definition of "cumulative" actions, because they will "have cumulatively significant impacts." 40 C.F.R. § 1508.25(a)(2). A cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." *Id.* § 1508.7. Here, not only will the expansion of plutonium pit production at LANL and the repurposing of the incomplete MOX Facility to produce plutonium pits each have significant impacts in their own right, but each project will also likely have cumulative environmental impacts that should be taken into account in a single EIS. For example, because each site will be performing similar activities and working with similar materials, each site will likely generate wastes that DOE and NNSA will have to determine how to treat, store, or dispose of.

Accordingly, because the expansion of plutonium pit production at LANL and the repurposing of the MOX Facility at SRS are clearly "connected," "cumulative," and "similar" actions, "their environmental effects are best considered in a single impact statement," *American Bird Conservancy*, 516 F.3d at 1032, and a PEIS is the legally and practically appropriate way to accomplish this.

Not surprisingly, therefore, DOE's own regulations require the production of a PEIS under these circumstances. DOE's regulations mandate that "[w]hen required to support a DOE programmatic decision (40 CFR 1508.18(b)(3)), DOE shall prepare a programmatic EIS." 10 C.F.R § 1021.330(a). In turn, a "DOE programmatic decision" includes the "[a]doption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive." 40 C.F.R. § 1508.18(b)(3). Here, both proposed actions at LANL and SRS are "systematic and connected agency decisions" undertaken to implement the specific "executive directive" in the 2018 Nuclear Posture Review to produce at least 80 plutonium pits per year by 2030. Accordingly, DOE's regulations mandate the preparation of a PEIS.

In addition to the need for a PEIS being clear under NEPA and its implementing regulations, DOE is currently subject to a court order in a case brought by two of the signatories to this letter that mandates the preparation of a PEIS under the current circumstances. That order establishes the following requirement:

Prior to taking any action that would commit DOE resources to detailed engineering design, testing, procurement, or installment of pit production capability for a capacity in excess of the level that has been analyzed in the SSM PEIS (the capacity analyzed in the SSM PEIS is the fabrication at LANL of 50 pits per year under routine conditions, and 80 pits per year under multiple shift operations), DOE shall prepare and circulate a Supplemental PEIS, in accordance with DOE NEPA regulation 10 C.F.R. § 1021.314, analyzing the reasonably foreseeable environmental impacts of and alternatives to operating such an enhanced capacity, and issue a Record of Decision based thereon.

*Natural Resources Defense Council v. Pena*, 20 F.Supp.2d 45, 50 (D.D.C. 1998). Because DOE and NNSA are currently devoting resources to designing a pit production capability of *at least* 80 pits per year, including a plan to produce pits at SRS, this order clearly requires the agencies to undertake a Supplemental PEIS.

Indeed, in analogous circumstances, DOE and NNSA have undertaken PEISs in the past. For example, in 1996, DOE undertook a *Stockpile Stewardship and Management PEIS* to consider relocating pit production to LANL. Likewise, in 2003, DOE undertook (but never finalized) a *Modern Pit Facility Supplemental PEIS* to analyze a possible increase in the rate of plutonium pit production. Similarly, in 2006, DOE undertook a *Complex 2030 Supplemental PEIS* to consider the modernization of the U.S. nuclear weapons program. And most recently, in 2008, the agencies undertook a *Complex Transformation Supplemental PEIS* in order to analyze alternatives for the modernization of the U.S. nuclear weapons program. Because both the agencies' plans and circumstances at both LANL and SRS have changed significantly since that time—including the new plan to radically increase the level of plutonium pit production, the demonstrated and ongoing serious safety issues at LANL, and the dubious proposition to repurpose the incomplete MOX Facility at SRS—the agencies must undertake a new or supplemental PEIS now as well.

## D. <u>DOE and NNSA Must Begin the NEPA Process Now.</u>

Because NEPA mandates that "[a]gencies shall integrate the NEPA process with other planning *at the earliest possible time*," 40 C.F.R. § 1501.2 (emphasis added), DOE and NNSA must begin the preparation of a PEIS now. DOE and NNSA have already begun the process for deciding how to move forward with the expansion of plutonium pit production at LANL and the repurposing of the MOX Facility at SRS, and the agencies must begin preparing a PEIS now "to ensure that planning and decisions reflect environmental values." *Id.*<sup>19</sup>

DOE and NNSA have undertaken significant steps toward the expansion of plutonium pit production at LANL and toward the repurposing of the MOX Facility. For example, DOE has sought and obtained the concurrence of the Nuclear Weapons Council regarding the proposed actions.<sup>20</sup> Moreover, DOE and NNSA have already used an undisclosed amount of taxpayer funds to direct its contractor to undertake design and planning for the repurposing of the incomplete MOX Facility to produce plutonium pits.<sup>21</sup> Although it is not entirely clear how

<sup>&</sup>lt;sup>19</sup> On October 31, 2018, the Nuclear Safety Organizations sent NNSA a similar letter explaining the need for a PEIS and requesting a response within 30 days. NNSA has not responded.

<sup>&</sup>lt;sup>20</sup> See <u>https://dod.defense.gov/News/News-Releases/News-Release-View/Article/1518222/joint-statement-from-ellen-m-lord-and-lisa-e-gordon-hagerty-on-recapitalization/</u>

<sup>&</sup>lt;sup>21</sup> See <u>https://www.aikenstandard.com/news/srns-tasked-with-initial-work-for-savannah-river-pit-production/article\_e3f15ab0-15ec-11e9-805c-d36536fe2d31.html</u>

much money is already being spent on this effort at SRS, DOE has requested that Congress allocate \$410 million toward design and planning for the repurposing of the MOX Facility.<sup>22</sup>

Likewise, Lisa Gordon-Hagerty, the Administrator of NNSA has testified to the House Subcommittee on Energy and Water Development that "NNSA is investing in the Savannah River Plutonium Processing Facility," and that "LANL is actively installing pit production equipment and has begun hiring to meet future work scope." Testimony Statement of Lisa Gordon-Hagerty before House Subcommittee on Energy and Water Development, April 2, 2019 ("Gordon-Hagerty Testimony"), at 5–6. Ms. Gordon-Hagerty also testified that "[r]epurposing the [MOX] Facility and producing plutonium pits at SRS and LANL is the preferred path," and that "[t]he time to move forward is now." *Id.* at 5. Similarly, Peter Fanta, a deputy assistant secretary of defense for nuclear matters, stated that "[t]here is one plan," and that NNSA must "[s]top discussing it, stop slowing it, stop looking at it again, stop looking at seven other alternatives." *See* <u>https://www.exchangemonitor.com/dod-still-satisfied-nnsa-pit-plan-warnscivilian-agency-margin/</u>.

However, taking a hard look at the expansion of plutonium pit production at LANL and the repurposing of the MOX Facility at SRS, and considering alternatives to this proposed plan, is precisely what NEPA requires. And because NEPA mandates that agencies undertake the NEPA process as early as possible in order to promote informed decision-making, DOE and NNSA must undertake a PEIS as soon as possible.

Until DOE and NNSA fully comply with NEPA through the preparation of a PEIS, any irreversible or irretrievable commitment of resources to either the expansion of pit production at LANL or to the repurposing of the MOX Facility at SRS is unlawful. Accordingly, we request that DOE and NNSA respond to this letter within 30 days to explain when the agencies intend to undertake the required PEIS for the expansion of plutonium pit production at LANL and the repurposing of the MOX Facility for plutonium pit production at SRS.

Sincerely,

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CC: Sen. Lamar Alexander, Chair, Senate Energy and Water Appropriations Subcommittee
Sen. Dianne Feinstein, Ranking Member, Senate Energy and Water Appropriations Subcomm.
Sen. Tom Udall, Senate Energy and Water Appropriations Subcommittee
Sen. Deb Fischer, Chair, Strategic Forces Subcommittee, Senate Armed Services Committee
Sen. Martin Heinrich, Ranking Member, Strategic Forces Subcommittee, SASC

<sup>&</sup>lt;sup>22</sup> DOE, *FY 2020 Congressional Budget Request*, March 2019, at 121–22, *available at* <u>https://www.energy.gov/sites/prod/files/2019/04/f62/doe-fy2020-budget-volume-1.pdf</u>

Sen. Lindsay Graham, South Carolina

Rep. Adam Smith, Chair, House Armed Services Committee

Rep. Mac Thornberry, Ranking Member, House Armed Services Committee

Rep. Jim Cooper, Chairman, Strategic Forces Subcommittee, House Armed Services Committee

Rep. Deb Haaland, House Armed Services Committee

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