

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
AIKEN DIVISION

SAVANNAH RIVER SITE WATCH, TOM)
CLEMENTS, THE GULLAH/GEECHEE SEA)
ISLAND COALITION, NUCLEAR WATCH)
NEW MEXICO, and TRI-VALLEY)
COMMUNITIES AGAINST A RADIOACTIVE)
ENVIRONMENT,)

Plaintiffs,)

v.)

UNITED STATES DEPARTMENT OF)
ENERGY, JENNIFER GRANHOLM, in her)
official capacity as the Secretary, The)
NATIONAL NUCLEAR SECURITY)
ADMINISTRATION and JILL HRUBY,)
Administrator,)

Defendants.)

No. 1:21-cv-01942-MGL

**AMENDED
COMPLAINT FOR DECLARATORY
AND INJUNCTIVE RELIEF**

1. This Action for declaratory and injunctive relief is brought pursuant to the Administrative Procedure Act (“APA”), 5 U.S.C §§ 701-706, and the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4321-4370. Plaintiffs challenge the United States Department of Energy (“DOE”) and the National Nuclear Security Administration’s (“NNSA”, and collectively, “Defendants”) failure to prepare a new or supplemental Programmatic Environmental Impact Statement (“PEIS”) pursuant to NEPA. Defendants intend to undertake the major federal action to quadruple the production of plutonium pits, as mandated by Congress, which are the fissile cores of nuclear warheads, and to split the production between two facilities located across the country from each other, in furtherance of producing newly-designed nuclear warheads. The first-time utilization of more than one facility, specifically the Savannah River

Site (“SRS”) in South Carolina and the Los Alamos Nuclear Laboratory (“LANL”) in New Mexico, to undertake this production is a substantial change from the Defendants’ long-standing approach of producing a limited number of pits at only one facility. The Defendants’ decision to conduct a piecemeal, post-hoc evaluation of this programmatic shift is arbitrary and capricious and therefore violates the APA and NEPA.

2. Plutonium pits are critical components of every nuclear weapon in the United States and serve as the explosive core or “primary” that initiates thermonuclear fusion upon detonation. Since the 1990s, Defendants have produced less than twenty pits annually, and only at LANL in New Mexico. However, Defendants seek to implement Congress’s recent mandate to produce at least 80 pits per year by the year 2030 by not only expanding production at the LANL, but also initiating brand new pit production at the SRS in South Carolina, a dual-site plan selected by Defendants that has never been evaluated in a PEIS. The Defendants intend to produce pits at SRS through “repurposing” the defunct Mixed Oxide Fuel Fabrication Facility (“MOX”) on-site, a facility that was not designed—and has never been used—for producing plutonium pits. The construction of the MOX Facility was never completed and the project suffered from well-documented construction fraud, costs overruns, and delays. Defendants’ actions have unlawfully avoided the statutorily mandated consideration of programmatic alternatives, such as the disqualification of SRS from consideration as a pit-production site based on the failure of the MOX facility, as well as other programmatic alternatives such as the re-use of existing pits or the production of pits at other locations or combinations of locations.

3. Recent information from the Administration reveals that the Defendants’ plan to produce a minimum of 80 pits at two sites by 2030 is clearly impossible to accomplish as proposed. The plan is already significantly behind schedule and the Defendants have publicly

acknowledged that the project will drastically exceed the initial cost estimates, both for construction and long-term operation. Defendants have failed to take the necessary “hard look” at the programmatic decision to divide pit production across two facilities, which represents a sweeping change in U.S. nuclear policy. Defendants conducted NEPA reviews for only specific components of this plan, most of which are now outdated, incomplete, or inaccurate, and none of which considered any programmatic alternatives other than producing pits at LANL and SRS. The prevalence of significantly new circumstances and information available since the last programmatic review in 2008 require Defendants to prepare a new or supplemental PEIS, and the piecemeal evaluation of individual components of the program fails to satisfy NEPA’s requirements.

4. The significantly increased pit production capacity is not for the purpose of maintaining the safety and reliability of the existing U.S. nuclear weapons stockpile, but initially for the production of a new warhead known as the W87-1. This new warhead replacement program is connected to, and the driving force behind, the timing and scope of expanded pit production. Rather than examining the connected programmatic environmental impacts of pit production as well as potential alternatives, cumulative impacts, and possible mitigation measures relating to the W87-1 program, which involves sites other than LANL and SRS—including but not limited to the Lawrence Livermore National Laboratory (“LLNL”) and the Waste Isolation Pilot Plant (“WIPP”)—Defendants have failed to consider all other connected and similar actions in the existing NEPA documents.

5. The proposed actions of expanding the number of pits to be produced at LANL and repurposing the MOX facility to allow for extensive production at SRS, along with the W87-1 program—to be supplied with these plutonium pits produced under this plan—impacting

several other sites, are “connected,” “cumulative,” and “similar” actions that must be analyzed in a new or supplemental PEIS.

6. A major vulnerability to this overly ambitious plan for expanded plutonium pit production at LANL and expanding production to multiple sites is the uncertainty of future disposal of radioactive transuranic (“TRU”) wastes, which are plutonium wastes generated from pit production, and the failure to analyze this disposal issue under NEPA. The only repository for TRU waste in the country is the WIPP in southern New Mexico. Its current state-issued permit mandates that waste operations end in 2024 and that the facility move towards permanent closure. As a National Academy of Sciences report has concluded,¹ the WIPP is already oversubscribed for future waste from multiple sites and will overextend its capacity from this increase in TRU production from the pit project and other DOE projects set to generate large amounts of TRU waste. The Defendants have failed to meaningfully address this critical waste disposal question raised by the anticipated expansion of production at two different sites.

7. DOE and NNSA’s plan to fundamentally alter this production program in the number of production and waste disposal locations will saddle the already-burdened communities represented by the Plaintiffs with a significant amount of nuclear waste and pollution that is in complete contravention to the President’s Executive Order on Environmental Justice and violates NEPA. Executive Order, Section 219, January 27, 2021. A programmatic review must be undertaken as a result.

¹ See Review of the Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant (2020), NAS, <https://www.nationalacademies.org/ocga/briefings-to->

JURISDICTION AND VENUE

8. This action arises under NEPA, 42 U.S.C. §§ 4321-4370h and the APA, 5 U.S.C. §§701-06. This Court has subject matter jurisdiction over this case pursuant to the APA, 5 U.S.C. § 704 and 28 U.S.C. § 1331 and may issue declaratory and/or injunctive relief pursuant to 28 U.S.C. §§ 2201, 2202.

9. This Court has personal jurisdiction over Defendants because they are agents and officers of the United States. Venue is proper in this Court and in the Aiken Division of the Court pursuant to 28 U.S.C. § 1391(e) and Local Civil Rule 3.01(A)(2) D.S.C., because a substantial part of the events or omissions giving rise to the claims herein occurred at SRS, one of the facilities impacted by this federal action. The 310 square mile SRS is located in Aiken, Barnwell, and Allendale Counties in South Carolina. Indeed, SRS is the location that will be impacted most significantly and dramatically by the Defendants' proposed new pit production plan, both because the greatest number of pits would be produced there and because no pit production has ever occurred there. The Defendants' proposed plan would require spending at least \$11 billion simply to convert the defunct MOX facility at SRS into a plutonium pit production facility in order to produce more pits than have been produced anywhere since the Cold War and the formal closure of DOE's contaminated Rocky Flats Plant in 1992. The fact that the MOX facility was never designed for this purpose, endured a substantially delayed construction phase that was never completed, and was subject to construction-related fraud risks exposing the public in South Carolina to a greater extent than in other areas. In this way, the Aiken Division is where the most substantial part of the Defendants' plan, which fails to comply with NEPA's requirement for a PEIS, would occur and venue here is proper.

[congress/review-of-the-department-of-energys-plans-for-disposal-of-surplus-plutonium-in-the-](#)

PARTIES

10. Plaintiffs are non-profit and/or community organizations and an individual who have strong interests advocating for protection of the environment from impacts of nuclear facilities, those currently in existence, as well as future additions or expansions to the United States nuclear weapons program, including environmental justice-related impacts, and advocating against nuclear proliferation.

11. Savannah River Site Watch (“SRS Watch”) is a duly registered 501(c)(3) nonprofit organization based in Columbia, South Carolina. The mission of SRS Watch is to monitor programs and policies being pursued by the DOE, with a focus on activities at the Savannah River Site located near Aiken, South Carolina. SRS Watch engages in research, public outreach, frequent filing of Freedom of Information Act requests on SRS matters (including on programs concerning plutonium management and pit production) and advocacy and education, including with citizens who live near SRS, which is a site designated on “Superfund” National Priorities List since 1989 by the Environmental Protection Agency. SRS Watch, whose focus on SRS is unique amongst conservation and public-interest organizations in South Carolina and Georgia, educates and encourages members of the public to participate in public meetings held on SRS issues, including on the plutonium pit issue, and advocate to both appointed and elected officials regarding these issues. The interests of SRS Watch and those that participate with them are impacted or harmed by the plutonium storage, processing, and management and nuclear waste disposal caused by Defendants’ decision to implement the plan to produce plutonium pits at SRS, and to do so without completing a PEIS.

[waste-isolation-pilot-plant](#)),

12. SRS Watch has submitted comments on the NEPA documents prepared on pit production at SRS and LANL, filed various Freedom of Information Act requests with NNSA on pit production, organized public participation and comments throughout those processes, and informed the public about the Defendants' operations and future plans. Likewise, SRS Watch sent several letters to NNSA on the current pit-production proposals. Additionally, in accordance with its mission, SRS Watch sponsored two well-attended public forums on the pit issue in Aiken, South Carolina in 2019, to educate the public on the Defendants' plan to initiate production of plutonium pits at SRS and the absence of a new or supplemental PEIS.

13. A key component for SRS Watch to effectively carry out its mission of monitoring DOE and NNSA programs and policies, educating the public, and engaging in advocacy to elected officials is the availability of information regarding such programs and activities at SRS. SRS Watch is directly harmed by Defendants' failure to prepare a PEIS because it constitutes the deprivation of environmental information and analysis to which it is legally entitled and directly frustrates its mission by preventing it from adequately educating the public and monitoring DOE activities and programs.

14. The absence of the PEIS evaluating the program-wide and cumulative effects on the environment and the public's health and safety from plutonium pit production at both SRS and LANL will necessitate the diversion of SRS Watch resources to obtain such information and disseminate it to the public. This information on environmental and human health impacts—the precise type of information NEPA was enacted to ensure was developed and shared with decision-makers, including the public—is essential to SRS Watch fulfilling its purpose and the Defendants' deprivation of the information constitutes a direct injury to SRS Watch.

15. Plaintiff and SRS Watch Director Tom Clements, who lives approximately 50 miles from the northeastern boundary of SRS, has been involved in SRS issues since the 1970s with various public-interest organizations. Mr. Clements regularly attends numerous public meetings on SRS matters held in the Aiken, South Carolina area (or virtually) by DOE, the SRS Citizens Advisory Board (“SRS CAB”), and, on occasion, the South Carolina Department of Health and Environmental Control (“SCDHEC”). On behalf of SRS Watch, Clements has monitored and submitted comments on the current pit-production proposal since its inception in 2018 as well as the proposal for the Modern Pit Facility in the early 2000s and on the issues of plutonium disposition and the MOX Facility, beginning in 1994 to the current date. Clements has visited SRS on many occasions and recreates in natural areas adjacent to or near SRS, including the Crackerneck Wildlife Management Area and Ecological Reserve, located within the boundary of SRS, owned by the DOE, and managed by the South Carolina Department of Natural Resources. He also regularly visits Audubon’s Silver Bluff Sanctuary located nearby on the Savannah River. Though public access to Crackerneck is limited and the site is open but a few days a year, he has visited the site in 2022. The Audubon Sanctuary is freely accessed by the public and Mr. Clements recreates there several times per year. To reach the Audubon site and for other reasons, Mr. Clements transits the federal road that traverses the Northern portion of SRS. The Defendants’ decision to initiate plutonium pit production at SRS will detrimentally affect Mr. Clements’ recreational enjoyment of both Crackerneck and the Audubon Sanctuary because of health and safety concerns triggered by pit production. In addition, the Defendants’ failure to prepare a PEIS deprives Mr. Clements’ of information to which NEPA entitles him and the absence of such information will deprive Mr. Clements of the ability to make choices regarding the safety of visiting and recreating in both Crackerneck and the Audubon Sanctuary.

16. Notwithstanding recent COVID restrictions, for the past 15 years Mr. Clements regularly has attended DOE meetings, often in close proximity to SRS, which primarily include 2-day quarterly meetings of the SRS CAB. The SRS CAB makes recommendations to DOE's Office of Environmental Management on issues pertaining to management and clean up of nuclear and hazardous waste at SRS, including disposition of surplus plutonium.

17. SRS CAB has in the past few years met in the City of New Ellenton, South Carolina City Hall, about a mile from the northern boundary of SRS, and the subcommittees of SRS CAB still meet in DOE's meeting center on Silver Bluff Road between Aiken, South Carolina, and SRS. Clements has also attended many SRS CAB meetings in Aiken; Augusta, Georgia; North Augusta, South Carolina; Hilton Head Island, South Carolina; and Savannah, Georgia. Of all citizens participants in the meetings of the full SRS CAB and its subcommittees, Mr. Clements has arguably been the main public participant during the last 15 years. Additionally, over that period Mr. Clements has attended approximately 20 meetings held near SRS by DOE on EIS preparation on various issues or on regulation of the MOX project by the United States Nuclear Regulatory Commission (NRC). Those NRC meetings, as well as an occasional SRS CAB meeting, were held in the research park affiliated with the Savannah River National Laboratory, which houses the Hydrogen Technology Research Laboratory, located adjacent to the northern boundary of SRS, thus bringing Mr. Clements even closer to the site.

18. Mr. Clements also has held meetings with members of the press to disseminate information on SRS activities and developments on the banks of the Savannah River in close proximity to SRS.

19. On May 5, 2022, Mr. Clements attended a day-long class on the SRS itself, but outside the fence, held in a facility operated by the Savannah River Ecology Laboratory as a part of his participation in Clemson University's "South Carolina Native Plant Certificate Program."

20. Thus, it is well established that Mr. Clements spends time near SRS for both professional and recreational reasons.

21. With every visit he makes to SRS and the nearby areas, he considers the risks associated with being present on or near the site. Should the Defendants fail to comply with NEPA and conduct a new or supplemental PEIS, he will be dissuaded from conducting the professional and recreational activities he currently undertakes.

22. Mr. Clements also regularly travels on Interstate 20 between Columbia, South Carolina and Atlanta, Georgia, the main DOE transport corridor between SRS and LANL, where plutonium shipped to SRS for disposal will be processed before being shipped back to New Mexico for disposal in the WIPP facility, and between SRS and the Pantex site in Texas, where plutonium pits will be stored prior to shipment to SRS for processing, if the SRS pit project proceeds as planned. While in-transit accident risks, or attacks due to terrorist attack seeking to obtain weapons plutonium, to Mr. Clements and the traveling public may be small, they nonetheless exist, as confirmed by emergency preparation by state authorities and the security escorts that accompany all such transports (and with which Mr. Clements is familiar, in part as he monitored movement of a plutonium fuel shipment from Charleston, South Carolina to SRS in 2005).

23. In the event of a serious accident at the pit facilities at SRS, offsite populations, including individuals who live, travel, and/or recreate in the vicinity of SRS such as Mr. Clements, would be at risk of exposure to the negative health and safety impacts of the release of

radioactive and hazardous materials inherent in the production of plutonium pits. In the EIS on pit production at SRS, NNSA has estimated from production of 50 pits per year that there would be 77 TRU shipments per year from SRS to WIPP. Though the number of shipments per year is classified, NNSA lists 6 pit shipments per year from Pantex to SRS at the 50 pits per year level. Such shipments annually could involve a minimum of 200 kilograms of plutonium, a material that is flammable and highly dispersible. Significantly, the EIS fails to discuss details of purification at SRS, or at another site, of pit material shipped from Pantex, a process that involves risks beyond mere storage. Details of transportation of plutonium between DOE sites and processing methods used to purify such plutonium for pits, whether located at SRS, Pantex or Los Alamos, are most appropriately reviewed in a PEIS.

24. There is a risk of a catastrophic failure of the repurposed and overhauled MOX Facility, a facility that was never designed to support plutonium pit production. The SRS pit-production EIS from 2020 downplays the risk of earthquakes and states that “levels of earthquake activity within this region are usually low, with magnitudes generally less than or equal to 3.0 on the *Richter scale*.” In contrast, the United States Geological Survey subsequently has reported about 40 earthquakes in 2020-2022 in the Midlands of South Carolina and that “four of the earthquakes were M3.0 or larger and were widely felt,” including in the Aiken area. The USGS goes on to state that “the 2021-2022 sequence is not associated with the seismic zone of the 1886 earthquake,” referring to the large earthquake caused by the Charleston seismic zone, a zone claimed by NNSA in the EIS to be responsible for earthquakes in the SRS area with largest “peak ground acceleration.” Thus, given unanticipated earthquake activity in 2021-2022 and of a number of earthquakes of intensity greater than 3.0, the EIS is outdated and this can be corrected by preparation of the PEIS.

25. Given the history of plutonium fires at DOE's now-closed Rocky Flats pit production site near Denver, Colorado, down-wind exposure from accidents at a pit production facility are real and not speculative and these specific risks must be analyzed. Moreover, increased earthquake activity in South Carolina during June of 2022, which was experienced by Mr. Clements, creates a concern about potential impacts to pit production at SRS and plutonium storage that warrants a new or supplemental PEIS.

26. There can be no doubt of the significant environmental consequences of producing plutonium pits at SRS. Not only have pits never been produced there, but production requires a total overhaul of the defunct MOX facility, which was the underlying subject matter in *South Carolina v. United States*, 912 F.3d 720 (4th Cir. 2019). Not insignificant to the analysis is the fact that SRS has suffered from so much environmental contamination that it has been designated a "Superfund" National Priorities List Site since 1989 by the Environmental Protection Agency.² While existing waste at SRS poses environmental and health risks, it is the creation and handling of newly created plutonium waste (TRU waste) and dumping of low-level waste from pit production in unlined trenches at SRS that will exacerbate environmental and health concerns, which Defendants failed to adequately address in only a site-specific analysis instead of a PEIS.

27. Plaintiff the Gullah/Geechee Sea Island Coalition ("Gullah/Geechee SIC") is a non-profit organization that operates in accordance with the mission of the Gullah/Geechee Nation to preserve, protect, and promote its people's history, culture, language, and homeland. The Gullah/Geechee SIC also seeks to institute and demand official recognition of the governance (minority rights) necessary to accomplish its mission to protect its community

through collective efforts, which will provide a healthy environment, care for the well-being of each person, and provide economic empowerment. The Gullah/Geechee Nation spans from North Carolina to northern Florida and receives the downward flow of the Savannah River, which brings its benefits and also could bring disastrous impacts to a community that relies so heavily on the water, as discussed below. Plaintiff Gullah/Geechee SIC was a signatory to a letter sent to DOE and NNSA on April 20, 2021, again requesting that a new or supplemental PEIS be prepared and notifying them that the filing of a lawsuit against the agencies was forthcoming. No response was received.

28. The Gullah/Geechee SIC's members rely heavily on the Savannah River as a sacred area that served as transport for many of their ancestors in addition to this being one of the inlets from which native Gullah/Geechee have lived and practiced subsistence fishing.

29. Members of the Gullah/Geechee SIC consider fishing and other water activities an important aspect of their cultural customs and traditions. Members of the Gullah/Geechee SIC engage in these activities in the Savannah River downstream of the SRS.

30. Members of Gullah/Geechee SIC are negatively affected by the Defendants' decision to initiate plutonium pit production at SRS, an activity never before conducted at SRS, because the risk associated with such storage, management, and waste disposal to the water quality of the Savannah River harms their interests in promoting and preserving their cultural interests.

31. Members of Gullah/Geechee SIC will be dissuaded from engaging in such activities in the Savannah River in the future if the Defendants proceed with their plan to produce plutonium pits at SRS.

² National Priorities List for Uncontrolled Hazardous Waste Sites, 44 Fed. Reg. 48,184 (Nov. 21,

32. The Defendants' decision to initiate plutonium pit production at SRS will therefore detrimentally affect Gullah/Geechee SIC members' cultural and recreational uses of the Savannah River because of health and safety concerns triggered by pit production.

33. In addition, the absence of a PEIS fully evaluating the program-wide and cumulative impacts to the environment and the public's health and safety further diminishes the members' interests in promoting their culture because it inhibits their ability to evaluate the safety of fishing and other activities in the Savannah River.

34. The Defendants' failure to prepare a PEIS deprives Gullah/Geechee SIC members of information to which NEPA entitles them and the absence of such information will deprive them of the ability to make choices regarding the safety of visiting and recreating in the Savannah River.

35. This information on environmental and human health impacts—the precise type of information NEPA was enacted to ensure is developed and shared with decision-makers, including the public—is essential to the members of the Gullah/Geechee SIC to effectively evaluate the safety of visiting and recreating in the Savannah River and promoting a key aspect of their culture.

36. This deprivation of information constitutes an injury to these Gullah/Geechee SIC members' interests in preserving and promoting their culture and these interests are directly related to the purpose of the Gullah/Geechee SIC.

37. Accordingly, the Gullah/Geechee SIC is harmed by the Defendants' failure to prepare a PEIS for the production of plutonium pits.

1989) (to be codified at 40 C.F.R. pt. 300).

38. The harms to the interests of the Gullah/Geechee SIC and its members also include the risk of a catastrophic failure of the repurposed and overhauled MOX Facility, which was never designed to support plutonium pit production, and which would likely result in the release of nuclear or toxic materials, placing the environment, workers, and local residents in extreme peril.

39. Finally, many of the Gullah/Geechee SIC's members reside downstream of SRS and are also part of underserved communities of color. The failure to prepare a new or supplemental PEIS contravenes the goal of NEPA to evaluate these proposed actions in the context of environmental justice. The mission of the Gullah/Geechee SIC, to preserve and protect its members' homeland, cannot be achieved where its members cannot be fully involved in the government's decision-making process relative to this plan to produce plutonium pits at both LANL and at SRS.

40. Plaintiff Nuclear Watch New Mexico ("NukeWatch") is a project of the Southwest Research and Information Center, a 501(c)(3) nonprofit organization based in Albuquerque, New Mexico. NukeWatch's mission is to use research, public education, and effective citizen action to promote safety, environmental protection, and cleanup at nuclear facilities, including LANL, and to advocate for U.S. leadership toward a world free of nuclear weapons.

41. NukeWatch has a long history of active participation in NNSA processes involving expanded plutonium pit production. Before its founding in December 1999, NukeWatch's current Executive Director, Jay Coghlan, submitted extensive comments on the 1996 Stockpile Stewardship and Management PEIS and the 1999 draft LANL Site-Wide Environmental Impact Statement ("SWEIS"). Since then, NukeWatch has submitted extensive

public comment on the DOE/NNSA NEPA documents since 1999, including but not limited to the 2008 Complex Transformation Supplemental PEIS, the 2019 Complex Transformation SPEIS Supplement Analysis, the 2020 LANL SWEIS Supplement Analysis, and the 2020 Draft SRS EIS. NukeWatch carries out its mission by gathering this critical information, disseminating it to educate members of the public, and promoting the public's advocacy of nuclear nonproliferation, as well as safety and environmental protection in any nuclear programs.

42. Mr. Coghlan regularly recreates just outside the boundaries of LANL, and specifically has been rock climbing on nearby crags for nearly 50 years. For more than 20 of those years, Mr. Coghlan climbed in an area contiguous and immediately downstream of LANL and along the Los Alamos Canyon's narrow streambed. There are instances of plutonium migration from LANL, through the streambed to the Rio Grande. There have been measurable detections of plutonium up to 17 miles downstream, in Cochiti Lake. Since that time, Mr. Coghlan has climbed in an area known as the Overlook and other nearby crags located to the east of White Rock, New Mexico, near LANL and where many LANL employees live. The Overlook is located within six miles of LANL's plutonium pit production facility.

43. Before the COVID pandemic, Mr. Coghlan traveled through the LANL site on average three times per year to attend meetings on-site. In addition, Mr. Coghlan and fellow NukeWatch staff member Scott Kovac travel through the heart of the laboratory on State Highways 501 and 502 between three and four times per year to access the Jemez mountains and to visit a spiritual center located in Jemez Springs, New Mexico.

44. The failure of the Defendants to conduct a new or supplemental PEIS thwarts NukeWatch's mission of promoting safety at nuclear facilities as they exist and their planned

expansions by precluding any public involvement or discussion of LANL's checkered safety history.

45. A key component for NukeWatch to effectively carry out its mission of monitoring DOE and NNSA programs and policies, specifically at LANL, educating the public, and engaging in advocacy to elected officials is the availability of information regarding such programs and activities at LANL and across DOE's nuclear weapons complex. NukeWatch is directly harmed by Defendants' failure to prepare a PEIS because it constitutes the deprivation of environmental information and analysis to which it is legally entitled and directly frustrates its mission by preventing it from adequately educating the public and monitoring DOE activities and programs.

46. The absence of the PEIS evaluating the program-wide and cumulative effects on the environment and the public's health and safety from plutonium pit production at both SRS and LANL will necessitate the diversion of NukeWatch resources to obtain such information and disseminate it to the public. This information on environmental and human health impacts—the precise type of information NEPA was enacted to ensure was developed and shared with decision-makers, including the public—is essential to NukeWatch fulfilling its purpose and the Defendants' deprivation of the information constitutes a direct injury to NukeWatch.

47. NNSA's dose calculations that potentially would occur for the No Action Alternative and the Defendants' preferred alternative for expanded operations, which were identified in the 2008 Complex Transformation Supplemental PEIS and the 2019 CT PEIS Supplemental Analysis, are inconsistent with the calculations made by the Defense Nuclear Facilities Safety Board ("DNFSB"). The DNFSB estimated much higher radiological doses (300

rem³) that nearby members of the public would experience and a lethal dose of 760 rem to workers due to incompatibly mixed radioactive waste at LANL. Evidence of the likelihood of a nuclear material release includes a burst radioactive waste drum in February of 2014 at the WIPP. The release contaminated 22 workers and closed the facility for nearly three years, costing the taxpayers approximately 2 billion dollars to re-open.

48. The DNFSB estimated there are approximately 100 incompatibly mixed radioactive waste drums at LANL's area G, which is located approximately three miles from where Mr. Coghlan frequently climbs. These waste drums could burst at any time and have burst, which would cause radioactive doses to members of the public.⁴

49. With every piecemeal NEPA analysis, NNSA has refused to consider and implement a number of the DNFSB's recommendations that directly pertain to expanded plutonium pit production at LANL, such as installing safety class active confinement ventilation systems at LANL's pit production facility. NNSA should have discussed this in the 2008 Complex Transformation Supplemental PEIS and the 2019 CT SPEIS Supplement Analysis but failed to do so. It also failed to do so in its 2020 SRS EIS on pit production. These failures should be remedied in a new or supplemental PEIS, the lack of which impedes Nuke Watch's nuclear safety mission and places public safety at risk.

³ US Nuclear Regulatory Commission: "One of the two standard units used to measure the dose equivalent (or effective dose), which combines the amount of energy (from any type of ionizing radiation that is deposited in human tissue), along with the medical effects of the given type of radiation." <https://www.nrc.gov/reading-rm/basic-ref/glossary/rem-roentgen-equivalent-man.html>

⁴ Potential Energetic Chemical Reaction Events Involving Transuranic Waste at Los Alamos National Laboratory, DNFSB, September 2020, page 11, <https://www.dnfsb.gov/documents/reports/technical-reports/potential-energetic-chemical-reaction-events-involving>

50. The failure to consider these factors, including the inconsistency from DNFSB's analysis of risk, in conjunction with the plan to expand production to two facilities and stress the system even further will result in increased risk of accidents and resultant injury, in particular to Mr. Coghlan who spends a substantial amount of his free time nearby.

51. Wildfires are an increasing threat to LANL due to climate change and extended periods of drought. In 2022 the state of New Mexico recorded two record wildfires that impacted over 325,000 acres each. In 2000, a fire burned 3,500 acres of LANL property, which forced mandatory evacuations of LANL and surrounding Los Alamos. In 2011 a wildfire reached LANL's western boundary, only stopped by State Highway 501. The lack of a new or supplemental PEIS that would analyze and consider fire mitigation measures for LANL is impeding Nuke Watch's mission to enhance public and occupational safety and environmental protection from harmful nuclear impacts by prohibiting NEPA comment.

52. Along with Plaintiffs SRS Watch and Tri-Valley CAREs, Plaintiff NukeWatch has petitioned NNSA six times for a new or supplemental PEIS on expanded plutonium pit production.

53. The NNSA's rejection of SRS Watch's, Tri-Valley CAREs', and NukeWatch's petitions and its refusal to consider the information and issues raised in those petitions harm the interests of SRS Watch, Gullah/Geechee SIC, Tri-Valley CAREs, and NukeWatch, and specifically the interests of their supporters and members in protecting the environment and local communities from harm caused by prior and ongoing production of nuclear weaponry at LANL. The harms to Plaintiffs' interests also include deprivation of environmental information and analysis which they are entitled to receive under NEPA, and denial of the opportunity for informed public participation that is a cornerstone of the NEPA process.

54. Tri-Valley CAREs consists of 6,000 members, the majority of whom reside, work, and/or recreate within 50-miles of LLNL. Many Tri-Valley CAREs members live within 10 miles of LLNL's Main Site in Livermore, California or its Site 300 high explosives testing range near Tracy, California. Tri-Valley CAREs was founded in 1983.

55. Marylia Kelley is the Executive Director of Tri-Valley CAREs, a position she has held since 1984. Ms. Kelley resides in Livermore, California, within 6 miles of LLNL. The organization's offices at 4049 1st St., Livermore, California, where staff, board, and members congregate regularly (except during the Covid-19 lockdown) is less than three miles from the LLNL Main Site.

56. Tri-Valley CAREs Executive Director, staff, board, and members regularly attend meetings held inside the fence at the LLNL Main Site, including but not limited to daylong sessions on cleanup progress at LLNL of hazardous and radioactive wastes as it is a Superfund site. Tri-Valley CAREs' Executive Director, staff, board, and members also participate in annual on-site Superfund community tours hosted by LLNL. Its Executive Director, staff, board, and members also host, and participate in, regularly scheduled events at the LLNL Main Site West Gate and other locations around the fence line of the LLNL Main Site, including but not limited to an annual Hiroshima-Nagasaki commemoration held each August. Ms. Kelley also hosts LLNL Main Site fence line tours for visiting journalists, new group members, and other interested individuals.

57. Plaintiff Tri-Valley CAREs is a 501(c)(3) nonprofit organization with a mission to educate its members and other stakeholders, including decision-makers and the public, about U.S. nuclear weapons and their associated toxic and radioactive wastes with a focus on environmental and health risks at LLNL and throughout the nuclear weapons complex.

58. To carry out its mission, Tri-Valley CAREs utilizes and depends on environmental statutes and the analyses that DOE and NNSA produce according to those statutes, including programmatic environmental impact statements conducted pursuant to NEPA.

59. In service of its mission, Tri-Valley CAREs has written repeatedly to DOE and NNSA regarding the agencies' obligation to conduct a PEIS on the nationwide program to expand plutonium pit production, which reasonably would contain information and analysis of the role of LLNL and other sites in the DOE complex. Defendants have stated briefly in writing that LLNL and other sites in the complex are an integral part of the agencies' plutonium pit production plans, but have not provided underlying—and essential—NEPA analysis of those activities, which it reasonably would do in a PEIS.

60. Evidence suggests there will be an increase in “Plutonium Activities” at LLNL in connection to the Defendants' plutonium production plans.

61. Yet, Defendants have not conducted any analysis of the potential impacts on the environment or the public's health and safety of that activity, as mandated by NEPA.

62. As a result, Tri-Valley CAREs is thwarted in carrying out its mission due to Defendants' failure to comply with NEPA and conduct a PEIS on its pit production plans that explicitly and thoroughly addresses the impact on LLNL.

63. A key component for Tri-Valley CAREs to effectively carry out its mission of monitoring DOE and NNSA programs and policies, specifically at LLNL, educating the public, and engaging in advocacy to elected officials is the availability of information regarding such programs and activities at LLNL and across DOE's nuclear weapons complex. Tri-Valley CAREs is directly harmed by Defendants' failure to prepare a PEIS because it constitutes the deprivation of environmental information and analysis to which it is legally entitled and directly

frustrates its mission by preventing it from adequately educating the public and monitoring DOE activities and programs.

64. The absence of the PEIS evaluating the program-wide and cumulative effects on the environment and the public's health and safety from plutonium pit production at both SRS and LANL and its related activities will necessitate the diversion of Tri-Valley CAREs' resources to obtain such information and disseminate it to the public. This information on environmental and human health impacts—the precise type of information NEPA was enacted to ensure was developed and shared with decision-makers, including the public—is essential to Tri-Valley CAREs fulfilling its purpose and the Defendants' deprivation of the information constitutes a direct injury to Tri-Valley CAREs.

65. Plaintiff Tri-Valley CAREs submitted public comments pursuant to NEPA on the DOE and NNSA plan to expand plutonium pit production, including written comments on the Amended ROD at the heart of this action. The organization also submitted spoken and written comments during the Savannah River Site-specific EIS process. Comments were produced, signed, and sent by Tri-Valley CAREs' Executive Director, Staff Attorney, Legal Intern, and more than 100 concerned members of the organization.

66. Plaintiff Tri-Valley CAREs' staff, board, and memberships' comments repeatedly stressed the need for DOE and NNSA to (a) include connected actions as required by NEPA, including but not limited to connected actions at LLNL, (b) properly analyze alternatives pursuant to NEPA, and (c) undertake a nationwide programmatic review in the form of a new or supplemental PEIS. The organization's comments identified important new information directly bearing on the proposed action and raised issues for the agency to consider.

67. Plaintiff Tri-Valley CAREs, including its Executive Director Ms. Kelley, is harmed by the Defendants' performance of the environmental review process for expanded pit production, which ignored outright, or sidestepped with cursory response, important new information and issues detailed in the group's comments at multiple stages of the NEPA process.

68. Plaintiff Tri-Valley CAREs, including its Executive Director Ms. Kelley, its members, and other stakeholders, is harmed by operations at the LLNL Main Site and its Site 300 high explosives testing range, including dangerous activities directly related to DOE and NNSA's plan to expand pit production. These actions involve, but are not limited to, LLNL's development and testing of a new warhead design into which the pits produced at the LANL and SRS will ultimately be placed. In its fiscal year 2021 Stockpile Stewardship and Management Plan at page 44, NNSA notes that "in particular plutonium pits ... support the W87-1 Modification Program..."

69. Harms from the connected new warheads activities at LLNL to Tri-Valley CAREs and its members include increased handling of and experiments with hazardous materials at the LLNL Main Site, as well as high explosives tests with hazardous components at the LLNL Site 300. Past weapons development at LLNL has caused uncontrolled releases of chemicals, metals, and radioactivity into the air, soils, and groundwater aquifers at the LLNL Main Site and Site 300 to such an extent that both locations have been placed on the EPA's "Superfund" National Priorities List - in 1987 and 1990 respectively. The Superfund cleanup of soils and groundwater at both locations is multi-generational and is slated to continue until at least the 2040 to 2060 timeframe. This contamination harms Tri-Valley CAREs and its members by exposing them to toxic and hazardous substances in the air they breathe and potentially to the

water they drink. The Defendants' proposed plan stands to significantly increase the environmental and health hazards already experienced by these members.

70. LLNL is procuring a new plutonium glovebox for the Superblock to support expanded pit production, a project noted in the NNSA's FY22 budget request to Congress (volume I page 198) but not described or noted in any NEPA review document for pit production. A plutonium glovebox is used for the purpose of handling, cutting and/or experimentation with this nuclear material inside the LLNL Main Site "Superblock." Tri-Valley CAREs and its members will be harmed by accidents or mishaps with plutonium, which have been documented previously at LLNL and have included airborne emissions of plutonium and other hazardous, toxic and radioactive materials. The nearest public residence is approximately 300 yards away from the LLNL Main Site Superblock. Further, LLNL failed a "force on force" security test at its Main Site Superblock in 2008 and subsequently lost its "Category I/II" security, which means, among other things, that the security force at LLNL was substantially reduced in numbers, training level, and equipment on-hand to repel an inside or outside terrorist threat. This security reduction limited LLNL to possessing only small gram quantities of plutonium and other "Special Nuclear Materials" that are not "nuclear weapons usable" starting in 2012. Less plutonium and Special Nuclear Material on site at LLNL substantially lowered the perceived risk of a release of radiation from the facility, whether by accident, miscalculation or malicious act.

71. Expanded pit production will involve LLNL receiving shipments of plutonium from LANL in New Mexico, 1,100 miles away, according to a table on page 21 of the August 2020 "Supplement Analysis of the 2008 SWEIS for LANL Plutonium Operations." That one-line notation regarding shipments for "Materials Testing" at LLNL in Table 2-1 is not discussed or

analyzed in that or any other NEPA document. Tri-Valley CAREs is thwarted from informing its members and other stakeholders about the shipments. Tri-Valley CAREs is also environmentally harmed by the presence of the plutonium material in heavily populated environments and also by significant uncertainties regarding these shipments as the amount of material, number of shipments, method(s) of transport, and nature of the “materials testing” that will take place have neither been disclosed nor analyzed pursuant to NEPA. Tri-Valley CAREs believes that a PEIS would remedy the harms.

72. Finally, Tri-Valley CAREs’ mission includes achieving justice for workers at LLNL who have been exposed to radiation and toxic chemicals on the job. More than 2800 LLNL employees have applied for federal benefits due to exposures at LLNL.⁵ Tri-Valley CAREs has used its resources and staff time to facilitate support groups for these workers and has provided direct assistance to employees who were exposed to plutonium at LLNL’s Superblock and later developed cancer. The Defendants’ plan to expand plutonium pit production at multiple sites without fully addressing the impact and the connected actions that would occur at LLNL increases the likelihood of nuclear accidents at LLNL, which will further necessitate Tri-Valley CAREs diversion of resources to assist LLNL employees and impedes their ability to advise the employees regarding the availability of federal benefits.

73. Defendant U.S. Department of Energy (“DOE”) is the agency charged with the administration of the National Nuclear Security Administration Act.

⁵ US Dep’t of Labor statistic from <https://www.dol.gov/owcp/energy/regs/compliance/statistics/WebPages/LLNL.htm>

74. Defendant Jennifer M. Granholm is the highest-ranking official within DOE, which is the parent agency of the NNSA, and is thus responsible for the actions of the agencies being challenged here.

75. Defendant National Nuclear Security Administration (“NNSA”) is a semi-autonomous agency within DOE charged with managing the U.S. nuclear weapons stockpile, including design, production and testing.

76. Defendant Jill Hruby is the highest-ranking official within NNSA and is thus responsible for the actions of the NNSA being challenged here.

FACTS GIVING RISE TO PLAINTIFFS’ CLAIMS

A. STATUTORY AND REGULATORY BACKGROUND

77. NEPA “declares that it is the continuing policy of the federal government, in cooperation with state and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.” 42 U.S.C. § 4331(a).

78. NEPA’s “action-forcing procedures” require agencies to prepare or adopt an environmental impact statement (“EIS”) before undertaking a “major federal action significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 331, 333 (1989).

79. To implement the requirements of NEPA, the Council on Environmental Quality (“CEQ”) promulgated regulations applicable to all federal agencies. 42 U.S.C. § 4321; *See* 40 C.F.R. §§ 1500-1508 (2005 as amended).⁶

80. According to the CEQ, “Environmental Impact Statement means a detailed written statement as required by section 102(2)(C) of the Act.” 40 C.F.R. § 1508.11 (2005 as amended). An EIS “shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1.

81. A consideration of whether a major federal action will have a “significant” effect on the quality of the environment includes consideration of both its “context” and its “intensity.” 40 C.F.R. §1508.27.

82. “Context” considerations include “society as a whole (human, national), the affected region, the affected interests, and the locality.” 40 C.F.R. §1508.27(a). “To account for context, the agency must analyze any environmental impacts with respect to ‘society as a whole,’ the affected region, the affected interests, and the locality.” *Oak Ridge Env. Peace All. v. Perry*, 412 F.Supp.3d 786, 832-833. (E.D. Tenn. 2019).

83. “Intensity” requires consideration of the severity of the 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

⁶ Plaintiffs cite throughout this Complaint to the 2005 version of the CEQ NEPA regulations and not the recently promulgated version as the NEPA documents relied on by the Defendants were drafted under the prior version of the NEPA regulations.

controversial... the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.” 40 C.F.R. § 1508.27(b).

84. The EIS serves several functions. First, it ensures that an agency takes a “hard look” at a proposed project's environmental effects. Second, it guarantees that the agency considers reasonable alternatives to the proposed project that may have fewer adverse impacts on the environment before deciding whether to undertake the project. Finally, the EIS presents to the public detailed information about a proposed project, its impacts, and its alternatives, so that the public may participate in the decision-making process. *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 446 (4th Cir. 1996).

85. NEPA’s focus is to have an agency prepare an EIS “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.” 40 C.F.R. § 1502.5.

86. CEQ regulations require agencies to “specify the underlying purpose and need to which the agency is responding in proposing the alternatives including their proposed action.” 40 C.F.R. § 1502.13.

87. NEPA requires an agency to include in an EIS a “detailed statement” on “alternatives to the proposed action.” 42 U.S.C. § 4332(2)(C)(iii). In this statement, the agency must rigorously explore and objectively evaluate all reasonable alternatives that could achieve the underlying project purpose. 40 C.F.R. § 1502.14(a). This alternatives analysis is “the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. “If an agency decides to prepare an EIS, it must next determine the scope of the EIS- that is, whether the action should be considered individually or along with other related actions.” *Oak Ridge Env. Peace All.*, 412 F.Supp.3d at 805. An EA or an EIS should consider similar actions “when the best way to assess adequately

the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement.” §1508.25(a)(3).

88. “Programmatic NEPA document means a broad-scope EIS or EA that identifies and assesses the environmental impacts of a DOE program; it may also refer to an associated NEPA document, such as an NOI, ROD, or FONSI.” 10 C.F.R. § 1021.104(b).

89. An agency must consider multiple actions together in a single programmatic EIS where the actions are “connected,” “cumulative,” or “similar.” 40 C.F.R. §1508.25(a)(1). *See Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976); *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 894 (9th Cir. 2002).

90. Connected actions are those that “are closely related and therefore should be discussed in the same impact statement” because they “[a]re independent parts of a larger action and depend on the larger action for their justification.” 40 C.F.R. §1508.25(a)(1).

91. Cumulative actions are those that 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 the other past, present and reasonably foreseeable future actions.” *Id.* §1508.7.

92. DOE NEPA regulations recognize, like the CEQ regulations, that a supplemental EIS (an EIS prepared to supplement a prior EIS as defined in 10 C.F.R. § 1021.104(b)) shall be prepared where “there are substantial changes to the proposal or significant new circumstances or information relevant to environmental concerns, as discussed in 40 C.F.R. § 1502.9(c)(1).” 10 C.F.R. § 1021.314.

93. “Supplemental Analysis” (“SA”) is defined in DOE NEPA regulations as “a DOE document used to determine whether a supplemental EIS should be prepared pursuant to 40

C.F.R. §1502.9(c), or to support a decision to prepare a new EIS.” 10 C.F.R § 1021.104. DOE’s regulations also state that “[w]hen it is unclear whether or not an EIS supplement is required, DOE shall prepare a Supplement Analysis.” *Id.* § 1021.314(c). A SA “shall contain sufficient information for DOE to determine whether ... [a]n existing EIS should be supplemented; [a] new EIS should be prepared; or [n]o further NEPA documentation is required.” *Id.*

94. “Agencies may ‘tier’ impact statements in sequence, incorporating by reference general discussions from the earlier statements into later, more specific statements. . . . Thus, an agency may prepare an EIS that ‘reflects the broad environmental consequences attendant upon a wide-ranging federal program. . . . It may then prepare a later statement to address more particularized, site-specific considerations once the overall program has reached the ‘second tier, or implementation stage of its development.’” *Oak Ridge Env. Peace All.*, 412 F.Supp.3d at 832-33.

95. CEQ regulations define “tiering” as follows:

“Tiering refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

- a. From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.
- b. From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such case is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.”

40 C.F.R. § 1508.28.

96. “NEPA regulations provide two frameworks within which additional NEPA analysis may occur after an initial EIS is finalized: namely, tiering and supplementation. Tiering refers to the incorporation by reference in subsequent EISs or EAs, which concentrate on issues specific to the current proposal, of previous broader EISs that cover matters more general in nature. Supplementation refers to the process of updating a previous EIS in situations where the agency makes substantial changes to the proposed action, or there are significant new circumstances or information. The NEPA regulations do not provide any express guidance for determining whether to prepare a tiered NEPA analysis or a supplemental NEPA analysis in borderline cases.” *N. Alaska Env’tl. Ctr. v. U.S. Dep’t of Interior*, 983 F.3d 1077, 1090 (9th Cir. 2020) (citations omitted).

97. The APA requires the court to review agency decisions and find them unlawful if the conclusions are, "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A) (2016).

98. On December 10, 1997, CEQ issued Environmental Justice: Guidance Under the National Environmental Policy Act. CEQ recommends an agency review under NEPA be guided by the following principles that consider:

- a. the composition of the affected area and whether there may be “disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, or Indian tribes;
- b. the “potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards;”
- c. how the “interrelated cultural, social, occupational, historical, or economic factors [may] amplify the natural and physical environmental effects of the proposed agency action;”
- d. How the agency can overcome “linguistic, cultural, institutional, geographic and other barriers to meaningful participation;”
- e. The diverse constituencies within any particular community should “endeavor to have complete representation of the community as a whole;”

- f. The requirement that agencies should seek tribal representation in the process in a manner that is consistent with the government-to-government relationship between the United States and tribal governments, the federal government’s trust responsibility to federally recognized tribes, and any treaty rights.”

99. In issuing an Executive Order on Environmental Justice shortly after inauguration, the Biden Administration has made environmental justice a significant priority, reaffirming the 1997 environmental justice NEPA guidance, and directed federal agencies to prioritize consideration of these concerns:

Agencies shall make achieving environmental justice part of their missions by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts. It is therefore the policy of my Administration to secure environmental justice and spur economic opportunity for disadvantaged communities that have been historically marginalized and overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure, and health care.

Exec. Order No. 14008, 86 Fed. Reg. 7619, 7629 (Jan. 27, 2021).

B. HISTORY OF PLUTONIUM PIT PRODUCTION

100. From 1952 to 1989, plutonium pits for the nuclear weapons stockpile were manufactured only at the Rocky Flats Plant near Denver, Colorado.

101. Production was stopped in 1989 by an FBI raid investigating environmental crimes, and the facility was permanently closed in 1992. The Rocky Flats contractor was assessed an \$18 million dollar fine as a result of a settlement of violations of the Clean Water Act and the Resource Conservation and Recovery Act.

102. Most plutonium pits currently in the U.S. stockpile were produced between 1978 and 1989. From then until now, the U.S. has largely ceased producing new nuclear weaponry and has instead focused on reducing the size of the nuclear arsenal and on maintaining a smaller

nuclear stockpile. Pits from dismantled nuclear warheads are stored at DOE's Pantex site in Texas, which would provide plutonium to be processed into new pits.

103. Since the early 1990s, the U.S. has produced a small number of plutonium pits solely at LANL in New Mexico. Since 2012, no plutonium pits have been produced to maintain the U.S. existing nuclear stockpile, only for speculative new designs or future production that are "W87-like." DEP'T OF ENERGY, DOE/CF-1050, NAT'L NUCLEAR SEC. ADMIN FY 2020 CONGRESSIONAL BUDGET REQUEST 122-2424, 126 (Mar. 2019). This indicates that future pits may be heavily modified from original designs, which could potentially raise stockpile reliability issues or even prompt the U.S. to resume nuclear weapons testing.

104. In 1996, DOE/NNSA issued a Stockpile Stewardship and Management Programmatic Environmental Impact Statement ("1996 SSM PEIS"). The 1996 SSM PEIS reflected a policy of dismantling some nuclear weapons and retaining a smaller nuclear arsenal through the ongoing maintenance of existing weapons, including through prolonging the lives of existing plutonium pits. After identifying the alternatives of producing pits at LANL or producing pits at SRS, DOE concluded that the pits would be produced at LANL. Pursuant to the 1996 SSM PEIS and after considering an increase in the number of pits to be produced, DOE issued the 1996 SSM PEIS Record of Decision ("ROD") that committed to a "small capacity" to produce pits at LANL. This programmatic NEPA analysis did not contemplate producing pits at more than one facility simultaneously.

105. Regarding stockpile management, the ROD states, "the Department has decided to: ... (5) reestablish pit fabrication capability, with a small capacity, at the Los Alamos National Laboratory... For pit component fabrication (a capability which no longer exists due to the closure of the Rocky Flats Plant in 1992), the Department evaluated reestablishing this

capability, with an attendant small capacity, at Los Alamos Laboratory (LANL) or at the Savannah River Site (SRS)... DOE's decision is to reestablish the pit fabrication capacity, **at a small capacity**, at LANL." Department of Energy; Record of Decision Programmatic Environmental Impact Statement for Stockpile Stewardship and Management, 61 Fed. Reg. 68,014 (Dec. 26, 1996) (emphasis added).

106. In 1998, a coalition of advocacy groups, including Plaintiff Tri-Valley CAREs, brought a lawsuit pursuant to NEPA, asserting that NEPA required DOE to complete a supplemental EIS for the 1996 SSM PEIS based on new information regarding the environmental and safety risks associated with pit production at LANL, including information about seismic risk, new and risky proposals regarding operations at LANL and a potentially congressionally mandated plan for a larger pit production capacity featuring multiple sites. *See Nat. Res. Def. Council v. Pena*, 20 F.Supp.2d 45 (D.D.C. 1998). The Court ordered that a Supplemental PEIS be prepared under the following conditions:

Prior to taking any action that would commit DOE resources to detailed engineering design, testing, procurement, or installment of pit production capability 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.

Id. at 50 (emphasis added).

107. In 2008, DOE/NNSA issued a Complex Transformation Supplemental Programmatic Environmental Impact Statement ("2008 CT SPEIS"), which evaluated "alternatives for transforming the nuclear weapons complex into a smaller, more efficient

enterprise.” Department of Energy; Final Complex Transformation Supplemental Programmatic Environmental Impact Statement, 73 Fed. Reg. 63460, at 1-1 (Oct. 24, 2008), https://www.energy.gov/sites/default/files/EIS-0236-S4_FEIS_vol1-2008.pdf. The purpose identified in the 2008 CT SPEIS was “consolidating Category I/II special nuclear material [e.g. plutonium] at fewer sites and locations within sites to reduce risks and safeguard costs.” *Id.* at 2-1. As evidence of the intense public interest in ensuring the safe handling of hazardous nuclear materials, over 100,000 comments were submitted to NNSA in response to the draft 2008 CT SPEIS. Department of Energy; Record of Decision for the Complex Transformation Supplemental Programmatic Environmental Impact Statement—Operations Involving Plutonium, Uranium, and the Assembly and Disassembly of Nuclear Weapons, 73 Fed. Reg. 77644, 77655 (Dec. 19, 2008).

108. The 2008 CT SPEIS ROD stated that “NNSA does not foresee an imminent need to produce more than 20 pits per year to meet national security requirements.” *Id.* at 77648.

109. Like the 1996 SSM PEIS, the 2008 CT SPEIS looked at the alternatives of producing pits at either LANL or SRS but never considered producing pits at both facilities simultaneously.

110. In the 2008 CT SPEIS, DOE and NNSA represented that the alternatives described therein “are based on the need for a more responsive Complex infrastructure that has ... [a] smaller size for more cost-effective operations.” Department of Energy; Final Complex Transformation Supplemental Programmatic Environmental Impact Statement, 73 Fed. Reg. 63460, at 2-2 (Oct. 24, 2008). **Transfer of production to another site “poses unacceptable programmatic risks” and “would take years to achieve and might be unsuccessful.”** Department of Energy; Record of Decision for the Complex Transformation Supplemental

Programmatic Environmental Impact Statement—Operations Involving Plutonium, Uranium, and the Assembly and Disassembly of Nuclear Weapons, 73 Fed. Reg. 77644, 77647 (Dec. 19, 2008) (emphases added).

111. The 2008 CT SPEIS ROD drew a conclusion that plutonium pit production would be conducted solely at LANL and that LANL would continue to produce no more than 20 pits per year.

112. Since 2003, LANL has been the only site in the U.S. producing plutonium pits.

113. 50 U.S.C. §2538a, passed by Congress in 2014, requires the U.S. Government to produce at least 80 pits per year by the year 2030. Congress did not, however, dictate at which facility pits were to be produced nor did it dictate whether production would be conducted at more than one facility. Thus, the current NNSA policy to pursue a second pit-production site at SRS is not required by law but is driven by NNSA policy.

114. In October 2017, and not as part of any NEPA process or any process open to public input, NNSA drafted a Final Report for Plutonium Pit Production Analysis of Alternatives, which recommended that any alternatives that involved production of plutonium pits at more than one facility be eliminated from consideration. The report concluded that producing pits at more than one location would “add long-term production risk and surveillance costs due to multiple production lines.” National Nuclear Security Administration, Final Report for the Plutonium Pit Production Analysis of Alternatives, at 46 (Oct. 2017), http://www.lasg.org/MPF2/documents/NNSA_PuPitAoA_Oct2017_redacted.pdf.

C. PIT PRODUCTION EXPANSION PLAN

115. Up until 2018, the Defendants had never altered the plan of producing 20 pits per year at LANL and never considered dual site production. Though the 1996 PEIS considered the

alternatives of production at one site or another, Defendants never evaluated multiple contemporaneous production sites. Like the 1996 PEIS, the 2008 CT SPEIS looked at producing pits alternatively at either LANL or SRS, but it never evaluated producing pits at both sites simultaneously.

116. In February of 2018, the Trump Administration issued a Nuclear Posture Review that called for expanding production of nuclear weapons.

117. In May 2018, DOE and NNSA announced their intention, with no accompanying NEPA analysis, to produce plutonium pits at both LANL and SRS and to increase production to at least 30 pits per year at LANL and at least 50 pits per year at SRS.

118. On May 17, 2019, Plaintiffs submitted correspondence to DOE and NNSA requesting that a programmatic EIS be conducted. Subsequent to the letter submitted by SRS Watch, Nuke Watch, and Tri-Valley CAREs, DOE and NNSA announced on May 31, 2019 that it would prepare an EIS for the portion of the federal action involving production at the SRS facility. The scoping process was commenced in June of 2019.

119. In December 2019, DOE and NNSA issued a Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement (“2019 Final SA”). The Final SA restated the plan announced in May of 2018 and concluded that “no further NEPA documentation is required at a programmatic level, and NNSA may amend the existing Complex Transformation SPEIS ROD.” The purpose and need identified in the 2019 Final SA by DOE and NNSA were to create “redundancy” by producing pits at two sites, but the agencies did not consider any alternatives in the 2019 Final SA. Department of Energy, Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, at 67 (Dec. 2019),

<https://www.energy.gov/sites/prod/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>.

120. The 2019 Final SA did not consider any programmatic alternatives to the decision to split production and concluded that the impacts associated with the proposal to produce pits at more than one site are not significantly different from the prior impacts considered by DOE and NNSA in the 2008 CT SPEIS.

121. A Draft SRS Pit Production EIS was noticed in the Federal Register on April 3, 2020. Approximately 400 comment documents were submitted during the public comment period, a significant portion of which requested that a programmatic EIS be conducted.

122. In September of 2020, NNSA issued a Final Environmental Impact Statement for Plutonium Pit Production at the Savannah River Site (“SRS Pit Production EIS”).

123. The SRS Pit Production EIS evaluated the environmental impacts of the alternatives of producing plutonium pits at a level of 50, 80, and 125 pits per year, but the EIS was focused solely on the SRS pit production location.

124. In its ROD issued on November 5, 2020 for the SRS Pit Production EIS, NNSA stated, “pit production, at a level of at least 80 pits per year at SRS, has been analyzed in two programmatic EISs and the site-specific SRS Pit Production EIS. ... The [1996] SSM PEIS evaluated reasonable alternatives for reestablishing interim pit production capability on a small scale. It analyzed a production level of 80 pits per year at SRS and LANL at a programmatic level and associated impacts across the Complex.” Department of Energy; Record of Decision for the Final Environmental Impact Statement (EIS) for Plutonium Pit Production at the Savannah River Site (SRS) in South Carolina (DOE/EIS–0541), 85 Fed. Reg. 70601, 70602 (Nov. 5, 2020).

125. NNSA issued an Amended ROD (“AROD”) for the 2008 CT SPEIS on September 2, 2020, detailing the increase in production at LANL: “[LANL] will produce a minimum of 30 war reserve pits per year for the national pit production mission during 2026 and implement surge efforts to exceed 30 pits per year as needed. ... Pit production alternatives were previously analyzed in the Complex Transformation SPEIS.” Department of Energy; Amended Record of Decision for the Complex Transformation Supplemental Programmatic Environmental Impact Statement, 85 Fed. Reg. 54550 (Sept. 2, 2020).

126. NNSA issued a second AROD on November 5, 2020 for the 2008 CT SPEIS. In the ROD, “NNSA announces its programmatic decision to implement elements of a Modified Distributed Centers of Excellence (DCE) Alternative whereby NNSA would produce a minimum of 50 war reserve pits per year at a repurposed MOX at the Savannah River Site (SRS) during 2030 for the national pit production mission and implement surge efforts to exceed 80 pits per year up to the analyzed limit as necessary beginning during 2030 for the nuclear weapons stockpile. After preparing and considering the 2019 SPEIS SA, NNSA has determined that **no further NEPA analysis is needed at a programmatic level prior to issuing this Amended ROD....**” Department of Energy; Amended Record of Decision for the Complex Transformation Supplemental Programmatic Environmental Impact Statement, 85 Fed. Reg. 70598, 70601 (Nov. 5, 2020) (emphasis added).

127. The November 5, 2020 AROD stated, “NNSA has determined that the proposed action does not constitute a substantial change from actions analyzed previously and there are no new significant new circumstances or information relevant to environmental concerns.” Id. at 70600.

D. TRU WASTE STORAGE/DISPOSAL UNCERTAINTIES

128. Transuranic (TRU) waste consists of materials contaminated with artificially made radioactive elements, such as plutonium, that have atomic numbers higher than uranium in the periodic table of elements. TRU waste is primarily produced from using plutonium to fabricate nuclear weapons and is generated from the process of pit production. Currently the only underground disposal facility for TRU waste in the U.S. is the WIPP in southern New Mexico. The WIPP is owned by DOE's Office of Environmental Management, which is the main user of the facility and already receives waste from other nuclear weapons sites around the country.

129. The WIPP operates under a state Resource Conservation and Recovery Act ("RCRA") permit that will expire in 2024. Currently the state of New Mexico's permit requires that waste disposal cease in 2024 and that the facility must then be safely closed down over a period of a decade.

130. The New Mexico Environmental Department ("NMED"), the agency responsible for issuing and enforcing the WIPP RCRA permit, submitted the following comment relating to storage issues at WIPP on NNSA's 2020 Supplement Analysis of the 2008 LANL Site-Wide Environmental Impact Statement, in which DOE/NNSA addressed expanded pit production at LANL: "[i]ncreased pit production will generate extra waste and DOE and NNSA will likely have to request permit modifications to increase their hazardous waste storage capacity." James C. Kenney, NEW MEXICO ENVIRONMENT DEPARTMENT, <https://www.env.nm.gov/wp-content/uploads/2020/05/2020-05-09-OOTS-NEPA-Review-LANL-Sitewide-EIS-Supplemental-Analysis-Final.pdf>

131. The Waste Isolation Pilot Plant Land Withdrawal Act of 1992 as amended by Public Law 104-201 (H.R. 3230, 104th Congress) places a cap on the total amount of radioactive wastes that WIPP can receive.

132. Just before she left office in January 2019, the former Governor of New Mexico approved a modification to the method of waste counting at WIPP that increased the capacity by 30%. Nonetheless, current capacity is either at 60% by the current method of counting or at 43%, by the original accounting method. Department of Energy, Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, at 67 (Dec. 2019),

<https://www.wipp.energy.gov/general/GenerateWippStatusReport.pdf>.

133. NMED also stated the following in their comments on the 2020 LANL Supplement Analysis:

The DOE and NNSA must include an assumption in its surplus plutonium analysis based on potential court reversal on the method of waste volume calculation that includes potential impacts to transportation regarding pit production and SPD, and the current statutory limitations at the WIPP, existing inventory of legacy waste, and future waste generated for disposition at the WIPP. The disposal capacity limits at WIPP are defined by several different laws, agreements, and permits intended for the purpose of regulating both the physical space as well as the physiochemical and radiological aspects of transuranic (TRU) and hazardous waste disposal.

James C. Kenney, NEW MEXICO ENVIRONMENT DEPARTMENT, <https://www.env.nm.gov/wp-content/uploads/2020/05/2020-05-09-OOTS-NEPA-Review-LANL-Sitewide-EIS-Supplemental-Analysis-Final.pdf> (emphasis added).

134. There are two settlement agreements with the states of Idaho and South Carolina obligating the WIPP to accept their waste.

135. NMED submitted the following comment relating to the settlement agreement with Idaho on the 2020 LANL Supplement Analysis:

[The draft 2020 LANL Supplement Analysis] does not discuss the November 2019 settlement between DOE and the State of Idaho related to Idaho National Labs. In that settlement, DOE agreed to allocate 55% of all transuranic waste shipments received at the Waste Isolation Plant (WIPP) for Idaho National Labs. By prioritizing waste shipped from the State of Idaho to the WIPP, DOE will need to store remediated legacy waste at LANL and/or delay remediating legacy waste at LANL or both. ...

136. The issues raised by the NMED to DOE/NNSA regarding the lack of analysis of the impacts of the waste disposal and storage issues at WIPP contradict the Defendants' conclusion in the Final SA that there are no significant new circumstances or information relevant to environmental concerns and demonstrate the necessity for DOE and NNSA to prepare a new or supplemental PEIS addressing these issues.

137. Currently, 11.5 metric tons of plutonium are stored at SRS, in aging containers. The State of South Carolina successfully sued to get that plutonium removed from SRS and reached a settlement with DOE. A program called "Plutonium Disposition" could bring in another 30 or more metric tons of plutonium, to be processed over the next 20-30 years. That plutonium would be processed for shipment off site to the WIPP facility in New Mexico. That plutonium designated to be disposed of as waste via a process at SRS called "dilute and dispose" would take up a significant volume in WIPP. That program, along with disposal of pit TRU and existing and new TRU generated by other DOE programs, must be analyzed in unison for cumulative impacts on WIPP capacity.

138. In the event of a serious accident at SRS, workers would be especially vulnerable to impacts of release of radioactive and hazardous materials and offsite populations would also

be at risk of exposure. EPA has designated SRS as being on its National Priorities List, and SRS is a Superfund site.

<https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=0403485>.

139. In fact, the SRS EIS states, “[i]f an accident involving the release of radioactive or chemical materials occurred, workers, members of the public, and the environment would be at risk. ... The offsite public would also be at risk of exposure to the extent that meteorological conditions exist for the atmospheric dispersion of released hazardous materials.” Final Environmental Impact Statement for Plutonium Pit Production at the Savannah River Site in South Carolina (SRS Pit Production EIS) (DOE/EIS-0541)

<https://www.energy.gov/sites/default/files/2020/09/f79/final-eis-0541-srs-pit-production-vol-1-2020-09.pdf>.

Expanded pit production at LANL will double the amount of TRU wastes to be sent to the WIPP.

140. The 2008 CT SPEIS and 2008 LANL SWEIS did not adequately consider TRU waste disposal and no such NEPA analysis has been done since then for expanded plutonium pit production at LANL and SRS.

E. SIGNIFICANT CHANGES IN THE PROPOSED ACTION

141. The 2018 Nuclear Posture Review (“NPR”) announced a significant change in the Defendants’ plan. The NPR is significantly different from prior nuclear posture reviews in that the prior NPRs never advocated for expanded pit production.

142. Since 2008, DOE/NNSA’s own stated purpose and need for pit production has changed significantly. The 2008 CT SPEIS stated “[t]he purposes of NNSA’s proposed actions” include “consolidating Category I/II special nuclear material [e.g. plutonium] **at fewer sites and**

locations within sites to reduce risks and safeguard costs.” Department of Energy; Final Complex Transformation Supplemental Programmatic Environmental Impact Statement, 73 Fed. Reg. 63460, at 2-1 (Oct. 24, 2008) (emphasis added),

https://www.energy.gov/sites/default/files/EIS-0236-S4_FEIS_vol1-2008.pdf. The stated purpose and need were to “create a more responsive nuclear weapons infrastructure that is cost-effective.” *Id.* The 2008 CT SPEIS only included “alternatives that could reduce in size, capacity, and number of sites with Category I/II SNM ... and eliminate redundant activities.” *Id.* at 3-1.

143. Though the 2019 Final SA, which is a supplemental document to the 2008 CT SPEIS, asserts that “the purpose and need has not changed from the Complex Transformation PEIS” Department of Energy, Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, at 3 (Dec. 2019), <https://www.energy.gov/sites/prod/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>, the Final SA does not discuss the prior purpose in the 2008 CT SPEIS. That purpose was to consolidate nuclear material and processes at fewer sites and the 2019 Final SA does not consider how the 2008 CT SPEIS is significantly different from the purpose and need of increasing production and producing simultaneously at two sites. The 2019 Final SA describes the purpose and need for pit production as being to “improve the resiliency, flexibility, and redundancy of the Nuclear Security Enterprise by not relying on a single production site.” *Id.* Further, the Final SA states that “[u]sing two pit production sites would improve the resiliency, flexibility and redundancy of the Nuclear Security Enterprise by not relying on a single production site.” *Id.* at 7.

144. The shift from being a cost-effective and streamlined enterprise to a significantly costlier and more redundant plan is a substantial change in the proposed action that makes a new or supplemental PEIS necessary. The 2008 CT SPEIS stated that “significant economic and security benefits could be realized” by consolidating operations and eliminating “redundant activities.” Department of Energy, Final Complex Transformation Supplemental Programmatic Environmental Impact Statement, 73 Fed. Reg. 63460, at 1-5 (Oct. 24, 2008), https://www.energy.gov/sites/default/files/EIS-0236-S4_FEIS_vol1-2008.pdf. In contrast, the 2019 Final SA asserts that even though “this approach [of producing pits at multiple sites] will require NNSA to fund activities at two sites,” this approach is the “best way to manage the cost, schedule, and risk of such a vital undertaking.” Department of Energy, Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, at 7 (Dec. 2019), <https://www.energy.gov/sites/prod/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>.

145. At its core, the plan to produce more pits at more than one site is substantially different from producing fewer pits at only one site.

146. Furthermore, under the APA, when an agency changes policy or reverses a prior decision, and the new policy or decision rests upon factual findings that contradict those that underlay its prior policy or decision, the agency must provide a “‘reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy.’” *Organized Vill. Of Kake v. U.S. Dep’t of Agric.*, 795 F.3d 956, 996 (9th Cir. 2015) (quoting *Fed. Comm. Comm’n v. Fox Television Stations, Inc.*, 556 U.S. 502, 515-16 (2009)).

147. An agency's failure to provide such a reasoned explanation makes the policy or decision change arbitrary and capricious. *Id.* (quoting *Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005)).

148. The Defendants' failure to provide a reasoned explanation for why, without any additional information, it ignored and contradicted its previous factual findings, circumstances, and analyses that underlay the 2008 Complex PEIS decision to produce pits at only one location and reached the opposite conclusion in the Nuclear Posture Review despite the 2019 SA's assertion that no change in the purpose and need had occurred.

F. CONNECTED, SIMILAR ACTIONS

149. The plans for increased dual site pit production at LANL and SRS for the purpose of the W87-1 warhead replacement program involve actions that are inextricably connected, cumulative and similar.

150. Both LANL and SRS would rely on various NNSA support locations across the country for production, sites that have not been analyzed for environmental impacts. Multiple sites are involved in all aspects of pit production, including critical NNSA staff in Washington, D.C.; Germantown, Maryland; and Albuquerque, New Mexico; as well as at seven field offices. Moreover, by NNSA's own admission, multiple contractor-run sites are integral to NNSA's nation-wide plutonium pit production program, including LLNL, the Kansas City National Security Complex, the Pantex Plant and the WIPP. *See* Department of Energy, Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, at 29-30 (Dec. 2019), <https://www.energy.gov/sites/prod/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>.

151. Both LANL and SRS would have similar production processes, generating the same type of wastes, and would have the same potential for environmental impacts, including those on the underserved communities that surround the facilities in each state. Both proposed production sites would have TRU waste to be disposed of at WIPP, which is already oversubscribed. The two proposed sites are just that—two components of one large connected plan to expand pit production. Further, the overall driving force of the expanded pit production, the W87-1 warhead, is so connected to this plan that the actions must be considered in a new or supplemental PEIS. The 2019 Final SA concedes that “NNSA agrees that expanding pit production at LANL and repurposing the [MOX] facility are connected actions.” *Id.* at A-7. Additionally, the SRS EIS on pit production confirms that low-level nuclear waste (LLW) or mixed low-level nuclear waste (MLLW) could go to a “commercial facility,” a site or sites also not reviewed for environmental impacts.

152. The 2019 Final SA summarily states, in response to public comments about the W87-1 program being connected to pit production, that examining which “warheads should be in the nuclear weapons stockpile is beyond the scope of the SA.” However, the SA was by definition intended to consider whether any new information or changed circumstances, such as the planned development of a new type of nuclear warhead, might render a new or supplemental PEIS necessary.

153. The November 25, 2020 AROD stated, “NNSA has made no proposals to, and there are no changes to, NNSA’s decisions on other aspects of the 2008 Programmatic ROD,” despite the newly proposed warhead replacement program. Department of Energy; Amended Record of Decision for the Complex Transformation Supplemental Programmatic Environmental Impact Statement, 85 Fed. Reg. 70598, 70601 (Nov. 5, 2020).

154. In September 2020, the U.S. Government Accountability Office (“GAO”) issued a report, “NNSA Should Further Develop Cost, Schedule, and Risk Information for the W87-1 Warhead Program.” U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-20-703, NNSA SHOULD FURTHER DEVELOP COST, SCHEDULE, AND RISK INFORMATION FOR THE W87-1 WARHEAD PROGRAM (2020). GAO connected the action of pit production to the development of the W87-1 warhead: “NNSA has less assurance that it will be able to produce sufficient numbers of pits in time to sustain W87-1 production on its current schedule.” *Id.* NNSA’s planned production of W87-1 warheads depends entirely on NNSA’s capability to produce up to 80 pits per year from the combined production of the two facilities at LANL (30 pits per year) and SRS (50 pits per year). “NNSA’s plans call for ramping up its pit production capabilities to 30 pits per year at LANL by 2026 and 50 pits per year at SRS by 2030, according to NNSA documents. This schedule is intended to support production through to final production of the last W87-1 in 2038.” *Id.* at 15.

G. NEW CIRCUMSTANCES AND INFORMATION

1. MOX Facility Failures

155. To enable production at SRS, Defendants announced a plan to repurpose the failed MOX Facility. The proposed repurposed facility has been referred to as the Savannah River Plutonium Processing Facility (“SRPPF”). The MOX facility was never designed or intended to produce nuclear weapon components. The MOX Facility was intended to be a major component in the United States’ program to dispose of surplus weapons-grade plutonium. In fiscal year (FY) 2007, NNSA authorized the start of MOX Facility construction activities, which were estimated at a total project cost of about \$4.8 billion, with an FY 2017 projected start of operations date. In FY 2016, the Department of Energy’s Office of Project Management

Oversight, in partnership with the U.S. Army Corps of Engineers, estimated the total project cost for MOX Facility construction to be at about \$17.2 billion, with operations starting as late as 2048. The significant remaining lifecycle cost of the MOX Facility led, in part, to NNSA terminating the MOX Services contract in October 2018. The MOX Facility was never completed.

156. In 2013, the Government Accountability Office (GAO) had placed NNSA's management of various projects, including the MOX Facility on its "list of areas at high risk of fraud, waste, abuse, and mismanagement for major contract and project management." U.S. GOV'T ACCOUNTABILITY OFFICE, High Risk List, <https://www.gao.gov/high-risk-list>. In 2014, the GAO reiterated its concern about the MOX Facility and stated that "Because NNSA has not conducted a root cause analysis to identify the underlying causes of the cost increases for the MOX facility and WSB, it cannot provide assurance that it has correctly identified the underlying causes to ensure that they will not lead to further cost increases as the projects move forward." *Id.* at 32. U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-14-231, Plutonium Disposition Program: DOE Needs to Analyze the Root Causes of Cost Increases and Develop Better Cost Estimates, at 32 (Feb. 2014), <https://www.gao.gov/assets/gao-14-231.pdf>.

157. The MOX Facility problems only became apparent after the 2008 CT SPEIS was prepared. The Defendants failed to consider or account for this significant change in circumstances on a programmatic level.

158. Defendants prepared an EIS for the SRS pit production component of the proposed agency action, which recognizes that SRS has never been designed to accommodate pit production and the facility being overhauled was never completed and was subject to significant cost overruns and construction delays.

159. At SRS, the abandonment of the MOX facility project, conceded in the Final SA as a significant change, warrants programmatic NEPA review. Despite the Defendants' creation of an EIS specifically for the component of the agency action located at SRS, the problems with the MOX facility have clear bearing on the programmatic alternative of selecting SRS as one of the sites for pit production, especially when plutonium pits have *never* been produced at SRS.

2. Increased Cost and Delays of Pit Production Plan

160. Congress directed the Institute for Defense Analysis to produce an Independent Assessment of the Two-Site Pit Production Decision in May of 2019, which stated that producing the number of pits of at least 80 per year by 2030 would be “extremely challenging” to be achieved following the planned timeline or budget estimates. *See* INSTITUTE FOR DEFENSE ANALYSIS, Independent Assessment of the Two-Site Pit Production Decision: Executive Summary, at vii (May 2019).

161. The DOE Fiscal Year 2022's Congressional Budget Request for NNSA states that “NNSA has determined that achieving the required 50 war reserve ppy [pits per year] production rate at the Savannah River Site in 2030 is not likely.”

162. On May 26, 2021, at a U.S. Senate Armed Services hearing, NNSA Administrator-nominee Jill Hruby testified that the date production at SRS would commence has been delayed to between 2030 and 2035, reflecting up to a five-year delay in operation of the facility. https://www.armed-services.senate.gov/hearings/nominations_hruby-rose-rosenblum-maier. She also conceded that there are significant challenges to achieving production of 30 pits per year at LANL by 2026.

163. These delays constitute a significant change in circumstances such that a new or supplemental PEIS is required.

164. The estimated cost of the project over its lifetime has significantly increased. The initial estimated cost to repurpose the SRS facility was \$4.6 billion in 2018. The costs of the SRS facility alone have risen to an estimated \$11.1 billion in the NNSA budget for Fiscal Year 2022. Kelly Cummins, *Plutonium Pit Production Engineering Assessment (EA) Results*, DEP'T OF ENERGY 8 (May 2018), https://nukewatch.org/newsite/wp-content/uploads/2019/03/FINAL-Pu-Pit-Production-EA-Results-05.14.18_Unclassified.pdf?x25155.

165. In 2018, NNSA estimated that the re-purposing of the MOX facility will have a life cycle cost of \$27.8 billion, an estimate that is now obsolete.

166. In 2018, NNSA estimated that the expansion of pit production at LANL will have a life cycle cost of \$14.3 billion. *Id.*

167. The significant cost overruns that have already occurred are a significant change in circumstances necessitating a new or supplemental PEIS. Likewise, schedule delays will result in different amounts of waste created from pit production, possibly including production of larger amounts of all types of wastes.

168. The State of Idaho and the State of South Carolina have legally binding agreements for the WIPP to accept their waste, both of which were executed following the 2008 CT SPEIS, and these agreements impact the current and future capacity of waste disposal. The analyses conducted by Defendants fail to account for the consequences of these agreements on the waste disposal inherent in the planned expanded production of plutonium pits.

169. The Final SA cites to the 2018 NPR for the proposition that other nations, “including Russia and China ... have added new types of nuclear capabilities to their arsenals, increased the salience of nuclear forces in their strategies and plans, and engaged in increasingly aggressive behavior, including in outer and cyber space.” Department of Energy, Final

Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, at 6 (Dec. 2019),

<https://www.energy.gov/sites/prod/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>. The Final SA also refers to North Korea’s “illicit pursuit of nuclear weapons and missile capabilities.” *Id.*

170. The 2008 CT SPEIS does not mention Russian, Chinese, or North Korean development of nuclear weapons as a basis for an increase in pit production. In fact, the CT PEIS discusses that increased cooperation between the U.S. and Russia is allowing the U.S. to “cut the U.S. nuclear weapons stockpile to about one-half the size.” Department of Energy; Final Complex Transformation Supplemental Programmatic Environmental Impact Statement, 73 Fed. Reg. 63460, at 1-4 (Oct. 24, 2008), https://www.energy.gov/sites/default/files/EIS-0236-S4_FEIS_vol1-2008.pdf.

171. The Final SA’s reliance on international developments to demonstrate a need to increase production is evidence of significantly changed circumstances surrounding Defendants’ plan.

3. Safety Issues at LANL

172. LANL has suffered from lack of management of nuclear safety issues for many years and has an extensive history of serious safety problems. LANL’s main plutonium facility was shut down for over three years because of chronic nuclear criticality safety concerns. In 2014, a radioactive waste barrel improperly prepared by LANL ruptured at the WIPP in southern New Mexico, which contaminated 21 workers and resulted in shutting down the only repository for plutonium wastes from pit production for almost three years. These safety issues have

become significantly more alarming since the 2008 CT SPEIS and should be analyzed as part of a PEIS before initiating this expansion of production across two sites.

173. DOE found deficiencies in the management of nuclear safety issues in its 2019 Assessment of the Management of Nuclear Safety Issues at LANL. This new information has not been evaluated and requires the Defendants to undertake a new or supplemental PEIS.

174. The DNFSB issued a report in 2019 that highlighted the “need for timely completion of safety control improvements that have stagnated over the last decade.” Bruce Hamilton, *DNFSB letter and report to DOE Secretary James Richard Perry*, DEFENSE NUCLEAR FACILITIES SAFETY BOARD, (Nov. 15, 2019), <https://ehss.energy.gov/deprep/2019/FB19N15B.PDF>.

175. The Final Complex Transformation Supplement Analysis claims under the section on “Environmental Justice”:

“No significant health risks to the public are expected and radiological dose would remain below the annual dose limit of 10 mrem [millirem] at both SRS and LANL. At both sites, there are no special circumstances that would result in any greater impact on minority or low-income populations than the population as a whole. Impacts would be consistent with impacts presented in the Complex Transformation SPEIS. Because of the distance between SRS and LANL, environmental justice impacts would not be additive.”

Department of Energy, Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, at 54 (Dec. 2019),

<https://www.energy.gov/sites/prod/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>.

176. The population within the 50-mile radius “Region of Influence” around LANL consists of 68% People of Color. Final Supplement Analysis of the 2008 Site-Wide

Environmental Impact Statement for the Continued Operation of Los Alamos National Laboratory for Plutonium Operations, NNSA, August 2020, p. 52, <https://www.energy.gov/sites/prod/files/2020/09/f78/final-supplement-analysis-eis-0380-sa-06-lanl-pit-production-2020-08.pdf>. NNSA's 2020 Supplement Analysis to the 2008 LANL SWEIS found that expanded operations could result in a dose of 8.2 millirem to the public. Not included are planned intentional tritium releases that by LANL's own admission could result in doses of up to 20 millirem. *Application for Pre-Construction Approval under 40 CFR 61 Subparts A and H for Venting of Flanged Tritium Waste Containers (FTWCs) at TA-54*, LANL to EPA, May 17, 2019, p. 4. Above all of this are the Defense Nuclear Facilities Safety Board's calculated potential public doses of 24 rem (3,000 times greater than 8.2 millirem), not to mention lethal potential occupational doses of 760 rem from incompatible radioactive wastes which ruptured a drum and closed the WIPP for nearly 3 years. *Potential Energetic Chemical Reaction Events Involving Transuranic Waste at Los Alamos National Laboratory*, DNFSB, September 20, p. 10, <https://www.dnfsb.gov/sites/default/files/document/22156/Tech-46%2C%20Potential%20Energetic%20Chemical%20Reaction%20Events%20Involving%20Transuranic%20Waste%20at%20LANL%20%5B2020-100-055%5D.pdf>.

177. These changed circumstances impact the environmental risks from producing over quadruple the number of nuclear weapon components, from transporting components and source materials and the uncertainty of waste streams and disposal.

178. The National Academy of sciences, Engineering, and Medicine issued a Review of the Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant (2020) and recommended the following:

The Department of Energy should implement a new comprehensive programmatic environmental impact statement (PEIS) to consider fully the environmental impacts of the total diluted surplus plutonium transuranic waste inventory (up to an additional 48.2 metric tons) targeted for dilution at the Savannah River Site and disposal at the Waste Isolation Pilot Plant (WIPP). Given the scale and character of the diluted surplus plutonium inventory, the effect it has on redefining the character of WIPP, the involvement of several facilities at several sites to prepare the plutonium for dilution, a schedule of decades requiring sustained support, and the environmental and programmatic significance of the changes therein, a PEIS for the whole of surplus plutonium that considers all affected sites as a system is appropriate to address the intent and direction of the National Environmental Policy Act and would better support the need for public acceptance and stakeholder engagement by affording all the opportunity to contemplate the full picture.

Review of the Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant, NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, & MEDICINE (Apr. 28, 2020), <https://www.nationalacademies.org/ocga/briefings-to-congress/review-of-the-department-of-energys-plans-for-disposal-of-surplus-plutonium-in-the-waste-isolation-pilot-plant>.

FIRST CAUSE OF ACTION

Violations of NEPA and Administrative Procedures Act

179. Plaintiffs repeat and reallege Paragraphs 1- 178 as if restated verbatim.

180. The Defendants' current plan is a substantial change from the 2008 CT SPEIS, including its stated purpose and need, to have a dual-site method of production of the mandated increased number of pits. Shifting from pit production at one site to pit production at two sites, with the attendant increased waste and transportation issues, is a substantial change in the proposed action. By declining to prepare a new or supplemental EIS based on this substantial change, Defendants violated NEPA and its implementing regulations and acted arbitrarily,

capriciously, not in accordance with law, and have also abused their discretion and failed to comply with procedure required by law, violating the APA, 5 U.S.C. § 706(2).

181. Significantly new circumstances exist which require either a new or supplemental PEIS, including: the status of the capacity at the WIPP and the impending expiration of its state RCRA permit; the never-completed MOX Facility at SRS intended to be repurposed for pit production; the safety issues at LANL, including the circumstances that shut down the LANL facility for over three years; and the President's Executive Order emphasizing the need for an increased consideration of environmental justice issues. By declining to prepare a new or supplemental PEIS to consider these substantial changes, Defendants violated NEPA and its implementing regulations and acted arbitrarily, capriciously, not in accordance with law, and have also abused their discretion and failed to comply with procedure required by law, violating the APA, 5 U.S.C. § 706(2).

182. Connected and similar actions are present that require the preparation of a new or supplemental PEIS, including: the production processes at LANL and SRS; the fact the facilities share a disposal site that is already oversubscribed; that there are numerous unanalyzed support sites throughout the country that are impacted by the pit production process; and that both production sites further the larger goal of producing the W87-1 warhead being designed at LLNL in California. By declining to prepare a new or supplemental PEIS to evaluate these connected and similar actions, Defendants violated NEPA and its implementing regulations and acted arbitrarily, capriciously, not in accordance with law, and have also abused their discretion and failed to comply with procedure required by law, violating the APA, 5 U.S.C. § 706(2).

183. Significant new information is available that requires preparation of a new or supplemental PEIS, such as the acknowledgment by Defendants that the planned action cannot

be undertaken under the timeline evaluated nor under the budget proposed. By declining to prepare a new or supplemental PEIS on this substantial change, Defendants violated NEPA and its implementing regulations and acted arbitrarily, capriciously, not in accordance with law, and have also abused their discretion and failed to comply with procedure required by law, violating the APA, 5 U.S.C. § 706(2).

184. Defendants have failed to comply with NEPA's requirement to consider alternatives to the proposed actions: the Final SA's purpose and need identified by DOE/NNSA was to improve "redundancy," yet it failed to require analysis of any alternatives to the two sites identified; alternatives to the decision to expand production by converting the MOX facility at SRS were not considered; Defendants did not evaluate properly any alternatives to production at SRS; and plutonium pit reuse was not considered as an alternative. By declining to prepare a new or supplemental PEIS to evaluate these alternatives, Defendants violated NEPA and its implementing regulations and acted arbitrarily, capriciously, not in accordance with law, and have also abused their discretion and failed to comply with procedure required by law, violating the APA, 5 U.S.C. § 706(2).

185. The 2019 Final SA's conclusion that "no further NEPA documentation is required at a programmatic level" is arbitrary and capricious and violates NEPA and the APA.

186. Defendants cannot rely on the tiering concept to support their position the 2019 Final SA is sufficient under NEPA. The existence of a significant change in circumstances and new information requires a new or supplemental PEIS and not a tiered supplemental analysis.

187. The NNSA budget for fiscal year 2022, dated May 28, 2021, states that "achieving the required 50 war reserve ppy production rate at the Savannah River Site in 2030 is not likely," with an anticipated "CD-4 schedule range of 1st Quarter FY 2032 to 2035." Budget

Request at 211. With this admitted up-to-five-year delay in the SRS pit plant, NNSA has time to prepare the PEIS.

188. The Final SA and the SRS EIS are attempting to justify a decision (to produce at two sites) that has already been made in violation of NEPA and the APA.

PRAYER FOR RELIEF

WHEREFORE, plaintiffs respectfully request that this Court:

- A. Declare that Defendants have violated the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4321 et seq., and its implementing regulations, 40 C.F.R. §§ 1500 et seq., by failing to prepare, circulate for comment and consider in their decision-making process a detailed Programmatic Environmental Impact Statement concerning the proposed plan to dramatically alter its plan for plutonium pit production;
- B. Enter appropriate injunctive relief to ensure that the Defendants comply with the National Environmental Policy Act and Executive Order of January 27, 2021, and specifically to ensure that Defendants take no further actions toward proceeding with their plutonium pit production plans until they have complied with NEPA and the Executive Order;
- C. Award Plaintiffs their fees, costs, and other expenses as provided by applicable law; and
- D. Issue such other relief as the Court may deem just, proper and equitable.

Respectfully submitted this 11th day of July, 2022.

s/ Leslie S. Lenhardt

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