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

STATE OF SOUTH CAROLINA, Plaintiff, v. UNITED STATES; UNITED STATES DEPARTMENT OF ENERGY; RICK PERRY, in his official capacity as Secretary of Energy; NATIONAL NUCLEAR SECURITY ADMINISTRATION; and LISA E. GORDON-HAGERTY, in her official capacity as Administrator of the National Nuclear Security Administration and Undersecretary for Nuclear Security; Defendants.	)	Civil Action No. 1:18-1431-JMC

MOTION FOR PRELIMINARY INJUNCTION AND MEMORANDUM IN SUPPORT

Pursuant to Rule 65 of the Federal Rules of Civil Procedure and Local Rules 7.04 and 7.05, Plaintiff State of South Carolina (South Carolina or State) moves this Court for a preliminary injunction to prevent the Department of Energy (DOE) and National Nuclear Security Administration (NNSA) and their respective officials (collectively, the Federal Defendants) from terminating the mixed oxide fuel fabrication facility project (MOX Facility or Project) currently under construction at the Savannah River Site (SRS) in Aiken County, South Carolina until this important case can be decided. Pursuant to Local Rule 7.02, counsel for the State attempted to confer with counsel for Federal Defendants but was unable to resolve the matters in this motion.

INTRODUCTION

For over 20 years, DOE and NNSA have recommended that the Nation dispose of its surplus weapons-grade plutonium by converting it into mixed oxide fuel for use in commercial nuclear reactors. Recognizing the importance of advancing this "preferred alternative," Congress statutorily directed DOE and NNSA to construct the MOX Facility. Following Congressional appropriation of funds for the Project in Fiscal Year 2007, DOE and NNSA began constructing the MOX Facility.[1] Each year since, Congress has continued to fund construction of the Project including, most recently, $335.5 million dollars in Fiscal Year 2018, and has specified that these funds "and any funds provided by prior Acts for such Project that remain unobligated, may be made available only for construction and project support activities for such Project."[2]

Nevertheless, DOE has continuously sought to terminate the MOX Project and advocated for its proposed alternative, a process called "downblending" or "Dilute and Dispose." Even though there are significant obstacles to the "Dilute and Dispose" process and Congress has made available only a limited amount of appropriated funds to study the feasibility of this process, DOE and NNSA decided to terminate and cease construction of the MOX Facility and pursue the "Dilute and Dispose approach to plutonium disposition."[3] On May 14, 2018, they also issued a Partial Stop Work Order that halted any new contracts or new hires at SRS for the MOX Project.[4] They did so,

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[1] Bob Stump National Defense Authorization Act for Fiscal Year 2003 (NDAA FY03), Pub. L. No. 107-314, 116 Stat. 2458, Subtitle E, § 3182, *subsequently codified by* NDAA FY04, as 50 U.S.C.A. § 2566 (Section 2566).

[2] Consolidated Appropriations Act, 2018 (CAA FY18), Pub. L. 115-141, 132 Stat. 348, Sec. 309(a); Explanatory Statement, CAA FY18, 164 Cong. Rec. H2045-01, H2498-01.

[3] Compl. Ex. 1, May 10, 2018 Secretary Perry Letter; Compl. Ex. 29, NNSA, *Surplus Plutonium Disposition Dilute and Dispose Option Independent Cost Estimate (ICE) Report*.

[4] Compl. Ex. 30, May 14, 2018 NNSA Letter to CB&I AREVA MOX Services, LLC RE: Contract DE-AC02-99CH10888 (Mixed Oxide Fuel Fabrication Facility).

however, without consulting with the Governor of South Carolina as required by 50 U.S.C.A. § 2567(a). They also failed to conduct any analysis for the indefinite storage of defense plutonium at SRS, as is mandated by the National Environmental Policy Act, 42 U.S.C.A. §§ 4321-4370h (NEPA). Further, DOE improperly and without justification attempted to avoid the Congressional mandates by committing to remove the stored plutonium and certifying that an alternative and less expensive option for carrying out the plutonium disposition program exists. However, these commitments and certifications are without any support in law or in fact.

Because of the serious consequences this action will have on the environment, economy, and safety of the State, her citizens, and the Nation's public in general, and the affront to federal laws, South Carolina, by this motion, asks this Court to bar the Federal Defendants and those under their supervision from terminating or stopping work on the Project.

BACKGROUND

As this is the third lawsuit filed by the State against the Federal Defendants related to the MOX Project, the Court is familiar with the general background. However, the State will highlight some of the most pertinent background facts relevant to this Motion.

Following the end of the Cold War and the collapse of the Soviet Union, significant quantities of nuclear weapons, including large amounts of weapons grade plutonium, became surplus to the defense needs of the United States and Russia. Control of these surplus materials became an urgent U.S. foreign policy goal, with a particular focus on nuclear weapons. In an effort to consolidate and reduce surplus weapons-grade plutonium, the United States and Russia jointly developed a plan for the nonproliferation of weapons of mass destruction worldwide.[5]

[5] *See* Compl. Ex. 6, Excerpt from D.J. Spellman et al., *History of the U.S. Weapons-Usable Plutonium Disposition Program Leading to DOE's Record of Decision* 2 (1997) (detailing important events and studies concerning surplus weapons-usable plutonium disposition).

After extensive study, including an environmental impact statement (EIS) conducted pursuant to NEPA, in 1996 DOE concluded that the "preferred alternative" for plutonium disposition consisted of a dual-path strategy that proposed (1) immobilization of a portion of the surplus plutonium in glass or ceramic materials and (2) irradiation of the remaining plutonium in MOX fuel. DOE also analyzed the environmental impacts of various alternatives for the "long term" storage of plutonium and other nuclear materials for up to fifty years.[6] The following year, DOE announced its intention to pursue this dual-path strategy, including the construction and operation of a MOX fuel fabrication facility.

In November 1999, after further evaluating the alternatives for surplus plutonium disposition, DOE issued the *Surplus Plutonium Disposition Final EIS* (SPD EIS).[7] DOE also analyzed a "No Action Alternative" that did not involve disposition of any surplus plutonium but rather addressed storage of the plutonium in accordance with its previous analysis of the impacts of continued storage of the surplus plutonium for a period up to 50 years.[8] DOE again concluded that the "Preferred Alternative" was the hybrid approach to immobilize surplus weapons-grade plutonium in glass and ceramic materials and to irradiate the remaining plutonium in MOX fuel in existing domestic, commercial reactors.[9] DOE selected SRS as the preferred site to implement both of these approaches and upon which to construct and operate the MOX Facility.

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[6] *See* Compl. Ex. 7, NNSA, *Report to Congress: Disposition of Surplus Defense Plutonium at Savannah River Site* 2-1 (Feb. 15, 2002) (hereinafter *Report to Congress*); Compl. Ex. 9, DOE, Record of Decision (ROD) for *Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement* (PEIS) (Jan. 21, 1997), 62 Fed. Reg. 3014.

[7] Compl. Ex. 11, DOE, Excerpt from SPD EIS, Vol. I – Part A, at 1-3 (Nov. 1999).

[8] *Id.*

[9] *Id.* at 1-10 to 1-11.

In 1999, DOE signed a contract with a consortium, now CB&I AREVA MOX Services, LLC (MOX Services), to design, build, and operate the MOX Facility.[10] On or about February 28, 2001, MOX Services submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for a license to construct the MOX Facility at SRS.[11] In late 2001, Congress directed DOE to provide, not later than February 1, 2002, a plan for the disposal of surplus defense plutonium located at SRS and to be shipped to SRS in the future. Congress also required the Secretary of Energy to:

- Consult with the Governor of South Carolina regarding "any decisions or plans of the Secretary related to the disposition of surplus defense plutonium and defense plutonium materials located at [SRS]";
- Submit a report to the congressional defense committees providing notice for each shipment of defense plutonium and defense plutonium materials to SRS;
- If DOE decides not to proceed with construction of the immobilization facilities or the MOX Facility, prepare a plan that identifies a disposition path for all defense plutonium and defense plutonium materials; and
- Include with the budget justification materials submitted to Congress in support of DOE's budget for each fiscal year "a report setting forth the extent to which amounts requested for the [DOE] for such fiscal year for fissile materials disposition activities will enable the [DOE] to meet commitments for the disposition of surplus defense plutonium and defense plutonium materials located at [SRS]…." [12]

Consistent with these duties and responsibilities, in 2002, DOE decided not to proceed with the immobilization portion of the hybrid strategy, leaving the construction and operation of the MOX Facility as the only strategy to dispose of surplus plutonium in the United States.

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[10] *See* Compl. Ex. 12, DOE, Excerpt from *SPD EIS*, Summary, at S-1 (Nov. 1999); Compl. Ex. 13, DOE, ROD for *SPD EIS* (Jan. 11, 2000), 65 Fed. Reg. 1608.

[11] *See* Compl. Ex. 16, NRC, Excerpt from *Environmental Impact Statement on the Construction and Operation of a Proposed Mixed Oxide Fuel Fabrication Facility at Savannah River Site, South Carolina* 1-3 (Jan. 2005) (NRC EIS).

[12] National Defense Authorization Act for Fiscal Year 2002 (NDAA FY02), Pub. L. No. 107-107, 115 Stat. 1378, § 3155.

In 2003 Congress enacted statutory requirements for DOE's construction and operation of the MOX Facility.[13] Specifically, Section 2566 provides the Congressional mandate for the "construction and operation of [the MOX Facility]" and requires DOE to achieve the "MOX production objective" by producing mixed-oxide fuel from defense plutonium and defense plutonium materials at an average rate of no less than one metric ton of mixed-oxide fuel per year.[14]

In 2005, DOE began transferring plutonium to SRS for conversion into MOX fuel.[15] (This plutonium was in addition to the several tons of plutonium that already existed at SRS.) On or about March 30, 2005, after its own evaluation and analysis, NRC issued a license for construction to MOX Services finding, among other things, that radiation exposure to the public is greater in a "no action" alternative than with the Project and noting that "continued storage would result in higher annual impacts" of public radiation exposure than implementation of the Project.[16] Construction began on the MOX Facility on or about August 1, 2007.

In 2014, the Federal Defendants sought to undermine and abandon the Project by trying to place the MOX Facility into "cold standby," which would effectively have amounted to an indefinite suspension of the Project. The State filed a lawsuit before this Court, and the Federal Defendants then agreed to continue construction of the Project in compliance with law. The case was resolved through a stipulation of dismissal and dismissed without prejudice.[17]

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[13] NDAA FY03, Subtitle E, § 3182, *subsequently codified by* NDAA FY04 as 50 U.S.C.A. § 2566.

[14] 50 U.S.C.A. § 2566(a), (h).

[15] *See* Compl. Ex. 21, DOE, *Storage of Surplus Plutonium Materials at the Savannah River Site Supplemental Analysis* (Sept. 5, 2007).

[16] Compl. Ex. 16, Excerpt from NRC EIS at 4-96.

[17] *South Carolina v. U.S. Dep't of Energy*, 1:14-cv-00975-JMC (dkt. #19).

Since then, DOE's budget requests have all requested funding to terminate construction of the MOX Facility. However, Congress has specifically required the DOE and NNSA to utilize any MOX-specific appropriations for the construction of the MOX Facility, denying and rebuffing the attempts by DOE and NNSA to utilize Congressional appropriations to terminate the Project. Nevertheless, DOE has continuously sought termination of the MOX Project and has advocated for its proposed "Dilute and Dispose" alternative, under which DOE would prepare surplus non-pit plutonium at SRS for disposal at the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico.[18]

Furthermore, and despite the Defendants' new preferred alternative, Congress has continued to require DOE to pursue construction of the MOX Facility. Congress specified that the Secretary can avoid this mandate ***only*** if the Secretary submits to the Congressional defense committees:

> (A) the commitment of the Secretary to remove plutonium intended to be disposed of in the MOX facility from South Carolina and ensure a sustainable future for the Savannah River Site;
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> (B) a certification that—
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> (i) an alternative option for carrying out the plutonium disposition program for the same amount of plutonium as the amount of plutonium intended to be disposed of in the MOX facility exists, meeting the requirements of the Business Operating Procedure of the National Nuclear Security Administration entitled 'Analysis of Alternatives' and dated March 14, 2016 (BOP–03.07); and
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> (ii) the remaining lifecycle cost, determined in a manner comparable to the cost estimating and assessment best practices of the Government Accountability Office, as found in the document of

[18] Notably, the "Dilute and Dispose" approach has only been given a limited approval and limited budget to process plutonium that is NOT part of the 34 metric tons of defense plutonium to be disposed of through the MOX Project. In other words, there currently exists no legal authority or authorization for the "Dilute and Dispose" approach to be utilized for the MOXable plutonium.

> the Government Accountability Office entitled 'GAO Cost Estimating and Assessment Guide' (GAO–09–3SP), for the alternative option would be less than approximately half of the estimated remaining lifecycle cost of the mixed oxide fuel program; and
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> (C) the details of any statutory or regulatory changes necessary to complete the alternative option.[19]

In making the certification under Section 3121(b)(1)(B), the Secretary also must ensure that the estimates used "are of comparable accuracy." NDAA FY18, § 3121(b)(2).

Nevertheless, on or about May 10, 2018, DOE notified Congress of the Federal Defendants decision to terminate and cease construction of the MOX Facility and pursue the "Dilute and Dispose approach to plutonium disposition."[20] The Secretary further stated that the requirements of Section 3121 of NDAA FY 18 and Section 309 of the CAA FY18 had been met and that he therefore was exercising his authority to "cease MOX construction." DOE and NNSA also issued a Partial Stop Work Order on May 14, 2018, that halted any new contracts or new hires at SRS for the MOX Project.[21] DOE and NNSA further intend to issue a full stop work order to begin the wind-down of the MOX Project and termination of employees on the MOX Project on or about Monday, June 11, 2018.

PRELIMINARY INJUNCTION STANDARD

In order to obtain a preliminary injunction, the State must demonstrate: "(1) that [it] is likely to succeed on the merits, (2) that [it] is likely to suffer irreparable harm in the absence of preliminary relief, (3) that the balance of equities tips in [its] favor, and (4) that an injunction is in

[19] NDAA FY18, § 3121(b)(1).

[20] Compl. Ex. 1, May 10, 2018 Secretary Perry Letter; Compl. Ex. 29, NNSA, *Surplus Plutonium Disposition Dilute and Dispose Option Independent Cost Estimate (ICE) Report*.

[21] Compl. Ex. 30, May 14, 2018 NNSA Letter to CB&I AREVA MOX Services, LLC RE: Contract DE-AC02-99CH10888 (Mixed Oxide Fuel Fabrication Facility).

the public interest." *Winter v. Natural Resources Defense Council, Inc.*, 555 U.S. 7, 19–20 (2008). "The traditional office of a preliminary injunction is to protect the status quo and to prevent irreparable harm during the pendency of a lawsuit ultimately to preserve the court's ability to render a meaningful judgment on the merits." *In re Microsoft Corp. Antitrust Litig.*, 333 F.3d 517, 525 (4th Cir. 2003); *see Omega World Travel, Inc. v. Trans World Airlines*, 111 F.3d 14, 16 (4th Cir. 1997) ("The purpose of interim equitable relief is to protect the movant, during the pendency of the action, from being harmed or further harmed in the manner in which the movant contends it was or will be harmed through the illegality alleged in the complaint."). The Fourth Circuit has defined the status quo as the "last uncontested status between the parties which preceded the controversy." *Pashby v. Delia*, 709 F.3d 307, 320 (4th Cir. 2013).

ARGUMENT

I. South Carolina will likely succeed on the merits.

A. *Violation of 50 U.S.C.A. § 2567 – Failure to Consult with the Governor*.

The State will likely succeed on the merits of its claim that 50 U.S.C.A. § 2567(a) was violated by the Secretary of Energy's failure to consult with Governor McMaster prior to reaching his May 10, 2018 decisions. An agency that has been statutorily directed to consult with a state government during the course of agency decision-making must conduct the consultation prior to reaching its decision—and consultation is more than "notice and comment" of and on agency action. *California Wilderness Coalition v. U.S. Dep't of Energy*, 631 F.3d 1072, 1087 (9th Cir. 2011). Further, where a federal agency is required to do an act "in consultation with" another agency, the requisite consultation must be made before the agency takes action. *Northern California River Watch v. Wilcox*, 633 F.3d 766, 774 (9th Cir. 2011) (noting that the language "in consultation with" in Section 7 of the Endangered Species Act requires consultation before the

agency reaches a decision); *see also, Natl. Wildlife Fed'n v. Coleman*, 529 F.2d 359, 371 (5th Cir. 1976) ("in consultation with" language requires meaningful consultation prior to reaching a final agency decision).

A federal agency should apply the ordinary meaning of the word consult when Congress has directed it to consult with outside parties:

> [a]n ordinary meaning of the word consult is to 'seek information or advice from (someone with expertise in a particular area)' or to 'have discussions or confer with (someone), typically *before* undertaking a course of action.' We conclude that this is the definition that Congress intended when it directed DOE to prepare the [study] 'in consultation with the affected States.' Thus, DOE was to confer with the affected States before it completed the study.

California Wilderness Coalition, 631 F.3d at 1087 (quoting *The New Oxford Dictionary* 369 (2001)) (emphasis in original). An agency violates its statutory mandate to consult where it fails to conduct the consultation prior to reaching its decision. *Silver v. Babbitt*, 924 F. Supp. 976, 985 (D. Ariz. 1995).

Here, Section 2567(a), titled "Consultation required," provides that the Secretary of Energy ***shall consult*** with the Governor of the State of South Carolina regarding any decisions or plans of the Secretary related to the disposition of defense plutonium and defense plutonium materials at SRS. 50 U.S.C.A. § 2567(a). That language is mandatory. *National Railroad Passenger Corp. v. Morgan*, 536 U.S. 101, 109 (2002) (noting that the word "shall" provides no discretion). Both the decision to terminate the MOX Project and the decision to pursue the Dilute and Dispose approach relate to the disposition of surplus defense plutonium and defense plutonium materials at SRS.[22] Despite the statutory directive, but consistent with DOE's general refusal to engage in good faith

[22] Comp. ¶¶ 116-17; Compl. Ex. 1, May 10, 2018 Secretary Perry Letter.

discussions with South Carolina, Secretary Perry failed to engage in any meaningful consultation or discussions with the Governor prior to reaching his May 10, 2018 decisions.[23] Instead, the Governor was merely informed by representatives from DOE and NNSA that decisions were forthcoming or had been made.[24] Notably, while it is incumbent upon the Secretary to comply with the statute, the Governor has taken affirmative steps to try and initiate meaningful dialogue and facilitate an information exchange.[25] But, consistent with the disdain with which DOE and NNSA hold the State, they have refused to cooperate.

Secretary Perry is required by Section 2567 to consult with Governor McMaster prior to making decisions related to the disposition of defense plutonium and defense plutonium materials at SRS. 50 U.S.C. § 2567(a). Because his May 10, 2018 decisions to close the MOX Facility and pursue the Dilute and Dispose approach relate to the disposition of defense plutonium and defense plutonium materials at SRS, his failure to consult with Governor McMaster places him in violation of Section 2567(a). This is not harmless error. As the Ninth Circuit discussed when DOE excluded and failed to consult with states in another instance,

> we note that although the nature of consultation makes it difficult to determine the precise consequences of its absence, the prejudice to the party excluded is obvious. Consultation requires an exchange of information and opinions **before** the agency makes a decision. This requirement is distinct from the opportunity to offer comments on the agency's decision. The essential verity of this distinction is illustrated by posing the question: would any attorney forgo the

[23] Compl. ¶¶ 118-19; Compl. Ex. 31, April 18, 2018 Lowell Letter; Ex. 1, Aff. of Governor Henry McMaster ¶¶ 5-6.

[24] *Id.* Importantly, at the time the statute was passed, the discussions and negotiations were between the Secretary of Energy (then Spencer Abraham) and the Governor (then Jim Hodges). *See* Mar. 14, 2017 Order and Opinion, *South Carolina v. United States*, C/A No. 1:16-cv-00391-JMC, at 46-48 (dkt. # 84). Thus, the context of the passage of the governing law is that the Secretary and Governor would have a meaningful discussion, which given the international, national, and state interests at stake with weapons-grade plutonium is eminently reasonable.

[25] *See* Ex. 2, Feb. 23, 2018 McMaster Letter; Ex. 3, May 2, 2018 McMaster Letter.

> opportunity to argue his client's case before a judge renders a decision in favor of seeking reconsideration after the judge has made a decision? Of course not; such a decision might well amount to malpractice. Similarly, here, the opportunity to comment on DOE's completed Congestion Study does not compensate for the lost opportunity of consulting with DOE in the formation of that study.

California Wilderness Coalition, 631 F.3d at 1093 (emphasis in original).

Here, until the Federal Defendants are willing to engage in a good faith, meaningful discussion of the storage and disposition of weapons-grade plutonium in South Carolina with the Governor, the Federal Defendants cannot make a legally valid decision.

In light of the Secretary of Energy's failure to engage in any meaningful consultation or discussions with the Governor prior to reaching his May 10, 2018 decisions, South Carolina is likely to succeed on the merits of its claim that the Federal Defendants violated the consultation requirement set forth at 50 U.S.C.A. § 2567(a), thus requiring vacatur of the May 10, 2018 decisions and an injunction that no decision be made until the requisite consultation occurs. *California Wilderness Coalition*, 631 F.3d at 1095 ("Accordingly, as we have determined that § 216 required more than the notice-and-comment procedure adopted by DOE, and that DOE's failure to consult with the affected States was not harmless error, precedent and reason require that we vacate the Congestion Study and remand for the DOE to prepare a Congestion Study 'in consultation with the affected States.'").

B. *Violation of NEPA – Failure to Prepare a Supplemental EIS for 50+ Years of Storage of Plutonium at SRS.*

1. NEPA

NEPA directs all federal agencies to assess the environmental impact of proposed actions that significantly affect the quality of the environment. 42 U.S.C.A. § 4332(2)(C). NEPA was enacted to ensure that federal agencies carefully and fully contemplate the environmental impact of their actions and to ensure that sufficient information on the environmental impact is made

available to the public before actions are taken. 42 U.S.C.A. § 4342; *see* 40 C.F.R. §§ 1500-1508 (implementing regulations of the Council on Environmental Quality); 10 C.F.R. §§ 1021.100 *et seq*. (DOE implementing regulations of NEPA).

NEPA requires federal agencies to prepare an EIS when a major federal action is proposed that may significantly affect the quality of the environment. 42 U.S.C.A. § 4332(2)(C); 40 C.F.R. § 1501.4(a)(1); 10 C.F.R. § 1021.310. An EIS is a "detailed written statement" that "provide[s] 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, 1508.11. If after an EIS has been prepared for a proposed action, the federal agency makes substantial changes in the proposed action or there are new circumstances bearing on the proposed action or its impacts, the agency must prepare a supplemental EIS. 40 C.F.R. § 1502.9(c); *see* 10 C.F.R. § 1021.314 ("DOE shall prepare a supplemental EIS if there are substantial changes to the proposal or significant new circumstances or information relevant to environmental concerns….").

Importantly, the governing regulations state that during the NEPA process "[a]gencies shall not commit resources prejudicing selection of alternatives before making a final decision." 40 C.F.R. § 1502.2. Therefore, "[u]ntil an agency issues a record of decision…, no action concerning the proposal shall be taken which would: (1) Have an adverse environmental impact; or (2) Limit the choice of reasonable alternatives." 40 C.F.R. 1506.1(a); *see* 10 C.F.R. § 1021.211.

2. NEPA and the MOX Project

There is no question that DOE and NNSA must comply with NEPA when rendering decisions and taking action related to the disposition of defense plutonium at SRS.[26] *See* 50 U.S.C.A. § 2461 (requiring the NNSA to comply with "all applicable environmental … requirements."); 50 U.S.C.A. § 2566 (requiring NEPA compliance for MOX-related decisions). There are a multitude of NEPA-related documents that have been promulgated and issued regarding the selection of the MOX process and the plutonium disposition pathway. Most of these documents have been cited at various times between the parties in the prior and present litigation between the parties regarding the MOX Project. There is little utility in reciting the entire list here.

What is indisputable is that the decisions made regarding the MOX Project are subject to NEPA. It is also indisputable that addressing the storage and disposition of weapons-grade plutonium has a significant impact on the environment (as evidenced by the prior environmental impact statements issued by Federal Defendants for those activities at SRS).

3. Plutonium at SRS

The Federal Defendants previously told this Court that decisions involving "a substance with the potential to have as much impact on the environment as plutonium" should be subject to "a very thorough, deliberate process." *South Carolina v. United States*, 1:16-cv-00391-JMC (dkt. #100 at 16). As the Federal Defendants told the Fourth Circuit in their appeal of this Court's order to remove plutonium in accordance with the statute:

> "Unfortunately, the same nuclear properties of plutonium that make it attractive to science also make this element hazardous to human

[26] Indeed, NEPA is one of the main legal tasks that the Federal Defendants rely on to claim it is impossible for them to comply with their statutory obligations of removal and this Court's prior order ordering compliance with the statute to remove one ton in two years. *See South Carolina v. United States*, 1:16-cv-00391-JMC (dkt. #100) (DOE and NNSA complaining about how burdensome NEPA is before a decision can be made to remove plutonium).

> beings." Many forms of plutonium can spontaneously ignite when exposed to air. In addition, plutonium's radioactivity requires "a comprehensive safety program[ ]" involving "planning, personnel practices and engineered controls," as well as "mass limitations, training, procedures, postings, personnel and area radiation monitoring, and emergency response."

Br. of United States at 2, No. 18-1148 (4th Cir. March 19, 2018) (internal citations omitted). The Nuclear Regulatory Commission, in its decision approving the MOX Facility construction, stated that

> The primary benefit of operation of the proposed MOX facility would be the resulting reduction in the supply of weapons-grade plutonium available for unauthorized use once the plutonium component of MOX fuel has been irradiated in commercial nuclear reactors. ***Converting surplus plutonium in this manner is viewed as being a safer use/disposition strategy than the continued storage of surplus plutonium at DOE sites***, as would occur under the no-action alternative, since it would reduce the number of locations where the various forms of plutonium are stored (DOE 1997).[27]

This is true, in part, because radiation exposure to the public is greater in a "no action" alternative than with the MOX Project. As NRC has found, "continued storage would result in higher annual impacts" of public radiation exposure than implementation of the MOX Project.[28]

In other words, the Federal Defendants acknowledge and admit that the continued storage and presence of plutonium at SRS constitutes a significant environmental impact that must be properly analyzed under NEPA.

4. No analysis of 50+ year storage

The EIS initially designating SRS as the location for the MOX Facility and the transfer and storage of 34 metric tons of defense plutonium at SRS was issued in December 1996 (the PEIS).

[27] Compl. Ex. 16, NRC EIS at 2-36 (emphasis added).

[28] *Id.* at 4-96.

The PEIS analyzed and evaluated the storage of weapons-grade plutonium at SRS for a period of up to 50 years. *See Hodges v. Abraham*, 300 F.3d 432, 447 (4th Cir. 2002) ("By its 1996 PEIS, the DOE had examined various options for the long-term storage of surplus plutonium … at SRS for up to fifty years."). There have been supplements and updates since that time, but no evaluation or analysis has been undertaken that reviewed the storage at SRS of weapons-grade plutonium for a period longer than 50 years.

By making the decision to terminate the MOX Project, the Federal Defendants have rendered SRS as the repository for defense plutonium indefinitely. There is no alternative for disposition or removal of the MOXable plutonium. *See infra* § I.B.5 (explaining why "Dilute and Dispose" is not an option for MOXable plutonium). In other words, with no approved alternative, the MOXable plutonium at SRS will sit indefinitely, which is a longer time period than 50 years, and has not been studied or analyzed.

Since NEPA was utilized to evaluate the environmental impacts of the decision to bring plutonium into the State for 50 years, and that decision was implemented, the decision to impose the burden of the impacts of indefinite storage of plutonium on South Carolina must similarly be evaluated under NEPA prior to making that decision (*i.e.*, the May 10 decision).[29] As the Federal Defendants failed to conduct a NEPA analysis for the environmental consequences of storage longer than 50 years, the May 10 decisions must be vacated.

[29] Unlike instances where a NEPA evaluation for a project is undertaken and the project abandoned for any number of reasons without additional NEPA compliance, in this case the action constituting the environmental harm was the transfer of defense plutonium to SRS after the decision was made to dispose of the plutonium through the MOX Facility.

5. No other disposal or removal alternative

The Federal Defendants engage in subterfuge in shilling its proposed alternative to MOX of "Dilute and Dispose." The plutonium at SRS can be divided into two general categories—the plutonium intended for disposition through the MOX Facility and the plutonium not intended for MOX disposition. The "Dilute and Dispose" approach that the Federal Defendants discuss is ongoing at SRS is limited in resources and legal authority and is not applicable to the plutonium intended for disposition through the MOX Facility.

The Federal Defendants have no authorization or approval to apply the "Dilute and Dispose" approach to plutonium intended for disposition through the MOX Facility. All they have is a conceptual plan. In fact, the Federal Defendants asked the National Academies of Science to "evaluate the general viability of the U.S. Department of Energy's (DOE's) ***conceptual plans*** for disposing of surplus plutonium in WIPP to support U.S. commitments under the Plutonium Management and Disposition Agreement, identify gaps, and recommend actions that could be taken by DOE and others to address those gaps."[30] That study is ongoing (and not anticipated to be completed until 2019).

In point of fact, the supplemental EIS that was performed resulting in the record of decision published on April 5, 2016 assigning "Dilute and Dispose" as the preferred alternative to dispose of the non-MOXable plutonium pursuant to NEPA specifically disclaimed reconsidering MOX as the disposition pathway for the MOXable 34 metric tons of plutonium.[31]

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[30] NAS, Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant, DELS-NRSB-17-03, Project Scope (emphasis added).

[31] Compl. Ex. 27, DOE, *ROD for Surplus Plutonium Disposition* (April 5, 2016); Compl. Ex. 26, *Final SPD Supplemental EIS*, Foreword ("Under all alternatives, DOE would also disposition as MOX fuel 34 metric tons (37.5 tons) of surplus plutonium in accordance with previous decisions. The 34 metric tons (37.5 tons) of plutonium would be fabricated into MOX fuel at [the MOX Facility] for use at domestic commercial nuclear power reactors.").

When the U.S. Environmental Protection Agency (EPA) was asked its opinion on utilizing "Dilute and Dispose" for the plutonium intended for MOX disposition, it pointed out the NEPA and environmental analysis that still had to be done. Specifically, the EPA stated:

> There would be many steps and some time before the EPA formally becomes involved in exercising its regulatory responsibilities associated with the possible disposal of the 34 MT of plutonium at the WIPP. This includes the National Environmental Policy Act activities that the DOE would be required to do….

Compl. Ex. 28, Ltr. of EPA dated April 2, 2018.

Therefore, the May 10 decision certifying the selection of "Dilute and Dispose" as the "alternative" for the disposition of MOXable plutonium is void because the Federal Defendants failed to comply with NEPA prior to selecting "Dilute and Dispose" as the new preferred alternative for plutonium disposition at SRS. The Federal Defendants engaged in a NEPA analysis for every other decision related to plutonium disposition, impliedly acknowledged that a NEPA analysis would be required in reconsidering the disposition of the MOXable plutonium when it issued the record of decision for using "Dilute and Dispose" on the plutonium not intended for MOX disposition, and the basis of the Federal Defendants' opposition to this Court's enforcement of the removal requirement in Section 2566(c)(1) is NEPA compliance. Yet, now the Federal Defendants seem to think they can make decisions that have significant impacts on the environment and the public without any environmental analysis. Unless the requirements of NEPA are satisfied, there is no valid decision, and as a result there is no legally valid or authorized disposal pathway for the MOXable plutonium except for the MOX Project.

The State has a strong likelihood of success on the merits requiring vacatur of the May 10, 2018 decisions for violation of NEPA. The May 10 decision to terminate the MOX Project also constitutes a decision for South Carolina to serve as the permanent repository for the

weapons-grade plutonium by default. That decision has significant environmental consequences that require an analysis under NEPA, which has not been performed. Similarly, the May 10 decision to select "Dilute and Dispose" as a preferred alternative for plutonium disposition has significant environmental consequences that require an analysis under NEPA, which has not been performed. Therefore, the termination decision should be vacated, as NEPA demands compliance prior to any agency decision.

C. *Violation of NDAA FY18 and CAA FY18 – Failure to Meet Waiver Certification Requirements*.

The Administrative Procedures Act, 5 U.S.C.A. §§ 701 *et seq*. (APA), provides judicial review of final agency actions for which there is no other adequate remedy in a court. 5 U.S.C.A. § 704. A reviewing court shall hold unlawful and set aside agency action found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law, or in excess of statutory jurisdiction or authority, or without observance of procedure required by law. 5 U.S.C.A. § 706. An agency decision is:

> arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983); *Ohio River Valley Envtl. Coalition, Inc. v. Kempthorne*, 473 F.3d 94, 102 (4th Cir. 2006) (same) (quoting *Motor Vehicle Mfrs*.). Accordingly, "the agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" *Motor Vehicle Mfrs.*, 463 U.S. at 43 (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)).

Here, the State is likely to succeed on its claim pursuant to the APA that the Secretary of Energy's May 10 "certification" that the requirements of Section 3121 of NDAA FY 18 and Section 309 of the CAA FY18 had been met is arbitrary and capricious because the Secretary's "certification" has no basis in law or fact.

In the May 10, 2018 decision, the Secretary of Energy provides, "I confirm that the Department is committed to removing plutonium from South Carolina intended to be disposed of in the MOX facility[,]" in an apparent attempt to satisfy Section 3121(b)(1)(A) of the NDAA FY18. However, there has been no commitment by the Federal Defendants to remove defense plutonium from South Carolina—in fact, quite the opposite—and the Secretary's stated reasoning for this so-called commitment is based on information that is contrary to federal law and has no rational connection to such "commitment." *Motor Vehicle Mfrs.,* 463 U.S. at 43. The stated primary basis for this commitment is that "[the Federal Defendants] are currently processing plutonium in South Carolina for shipment to the Waste Isolation Pilot Plant (WIPP) and intend to continue to do so." But none of the defense plutonium that the Federal Defendants claim is currently being processed in South Carolina for shipment to WIPP was intended to be disposed of by the MOX Facility. Accordingly, this fact is irrelevant to and provides no support for the Secretary's "commitment" to remove plutonium from South Carolina intended to be disposed of in the MOX Facility, and thus, in making the so-called "commitment," the Federal Defendants have "relied on factors which Congress has not intended it to consider." *Id*.

The Secretary further avers that the Federal Defendants' commitment to removal is supported by the fact that they are "planning to install additional equipment for processing plutonium [pursuant to the Dilute and Dispose Approach] for removal from South Carolina and to increase the rate at which this removal can be carried out." The Secretary also states that the

Federal Defendants "are also exploring whether any of the plutonium currently in South Carolina can be moved elsewhere for programmatic uses." Neither of these statements evidence or support a legitimate commitment for the removal of the plutonium intended to be disposed of in the MOX Facility. First, there has been no NEPA analysis of the "Dilute and Dispose" approach or the storage of an additional 34 metric tons of weapons-grade plutonium at WIPP, and the Environmental Protection Agency (EPA) has stated that the requisite NEPA analyses and other studies for the storage of the plutonium at WIPP will take "many years."[32] Under applicable law and the Federal Defendants' permits for WIPP, the Federal Defendants also are not permitted to store an additional 34 metric tons of weapons-grade plutonium at WIPP. However, the Secretary's so-called commitment takes none of this into account.

More importantly, and as this Court has previously recognized, using the Federal Defendants' "Dilute and Dispose" approach, which might result in the removal of one metric ton of plutonium from South Carolina by 2025, would result in the Federal Defendants violating Section 2566(c)(2), which requires the removal of all defense plutonium from the State by no later than January 1, 2022. 50 U.S.C.A. § 2566(c)(2); Dec. 20, 2017 Order of Injunctive Relief, *South Carolina v. United States*, C/A No. 1:16-cv-00391-JMC (dkt. # 109) (Injunctive Order) at 5 ("Defendants request an injunction that does not require them to remove a single metric ton until 2025. . . . The court will not endorse an injunction that approves [the Dilute and Dispose] plan under which Defendants will inevitably violate subsection (c)(2) [of Section 2566]."). Accordingly, under existing law, it would be illegal to use the "Dilute and Dispose" approach as a method to remove the plutonium intended to be disposed of in the MOX Facility from South Carolina. This approach therefore cannot serve as support for a legitimate commitment to remove

[32] Compl. Ex. 28, Ltr. of EPA dated April 2, 2018.

plutonium from South Carolina. Consistent with the Federal Defendants' continued disregard for their obligations under Section 2566, the Secretary's letter makes no mention of this statute. Thus, the Federal Defendants "entirely failed to consider an important aspect of" removing plutonium from South Carolina, thereby making their "certification" arbitrary and capricious. *Motor Vehicle Mfrs.*, 463 U.S. at 43.

In fact, it is quite remarkable that the Secretary would even assert that the Federal Defendants are "committed" to removing plutonium from South Carolina when, as this Court already has found, they are currently in violation of their statutory obligation to remove plutonium from this State and are vigorously contesting any statutory obligation to remove any plutonium from the State. Injunctive Order at 2-3 ("[T]he court notes that Defendant United States Department of Energy ("DOE") has attempted to reargue . . . a position that rids them of responsibility for removal of the defense plutonium, despite the court's explicit findings to the contrary."); *United States v. South Carolina*, No. 18-1148 (4th Cir. 2018).

Simply put, the Federal Defendants cannot on the one hand declare a commitment to removing plutonium from the State, but on the other hand disavow and forego any attempt to comply with their existing statutory obligation to remove plutonium. Because Congress clearly sought more than empty promises, illegal plans, and implausible explanations through the requested commitment to remove plutonium from South Carolina, the Secretary's "commitment" does not meet the requirements of Section 3121 of NDAA FY 18 and serves no rational basis for the Federal Defendants' May 10, 2018 decisions.

The Federal Defendants' estimates used for the lifecycle costs of the MOX program and the Dilute and Dispose approach also are not of comparable accuracy as required by Section 3121(b)(1)(B)(ii) and (b)(2) of the NDAA FY18 and do not support the May 10, 2018 decisions.

First, the cost estimate for the Dilute and Dispose approach utilizes more generous and liberal underlying assumptions in funding and risk while the cost estimate for the MOX Project utilizes more stringent and conservative underlying assumptions in funding and risk.[33] It is not a comparable approach to assume one project is funding constrained, but the competing project is not.

Further, the estimate completed in September 2016 for the MOX Project lifecycle cost that the Federal Defendants compared to the Dilute and Dispose lifecycle cost estimate was not determined in a manner comparable to GAO best practices, as GAO determined a few months ago and the Federal Defendants admit.[34] GAO also identified the massive difference—approximately $32 billion—in the MOX Project lifecycle cost between the Federal Defendants' estimate prepared in 2013 and the estimate prepared in 2016, thereby demonstrating the flaws in the estimates.[35] Accordingly, GAO reported:

> In our February 2014 report, we recommended that NNSA revise and update the Plutonium Disposition Program's life-cycle cost estimate using the MOX approach following our cost estimating best practices, such as conducting an independent cost estimate. NNSA generally agreed with our recommendation, but has not yet implemented it…. Based on the findings of our review of NNSA's revised life-cycle cost estimate, we continue to believe that our

[33] *See* Compl. Ex. 32, GAO, *Plutonium Disposition, Proposed Dilute and Dispose Approach Highlights Need for More Work at the Waste Isolation Pilot* (Sept. 2017) (*GAO Plutonium Disposition Report*) at 24 (describing NNSA's funding profile for MOX Facility and lack of supporting documentation).

[34] Compl. Ex. 32, *GAO Plutonium Disposition Report* ("DOE's National Nuclear Security Administration (NNSA) has not yet applied best practices when revising its life-cycle cost estimate of $56 billion for the Plutonium Disposition Program using the MOX approach, as GAO previously recommended."); Compl. Ex. 29, ICE Report at 48 ("The GAO notes, however, in their report 'Plutonium Disposition: Proposed Dilute and Dispose Approach Highlights Need for More Work at the Waste Isolation Pilot Plant' (GAO-17-390) that the 2016 MOX fuel program lifecycle estimate ***does not exhibit the characteristics of an estimate developed in alignment with GAO best practices (and was never intended as such)***." (emphasis added)).

[35] Compl. Ex. 32, *GAO Plutonium Disposition Report* at 23-24.

> recommendation remains valid and that, should DOE choose to pursue the MOX approach, NNSA should revise this estimate consistent with our cost and schedule estimating best practices. NNSA officials in charge of revising this estimate stated that they will apply cost and schedule best practices to revise this estimate, including conducting an independent cost estimate, should there be a decision to continue with the MOX approach.[36]

In short, a certification that the lifecycle cost estimates for the Dilute and Dispose approach and the MOX Project are of comparable accuracy cannot be made until a new estimate of the MOX approach following GAO cost estimating best practices and using similar or comparable underlying assumptions to those used in the Dilute and Dispose approach is prepared. Therefore, the Secretary's certification that the lifecycle estimates are of comparable accuracy is unsupported by the "relevant data" and does not meet the requirements of Section 3121(b)(1)(B)(ii) and (b)(2) of the NDAA FY18. *Motor Vehicle Mfrs.*, 463 U.S. at 43.

In his letter, the Secretary of Energy also did not provide any details of the statutory or regulatory changes that are necessary to complete the proposed Dilute and Dispose approach, and thus, the requirement of Section 3121(b)(1)(C) of the NDAA FY18 also has not been meet. Although recognizing the "capacity issues related to the receipt of the full 34 metric tons at WIPP," the Secretary of Energy instead states that all that is needed to proceed with the Dilute and Dispose approach is a proposed permit modification. However, DOE and NNSA have no basis in law or fact to simply assume that the any permit modification will be granted. The Federal Defendants also cannot use this assumption to avoid reporting to Congress, as required by Section 3121(b)(1)(C) of the NDAA FY18, the statutory and regulatory changes that will be necessary for DOE and NNSA to pursue the Dilute and Dispose approach, which will likely include, among others, amending the federal WIPP Land Withdrawal Act. Moreover, as discussed above, the

[36] *Id*. at 24-25.

Dilute and Dispose proposal would not result in the removal from the State of the defense plutonium that arrived at SRS since 2002 by the Section 2566(c)(2) January 1, 2022 deadline. In fact, this plan would result in the importation of over an additional 26 metric tons of weapons-grade plutonium into SRS in the future. This necessarily means Section 2566 would have to be amended and revised for the Dilute and Dispose proposal to go forward. However, DOE did not inform the congressional committees of this necessary change as required by Section 3121(b)(1)(C) of the NDAA FY18.

Because the Secretary's purported "commitments" and "certifications" have no basis in law or fact, the State therefore is likely to succeed on its claim that the Federal Defendants' decision to terminate the MOX Facility is arbitrary and capricious and should be held unlawful and set aside.

II. South Carolina will suffer irreparable harm in the absence of preliminary relief.

Without a preliminary injunction, South Carolina will suffer irreparable harm. Based on the unlawful "certification" by Secretary Perry, the Federal Defendants have already issued a Partial Stop Work Order to the construction contractor that halted any new contracts or new hires at SRS for the MOX Project.[37] The Federal Defendants intend to issue a full stop work order to begin the wind-down of the MOX Project and termination of employment of employees at SRS related to the MOX Project on or about June 11, 2018, which is the first business day after the 30-day period following Secretary Perry's "certification" during which the Federal Defendants cannot use funds provided for the construction of the MOX Facility to eliminate the Project. CAA FY18, § 309(c)(2).

[37] Compl. ¶ 111; Compl. Ex. 30, May 14, 2018 NNSA Letter to CB&I AREVA MOX Services, LLC RE: Contract DE-AC02-99CH10888 (Mixed Oxide Fuel Fabrication Facility).

Once this full stop work order is issued, hundreds of current SRS employees—who pay taxes in and many of whom are citizens of South Carolina—will lose their jobs. This would be devastating for the individual employees and their families and the local communities and result in an economic loss for the State.[38] This also would be the "event horizon" for the termination of the MOX Project, because once the labor force is lost, the MOX Project is likely dead.[39]

With the MOX Project terminated, SRS and the State will be the *de facto* dumping ground for weapons-grade plutonium. There is no other approved or authorized disposition strategy or any removal strategy for the weapons-grade plutonium stored at SRS that was intended to be processed at the MOX Facility, and thus, the defense plutonium is set to be stored at SRS permanently. As discussed, the Federal Defendants have only analyzed the safety and environmental impacts of storing defense plutonium at SRS for a period of 50 years from 1996. Given the undeniable dangers of the weapons-grade plutonium, the irreparable harm to the State caused by the termination of the MOX Project and the resulting indefinite storage of plutonium within her borders therefore is substantial.[40] Because the termination will become irreversible once the full stop work order is issued and current labor force lost, the State will suffer this significant irreparable harm should the

[38] *See* NDAA FY03, Subtitle E, § 3181 ("The United States and the State of South Carolina have a compelling interest in the safe, proper, and efficient operation of the plutonium disposition facilities at the Savannah River Site. ***The MOX facility will also be economically beneficial to the State of South Carolina, and that economic benefit will not be fully realized unless the MOX facility is built.***") (emphasis added).

[39] It is clear this is the Federal Defendants' strategy to effect action and implement their decision while avoiding accountability to Congress or this Court. If they can force the contractor to lose the workforce and put the contractor in bankruptcy through constant decisions on procurement and contracting that are illegal, they know they can force the project to collapse under the bureaucratic weight they have created. At that point, Congressional and judicial review is nothing more than an autopsy, with the opportunities lost. The Federal Defendants' strategy is an egregious violation of the principles of separation of powers and checks and balances.

[40] *See supra* § I.B.3.

Federal Defendants not be enjoined from issuing the stop work order or taking any other actions in furtherance of the termination of the MOX Project.

Moreover, the Federal Defendants' decision to terminate the Project and store plutonium at SRS indefinitely violates the State's rights under NEPA, which in and of itself creates irreparable harm. When a federal agency undertakes actions that would significantly affect the environment, NEPA requires the agency to take a hard look at the impact of those actions. *Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 181 (4th Cir. 2005). Accordingly, "irreparable harm [exists] when agencies become entrenched in a decision uninformed by the proper NEPA process because they have made commitments or taken action to implement the uninformed decision." *Conservation Law Found. Inc. v. Busey*, 79 F.3d 1250, 1271 (1st Cir. 1996). This harm "is not merely a procedural harm, but is 'the added risk to the environment that takes place when governmental decision makers make up their minds without having before them an analysis (with prior public comment) of the likely effects of their decision upon the environment.'" *Id.* at 1271-72 (quoting *Sierra Club v. Marsh*, 872 F.2d 497 (1st Cir. 1989)).

A preliminary injunction is needed to prevent the Federal Defendants from proceeding with—and the State suffering the irreparable harm from—the uninformed decision to terminate the MOX Facility that would render South Carolina the permanent repository of weapons-grade plutonium. *Id.*; *see Western North Carolina Alliance v. North Carolina Dep't of Transp.*, 312 F.Supp.2d 765, 778 (E.D.N.C. 2003) ("[W]hen a decision to which NEPA obligations attach is made without the informed environmental considerations that NEPA requires, the harm that NEPA intends to prevent has been suffered.") (quoting *Watt*, 716 F.2d at 952).

If the full stop work order is issued, the State also will be robbed of the opportunity to obtain a meaningful judgment on the merits of its claims that the Federal Defendants' decision to

terminate the MOX Facility and leave South Carolina as the permanent repository for plutonium is unlawful. *International Refugee Assistance Project v. Trump*, 883 F.3d 233, 270 (4th Cir. 2018) ("[I]rreparable harm occurs when the threatened injury impairs the court's ability to grant an effective remedy."); *In re Microsoft Corp.*, 333 F.3d at 525 ("The traditional office of a preliminary injunction is to protect the status quo and to prevent irreparable harm during the pendency of a lawsuit ultimately to preserve the court's ability to render a meaningful judgment on the merits.").

South Carolina is challenging the legality of the waiver certification and corresponding decision to use funds originally authorized and appropriated for construction for the MOX Facility for its termination. If the preliminary injunction is not issued, then the Federal Defendants will use these construction funds for termination—the very thing the State contends is illegal and is attempting to prevent—during the pendency of this litigation. Therefore, without a preliminary injunction, the State's right to meaningful judicial review of the Federal Defendants' illegal action will be foreclosed.

Further, the decision to terminate the MOX Facility not only lacked the necessary environmental considerations under NEPA, it also lacked the input from South Carolina that would have occurred if the Secretary of Energy consulted with the South Carolina Governor prior to making the decision, as required by Section 2567(a). *See supra* § I.A. Because of the Secretary of Energy's lack of consultation, South Carolina will be irreparably harmed if the Federal Defendants are permitted to proceed with the termination because the State will suffer the consequences of a decision in which it was statutorily entitled to have input but was deprived of the opportunity to do so because of the Federal Defendants' disregard of federal law.

III. The balance of equities tips decidedly in South Carolina's favor.

The balance of equities greatly favors South Carolina. In contrast to the irreparable harm that the State will suffer if a preliminary injunction is not entered, there will be no harm to the Federal Defendants if they are enjoined from terminating the MOX Facility during the pendency of this suit. As discussed, the injunction the State seeks will simply preserve the status quo. Congress has instructed the Federal Defendants to continue construction of the MOX Facility this fiscal year and already appropriated funds for that specific purpose. Through Section 2566, Congress also has directed the Federal Defendants to pursue construction of the MOX Facility. The requested preliminary injunction only seeks to maintain that construction (and the associated labor force) until this Court can make a determination as to the legality of the Federal Defendants' decision to terminate the Project. Simply put, there is no harm to the Federal Defendants in having to comply with the law and Congressional mandate during the pendency of this litigation.

The Federal Defendants also do not have any urgent need that would require them to terminate the MOX Facility and, consequently, the livelihood of hundreds of SRS employees. There are no national policy interests or concerns that are promoted by terminating the MOX Facility prior to a determination of the legality of that decision. Indeed, quite the opposite. The Federal Defendants claim that the "Dilute and Dispose" approach is an alternative to the MOX Project, but, as discussed, the Federal Defendants have not conducted any NEPA analysis for the processing and ultimate storage at WIPP of the 34 metric tons of weapons-grade plutonium. More importantly, Congress has not approved or authorized the "Dilute and Dispose" approach as a replacement for the MOX Project. Therefore, if their agency action is not enjoined, the Federal Defendants will leave the Nation with no disposition pathway for 34 metric tons of weapons-grade plutonium, reversing and rendering pointless over 20 years of studies, decisions, efforts, and

substantial monetary investments to develop the MOX Facility to complete the Nation's disposition mission. Regardless, for purposes of the "balancing the equities," a preliminary injunction preventing the Federal Defendants from terminating the MOX Project would have no effect on the "Dilute and Dispose" approach because the Federal Defendants cannot proceed any further with that approach until Congress says so anyway.

The United States' foreign interests are also not furthered by terminating the MOX Facility. As the Court is aware, one of the purposes of pursuing the MOX Project was to meet the United States' obligations pursuant to the Plutonium Management and Disposition Agreement (PMDA) with Russia, whereby each nation agreed to dispose of no less than 34 metric tons of weapons-grade plutonium.[41] As support of the statutory requirements set forth in Section 2566 for construction and operation of the MOX Facility, Congress specifically found:

> (1) In September 2000, the United States and the Russian Federation signed a Plutonium Management and Disposition Agreement by which each agreed to dispose of 34 metric tons of weapons-grade plutonium.
>
> (2) The agreement with Russia is a significant step toward safeguarding nuclear materials and preventing their diversion to rogue states and terrorists.
>
> (3) The Department of Energy plans to dispose of 34 metric tons of weapons-grade plutonium in the United States before the end of 2019 by converting the plutonium to a mixed-oxide fuel to be used in commercial nuclear power reactors.
>
> (4) The Department has formulated a plan for implementing the agreement with Russia through construction of a mixed-oxide fuel fabrication facility, the so-called MOX facility, and a pit disassembly and conversion facility at the Savannah River Site, Aiken, South Carolina.

[41] Compl. Ex. 14, PMDA (Sept. 1, 2000); *see* Compl. Ex. 15, Congressional Research Serv., Mem., *U.S.-Russia Plutonium Management Disposition Agreement*, dated Oct. 20, 2015 (describing history of PMDA) (hereinafter *CRS PMDA Report*).

NDAA FY03, Pub. L. No. 107-314, 116 Stat. 2458, Subtitle E, § 3181.

DOE used the PMDA, and the need to pursue the MOX Project, as one of the primary reasons for DOE's need to ship defense plutonium into the State in the first place. In response to the State's challenge to the shipment of plutonium into the State in 2002, Linton F. Brooks, then-Deputy Administrator for Defense Nuclear Nonproliferation for DOE/NNSA, testified that any delay or uncertainty in the MOX program could "kill" the PMDA.[42] He further testified that failure to comply with the PMDA "would call into question the United States' commitment to other nonproliferation efforts and diminish our credibility in continuing to provide leadership on these issues internationally."[43] Therefore, because the MOX approach is the only method approved under the PMDA for plutonium disposition, the decision to terminate the MOX Facility does not further the Nation's foreign policy interests. And this is the exact position previously taken by DOE when it stated

> [the long-term storage option without disposition] does not achieve the U.S. plutonium disposition mission and it renounces the U.S.-Russian PMDA…. This option would represent a reversal of the U.S. position on disposition of surplus plutonium, be derided internationally, and be opposed by the states and the public.[44]

In other words, the Federal Defendants have previously recognized that the very path they now desire to take violates an international nonproliferation agreement with Russia.

The past history between South Carolina and the Federal Defendants with respect to the MOX Facility and weapons-grade plutonium located in the State also demonstrates that equity favors the State. As this Court is well aware, beginning in the late 1990s, DOE and its officials

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[42] Compl. Ex. 18, Brooks Aff, *Hodges v. Abraham*, C/A No. 1:02-cv-01426-CMC.

[43] *Id*.

[44] Compl. Ex. 7, *Report to Congress.*

made countless "commitments" to the State, which the State relied on in agreeing to accept the defense plutonium that DOE insisted it urgently needed to ship to South Carolina. In particular, DOE "committed" to ensuring that South Carolina not become the "dumping ground" for plutonium and, thus, "committed" to building the MOX Facility and expeditiously removing plutonium from the State if the MOX Facility was not timely built for any reason.[45] These commitments were then codified in federal law through Section 2566, with the additional commitment of monetary payments to the State if the defense plutonium moved to the State was not timely processed or removed from the State.

Now, DOE is flouting its statutory obligations and reneging on its promises made over the course of the last two decades. The MOX Facility has not been timely built, no defense plutonium intended for MOX disposition has been removed from the State, and no monetary payments have been made. As to the latter two broken promises, the Federal Defendants even have attempted to evade the clear historical record of their conduct by brazenly contending that no such commitments were ever made. They further have contested their statutory obligations to remove the plutonium and make the monetary payments, forcing the State to seek to enforce those obligations through the courts. And now, by terminating the MOX Facility, the Federal Defendants are breaking the ultimate commitment to the State: that South Carolina not become the "dumping ground" for plutonium. Accordingly, the balance of equities or hardships related to the MOX Facility weighs only on the State's side of the scale.

[45] *See* Compl. Ex. 7, *Report to Congress* 5-2 ("Storage in place undercuts existing commitments to the states, particularly South Carolina, which is counting on disposition as a means to avoid becoming a permanent 'dumping ground' for surplus weapons-grade plutonium by providing a pathway out of the site for plutonium brought there for disposition.").

IV. A preliminary injunction is in the public interest.

Requiring the government to act in accordance with the law is a public interest of the highest order. *See Seattle Audubon Soc'y v. Evans*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991) (citing *Olmstead v. United States*, 277 U.S. 438, 485 (1928) (Brandeis, J., dissenting)), *aff'd in relevant part*, 952 F.2d 297 (9th Cir. 1991). Injunctive relief serves the public interest where it furthers the clearly-expressed purposes of a statute. *Johnson v. United States Dep't of Agriculture*, 734 F.2d 774, 788 (11th Cir. 1984) ("Congressional intent and statutory purpose can be taken as a statement of public interest."). "Good administration of [a] statute is in the public interest and that will be promoted by taking timely steps when necessary to prevent violations even when they are about to occur or prevent their continuance after they have begun." *Walling v. Brooklyn Braid Co.*, 152 F.2d 938 (2d Cir. 1945). Compliance with NEPA also furthers the public interest in having public officials, and the public itself, fully informed about the likely consequences of actions prior to those actions being taken. 40 C.F.R. § 1500.1(b) ("NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken."); 40 C.F.R. § 1502.5 (environmental analysis must be completed "early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made").

Through this suit, the State seeks to enforce the Federal Defendants' compliance with the law and congressional mandate. Section 2567(a) requires the Secretary of Energy to consult the South Carolina Governor prior to making any decisions related the disposition of plutonium located at SRS. Thus, Congress has already concluded that this consultation serves the public interest, and a preliminary injunction preventing the Federal Defendants from terminating the

MOX Facility without the Secretary of Energy first engaging in meaningful consultation and discussions with the South Carolina Governor therefore serves the public interest as well.

Likewise, NEPA required the Federal Defendants to take a "hard look" at the environmental consequences of its decision to terminate the MOX Facility and render South Carolina the permanent repository for weapons-grade plutonium. The Federal Defendants did not do so, and thus, "the public interest expressed by Congress [has been] frustrated by the [F]ederal [D]efendants not complying with NEPA." *Fund for Animals v. Clark*, 27 F. Supp. 2d 8, 15 (D.D.C. 1998). Accordingly, an injunction preventing the Federal Defendants from taking any action to terminate the MOX Facility until NEPA compliance can be assured also furthers the public interest.

Through Section 3121 of NDAA FY 18 and Section 309 of the CAA FY18, Congress mandated that the Federal Defendants use federal funds to continue construction of the MOX Facility during the current fiscal year. The only way the Federal Defendants could avoid this mandate was by meeting the commitment and certification requirements of those respective statutes. Implicit in those statutory requirements, however, is that the Secretary's commitments and certifications are made in good faith and are supported by fact and law. This is especially so considering the substantial consequences of the decision to terminate the MOX Facility. Not only is South Carolina left as the permanent repository for plutonium by this decision, but decades of the Nation's plutonium disposition policy is overturned and, as discussed above, one of the Nation's most important international nonproliferation agreements is violated. Accordingly, the public interest is served by ensuring that the MOX Facility is not terminated before the legality of the Secretary's commitments and certifications can be fully vetted by this Court.

CONCLUSION

For the foregoing reasons, the State of South Carolina respectfully requests that its Motion for Preliminary Injunction be granted and the Federal Defendants be enjoined from terminating the MOX Project or otherwise giving any force and effect to the purported termination decision issued on or about May 10 and maintain the status quo, which would include rescission and vacatur of the Partial Stop Work Order and preventing the issuance of a full stop work order or other directive to the contractor to terminate the MOX Project.

Respectfully submitted,

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