

119TH CONGRESS
2D SESSION

S. 3828

To accelerate the development, demonstration, and deployment of advanced technologies and innovative solutions that support the environmental cleanup missions of the Department of Energy, help prevent the future generation and accumulation of nuclear waste from both current and anticipated future nuclear activities, and for other purposes.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 11, 2026

Mr. LUJÁN (for himself and Mr. SCOTT of South Carolina) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To accelerate the development, demonstration, and deployment of advanced technologies and innovative solutions that support the environmental cleanup missions of the Department of Energy, help prevent the future generation and accumulation of nuclear waste from both current and anticipated future nuclear activities, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLES.**

2 This Act may be cited as the “Combining Laboratory
3 Expertise to Accelerate Novel Solutions for Minimizing
4 Accumulated Radioactive Toxins Act of 2026” or the
5 “CLEAN SMART Act of 2026”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

8 (1) APPROPRIATE CONGRESSIONAL COMMIT-
9 TEES.—The term “appropriate congressional com-
10 mittees” means—

11 (A) the Committee on Commerce, Science,
12 and Transportation of the Senate;

13 (B) the Committee on Energy and Natural
14 Resources of the Senate;

15 (C) the Committee on Armed Services of
16 the Senate;

17 (D) the Committee on Science, Space, and
18 Technology of the House of Representatives;

19 (E) the Committee on Energy and Com-
20 merce of the House of Representatives; and

21 (F) the Committee on Armed Services of
22 the House of Representatives.

23 (2) ASSISTANT SECRETARY.—The term “Assist-
24 ant Secretary” means the Assistant Secretary of En-
25 ergy for Environmental Management.

1 (3) CHAIR.—The term “Chair” means the
2 Chair of the Nuclear Regulatory Commission.

3 (4) CORE NATIONAL LABORATORIES.—The
4 term “Core National Laboratories” means the Idaho
5 National Laboratory, the Los Alamos National Lab-
6 oratory, the Oak Ridge National Laboratory, the Pa-
7 cific Northwest National Laboratory, the Sandia Na-
8 tional Laboratories, and the Corporate Lab.

9 (5) CORPORATE LAB.—The term “Corporate
10 Lab” means the Savannah River National Labora-
11 tory.

12 (6) DEPARTMENT.—The term “Department”
13 means the Department of Energy.

14 (7) DIRECTOR.—The term “Director” means
15 Director of the Office of Legacy Management.

16 (8) FEDERAL SITE LIFE-CYCLE ESTIMATE.—
17 The term “Federal site life-cycle estimate” means
18 the scope, cost, and schedule profiles of work activi-
19 ties, including sunk costs and other relevant metrics,
20 of work activities pertaining to the cleanup mission
21 for an individual site of the Office of Environmental
22 Management.

23 (9) FRAMEWORK.—The term “Framework”
24 means the Technology Development and Deployment
25 Framework developed pursuant to section 5.

1 (10) MEMORANDUM.—The term “Memo-
2 randum” means the memorandum of understanding
3 entered into pursuant to section 4(c).

4 (11) NETWORK.—The term “Network” means
5 the Network of National Laboratories for Environ-
6 mental Management and Stewardship established
7 pursuant to section 3.

8 (12) SECRETARY.—The term “Secretary”
9 means the Secretary of Energy.

10 (13) SITE.—The term “site” means any out-
11 standing defense- and non-defense-related nuclear
12 waste site that is undergoing environmental remedi-
13 ation and facility decommissioning under the respon-
14 sibility of the Office of Environmental Management,
15 and any site that is undergoing long-term mainte-
16 nance and surveillance under the responsibility of
17 the Office of Legacy Management.

18 **SEC. 3. ESTABLISHMENT OF THE NETWORK OF NATIONAL**
19 **LABORATORIES FOR ENVIRONMENTAL MAN-**
20 **AGEMENT AND STEWARDSHIP.**

21 (a) ESTABLISHMENT.—The Secretary shall establish
22 a steering committee to be known as the “Network of Na-
23 tional Laboratories for Environmental Management and
24 Stewardship”.

1 (b) PURPOSE.—The Network shall advance the sci-
2 entific and technical expertise of the National Laboratory
3 system in support of the environmental cleanup mission
4 of the Office of Environmental Management and the long-
5 term surveillance and maintenance mission of the Office
6 of Legacy Management through support for research, de-
7 velopment, demonstration, and deployment of treatment
8 technologies, disposal methods, and other capabilities—

9 (1) to minimize the impact of environmental
10 contamination and risks to public health and the en-
11 vironment from radioactive and hazardous waste and
12 materials from defense-related nuclear activities;

13 (2) to lower lifecycle cleanup costs for sites;

14 (3) to accelerate cleanup schedules or reduce
15 the timeframe of site decommissioning; and

16 (4) to address high-priority technical challenges
17 in cleanup operations, or otherwise improve the ef-
18 fectiveness and safety of cleanup methods.

19 (c) DUTIES.—At the direction of the Assistant Sec-
20 retary and the Director, the Network and its participants
21 shall—

22 (1) leverage National Laboratory partnerships
23 to develop alternate treatment technologies, disposal
24 methods, strategies, and other capabilities to assist
25 in the cleanup and long-term management of sites,

1 in order to improve the cost, timeframe, effective-
2 ness, and safety of cleanup methods;

3 (2) identify and coordinate technical support re-
4 sources and capabilities to address emergent events
5 associated with environmental cleanup and long-term
6 monitoring of sites and facilitate the deployment of
7 viable alternative treatment technologies, disposal
8 methods, and other capabilities;

9 (3) conduct scalable performance testing, eval-
10 uation, verification, and validation of alternate treat-
11 ment technologies, disposal methods, and other ca-
12 pabilities to demonstrate the potential cost, safety,
13 and performance benefits of such capabilities in
14 comparison to those currently deployed in support of
15 the environmental cleanup mission of the Depart-
16 ment;

17 (4) leverage relevant infrastructure at the Core
18 National Laboratories, including the recently con-
19 structed Advanced Manufacturing Collaborative fa-
20 cility;

21 (5) conduct independent programmatic and
22 technical reviews of plans or activities of the Depart-
23 ment at the national or site level, including assess-
24 ments of technology performance and alignment with
25 respect to the programmatic priorities of the Office

1 of Environmental Management and the Office of
2 Legacy Management;

3 (6) collaborate with the contractors and staff of
4 the Department, other Federal agencies, academia,
5 industry, and other relevant entities to ensure best
6 practices are being exchanged and to identify oppor-
7 tunities for technology transfer;

8 (7) provide scientific and technical analysis to
9 the Department and to stakeholders, as directed by
10 the Department, regarding environmental cleanup,
11 waste disposal, and long-term stewardship policy op-
12 tions and issues;

13 (8) provide an integrated science and tech-
14 nology perspective to support near- and long-term
15 strategic planning for the Office of Environmental
16 Management and the Office of Legacy Management
17 at sites, including conducting analyses of alternative
18 technologies and treatment methods and providing
19 input on their insertion into the cleanup mission;

20 (9) coordinate and serve through the Corporate
21 Lab as a liaison among the Department and con-
22 tractors of the Department and the National Lab-
23 oratories with capabilities relating to the Office of
24 Environmental Management and the Office of Leg-
25 acy Management that have been developed and sup-

1 ported across all of the program offices of the De-
2 partment;

3 (10) provide technical expertise to inform con-
4 tract decisions and language, research and develop-
5 ment investments of the Department, and technical
6 feasibility of contractor proposals consistent with all
7 appropriate and applicable compliance requirements
8 to mitigate potential conflicts of interest;

9 (11) assist the Department in developing and
10 maintaining career pathway training opportunities in
11 environmental remediation science, with a focus on
12 engaging historically underserved or marginalized
13 populations; and

14 (12) other duties as determined by the Assist-
15 ant Secretary and the Director.

16 (d) MEMBERSHIP.—The Network shall be comprised
17 of a representative from—

18 (1) each Core National Laboratory;

19 (2) each of the other National Laboratories
20 with stewarded competencies for research activities
21 associated with the Office of Environmental Man-
22 agement and the Office of Legacy Management, in-
23 cluding the Argonne National Laboratory, the Fermi
24 National Accelerator Laboratory, the Lawrence
25 Berkeley National Laboratory, the Lawrence Liver-

1 more National Laboratory, the National Energy
2 Technology Laboratory, and the SLAC National Ac-
3 celerator Laboratory; and

4 (3) other National Laboratories or entities at
5 the request of the Assistant Secretary or the Direc-
6 tor.

7 (e) LEADERSHIP AND RESPONSIBILITIES.—

8 (1) COMPOSITION.—The leadership of the Net-
9 work shall be composed of—

10 (A) a liaison from the Office of Environ-
11 mental Management, designated by the Assist-
12 ant Secretary, who shall be responsible for Na-
13 tional Laboratory stewardship, coordination of
14 resources, and guidance and oversight of the
15 Network regarding the needs of the Office of
16 Environmental Management;

17 (B) a liaison from the Office of Legacy
18 Management, designated by the Director, who
19 shall work directly with the Director and mem-
20 bers of the Network to fulfill the needs of the
21 Office of Legacy Management;

22 (C) an Executive Director, who shall—

23 (i) be affiliated with the Corporate
24 Lab and appointed by the Network Chair
25 and Network Co-Chair; and

1 (ii) work on behalf of all National
2 Laboratories to coordinate the day-to-day
3 needs of the Network;

4 (D) an official representative from each
5 Core National Laboratory, who shall be des-
6 ignated by the respective Laboratory Director
7 or Chief Research Officer, and who shall be re-
8 sponsible for coordinating and procuring the
9 full complement of capabilities and resources
10 from the relevant National Laboratory in order
11 to fulfill its obligations with respect to the Net-
12 work; and

13 (E) ad hoc representatives, who are Fed-
14 eral Government employees or employees of the
15 management and operating contractors of the
16 National Laboratories, and who may be—

17 (i) representatives of other National
18 Laboratories, as needed based on the work
19 undertaken by the Network; or

20 (ii) additional representatives from
21 the Core National Laboratories, as needed
22 and subject to the approval of the Network
23 Chair and Network Co-Chair, with concur-
24 rence of the liaisons of the Office of Envi-

1 ronmental Management and the Office of
2 Legacy Management.

3 (2) NETWORK CHAIR AND NETWORK CO-
4 CHAIR.—

5 (A) NETWORK CHAIR.—The Laboratory
6 Director for the Savannah River National Lab-
7 oratory shall—

8 (i) serve as Network Chair;

9 (ii) report to the Assistant Secretary
10 and the Director; and

11 (iii) ensure the overall effectiveness
12 and coordination of the Network.

13 (B) NETWORK CO-CHAIR.—The Network
14 Co-Chair shall work with the Network Chair to
15 ensure the overall effectiveness of the Network
16 and shall rotate annually among the Directors
17 and Deputy Directors of the Core National
18 Laboratories.

19 (f) PARTICIPATION OF NONMEMBERS.—

20 (1) ENGAGEMENT.—The Network may engage
21 stakeholders, such as industry experts, educators,
22 nonprofit stakeholders, and advisory groups, for the
23 purpose of receiving mission-relevant information
24 from such stakeholders.

1 (2) LIMITATIONS ON PARTICIPATION.—The
2 Network shall prevent the regular and systematic
3 participation of stakeholders at meetings of the Net-
4 work, unless otherwise authorized by this Act.

5 (3) LIMITATIONS ON NONMEMBER INPUT.—The
6 engagement of nonmembers shall be limited to the
7 provision of individual advice and recommendations,
8 unless otherwise authorized by this Act.

9 (g) REPORT.—Not later than 1 year after the date
10 of the enactment of this Act, and annually thereafter, the
11 Secretary, in coordination with the Assistant Secretary
12 and the Director, shall submit to the appropriate congres-
13 sional committees a report that includes a summary of—

14 (1) the major activities of the Network during
15 the prior year;

16 (2) the major science and technology efforts of
17 the Office of Environmental Management and the
18 Office of Legacy Management during the prior year;
19 and

20 (3) the state of technology adoption and align-
21 ment across the Office of Environmental Manage-
22 ment and the Office of Legacy Management.

23 (h) AUTHORIZATION OF APPROPRIATIONS.—There is
24 authorized to be appropriated to the Secretary—

1 (1) \$55,000,000 for fiscal year 2027 and each
2 fiscal year thereafter to support the development
3 and implementation of activities specified under sub-
4 section (c); and

5 (2) \$3,000,000 for fiscal year 2027 and each
6 fiscal year thereafter to support the operation and
7 coordination of the Network.

8 (i) OTHER ENVIRONMENTAL CLEANUP CHAL-
9 LENGES.—The Secretary, in consultation with the Assist-
10 ant Secretary and the Director, may enter into an agree-
11 ment with any Federal agency to utilize the capabilities
12 of the Network to address radiological hazards and envi-
13 ronmental contamination challenges at locations where the
14 Office of Environmental Management and Office of Leg-
15 acy Management do not have primary cleanup responsibil-
16 ities, if and only if the agreement—

17 (1) is subject to the availability of the existing
18 appropriations of the Department, except for those
19 authorized in subsection (h), and to the extent pos-
20 sible leverages existing appropriations and resources
21 from the Federal agency with which the agreement
22 is made;

23 (2) does not utilize resources made available to
24 support the cleanup missions of the Office of Envi-

1 ronmental Management and the Office of Legacy
2 Management; and

3 (3) does not utilize the capabilities of the Net-
4 work in a manner that would prevent or otherwise
5 limit the Network from fulfilling responsibilities
6 specified in subsection (c).

7 (j) INAPPLICABILITY OF FEDERAL ADVISORY COM-
8 MITTEE ACT.—Chapter 10 of title 5 (commonly referred
9 to as the “Federal Advisory Committee Act”), shall not
10 apply with respect to the Network or the activities of the
11 Network.

12 **SEC. 4. COORDINATION WITH OTHER DEPARTMENT OF EN-**
13 **ERGY OFFICES AND OTHER FEDERAL AGEN-**
14 **CIES ON ENVIRONMENTAL MANAGEMENT RE-**
15 **SEARCH.**

16 (a) IN GENERAL.—The Secretary, in cooperation
17 with the Network, shall improve coordination across the
18 Department and the Federal Government on science and
19 technology efforts applicable to the environmental cleanup
20 mission of the Office of Environmental Management as
21 necessary to procure sufficient expertise and resources to
22 address the full range of research challenges and needs
23 identified by the Office.

24 (b) INTERAGENCY WORKING ADVISORY ON TECH-
25 NOLOGY EXCELLENCE IN ENVIRONMENTAL CLEANUP.—

1 (1) IN GENERAL.—The Secretary shall establish
2 an advisory group to be known as the “Interagency
3 Advisory Group on Technology Excellence in Envi-
4 ronmental Cleanup”, which shall—

5 (A) coordinate relevant technology transfer
6 activities among the National Laboratories, the
7 Technology Transfer Working Group of the De-
8 partment, and other appropriate Federal agen-
9 cies;

10 (B) facilitate the exchange of mission-rel-
11 evant information and best practices, including
12 information on technology transfer practices,
13 developments in environmental remediation
14 science and treatment methods, and alternative
15 approaches to radioactive waste management;

16 (C) identify and recommend technologies
17 developed within and outside of the jurisdiction
18 of the Department with potential applications
19 for the Office of Environmental Management;

20 (D) identify and recommend opportunities
21 to utilize the services and expertise of the Net-
22 work to assist in addressing cleanup challenges
23 at locations where the Office of Environmental
24 Management does not have cleanup responsibil-
25 ities, as described in section 3(i); and

1 (E) develop and disseminate to the public
2 and prospective technology partners information
3 about opportunities and procedures for tech-
4 nology transfer with the Network.

5 (2) COMPOSITION.—

6 (A) MEMBERS.—The Advisory Group shall
7 be comprised of representatives selected from—

8 (i) the Core National Laboratories;

9 (ii) the Office of Environmental Man-
10 agement;

11 (iii) the Office of Legacy Manage-
12 ment;

13 (iv) the Office of Nuclear Energy;

14 (v) the Office of Science;

15 (vi) the National Nuclear Security Ad-
16 ministration;

17 (vii) the Environmental Protection
18 Agency;

19 (viii) the Nuclear Regulatory Commis-
20 sion;

21 (ix) the Bureau of Land Management;

22 (x) the National Park Service;

23 (xi) the Bureau of Indian Affairs;

24 (xii) the United States Forest Service;

(xiii) such other Federal agencies with relevant science and technology expertise, as the Secretary determines, including agencies within the Department involved in technology development relating to radioactive waste disposal or environmental remediation;

(xiv) State and Tribal governments;

(xv) academia; and

(xvi) the private sector.

(3) CHAIR.—The Assistant Secretary shall serve as the Chair of the Advisory Group.

(4) MEETINGS.—The Advisory Group shall meet not less frequently than once every 180 days.

(5) INAPPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—Chapter 10 of title 5, United States Code (commonly referred to as the “Federal Advisory Committee Act”), shall not apply with respect to the Advisory Group or the activities of the Advisory Group.

(c) PARTNERSHIP WITH OFFICE OF SCIENCE.—

(1) MEMORANDUM OF UNDERSTANDING.—Not later than 1 year after the date of the enactment of this Act, the Assistant Secretary and the Director of the Office of Science of the Department shall enter

1 into a memorandum of understanding to facilitate
2 improved coordination and cooperation between the
3 Office of Environmental Management and the Office
4 of Science on areas of basic research that are appli-
5 cable to the environmental cleanup mission of the
6 Office of Environmental Management.

7 (2) BASIC RESEARCH NEEDS WORKSHOPS.—

8 Not later than 180 days after the Memorandum
9 takes effect, and on a periodic basis thereafter, the
10 Director of the Office of Science, in coordination
11 with the Assistant Secretary and the Network, shall
12 administer a workshop to solicit the input of rel-
13 evant Federal agencies, academia, industry, the Na-
14 tional Laboratories, and other relevant entities—

15 (A) to identify the major basic research
16 needs of the Office of Environmental Manage-
17 ment; and

18 (B) to develop strategic research plans to
19 advance knowledge and technological capabili-
20 ties to address the basic research needs identi-
21 fied in subparagraph (A).

22 (3) REPORTS.—

23 (A) INITIAL WORKSHOP REPORT.—Not
24 later than 180 days after the date of the initial
25 workshop described in paragraph (2), the As-

1 sistant Secretary and the Director of the Office
2 of Science shall submit to the appropriate con-
3 gressional committees a report summarizing the
4 major findings of the workshop, including gaps
5 in basic research knowledge relating to the envi-
6 ronmental cleanup mission of the Office of En-
7 vironmental Management.

8 (B) Not later than 1 year after the Memo-
9 randum takes effect, the Assistant Secretary
10 and the Director of the Office of Science shall
11 submit to the appropriate congressional com-
12 mittees a report summarizing the steps that the
13 Office of Environmental Management and the
14 Office of Science have taken to fulfill the obli-
15 gations of the Memorandum.

16 **SEC. 5. PROGRAM MANAGEMENT PROTOCOLS OF THE OF-**
17 **FICE OF ENVIRONMENTAL MANAGEMENT.**

18 (a) IN GENERAL.—At the request and direction of
19 the Assistant Secretary, the Network shall provide an inte-
20 grated science and technology perspective to assist the Of-
21 fice of Environmental Management in implementing and
22 enhancing established, technology-focused strategic plans,
23 roadmaps, and program management protocols as nec-
24 essary to incorporate leading program management prac-

1 tices and facilitate safe, timely, and cost-efficient cleanup
2 of sites.

3 (b) TECHNOLOGY DEVELOPMENT AND DEPLOYMENT
4 FRAMEWORK.—

5 (1) IN GENERAL.—The Secretary shall direct
6 the Network, in coordination with the Assistant Sec-
7 retary, to develop and update biennially a framework
8 to be known as the “Technology Development and
9 Deployment Framework” that outlines—

10 (A) the key science and technology objec-
11 tives of the Office of Environmental Manage-
12 ment; and

13 (B) an integrated strategy to assist the Of-
14 fice of Environmental Management in—

15 (i) selecting safe, effective, and cost-
16 efficient approaches to resolve technically
17 complex challenges or reduce the cost,
18 time, and scope associated with the clean-
19 up mission;

20 (ii) advancing the development, dem-
21 onstration, and deployment of new innova-
22 tions, such as alternate treatment tech-
23 nologies, disposal methods, and other capa-
24 bilities; and

1 (iii) maximizing the benefits of exist-
2 ing research and technology investments.

3 (2) OBJECTIVES.—The Framework shall com-
4 plement and support existing program management
5 protocols, strategic plans, and roadmaps of the Of-
6 fice of Environmental Management and, at min-
7 imum, shall—

8 (A) emphasize support for a wide of range
9 of research and technology development activi-
10 ties, including—

11 (i) applied technology research and
12 technology development programs that
13 seek to—

14 (I) improve existing technologies
15 or mature early concept and emerging
16 technologies as specified under section
17 4406A(a) of the Atomic Energy De-
18 fense Act (50 U.S.C. 2586a(a)); and

19 (II) pursue breakthrough innova-
20 tions or improvements to the cleanup
21 mission that substantially lower
22 lifecycle cleanup costs and schedules
23 or address technically complex cleanup
24 challenges, as specified under section

- 1 4406A(b) of the Atomic Energy De-
2 fense Act (50 U.S.C. 2586a(b));
3 (ii) basic research;
4 (iii) scientific studies and technical
5 issue resolution to support evaluation and
6 selection of technologies for insertion into
7 the cleanup mission; and
8 (iv) research that addresses both
9 near-term, site-specific needs and long-
10 term, program-wide needs;
11 (B) summarize the major focus areas and
12 objectives of the science and technology efforts
13 of the Office of Environment Management;
14 (C) detail plans to leverage relevant ad-
15 vances and expertise in other technology devel-
16 opment programs across the Department, the
17 National Laboratories, academia, private indus-
18 try, and other technology providers; and
19 (D) support the development or mainte-
20 nance of a workforce pipeline that leverages the
21 capabilities of institutions of higher education,
22 especially those serving minority or historically
23 underserved populations.

1 (c) CORRECTIVE ACTION PLANS.—Section 4713 of
2 the Atomic Energy Defense Act (50 U.S.C. 2753) is
3 amended by inserting at the end the following:

4 “(e) CORRECTIVE ACTION PLANS FOR DEFENSE EN-
5 VIRONMENTAL CLEANUP PROJECTS.—If a root cause
6 analysis for a defense environmental cleanup project is re-
7 quired under the project management protocols of the De-
8 partment of Energy or under subsection (c)(3), then—

9 “(1) the site contracting entity, in consultation
10 with the site manager and Assistant Secretary, shall
11 develop a corrective action plan to address the un-
12 derlying causes for the cost or schedule change iden-
13 tified in the analysis; and

14 “(2) the Secretary, at the conclusion of the cor-
15 rective action plan, shall—

16 “(A) conduct an independent review that
17 includes an assessment and validation of the ef-
18 ficacy of the corrective measures utilized;

19 “(B) submit to the appropriate congres-
20 sional committees the outcome of the assess-
21 ment described in subparagraph (A); and

22 “(C) certify to the appropriate congres-
23 sional committees that program management
24 measures are in place to manage the cost and

- 1 schedule of the project and mitigate against fu-
- 2 ture cost overruns.”.

