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Environmental Deconfliction: The National Defense Authorization Act for Fiscal Year 2018 and Its Implications for Energy, Environment, and Natural Resources

*By Rachel Jacobson, Matthew F. Ferraro, and
Mark L. Hanin**

This article reviews implications of the National Defense Authorization Act for energy, environment, and natural resources issues.

The National Defense Authorization Act (“NDAA” or “the Act”) may be the most important piece of energy and environmental legislation most people have never heard of. It authorizes the appropriation of federal funds to support the U.S. Department of Defense (“DoD”) and related national security programs. Passed regularly since 1961, it establishes funding levels and sets policies under which authorized funds will be spent. The NDAA for Fiscal Year 2018, signed into law by President Trump on December 12, 2017, authorizes approximately \$700 billion for DoD activities.¹

The energy, environment, and natural resources issues involving DoD are significant. For example, the DoD “is the single[] largest energy consumer in the world, passing the consumption total of more than one hundred nations.”² With massive energy requirements across its worldwide operations, with legacy pollution and ongoing industrial scale operations at many military bases, and with millions of acres of habitat supporting endangered species as well as other natural resources, the DoD is acutely focused on matters related to energy, the environment, and natural resources. Analyzing the NDAA through this lens can provide valuable insights into DoD’s current priorities, challenges, and opportunities. Such analysis helps preview new areas of regulatory risk and allows federal

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¹ See National Defense Authorization Act for Fiscal Year 2018, Pub. L. No. 115-91, 131 Stat. 1283 (2017), <https://www.congress.gov/bill/115th-congress/house-bill/2810/text>.

² Steven Cohen et al., *Sustainability Policy* 54 (2015).

contractors to better understand and anticipate DoD needs. The NDAA also highlights areas of inter-agency cooperation and tension and offers clues about future litigation risks for the DoD.

The 2018 NDAA yields a number of insights discussed in greater detail in this report:

- *Siting Clearinghouse.* Increased funding is allocated to DoD's Siting Clearinghouse, which evaluates the potential impact on national security of energy projects (especially wind energy) near military installations. Developers should be mindful of these changes and engage in early consultation with DoD to improve chances for timely project review.
- *Energy Resilience and Security.* New definitions for "energy resilience" and "energy security" signal a strategic focus on anticipating and mitigating disruptions in DoD energy supplies. New reporting requirements to Congress on threats to military activities from climate change and food system vulnerabilities underscore DoD's readiness and mitigation goals. Certain suppliers to DoD of energy-efficient equipment and alternative energy sources may benefit from this strategic posture.
- *Private Sector Involvement.* Echoing the Trump Administration's priorities, the NDAA emphasizes private sector partnerships and third-party funding for projects, providing new opportunities for private enterprises to establish business relationships with DoD.
- *PFOA/PFOS Study.* A new study on chemicals known as perfluorooctanoic acid ("PFOA") and perfluorooctane sulfonic acid ("PFOS") present in groundwater around certain military facilities may generate new data about their incidence that will help assess environmental litigation risks for DoD.
- *Cleanup Activities.* NDAA authorizes new and ongoing environmental cleanup activities while bringing to a close some long-standing inter-agency disputes.

This article provides an overview of the NDAA legislative process and discusses key provisions of the 2018 NDAA relevant to energy, environment, and natural resources issues.

OVERVIEW OF AUTHORIZATION AND APPROPRIATIONS PROCESSES

Under the U.S. Constitution, Congress alone has the authority to appropriate money from the Treasury to fund the government.³ Congress exercises this authority through a two-step authorization-appropriations process based on House and Senate rules. First, Congress and the president enact an *authorization* measure that authorizes the appropriation of funds for specific purposes. Second, Congress and the president must enact an *appropriations* law to provide funds for the authorized agency, program, or activity.⁴

The House Armed Services Committee (“HASC”) and the Senate Armed Services Committee (“SASC”) have jurisdiction over the NDAA, which authorizes the appropriations of funds for the DoD, nuclear weapons programs of the Department of Energy (“DOE”), and defense elements of the U.S. Intelligence Community. The NDAA also “establishes defense policies and restrictions, and addresses organizational administrative matters related to the DoD.”⁵ The HASC and SASC work in parallel. Each committee holds hearings and writes its own national defense authorizing legislation, both of which are then reconciled by a conference committee. Once both houses of Congress approve the reconciled bill, it is presented to the president for signature.

The House and Senate approved the conference version of the 2018 NDAA in mid-November 2017. The reconciled bill authorizes funds for base budget requirements of about \$700 billion, a \$26 billion increase above the president’s combined initial and amended budget requests.⁶ That figure includes \$626 billion for DoD’s baseline budget, \$66 billion for the Overseas Contingency Operations warfighting account, and \$8 billion for other defense purposes. The president signed the NDAA into law on December 12, 2017.⁷

On March 23, 2018, Congress passed and the president signed an omnibus appropriations measure that funds the federal government through September 30, 2018.⁸ The \$1.3 trillion comprehensive spending bill appropriates monies authorized under the NDAA, namely \$654.6 billion in discretionary funding

³ See U.S. Const. art. I, § 9, cl. 7.

⁴ See Bill Heniff, Jr., *Overview of the Authorization-Appropriations Process*, Cong. Res. Serv., Nov. 26, 2012, at 1.

⁵ *Defense Primer: The NDAA Process*, Cong. Res. Serv., Nov. 28, 2016, at 1.

⁶ See *id.*

⁷ See *H.R. 2810—National Defense Authorization Act for Fiscal Year 2018*, Congress.gov, <https://www.congress.gov/bill/115th-congress/house-bill/2810/all-actions-without-amendments>.

⁸ See Consolidated Appropriations Act, 2018, Pub. L. No. 115-141, 132 Stat. 348 (2018), <https://www.congress.gov/bill/115th-congress/house-bill/1625/text>.

for the DoD, an increase of more than \$61 billion from fiscal year 2017. The bill allocates \$589.5 billion for the base Pentagon budget as well as an additional \$65.2 in funding for overseas war operations. The base figure includes \$89.2 billion for research, development, testing, and evaluation of new defense technologies, and \$144.3 billion for equipment procurement and upgrades. Separate appropriations will fund military construction, nuclear security, and certain other defense programs.⁹

RENEWABLE ENERGY PROJECTS AND MILITARY READINESS

Section 311—Military Aviation and Installation Assurance Siting Clearinghouse

In the 2011 NDAA, Congress created the DoD Siting Clearinghouse, which identifies and helps mitigate the impact of “energy projects”—such as wind turbines and solar power towers—on the operational and training needs of nearby military installations.¹⁰ For example, where it determines that constructing wind turbines would interfere with military airspace and thus have an “adverse impact on military operations and readiness,” the Clearinghouse may work with the developer to adjust the construction plans to avoid affected flight paths. Since its inception, the Clearinghouse has shared the authority to make these determinations with the Federal Aviation Administration (“FAA”).¹¹

Section 311 repeals the previous version of the Clearinghouse and reestablishes it with many of the same conditions and a few additions. The Clearinghouse must still create a list of geographic areas where energy developments would interfere with DoD operations or training. But this list will now be subject to public comment before finalization. Further, Section 311 now defines projects posing an “unacceptable risk” to U.S. national security as follows:

- (A) endanger safety in air commerce directly related to the activities of the Department of Defense;
- (B) interfere with the efficient use of the navigable airspace directly related to the activities of the Department of Defense; or
- (C) significantly impair or degrade the capability of the Department of Defense to conduct training, research, development, testing, and

⁹ See *id.*; see also Steven M. Masiello et al., *President Signs \$1.3 trillion FY18 Omnibus Spending Bill as Congress Shifts Focus to FY19 Budget*, Dentons, Apr. 19, 2018; Connor O’Brien, *Omnibus Includes Flexibility for \$655B in Defense Spending*, Politico, Mar. 21, 2018.

¹⁰ See 10 U.S.C. § 183a. (An “energy project” is “a project that provides for the generation or transmission of electrical energy.” See 2018 NDAA § 311(h)(2).)

¹¹ See 49 U.S.C. § 4478.

evaluation, and operations or to maintain military readiness.

And the term “unacceptable risk” applies to “construction, alteration, establishment, or expansion, or the proposed construction, alteration, establishment, or expansion, of a structure or sanitary landfill.”¹²

Representative Mac Thornberry (R-TX), chairman of the HASC, included Section 311 to make the Clearinghouse more central to decisions about the location and specifications of new energy projects. “We’re trying to get this sort of consultation and study done early in the process before they start leasing land” to developers, he said.¹³ Rep. Thornberry has emphasized that this will benefit military installations all across the country. With its authority expanded and clarified, the Clearinghouse should be able to assert DoD’s priorities more effectively in coordination with the FAA and developers.

Developers planning to construct or modify energy projects near military installations—especially wind, solar, geothermal and transmission lines—should keep in mind the new definition of “unacceptable risk” and be ready to consider mitigation measures. They should likewise engage in early consultations with DoD under 32 C.F.R. § 211, the federal regulation that outlines procedures for a formal review by the Secretary of Transportation (FAA) to determine if projects pose an unacceptable risk to U.S. national security. DoD encourages informal review “as early as possible to identify potential compatibility concerns,” in advance of filing an application with the FAA under 49 U.S.C. § 44718.¹⁴

PFOA AND PFOS REPORT

Section 316—Centers for Disease Control Study on Health Implications of Per- and Polyfluoroalkyl Substances Contamination in Drinking Water & Section 1059 Report on Alternatives to Aqueous Filming Forming Foam

In 2016, the Environmental Protection Agency (“EPA”) issued revised non-binding lifetime health advisories for the chemicals perfluorooctanoic acid (“PFOA”) and perfluorooctane sulfonic acid (“PFOS”), which substantially decreased advisable concentrations of these chemicals in drinking water.¹⁵ These chemicals were previously common in consumer products such as

¹² See 2018 NDAA § 311(h)(7).

¹³ See John Ingle, *House NDAA Establishes New Energy Project Clearinghouse*, Times Record News, July 1, 2017.

¹⁴ See “DoD Siting Clearinghouse Reviews,” Dep’t of Def., <https://www.acq.osd.mil/dodsc/contact/dod-review-process.html>.

¹⁵ See *Drinking Water Health Advisories for PFOA and PFOS*, Env’tl. Prot. Agency,

carpets, some fabrics, and stain-resistant paper food packaging. Products made with PFOA and PFOS were used frequently by the military, especially in a foam commonly deployed to extinguish fires. Studies suggest that exposure may be injurious to human health, including by potentially causing birth defects, certain cancers, and liver and thyroid damage.

Assessing safe PFOA and PFOS exposure levels has attracted considerable attention from the environmental community and other concerned parties, including some states and the public at large. While the chemicals have largely been phased out of consumer products, they have more recently been detected in groundwater near industrial facilities.¹⁶ In December 2016, DoD identified 393 DoD installations with known or suspected areas of PFOA/PFOS release.¹⁷

Cleanup of these chemicals has attracted bipartisan support in both houses of Congress. Section 316 was introduced by Representatives Ann Kuster (D-NH), Brendan Boyle (D-PA), Carol Shea-Porter (D-NH), Dan Kildee (D-MI), Patrick Meehan (R-PA), and Paul Tonko (D-NY).

Section 316 provides \$7 million for a study of the human health effects of PFOA and PFOS in drinking water and groundwater. It will be led by the Centers for Disease Control with assistance from other agencies, including DoD. The NDAA directs an exposure assessment of at least eight current or former military installations where contamination has been detected, to be completed within two years. It also mandates that this assessment shall not interfere with the EPA's regulatory processes. Given recent public pressure on EPA to set binding federal toxicity standards for PFOA and PFOS, as well as state action to set mandatory limits, developments at DoD and EPA will merit close scrutiny.¹⁸

The DoD has a significant interest in the outcome of this study, considering that many military installations have found PFOA and PFOS in nearby groundwater. While NDAA Section 1059 commissions a study on alternatives for manufacturing firefighting foam, any changes to future firefighting material will not mitigate past or present exposure in and around DoD facilities. Given the abundance of these chemicals near DoD sites, the study will likely have

<https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>.

¹⁶ See Jessica Morrison, *Perfluorinated Chemicals Linked to Military Bases, Airports*, Chem. & Eng'g News, Aug. 10, 2016.

¹⁷ See *Aqueous Film Forming Foam Report to Congress*, Dep't of Def. (Nov. 3, 2017), at 4, <https://www.denix.osd.mil/derp/home/documents/aqueous-film-forming-foam-report-to-congress/>.

¹⁸ See Amena H. Saiyid, "EPA Faces Public Pressure to Gauge Toxicity of Fluorochemicals," Bloomberg, Mar. 15, 2018.

substantial consequences for environmental litigation risk. The data could be used by local government entities or individuals in suits against DoD seeking compensation for environmental and health-related harms, as well as remediation and other expenses.

The NDAA also authorizes DoD to take action on PFOA/PFOS without waiting for the results of the study. Section 4301 provides specific authorities to the Navy and Air Force to remediate PFOA and PFOS and attaches concrete dollar figures: \$42,234,000 for the Navy and \$30,000,000 for the Air Force.

In addition, the Conference Committee appropriated \$72,234,000 to the Army and Navy for PFOA/PFOS cleanup, which was not part of the original budget request. The 2018 Omnibus bill appropriated similar or slightly larger amounts, increasing the formerly used defense sites figure by \$40,000,000 and the Defense figure by \$10,000,000.

DoD ENERGY USE, “ENERGY RESILIENCE” AND “ENERGY SECURITY”

As the largest government consumer of energy in the United States, with petroleum-based liquid fuels composing approximately two-thirds of the DoD’s consumption, the DoD has long been a leader in pursuing renewable energy sources and energy efficiency.¹⁹ Federal law already requires DoD to produce or procure not less than 25 percent of energy consumed within its facilities during FY 2025 and thereafter from renewable energy sources.²⁰ Similar goals have been a part of federal law since 2006.²¹

The 2018 NDAA introduces two important concepts to 10 U.S.C. § 2911: “energy resilience” and “energy security.” Section 2831(d) defines “energy resilience” as follows:

the ability to avoid, prepare for, minimize, adapt to, and recover from anticipated and unanticipated energy disruptions in order to ensure energy availability and reliability sufficient to provide for mission assurance and readiness, including task critical assets and other mission essential operations related to readiness, and to execute or rapidly reestablish mission essential requirements.

¹⁹ See Cohen, Sustainability Policy, at 54; *Military’s Shift Toward Renewable Energy*, Armed with Science, Aug. 12, 2015, <http://science.dodlive.mil/2015/08/12/militarys-shift-toward-renewable-energy/>.

²⁰ See 10 U.S.C. § 2911.

²¹ See 10 U.S.C.A. § 2911(e)(1) (2006) (superseded 2009).

Section 2831(d) defines “energy security” as “having assured access to reliable supplies of energy and the ability to protect and deliver sufficient energy to meet mission essential requirements.”

These new concepts are central to the NDAA’s provisions on energy use.

Section 312—Energy Performance Goals and Master Plan

Under current law, the DoD must submit an annual plan to Congress describing how it will achieve its energy consumption goals for the year. In developing and implementing energy performance goals and an energy performance master plan, the DoD must consider various factors, including (i) opportunities to reduce the current rate of energy consumption, (ii) the future demand for energy, and (iii) requirements for the use of energy. The 2018 NDAA expands this list. It requires DoD to address opportunities to “enhance energy resilience” so that DoD “has the ability to prepare for and recover from energy disruptions that affect mission assurance on military installations.” It also directs DoD to consider for the first-time opportunities to use financing from third parties to address installation energy needs.

Sections 2831–2837—Energy Resilience

These sections of the NDAA make several changes to 10 U.S.C. § 2911 to ensure the readiness of the armed forces by “pursuing energy security and energy resilience.”

Section 2831(a) adds “energy resilience” as a readiness policy of the DoD and directs the Secretary of Defense to “ensure the readiness of the armed forces for their military missions by pursuing energy security and energy resilience.” To achieve this objective, Section 2831 (i) grants the Secretary authority to require the secretaries of military departments to establish energy resilience master plans for military installations; (ii) authorizes the use of onsite generation resources to reduce or avoid the cost of backup power; and (iii) authorizes the Secretary to give favorable consideration to energy projects that provide power directly to military facilities.

Section 2832 authorizes the use of energy cost savings for the implementation of additional “energy resilience, mission assurance, weather damage repair and prevention, energy conservation, and energy security measures” at DoD facilities. Federal law had previously authorized use of those cost savings only for “energy conservation and energy security measures,” without reference to energy resilience, assurance, and weather damage repair and prevention.

Additionally, Section 2833 requires the Secretary to prioritize energy security and resilience in awarding energy and fuel contracts. Federal law provides secretaries of military departments the authority to convey a utility system

under their jurisdiction to a municipal or private entity “to serve the interests of the United States.”²² Section 2834 of the NDAA modifies 10 U.S.C. § 2688 by granting the relevant secretary the authority to require that any recipient of such a utility system operate it “in a manner consistent with energy resilience requirements and metrics provided to the conveyee to ensure that the reliability of the utility system meets mission requirements.” Section 2834 also directs the Secretary of Defense to report on progress in meeting resilience metrics for conveyance contracts in an annual report that the Secretary must submit to Congress under existing federal law²³ every fiscal year detailing the fulfillment of the energy performance goals for the DoD under 10 U.S.C. § 2911. In addition, NDAA Section 2836 ensures that DoD distinguishes between planned and unplanned power outages and establishes critical mission resilience metrics in the installation energy report under 10 U.S.C. § 2925.

Section 2835 requires prioritization of energy resilience in the event of commercial grid outages when selecting utility services.

Section 2837 requires DoD to aggregate energy efficiency projects and energy resilience improvements, as appropriate.

A number of implications follow from these provisions:

- *Equipment Suppliers.* Increased focus on energy resilience and energy security may mean DoD will seek contracting opportunities with suppliers providing equipment that is energy efficient and powered by non-hydrocarbon sources. Possibilities are wide-ranging, from fashioning equipment for bases around the world to outfitting personnel and supplying power generation and battery units.
- *Fuel Contracts.* Entities bidding for DoD fuel contracts should prioritize cost-efficiency and reliability, which can include dual-fuel systems.
- *Utilities.* Utilities seeking contracts under 10 U.S.C. § 2688 should ensure they can demonstrate their ability to operate “in a manner consistent with energy resilience requirements,” which may include effective cybersecurity measures and protocols and low failure rates, among other things.²⁴
- *Cybersecurity.* Given recent high-profile concerns about the security of networked energy grids, there could be opportunities for contractors in

²² 10 U.S.C. § 2688(a).

²³ 10 U.S.C. § 2925(a).

²⁴ In FY2016, 45 percent of DoD utility outages were attributed to equipment failure. See Dr. Ariel Castillo, “Department of Defense Installation Energy Resilience” (Jun. 8, 2017).

the cybersecurity industry to provide needed services to ensure energy security and reliability.

ENVIRONMENTAL CLEANUP

The NDAA authorizes various environmental cleanup activities, ranging from ongoing programs to cash-out payments to end contentious, longstanding disputes between DoD and the EPA.

Section 4301—Defense Environmental Restoration Program

The DoD oversees a wide-ranging set of environmental restoration programs at current and former military installations and facilities. In Congressional testimony about its 2019 budget request, DoD projected that by the end of 2018 it aspires to reach an 88 percent completion rate for cleanup goals across its restoration accounts, including the Installation Restoration Program, Military Munitions Response Program, and Formerly Used Defense Sites Program.²⁵

NDAA Section 4301 authorizes \$1,080,822,000 for environmental restoration, including for cleanup of hazardous substances, pollutants, and contaminants. This sum covers \$215,809,000 for the Army, \$323,649,000 for the Navy, \$323,749,000 for the Air Force, \$9,002,000 for Defense, and \$208,673,000 for formerly used sites.

The 2018 NDAA also authorizes funds for the DOE's separate defense environmental cleanup activities. Section 3102(a) appropriates approximately \$5.44 billion for cleanup at locations including the Hanford Site (Richland, Washington) (\$755,563,000), Idaho National Laboratory (\$350,226,000), various National Nuclear Security Administration sites (\$257,340,000), Oak Ridge Reservation (\$207,600,000), the Office of River Protection (Richland, Washington) (\$1,504,311,000), and Savannah River Site (Aiken, South Carolina) (\$1,309,467,000).

Section 3102(b) authorizes funding for new plant projects run by the DOE, including two new Disposal Units at the Savannah River Site (\$500,000), a new Emergency Operations Center at the Savannah River Site (\$500,000), and a modification to a Waste Encapsulation and Storage Facility at the Hanford Site (\$6,500,000).

Section 3121 authorizes \$340,000,000 for continued construction of the mixed-oxide ("MOX") fuel fabrication facility at the Savannah River Site, over

²⁵ See Statement of Lucian Niemeyer, Ass. Sec. of Def., before the H. Comm. on Appropriations, Subcomm. on Military Construction, Veterans Affairs and Related Agencies, Fiscal Year 2019 Department of Defense Budget Request for Energy, Installations and Environment, at 8 (Apr. 12, 2018).

the objections of the Trump Administration. This controversial project, which has been delayed and over-budget, transforms weapons-grade plutonium into fuel for commercial nuclear reactors. The plutonium comes from Russian and American stockpiles that both countries agreed to decommission under the 2000 Plutonium Management and Disposition Agreement. After the Obama Administration announced plans to pursue an alternative “dilute and dispose” method in lieu of the MOX facility, Russia suspended the Agreement in 2017. The Trump Administration likewise supports “dilute and dispose,” given the MOX facility’s high price tag. The Administration’s 2019 budget request includes \$220,000,000 to close the facility.

Section 313—Payment to Environmental Protection Action of Stipulated Penalty in Connection with Umatilla Chemical Depot, Oregon & Section 314—Payment to Environmental Protection Agency of Stipulated Penalty in Connection with Longhorn Army Ammunition Plant, Texas

Section 313 authorizes payment of a \$125,000 penalty to EPA in relation to the ongoing cleanup of heavy metals and explosives around the Army storage depot in Umatilla, Oregon. The depot, which opened in 1941, was a 19,827-acre facility used for storage, maintenance, and demilitarization of munitions and weapons (among other uses).²⁶ After 85 million gallons of explosive-contaminated wastewater was discharged into two unlined lagoons in the 1950s and 1960s, the site was placed on EPA’s National Priorities List in 1987.²⁷ The Army became responsible for cleanup under a 1989 Federal Facilities Agreement between EPA and DoD.²⁸ In April 2015, the Army failed to submit to EPA timely remediation reports for the depot as mandated under the Federal Facilities Agreement. After EPA issued a notice of violation in November 2015, the Army, EPA, and Oregon Department of Environmental Quality reached a settlement agreement with a stipulated penalty of \$125,000. The Army approved the agreement on July 14, 2016. Section 313(a)(1) authorizes DoD to transfer the full penalty amount to the Superfund.

Section 314 authorizes payment of a \$1.185 million penalty to EPA in relation to the ongoing environmental cleanup at the 8,493-acre site around the Longhorn Army Ammunition Plant (“LHAAP”) in Karnack, Texas. The LHAAP was used since 1942 for various military activities, including manu-

²⁶ See *Umatilla Army Depot Activity*, Or. Dep’t of Env’t. Quality (Dec. 27, 2016).

²⁷ *Id.*

²⁸ *Id.*

facture and testing of explosives. It closed in the 1990s.²⁹ Since 2011, the LHAAP has been at the center of a protracted dispute between the DoD and EPA over cleanup standards for perchlorate in groundwater. While EPA insisted on more stringent standards set out in a 2006 EPA health advisory, DoD argued for using laxer state-level standards which were previously adopted in the proposed remedy. In October 2014, then-EPA Administrator Gina McCarthy affirmed an EPA Region 6 determination that had imposed a \$1.185 million stipulated penalty on DoD under Section XXIV of the 1991 Longhorn Federal Facility Agreement.³⁰ After DoD asked the Office of Management and Budget (“OMB”) to resolve the dispute, OMB declined to revisit Administrator McCarthy’s decision, but encouraged the agencies to work out their differences.³¹ Bringing this drawn-out inter-agency dispute to a likely close, Section 314(a)(1) authorizes DoD to transfer the full stipulated penalty to the Superfund.

Section 318—Report on Release of Radium or Radioactive Material into the Groundwater near the Industrial Reserve Plant in Bethpage, New York

Section 318 requires DoD to submit an addendum to a June 2017 report on groundwater contamination at DoD’s Industrial Reserve Plant in Bethpage, New York.³² Beginning in the late 1930s, the Navy and a defense contractor used this expansive 605-acre site to manufacture and test airplanes and space exploration vehicles, among other uses.³³ It has been listed as a New York state superfund site since 1983.³⁴ A discovery of radium at Bethpage High School in summer 2017 prompted high-level political attention, including a July 2017 meeting between Secretary of Defense James Mattis and Senator Chuck

²⁹ See *The Longhorn Army Ammunition Plant Superfund Site in Karnack, Texas*, Env’tl. Prot. Agency, Jan. 2018, <https://semspub.epa.gov/work/HQ/100000819.pdf>.

³⁰ See “Longhorn Federal Facility Agreement under CERCLA Section 120” (Sept. 11, 1991), <https://bit.ly/2jRW2tR>.

³¹ See “OMB Defers To EPA In Lengthy Dispute Over Army’s Perchlorate Cleanup,” InsideEPA.com (Apr. 26, 2016), <https://insideepa.com/daily-news/omb-defers-epa-lengthy-dispute-over-armys-perchlorate-cleanup>.

³² “2017 Annual Report for Groundwater Impacts at Naval Weapons Industrial Reserve Plant Bethpage, New York.”

³³ “Naval Weapons Industrial Reserve Plant Bethpage,” NAVY FACILITIES ENGINEERING COMMAND, https://www.navfac.navy.mil/products_and_services/ev/products_and_services/env_restoration/installation_map/navfac_atlantic/midlant/nwirp_bethpage.html.

³⁴ See “Fact Sheet,” N.Y. State Dep’t of Env’tl. Conservation (Jun. 1992), <https://bit.ly/2Ki62HX>.

Schumer (D-NY).³⁵ To remedy an informational gap in the June 2017 report, NDAA Section 318 requires an addendum that describes “any releases” by DoD “of radium or radioactive material into the groundwater within a 75-mile radius” of the Bethpage plant.

In the recently released Addendum, DoD states that radium has been detected in 97.5 percent of 122 groundwater and public water supply test locations, with seven wells (5.7 percent) showing radium concentrations that exceed the federal and state maximum contaminant level. The Addendum concludes that while “several types of radium or radioactive materials may have been present” at the Bethpage site, “there is no current documentation” that any of those materials were released from that site. Nevertheless, DoD is undertaking a Preliminary Assessment/Site Inspection that will help “determine if further removal or remedial action is warranted.”³⁶

Information in the Addendum, as well as DoD’s future findings, might be used to bring legal claims against DoD by various parties, including the State of New York towns, municipalities, and water districts, some of which have actively litigated groundwater issues. (In November 2017, for example, the Suffolk County Water Authority on Long Island filed a tort suit against a number of major corporations alleging groundwater contamination and seeking damages for its ongoing water treatment efforts.)

CLIMATE CHANGE

DoD has taken important steps to study, anticipate, and mitigate risks to its core mission associated with climate change.³⁷ The NDAA mandates further efforts to improve DoD climate preparedness. In particular, it requires DoD to submit a report that assesses climate risks, informs Congress of key challenges, and develops plans to address them. The NDAA also solicits a report on food system vulnerabilities that may affect U.S. interests and military operations. Such initiatives are likely to continue as DoD improves its understanding of climate and food security risks to its vast global footprint and U.S. strategic interests. The NDAA directs these actions even as the Pentagon has, at least in one instance, revised an Obama Administration-era report to play down the

³⁵ Emily D. Dooley, *Mattis To Look Into Navy Use of Radioactive Materials in Bethpage*, *Newsday*, Jul. 19, 2017.

³⁶ See *Addendum to 2017 Annual Report for Radiological Groundwater Impacts at Naval Weapons Industrial Reserve Plant Bethpage, New York*, Apr. 2018, <https://bit.ly/2IbF3wT>.

³⁷ See, e.g., *National Security Implications of Climate-Related Risks and a Changing Climate*, Dep’t of Def., July 23, 2015, at 3 (“DoD recognizes the reality of climate change and the significant risk it poses to U.S. interests globally.”).

references to climate change.³⁸ The DoD's approach seems to be to stay out of the political debate around the issue while addressing the real-world risks to its installations and missions.

Section 335—Report on Effects of Climate Change on Department of Defense

After expressing a Sense of Congress that “climate change is a direct threat to the national security of the United States,” including DoD’s “mission resiliency,” Section 355 calls on DoD to prepare a report on the threat of climate change for DoD installations.

This report (which can include a classified annex) must cover at least four areas:

- A list of the 10 most vulnerable military installations within each service based on “effects of rising sea tides, increased flooding, drought, desertification, wildfires, thawing permafrost,” as well as “any other categories the Secretary determines necessary”;
- An overview of mitigation efforts to ensure “continued operational viability” and to “increase the resiliency” of vulnerable military installations (along with the cost of such mitigations);
- A discussion of climate-change related effects on the DoD, including a potential “increase in the frequency of humanitarian assistance and disaster relief missions and the theater campaign plans, contingency plans, and global posture of the combatant commanders”; and
- An overview of potential mitigation measures to ensure mission resiliency (along with the cost of such mitigations).

The report must be submitted to Congress by December 12, 2018.

Section 1075—Report on the Global Food System and Vulnerabilities Relevant to Department of Defense Missions

Section 1075 requires the DoD to submit a report to Congress on the national security implications of food system risks, including DoD’s assessment of policies and operational plans to address related national security implications.

The report must cover at least the following areas:

- *Key Vulnerabilities.* Evaluation of global food system vulnerabilities that may affect U.S. national security and DoD’s “roles, missions, and capabilities in addressing such vulnerabilities.” These include, among

³⁸ See Chris Mooney & Missy Ryan, *Pentagon Revised Obama-era Report to Remove Risks From Climate Change*, Wash. Post, May 10, 2018.

other things, “information technology, data management, and surveillance capabilities for detection and assessment of food system shocks with the potential to result in the deployment of the Armed Forces or directly affect bilateral security interests with allies or partners”;

- *Major Conflicts.* Description of how various DoD “strategy, policies, and plans” “account for food system vulnerabilities as precursors to and components of protracted major state conflicts, civil wars, insurgencies, or terrorism”;
- *U.S. Interests.* Evaluation of U.S. interests, interests of U.S. allies and partners, and the potential for military operations “in regions where food system instability represents an urgent and growing threat, including due to the presence of destabilizing non-state actors who may weaponize access to food”; and
- *Military Cooperation.* Identification of “opportunities to initiate or further develop cooperative military-to-military relationships to build partner capacity to avoid, minimize, or control global and regional food system shocks.”

The report must be submitted to Congress by December 12, 2018.

Section 2805—Use of Operation and Maintenance Funds for Military Construction Projects to Replace Facilities Damaged or Destroyed by Natural Disasters or Terrorism Incidents

This Section, which amends 10 U.S.C. § 2854 (“Restoration or replacement of damaged or destroyed facilities”), permits DoD to use appropriations available for operation and maintenance to undertake construction projects to replace various facilities (including family housing). To trigger this authorization, two conditions must be met: (1) the damage or destruction to the facility must have resulted from a natural disaster (or terrorism); and (2) appropriate notifications must be provided to Congress. Such notifications must contain:

- A cost estimate of the replacement project;
- The source of funds for the project;
- A certification that a replacement is more effective than restoration in cases involving facility damage; and
- A certification that deferring the replacement project until the next Military Construction Authorization Act would be “inconsistent with national security or the protection of health, safety, or environmental quality, as the case may be.”

There is \$50 million fiscal year cap for projects under this authority.

Section 2878—Report on Hurricane Damage to Department of Defense Assets

This Section requires the Secretary of Defense to submit to Congress a report on hurricane damage affecting DoD assets and installations in 2017.

The report must contain at least four elements:

- Results of a storm damage assessment;
- A description of affected military installations and assets;
- A request for funding to initiate the repair and replacement of damaged facilities and assets, including necessary upgrades to existing facilities to make them compliant with current hurricane standards, and to cover any unfunded requirements for military construction at affected military installations; and
- Adaptation plan to ensure facilities are constructed to better withstand flooding and extreme weather events.

The report must have been submitted to Congress by March 12, 2018.

CONSERVATION PROJECTS

Section 317—Sentinel Landscapes Partnership

This Section renews the Sentinel Landscapes Partnership, a joint program among the Departments of Defense, Agriculture, and the Interior initially created in July 2013 through an interagency Memorandum of Understanding. The program protects designated sentinel landscapes, which are areas that contain a military installation as well as agriculture, wildlife habitat, or outdoor recreation. The NDAA permits the Secretaries to coordinate actions among their departments with other agencies and private organizations “to more efficiently work together for the mutual benefit of conservation, working lands, and national defense, and to encourage private landowners to engage in voluntary land management,” among other aims. Advocates for the program highlight its protection of working landscapes and critical natural resources around military installations during testing and training activities.³⁹

Similarly, in the 2018 NDAA, Congress continued its strong support for military-related conservation initiatives by authorizing \$75 million, and later appropriating \$90 million, for the Readiness and Environmental Protection Integration (“REPI”) Program. REPI works with the military services, private

³⁹ See Press Release, *The Conservation Fund Applauds Congress’ Passage Of Bill that Supports Military Readiness By Preserving Land Around Military Installations*, The Conservation Fund, Nov. 17, 2017.

conservation groups, and state and local governments to help remove or avoid-land-use conflicts near military installations while addressing regulatory restrictions that inhibit military activities. A key component is REPI's efforts, through private and public partnerships, to acquire easements to preserve land and natural habitats near military installations and ranges.⁴⁰

Section 2402—Authorized Energy Resiliency and Conservation Projects

This Section authorizes spending on energy resiliency and conservation projects for certain military installations at approximately the same level as the 2017 NDAA. Without specifying the nature of the projects, this section appropriates \$127,470,000 for 14 enumerated domestic projects and an unspecified number of other projects, as well as \$37,530,000 for four international installations. The largest individual authorizations domestically are for Colorado's Schriever Air Force Base (\$15,260,000), Maryland's NSA South Potomac-Indian Head facility (\$10,790,000), and North Carolina's Lejeune/New River facility (\$9,750,000). The largest authorizations internationally for energy resiliency and conservation projects are for Osan Air Base in Korea (\$13,700,000) and Soto Cano Air Base in Honduras (\$12,600,000).

Section 2846—Imposition of Additional Conditions on Future Use of Castner Range, Fort Bliss, Texas

The NDAA imposes stringent new environmental protections for the Castner Range in El Paso, Texas, which has been a site for political organizing since the 1970s. Section 2844(a) of the 2013 NDAA had authorized the Army to convey 7,081 acres of federal land at Fort Bliss, Texas, to form part of the Franklin Mountains State Park. The land had previously been used as an Army artillery range. The 2018 NDAA places strict conditions on use of that land to protect and conserve "ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources." Among other uses, Section 2846 prohibits commercial enterprises, roads, motorized vehicles and equipment, as well as structures and installations. It also permits the "head of any other federal agency," as well as the Secretary, to make a finding that the lands are not being used as intended, which can trigger DoD's reversionary interest under Section 2844(b) of the 2013 NDAA. Finally, Section 2846 states that the Secretary "shall" conduct "military munitions response actions" on these lands in a way that "minimize[s] disturbance of natural and cultural resources."

⁴⁰ See *Justification Book for Operations and Maintenance, Defense-Wide (OMDW) for FY 2018, OP-5 Exhibit; Joint Explanatory Statement*, Congressional Record, House, Mar. 22, 2018, at H2186; "About REPI," Readiness and Environmental Protection Integration, <http://www.repi.mil/About-REPI/Frequently-Asked-Questions/>.

CONCLUSION

The 2018 NDAA authorizes funds and establishes important policies for the Department of Defense on energy, the environment, and natural resources.

These policies will have substantial effects on regulated entities and contractors. Key takeaways include:

- An increased focus on renewable energy projects and an emphasis on the concepts “energy resilience” and “energy security” in DoD planning;
- Greater emphasis to the role of the private sector in energy, environment, and natural resources issues;
- Authorization for funding for studying certain impacts of the chemicals PFOA/PFOS, which have been discovered in groundwater near military installations, that will likely inform future litigation;
- Mandated studies of the risks of climate change, and broadened certain conservation projects; and
- Authorizations for various new and ongoing environmental cleanup activities and payment of penalties to resolve disputes with EPA.

During a period of Congressional gridlock and environmental skepticism, the NDAA represents a significant, if often overlooked, piece of federal policymaking in the energy, environment, and natural resources area.