



OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

SPECIAL REPORT

DOE-OIG-20-09

November 2019

**MANAGEMENT CHALLENGES AT THE
DEPARTMENT OF ENERGY -
FISCAL YEAR 2020**



Department of Energy
Washington, DC 20585

November 15, 2019

MEMORANDUM FOR THE SECRETARY

A handwritten signature in cursive script, appearing to read "Teri L. Donaldson".

FROM: Teri L. Donaldson
Inspector General

SUBJECT: INFORMATION: Special Report on “Management Challenges at the Department of Energy – Fiscal Year 2020”

INTRODUCTION

The Department of Energy’s mission is to ensure America’s security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions. The Department’s world-leading science and technology enterprise generates the innovations that fulfill its missions. Through 17 national laboratories, the Department engages in cutting edge research that expands the frontiers of scientific knowledge, generates new technologies to address the country’s greatest energy challenges, and strengthens national security by maintaining and modernizing the nuclear stockpile. To execute this diverse portfolio, the Department receives an annual appropriation of approximately \$35 billion, employs approximately 113,000 Federal and contractor personnel, and manages assets valued at \$196.1 billion. The Office of Inspector General annually identifies what it considers to be the most significant management challenges facing the Department. The Office of Inspector General’s goal is to focus attention on significant issues with the objective of working with Department managers to enhance the effectiveness of agency programs and operations.

MANAGEMENT CHALLENGES

Based on the results of our body of work over the past year, the management challenges list for fiscal year 2020 remains largely consistent with that of the previous year. These challenges include:

- Contract Oversight
- Cybersecurity
- Environmental Cleanup
- Nuclear Waste Disposal
- Safeguards and Security
- Stockpile Stewardship
- Infrastructure Modernization

WATCH LIST

The Office of Inspector General also prepares an annual Watch List, which incorporates other issues that do not meet the threshold of a management challenge, yet in its view, warrant special attention by Department officials. For fiscal year 2020, the Watch List includes:

- Intellectual Property Theft/Foreign Talents Program
- Human Capital Management
- Grant Management

SUMMARY

Attached is a brief synopsis of each management challenge, accompanied by summaries of work conducted that informed our decision process. A complete list of reports can be found at <https://www.energy.gov/ig/calendar-year-reports>, and press releases may be found at <https://energy.gov/ig/listings/media-releases>.

The management challenges process is an important tool that assists us in focusing our finite resources on what we consider to be the Department's most significant risks and vulnerabilities. We look forward to working with you and your leadership team in addressing and resolving these issues.

Attachment

cc: Deputy Secretary
Chief of Staff
Under Secretary of Energy
Under Secretary for Science
Administrator, National Nuclear Security Administration
Chief Information Officer
Deputy Chief Financial Officer

MANAGEMENT CHALLENGES AT THE DEPARTMENT OF ENERGY — FISCAL YEAR 2020

Contract Oversight

The Department of Energy is the largest civilian contracting agency in the Federal Government and spends approximately 90 percent of the annual budget on contracts to operate its scientific laboratories, engineering and production facilities, and environmental restoration sites and to acquire capital assets. As of September 2019, the Department managed 14,455 contracts valued at more than \$25 billion. According to the Office of Acquisition Management, the Department's management and operating contractors reported over \$1.3 billion in subcontracts during fiscal year (FY) 2019.

Oversight of the Department's contracts is necessary to ensure that contractors meet the established requirements, from contract award through completion or termination. Contract oversight starts with the development of a clear, concise, performance-based statement of work and a plan that effectively measures the contractor's performance. The specific nature and extent of oversight varies by contract and can range from simple acceptance of delivery and payment to extensive involvement by program, audit, and procurement officials. The goal of effective contract oversight is to ensure that the Government receives procured products and services and the public interest is effectively protected.

The Department has been challenged, both internally and externally, to improve the efficiency and effectiveness of its contract oversight process. Since 1990, the Government Accountability Office (GAO) has designated the Department's contract management, which included inadequate contract and project oversight, as a high-risk area. In addition, our investigative work and referrals to the Office of Inspector General (OIG) Hotline have identified continued vulnerabilities with less than adequate contract and subcontract oversight. Because of these issues and the large number of contracts and subcontracts managed by the Department, we continue to believe the area of Contract Oversight, which encompasses both Contractor Management and Subcontract Management as sub-components, remains a management challenge.

In January 2009, recognizing the progress at the Department's Office of Science, GAO narrowed the focus of Department's high-risk designation to two Department program elements: the National Nuclear Security Administration (NNSA) and the Office of Environmental Management (Environmental Management). In February 2013, GAO further narrowed the focus of the high-risk designation to those projects with an estimated cost of \$750 million or greater to acknowledge progress made in managing non-major projects.

Similar to prior years, our FY 2019 work identified numerous issues related to Contractor Oversight. Specifically, we identified weaknesses with the oversight of Contract Management resulting in additional incurred costs. Given the large number of contracts handled by the Department and the complexity and importance of the Department's numerous multimillion dollar projects, the area of Contractor Oversight is a significant management challenge.

Subcontract Management was identified as a subcomponent of Contract Oversight since our FY 2018 Management Challenges report and continues to be a challenge area for FY 2020. Work conducted during FY 2019 and prior years has indicated that the Department and its contractors had not always provided adequate oversight of subcontracts. For instance, during the past year, both GAO and OIG identified issues pertaining to the management of subcontracts. Specifically, GAO reported that the Department did not always ensure that contractors audited subcontractors' incurred costs, as required in their contracts. GAO's review of 43 incurred-cost assessment and audit reports identified more than \$3.4 billion in subcontract costs incurred over a 10-year period that had not been audited as required, and some subcontracts remained unaudited or unassessed for more than 6 years.

The following reports highlight the need for continued focus by the Department on Contractor Oversight.

*The Department of Energy's Management of the
ActioNet Information Technology Support Contract
June 2019, DOE-OIG-19-35*

The Department's Office of the Chief Information Officer is tasked with information technology (IT) responsibilities that include maintaining a technical architecture, procurement of IT goods and services, project management, and cybersecurity. To support the Office of the Chief Information Officer's mission, the Department awarded a cost-plus-fixed-fee contract to ActioNet, Inc. in October 2011 to provide IT support services to the Office of the Chief Information Officer and other Department programs and field sites. The contract was awarded with a 2-year base period and a 2-year option period with a ceiling value of approximately \$485 million. Although the contract was expected to be re-competed in April 2016 after the full option period was exhausted, it was extended several times. The contract was extended through April 2019, and the ceiling value was increased to approximately \$1.2 billion.

We found that the Department had not effectively managed the ActioNet IT support contract in accordance with Federal and Department requirements. In particular, the Department may have spent significantly more than necessary for direct labor costs over the life of the contract as a result of inadequate management of the contract. In addition, the use of subcontractors by ActioNet increased exponentially from what was initially anticipated, without adequate procedures in place to ensure that the need for additional subcontractors was warranted or that costs were fair and reasonable. Furthermore, multiple extensions to the period of performance, which were considered significant changes to the ActioNet contract, were not supported by documentation or other appropriate contract management actions.

Without significant improvements, the Department may continue to encounter weaknesses related to managing and overseeing the ActioNet contract, as well as future IT contracts. The problems identified during our review placed the Department at an increased risk of misusing taxpayer dollars and reimbursing costs that may not be allowable, reasonable, or necessary. As noted in our report, we determined that the Department may have spent at least \$33 million more than necessary over the life of the contract for direct labor and related fees. We also questioned

the approximately \$261 million paid for subcontractor labor due to the lack of documentation to support cost reimbursements. In light of the weaknesses identified, we made six recommendations that, if fully implemented, should help the Department improve IT contract management activities.

The full report can be accessed at https://www.energy.gov/sites/prod/files/2019/06/f63/DOE-OIG-19-35_0.pdf.

*Battelle Energy Alliance, LLC Costs Claimed under Department of Energy
Contract No. DE-AC07-051D14517 for Fiscal Year 2016
October 2019, DOE-OIG-20-02*

Since FY 2005, Battelle Energy Alliance, LLC (BEA) has managed and operated the Idaho National Laboratory under a 20-year contract with the Department valued at \$17.18 billion. As a management and operating contractor, BEA's financial accounts are integrated with those of the Department, and the results of transactions are reported monthly. BEA is required by contract to account for all net expenditures accrued annually on its Statement of Costs Incurred and Claimed (SCIC), to safeguard assets in its care, and to claim only allowable costs. During FY 2016, BEA incurred costs totaling \$972,328,027.31. BEA is required to comply with the Department's Cooperative Audit Strategy, under which BEA internal auditors perform audits of the contractor, including the annual audit of costs claimed on the SCIC, also referred to as the annual incurred cost audit. The objectives of our audit were to determine if the FY 2016 incurred costs were allowable, allocable, and reasonable in accordance with the terms of the contract, applicable cost principles, laws, and regulations, and to assess BEA's internal audit work for the annual incurred cost audit.

Our audit found BEA practices that were not compliant with Cost Accounting Standards (CAS). We also identified other issues for which we were not always able to quantify the full monetary impact, and weaknesses in BEA's Internal Audit's audit procedures (Internal Audit). For FY 2016, we questioned \$17.66 million of positive (over-recovered) funds and \$8.4 million of negative (under-recovered) funds from year-end indirect cost pool variances. We also questioned \$11,176 of Laboratory Directed Research and Development burdens. In particular, the CAS noncompliant practices and other issues we identified included:

- Disposition of year-end indirect cost pool rate variances – CAS 418 noncompliant;
- Charging year-end direct labor rate variances as indirect costs – CAS 402 noncompliant;
- Lack of indirect cost burden for unallowable costs – CAS 405 noncompliant;
- Allocation of travel and associated labor costs – BEA policy noncompliant; and
- Allocation of certain indirect rates – incorrect application.

These issues occurred because BEA did not properly follow contract terms and conditions, including the Federal Acquisition Regulation and CAS, and did not sufficiently adhere to internal policy.

We also identified areas that required improvement by Internal Audit. The audit procedures used by Internal Audit did not identify certain CAS noncompliant issues in BEA's cost accounting and management practices. Additionally, we identified a number of concerns with a "consulting engagement" Internal Audit performed related to BEA's guidelines for distributing variances. First, we concluded that Internal Audit exhibited poor judgment by accepting the request as a "consulting engagement." Second, we concluded that Internal Audit did not comply with its policies or professional internal auditing standards in the areas of planning, performing the engagement, supervision, communication, due professional care, and potentially independence. Finally, we noted that Internal Audit's shortcomings may have contributed to the material noncompliance at BEA associated with the disposition of indirect rate variances.

The full report can be accessed at https://www.energy.gov/sites/prod/files/2019/10/f68/DOE-OIG-20-02_0.pdf.

*Bechtel National, Inc.'s Subcontract Audit Program
November 2019, DOE-OIG-20-06*

Bechtel National, Inc. (Bechtel) is responsible for construction of the Department's \$16.8 billion Waste Treatment and Immobilization Plant which will treat and vitrify a majority of the 56 million gallons of waste amassed from decades of plutonium production at the Department's Hanford Site. To achieve its mission, Bechtel procures services and equipment, often using subcontractors. Many of these subcontracts are "flexibly-priced," where the costs incurred are a factor in determining the amount payable to the subcontractor. Between the start of the contract on December 11, 2000, and June 15, 2018, Bechtel paid \$1.98 billion for 392 flexibly-priced subcontracts. For its flexibly-priced subcontracts, Bechtel's contract with the Department contains a requirement to audit the subcontractors' costs. We initiated this audit to determine whether Bechtel was fulfilling its requirement to audit its flexibly-priced subcontracts.

Our review determined that Bechtel had not fulfilled its contract requirement to audit its flexibly-priced subcontracts. Specifically, since the beginning of its contract, a significant number of Bechtel's flexibly-priced subcontracts had not been audited. Our audit determined that for a total of 110 subcontracts, which the subcontractor had been paid \$1 million or more in the aggregate, only 23 had been audited by Bechtel or a cognizant Government audit agency. Additionally, each year of performance is required to be audited. When we reviewed the total number of years of performance for these 110 subcontracts, we found that only 102 out of 641 (16 percent) of the years of performance had been audited.

We also determined that subcontract audits that had been performed by Bechtel officials had not always been effective or reliable. Further, Bechtel had not always properly classified subcontracts as either fixed or flexibly-priced. A Defense Contract Audit Agency audit had determined that 30 of the 92 contracts it reviewed were improperly classified; 26 of those 30 subcontracts were misclassified as fix-priced when in fact they were flexibly-priced. Finally, we found that while Bechtel met a Department-established performance goal of completing at least 20 audits by the end of calendar year 2018, its efforts were not focused on those subcontracts that were at risk of exceeding the 6-year statute of limitations for submitting claims, as required by the Department.

By not fulfilling the requirement to audit its flexibly-priced subcontracts, Bechtel increased the risk that it was passing on unallowable costs from its subcontractors to the Department. Recently, Bechtel has revised its subcontract audit program to have audits performed by third-party audit firms, but weaknesses still exist.

The full report can be accessed at <https://www.energy.gov/sites/prod/files/2019/11/f68/DOE-OIG-20-06.pdf>.

*Department of Energy Contracting:
Actions Needed to Strengthen Subcontract Oversight
March 2019, GAO-19-107*

According to the General Accounting Office (GAO), in FY 2016, 28 entities participated in the Department's and NNSA's 24 largest prime contracts, which totaled \$23.6 billion of the Department's FY 2016 obligations. The contractors awarded about \$6.9 billion (nearly 30 percent) of those obligations to thousands of subcontractors. Further, multiple companies, universities, and other entities can join together to bid on a contract (become a "party to" a contract). GAO's review of data about these contracts and subcontracts identified complex ownership relationships among the contractors and subcontractors. For example, GAO found that almost all of the 28 parties to the prime contracts in its review were also subcontractors to some prime contracts, holding a total of nearly 3,000 subcontracts with FY 2016 obligations totaling about \$927 million. GAO found that it can be difficult to track changes in the ownership of parties to the contracts and to understand the relationships between parties.

According to the report, the Department, including NNSA, did not always ensure that contractors audited subcontractors' incurred costs as required in their contracts. GAO's review of 43 incurred-cost assessment and audit reports identified more than \$3.4 billion in subcontract costs incurred over a 10-year period had not been audited as required, and some subcontracts remained unaudited or unassessed for more than 6 years. Completing audits in a timely manner is important because of a 6-year statute of limitations to recover unallowable costs that could be identified through such audits. Department headquarters had not issued procedures or guidance requiring local offices to monitor contractors to ensure that required subcontract audits are completed in a timely manner, consistent with Federal standards for internal control. Without such procedures or guidance, unallowable costs may go unidentified beyond the 6-year limitation period of the *Contract Disputes Act*, preventing the Department from recovering those costs.

GAO indicated that the Department, including NNSA, performs several reviews to ensure that contractors meet other subcontract oversight requirements. For example, local offices review and assess any self-reported potential conflicts of interest on the part of contractors and subcontractors. However, local officials generally do not request additional information on ownership to independently ensure contractors are mitigating these conflicts, nor do they routinely make use of various databases available to Government employees that report ownership information for many Government contractors. By requiring contracting officers to independently review subcontractor ownership information, the Department would have better assurance that contractors are adequately identifying and mitigating organizational conflicts of interest.

The full report is available at <https://www.gao.gov/assets/700/697474.pdf>.

Cybersecurity

The Department operates nearly 100 entities across the Nation and depends on information technology systems and networks for essential operations required to accomplish its national security, research and development, and environmental management missions. The systems used to support the Department's various missions face millions of cyber threats each year, ranging from unsophisticated hackers to advanced persistent threats. According to the Office of Management and Budget, Federal agencies reported over 31,000 cyber incidents in FY 2018, a 12 percent decrease over FY 2017. The Office of Management and Budget reported in its FY 2018 *Annual Report to Congress on the Federal Information Security Modernization Act of 2014* that the Department's internal and external assessments identified below average management of hardware and software, configuration management, vulnerability and patch management, Web application integrity, access controls, continuous monitoring, risk management, and performance monitoring as common shortfalls. Additionally, the Department's Office of the Chief Information Officer identified and is addressing outdated cybersecurity policies and incident response planning and implementation. Given the importance and sensitivity of the Department's activities, along with the vast array of data it processes and maintains, protecting cyber assets continues to be a crucial aspect of the Department's overall security posture.

Although the Department made progress in the area of cybersecurity, our annual review of the Unclassified Cybersecurity Program continued to identify deficiencies with the Department's management of the program. Additionally, issues related to vulnerability and configuration management, system integrity of Web applications, access controls, security awareness and privacy training, and security control testing continue to exist. As a result of these inherent risks and the sensitivity of much of the Department's work, Department management must continue to emphasize the importance of cybersecurity.

The following reports identified weaknesses in the Department's cybersecurity programs.

*The Department of Energy's Unclassified Cybersecurity Program – 2018
October 2018, DOE-OIG-19-01*

The *Federal Information Security Modernization Act of 2014* requires Federal agencies to develop and implement agency-wide information security programs. In addition, Federal agencies are required to provide acceptable levels of security for the information and systems that support their operations and assets. As required by the *Federal Information Security Modernization Act of 2014*, the OIG conducted an independent evaluation to determine whether the Department's unclassified cybersecurity program adequately protected its data and information systems. Our review identified weaknesses related to vulnerability and configuration management, system integrity of Web applications, access controls, cybersecurity and privacy awareness training, and security control testing. Specifically, we found that weaknesses related to the Department's vulnerability and configuration management programs continue to exist. For example, at least 10 locations continued to use software on workstations

and servers that were missing security patches or were no longer supported by the vendor. We also noted that one of these sites had not conducted privileged vulnerability scans on all devices—a key component of a fully effective vulnerability management program that can help identify weaknesses. The types of vulnerabilities identified were mostly consistent with our prior evaluations, and our FY 2018 review disclosed weaknesses at new locations.

To correct the weaknesses highlighted in this report, we made 25 recommendations to programs and sites in FY 2018. In addition to these program- and site-specific recommendations, we made one overall recommendation to ensure that appropriate emphasis is placed on correcting identified cybersecurity weaknesses, including addressing findings identified during our current unclassified cybersecurity evaluation; this process should include the effective use of plans of actions and milestones to improve performance monitoring by identifying, prioritizing, and tracking the progress of remediation actions for all identified cybersecurity weaknesses.

The full report can be accessed at <https://www.energy.gov/sites/prod/files/2018/10/f57/DOE-OIG-19-01.pdf>.

*Management of a Department of Energy Site Cybersecurity Program
July 2019, DOE-OIG-19-42*

Public Law enacted by Congress required the Department to solidify and dispose of radioactive waste, decommission the facilities used in this process, and return control of the site to the state of record. To support its environmental cleanup mission, the reviewed site uses various types of information systems. The *Federal Information Security Modernization Act of 2014* requires each Federal agency to develop, document, and implement an enterprise-wide cybersecurity program to protect systems and data that support the operations and assets of an agency, including those provided or managed by contractors.

We found that the site had not fully implemented its cybersecurity program in accordance with Federal and Department requirements. We identified weaknesses related to vulnerability and configuration management, logical and physical access controls, contingency planning, and continuous monitoring. As a result, the integrity, confidentiality, and availability of systems and data managed by the site may be impacted by the vulnerabilities identified during our review. To help improve the management of the site's cybersecurity program, we issued a detailed report to the site's Director that included three recommendations.

Due to the sensitive nature of the vulnerabilities identified during our audit, the report issued to the Department was for Official Use Only.

An abridged version of the report is available at <https://www.energy.gov/sites/prod/files/2019/07/f65/DOE-OIG-19-42.pdf>.

*Management of Cybersecurity Activities at a Department of Energy Site
August 2019, DOE-OIG-19-44*

In January 2019, the OIG initiated a review to determine whether the selected Department location had effectively managed its cybersecurity program. During the course of our test work, we noted several areas of immediate concern. Due to the nature of the work conducted at the site and the use of systems that have mission critical and safety significant functions, we issued this management alert to ensure that management was provided with the opportunity to initiate immediate actions to address risks identified within the site's cybersecurity program.

Preliminary results of test work conducted at the site revealed potentially significant cybersecurity vulnerabilities on the site's general support system, including major financial management and safety applications. Specifically, preliminary test work identified more than 11,000 critical- and high-risk vulnerabilities on workstations and servers during our limited testing. Furthermore, our early analysis of the site's cybersecurity program revealed missing or deficient cybersecurity practices, including significant failures in the site's process for authorizing the operation of systems and a lack of most components of a Risk Management Framework. The seriousness of the system authorization issues coupled with a multitude of identified vulnerability/configuration weaknesses indicated ineffective cybersecurity practices at the site. In our opinion, the issues described in detail in our management alert were serious enough to warrant immediate action on the part of Department Headquarters and the site to ensure that operation of the information systems did not place the Department's information technology resources at risk.

During the course of the audit, we issued 11 recommendations to the site's manager to help improve its cybersecurity program. Our management alert also included a recommendation to the Under Secretary for Science.

Due to the sensitive nature of the vulnerabilities identified during our audit, the report was issued as Official Use Only.

An abridged version of the report is available at

<https://www.energy.gov/sites/prod/files/2019/08/f66/DOE-OIG-19-44.pdf>

Environmental Cleanup

The Department is responsible for addressing the Nation's Cold War environmental legacy resulting from 5 decades of nuclear weapons production and Government-sponsored nuclear energy research. The cleanup operation is the largest in the world and includes 107 sites across the country, encompassing an area equal to the combined size of the states of Rhode Island and Delaware. More than 50 years of activities have produced unique and technically complex problems. Specifically, this legacy includes some of the world's most dangerous sites with large amounts of radioactive wastes, spent nuclear fuel, excess plutonium and uranium, thousands of contaminated facilities, and contaminated soil and groundwater.

Since 1989, the Department has spent about \$177 billion to retrieve, treat, and dispose of nuclear and hazardous waste and has completed cleanup at 91 of the 107 sites. In the last 8 years alone,

the Department has spent \$48 billion, primarily to treat and dispose of nuclear and hazardous waste and construct capital asset projects to treat waste. Cleanup activities can last for decades and often require first-of-a-kind solutions. Characterization of legacy waste sites is performed in conjunction with planning and executing cleanup activities, such as deactivating and decommissioning facilities, removing hazardous materials, stabilizing waste streams to prevent additional environmental damage, and restoring the sites to conditions required by legal agreements.

Despite billions of dollars spent on environmental cleanup, from FY 2017 to FY 2018 the Department's environmental liability grew to \$494 billion, an increase of \$110 billion, primarily due to an increase in the estimated cost of cleanup at the Hanford Site in Washington State. In October 2018, Environmental Management provided a revised estimate increasing the FY 2018 Hanford Site environmental liability to \$242 billion, an increase of \$82 billion, further demonstrating the considerable risk of the environmental management program.

The Department is responsible for 83 percent of the Federal Government's approximately \$465 billion FY 2017 reported environmental liability, which is mostly related to nuclear waste cleanup. Half of the Department's environmental liability resides at the Hanford Site in Washington State and at the Savannah River Site in South Carolina.

The following report further supports the challenges related to Environmental Cleanup Liabilities.

*Department of Energy: Program-Wide Strategy and Better Reporting
Needed to Address Growing Environmental Cleanup Liability
January 2019, GAO-19-28*

In its report, GAO noted that Environmental Management faced an environmental liability of \$377 billion, according to the Department's FY 2018 financial statement. This amount largely reflected estimates of future costs to clean up legacy radioactive tank waste and contaminated facilities and soil. From FY 2011 through FY 2018, Environmental Management's environmental liability grew by about \$214 billion — outpacing its cleanup spending of about \$45 billion for that time period. Contract and project management problems and other factors have led to this growth. For example, from FY 2014 to FY 2018 Environmental Management's environmental liability increased by nearly \$130 billion at the Hanford Site in Washington State, in part because of contract and project management problems with waste cleanup. GAO found that Environmental Management's liability will likely continue to grow, in part because the costs of some future work are not yet included in the estimated liability. For example, Environmental Management's liability does not include more than \$2.3 billion in costs associated with 45 contaminated facilities that will likely be transferred to Environmental Management from other Department programs in the future.

Further, Environmental Management's recent budget materials had not provided required or accurate information on funding needed to meet future cleanup responsibilities. For example, under the *National Defense Authorization Act for Fiscal Year 2011*, Environmental Management must annually report estimated costs and detailed funding needs for future cleanup activities. Environmental Management's 2017 submission to Congress, only the second one since 2011, did

not include a detailed list of upcoming activities or funding needed to meet those activities. Additionally, Environmental Management's recent budget materials had not reflected the funding needed to meet scheduled milestones called for in site-specific compliance agreements with states. These agreements are legally enforceable documents defining cleanup activities that the Department must achieve by specified dates. By reflecting the funding it needs to meet all of its scheduled milestones called for in compliance agreements, Environmental Management could better ensure that Congress has complete information to assess the full costs of long-term cleanup.

The full report can be accessed at <https://www.gao.gov/assets/700/696632.pdf>.

Nuclear Waste Disposal

The Department is responsible for the safe cleanup of environmental legacy waste resulting from 5 decades of nuclear weapons development and Government-sponsored nuclear energy research. Overall, the Department has approximately 90 million gallons of liquid waste stored in underground tanks and approximately 4,000 cubic meters of solid waste derived from the liquids stored in bins. The Department's current estimated cost for retrieval, treatment, and disposal of this waste exceeds \$50 billion. The highly radioactive portion of this waste, located at the Idaho National Laboratory, and the Hanford and Savannah River sites, must be treated and immobilized, and prepared for shipment to a waste repository.

To accomplish its mission, the Department operates several waste processing and storage facilities. The Department is currently in the process of designing and building the Waste Treatment and Immobilization Plant (WTP). When complete, WTP will be the world's largest radioactive waste treatment plant. Its mission is to process and stabilize 56 million gallons of radioactive and chemical waste currently stored at the Hanford Site. In addition, after re-opening the Waste Isolation Pilot Plant, which closed due to an accidental radiological release, the Department resumed accepting waste shipments in April 2017 and resumed mining operations to expand storage capacity in January 2018. After much uncertainty with the construction of the Mixed Oxide Fuel Fabrication Facility, located in Aiken, South Carolina, the project was terminated in October 2018. As a result, the Department requested \$79 million to fund the Surplus Plutonium Disposition Project in order to continue with the dilution and disposal of waste.

Finally, the Department has been involved in numerous lawsuits pertaining to the delay in beginning disposal of spent nuclear fuel. In accordance with the *Nuclear Waste Policy Act of 1982*, the Department entered into more than 68 Standard Contracts with utilities in which, in return for payment of fees into the Nuclear Waste Fund, the Department agreed to begin disposal of spent nuclear fuel by January 31, 1998. Because the Department has no facility available to receive spent nuclear fuel, it has been unable to begin disposal of the utilities' spent nuclear fuel as required by the contracts. Significant litigation claiming damages for partial breach of contract has ensued as a result of the delay. To date, 40 suits have been settled, and an additional 61 cases have been resolved, resulting in \$8 billion paid to the utilities for the delay damages.

The following reports show some challenges the Department faces in regards to disposing of nuclear waste.

*Nuclear Waste Cleanup: DOE Faces Project Management and Disposal Challenges with High-Level Waste at Idaho National Laboratory
September 2019, GAO-19-494*

GAO found that Environmental Management had not fully followed selected project management best practices in managing the reengineering of the Integrated Waste Treatment Unit to treat 900,000 gallons of liquid sodium-bearing waste that must be solidified for disposal. Environmental Management's cost and schedule estimates for the Integrated Waste Treatment Unit reengineering did not fully meet selected best practices for cost (i.e., did not account for all costs) and schedule estimates (e.g., did not have a valid critical path). For example, Environmental Management did not follow best practices for a comprehensive cost estimate because Environmental Management did not include both Government and contractor costs over the entire project. As of February 2019, Environmental Management had experienced approximately \$64 million in added costs and a more than 1-year delay in the Integrated Waste Treatment Unit reengineering. Without fully following best practices for cost and schedule estimates, Environmental Management is at risk of future cost overruns and delays in meeting its target disposal milestones.

Based on GAO's review of Environmental Management's documents, Environmental Management faces challenges with its plans for sodium-bearing waste disposal at its preferred disposal site, the Waste Isolation Pilot Plant, an underground repository for waste contaminated by nuclear elements, near Carlsbad, New Mexico. These challenges include a statutory prohibition on the disposal of high-level waste at the Waste Isolation Pilot Plant. Further, Environmental Management does not have a strategy or timeline to address these challenges or to identify an alternative disposal pathway. Without such a strategy or timeline, Environmental Management risks not meeting its commitments with Idaho to prepare the sodium-bearing waste for removal from the state by 2035.

Environmental Management faces challenges implementing its selected technology to further treat 1.2 million gallons of granular calcine waste and selecting a potential waste disposal pathway. For example, the Department has identified challenges with retrofitting the Integrated Waste Treatment Unit for calcine waste treatment. As a result, Environmental Management is deferring further development of its plans to treat the calcine waste. Environmental Management officials said that the agency is making progress toward calcine waste disposal by testing options for removing the waste from its storage bins, a precursor to treating or packaging the waste for disposal. However, Environmental Management does not have a strategy or timeline for determining its next steps for the treatment and disposal of calcine waste. Such a strategy could help Environmental Management in seeking alternatives to its selected treatment technology and provide assurance that it will meet its commitments with Idaho for removing calcine waste from the state by the end of 2035.

The full report can be accessed at <https://www.gao.gov/assets/710/701252.pdf>.

*Interim Storage of Radioactive Canisters at the Savannah River Site
February 2019, DOE-OIG-19-17*

The Department's Savannah River Site became operational in 1951 and produces nuclear materials for national defense, research, medical, and space programs. The separation of fissionable nuclear material from irradiated targets and fuels results in the generation of liquid radioactive waste, which is stored in underground storage tanks at the site. The Savannah River Operations Office is responsible for the day-to-day oversight of Environmental Management's operations at the Savannah River Site.

In 1996, the Defense Waste Processing Facility at the Savannah River Site began stabilizing the high-level radionuclides in the liquid radioactive waste through a vitrification process that immobilizes the waste in a borosilicate glass matrix within a stainless steel canister. The radioactive canisters are then stored on an interim basis on-site while awaiting final shipment to a yet-to-be-determined permanent off-site Federal repository. There are currently two canister storage buildings on the Savannah River Site, Glass Waste Storage Buildings #1 and #2.

At the end of calendar year 2017, the Defense Waste Processing Facility operations had produced 4,159 radioactive canisters. The Savannah River Operations Office estimates that a total of 8,170 radioactive canisters will be produced through the end of the treatment process, currently estimated to be completed by 2036, resulting in a single stack canister storage capacity shortfall for 3,580 radioactive canisters. Since 2010, Environmental Management has considered several different strategies to increase its interim storage capacity, including the construction of a third canister storage building, and more recently, double stacking the canister storage positions in Glass Waste Storage Building #1. Because the canisters need to be safely stored until a permanent repository is identified, we initiated this audit to determine whether Environmental Management had developed an effective strategy for providing adequate interim storage for radioactive canisters at the Savannah River Site.

While Environmental Management had considered several interim storage strategies, the decision to double stack radioactive canisters in Glass Waste Storage Building #1 and single stack radioactive canisters in Glass Waste Storage Building #2 may not provide adequate interim storage capacity to accommodate planned Defense Waste Processing Facility radioactive canister production through 2036. We determined that Environmental Management selected this strategy without first resolving several uncertainties. We acknowledged that the Department has a strategy for the interim storage of radioactive canisters that allows Defense Waste Processing Facility to currently accomplish mission requirements. However, in light of the uncertainties associated with the double stacking strategy, the Savannah River Operations Office may need to develop additional interim radioactive canister storage capacity sooner than Environmental Management's expected date of 2029.

The full report can be accessed at <https://www.energy.gov/sites/prod/files/2019/02/f59/DOE-OIG-19-17.pdf>.

Safeguards and Security

Safeguards and Security programs are an essential part of the Department's ability to efficiently and effectively meet all its obligations to protect Special Nuclear Material, other nuclear materials, classified matter, sensitive information, Government property, and ensure the safety and security of employees, contractors, and the general public. Safeguards and Security programs are required to incorporate a risk-based approach to protect assets and activities against the consequences of attempted theft, diversion, terrorist attack, espionage, unauthorized access, compromise, and other acts that may have an adverse impact on national security or the environment.

In May 2019, the Office of Enterprise Assessments issued its report, *Lessons Learned from Assessments of Emergency Management Programs at U.S. Department of Energy Sites*, which identified weaknesses in emergency management programs. Some of the issues included that contractors did not always ensure that:

- Exercise scenarios demonstrated their full response capabilities over a 5-year period;
- Exercise evaluation criteria included specific, attainable, and measurable criteria;
- Communications and integration among responders were fully adequate; and
- Corrective actions fully addressed the findings and were effective.

Currently, we have an ongoing audit that has identified concerns with the termination of security clearance and personal identity verification card access for separated Federal and contractor employees. Safeguards and Security has been included in our management challenges report since FY 2001 and remains an area of focus for the Department, as evidenced by the following reports.

*Department of Energy's Quality Assurance: Commercial Grade
Dedication of Items Relied on for Safety
May 2019, DOE-OIG-19-30*

The Department is responsible for the construction and operation of nuclear facilities across its complex. To ensure these facilities operate safely, the Department and many of its contractors are required to develop and implement a quality assurance program in accordance with the American Society of Mechanical Engineers' *Quality Assurance Requirements for Nuclear Facility Applications* (NQA-1). However, the Department and its contractors had experienced difficulty finding suppliers that were NQA-1 qualified, which required the Department to increasingly depend on a process known as "commercial grade dedication" (CGD). CGD is a procurement process performed in accordance with NQA-1, which provides reasonable assurance that a commercial item or service will perform its intended safety function and is equivalent to an item or service provided under a NQA-1 quality assurance program.

In 2009 and 2015, the Department's Office of River Protection reported significant issues with the implementation of CGD by Bechtel National, Inc., the contractor responsible for the construction and commissioning of the WTP project, and Parsons Government Services, Inc., the contractor responsible for the construction and commissioning of the Salt Waste Processing Facility (SWPF) project. Since both WTP and SWPF are nuclear facilities, the Department

required its contractors to apply NQA-1 during construction. Due to the importance of nuclear safety, we initiated this audit to determine if the implementation of CGD of commercial items and services at the Department's WTP and SWPF projects was effective.

Our review identified weaknesses in the implementation of CGD procurements at the Department's WTP and SWPF projects. Specifically, our review identified weaknesses in the dedication acceptance process performed in accordance with NQA-1 and the Department's guidance. We concluded that the issues identified with implementation of CGD at WTP and SWPF were the result of weaknesses in Department oversight to ensure the contractors followed NQA-1 standards. In particular, the Department did not ensure consistent oversight across its complex. Additionally, we identified that the contractors did not effectively implement contractor quality assurance programs. While our findings are specific to the WTP and the SWPF, insufficient oversight may be a problem at other Department sites.

The full report can be assessed at <https://www.energy.gov/sites/prod/files/2019/05/f62/DOE-OIG-19-30.pdf>.

*Mitigation of Risks from Natural Disasters at
Lawrence Berkeley National Laboratory
May 2019, DOE-OIG-19-32*

The Department's Lawrence Berkeley National Laboratory (Berkeley Laboratory) is charged with conducting unclassified research across a wide range of scientific disciplines. Located on a 202-acre site in the hills adjacent to the University of California Berkeley campus and within yards of the Hayward Fault, Berkeley Laboratory is at risk for a variety of natural disasters, including earthquakes and wildland fires. In August 2017, an arsonist caused a wildland fire in the hills near Berkeley Laboratory, and in January 2018, a magnitude 4.4 earthquake occurred near Berkeley Laboratory and the surrounding area. A natural disaster occurrence could considerably impact Berkeley Laboratory and the surrounding communities. Because of the potential impact a natural disaster could have on the site, Berkeley Laboratory must have an Emergency Management System ready to respond promptly, efficiently, and effectively to any emergency involving Department facilities, activities, or operations.

We found that Berkeley Laboratory generally implemented the planning and coordination activities that were required by Department and site policy. However, we identified issues with the hazardous material screening process, protective action drills, and building emergency plans that needed improvement. The issues that we identified occurred, in part, because Berkeley Laboratory did not maintain an accurate and timely method for tracking changes in operations and processes involving hazardous materials. Additionally, Berkeley Laboratory did not

consistently implement its policy of notifying the Emergency Management Program of specific hazardous materials when procured. Finally, there was a lack of prioritization by line management. Therefore, we recommended developing and implementing a corrective action plan to enhance Berkeley Laboratory's ability to protect workers, the public, and the environment.

The full report can be accessed at <https://www.energy.gov/sites/prod/files/2019/05/f63/DOE-OIG-19-32.pdf>.

Stockpile Stewardship

The Department and NNSA are responsible for enhancing national security through the military application of nuclear science. NNSA maintains and enhances the safety, security, and effectiveness of the Nation's nuclear weapons stockpile without nuclear testing. Nuclear weapons are continuously assessed and evaluated to detect any potential problems. NNSA's mission is supported by three crosscutting capabilities: science, technology, and engineering; people and infrastructure; and management and operations. These capabilities are spread across the NNSA nuclear security enterprise at Headquarters, the field offices, production facilities, national security laboratories, and a national security site.

While the Department indicated that substantial progress on priorities had been made, including Life Extension Programs, continued investment is required to ensure the stockpile remains safe, secure, and effective. The nuclear weapons stockpile needs updated technologies requiring significant investment in new processes, technologies, and tools to produce, qualify, and certify warheads in accordance with the stringent specifications the stockpile requires. Further, NNSA's mission success depends on facilities, infrastructure, and equipment. More than half of NNSA's facilities are over 40 years old, and the demands of the Life Extension Programs and the Stockpile Stewardship Program have increased the loads on the aging infrastructure.

The following reports illustrate challenges associated with stockpile stewardship at the Department.

*Radioactive Liquid Waste Treatment Facility Replacement Project
at Los Alamos National Laboratory
March 2019, DOE-OIG-19-20*

The primary responsibility of NNSA's Los Alamos National Laboratory is to ensure the safety, security, and reliability of the Nation's nuclear stockpile. From June 1, 2006, to October 31, 2018, Los Alamos National Security, LLC (LANS) operated Los Alamos National Laboratory as an agent for NNSA. To meet its mission, Los Alamos National Laboratory stores, treats, and disposes of low-level waste and transuranic liquid waste at the Radioactive Liquid Waste Treatment Facility. The facility has been in operation since 1963, and the facility's systems have degraded and failed on multiple occasions. Therefore, NNSA committed to constructing one facility for processing low-level waste and a second for processing transuranic liquid waste.

Because of the importance of the project, we conducted this audit to determine whether NNSA and LANS effectively managed the Radioactive Liquid Waste Treatment Facility Replacement Project.

Although NNSA provided adequate oversight of the Radioactive Liquid Waste Treatment Facility Replacement Project, LANS still experienced significant problems managing the low-level waste and transuranic liquid waste projects. Specifically, we found issues with the design process, construction quality, and subcontractor management of the low-level waste project, as well as issues with the design phase of the transuranic liquid waste project. We determined that these conditions occurred because LANS had not corrected systemic project management weaknesses. In particular, LANS lacked a consistent method of analyzing and addressing project management lessons learned. Further, LANS did not effectively incorporate lessons learned from prior capital asset projects into the planning and execution of subsequent capital asset projects.

The full report can be accessed at <https://www.energy.gov/sites/prod/files/2019/03/f60/DOE-OIG-19-20.pdf>.

*Nuclear Weapons: Additional Actions Could Help Improve
Management of Activities Involving Explosive Materials
June 2019, GAO-19-449*

NNSA is responsible for the management and security of the U.S. nuclear stockpile. NNSA has ongoing and planned efforts to modernize nearly all of the weapons in the stockpile, which require new explosive components. The production of some key explosives ceased in the early 1990s, and much of the infrastructure supporting this work is aging, making it expensive and difficult to maintain. Five NNSA contractor-operated sites conduct activities to design and produce explosive materials. There are about 100 different nuclear weapon components that contain explosive materials. Each site assumes primary responsibility for certain activities, but most activities require collaboration by multiple sites, according to NNSA officials and contractor representatives. In 2018, NNSA began adopting a centralized approach to managing these activities and coordinating them across its sites.

GAO reported that NNSA officials and contractor representatives identified several challenges related to explosives activities, such as the agency's dwindling supply of explosive materials, aging and deteriorating infrastructure, and difficulty recruiting and training qualified staff. For example, only a single container of one specialized material remains. NNSA officials and contractor representatives indicated that the agency is taking some actions to address these challenges, such as working to replenish the supply of dwindling, highly specialized materials.

GAO found that NNSA's strategic plan for explosives activities addresses some of the challenges agency officials and contractor representatives have identified, and NNSA followed several key leading practices in developing its strategic plan. However, some of the plan's elements have not been fully developed consistent with selected leading practices. For instance, the plan does not include a fully developed mission statement and some performance goals are not quantifiable. NNSA officials stated that they are aware of the strategic plan's limitations and

that they released it quickly to ensure that the explosives community could use it as soon as possible. NNSA officials said that they intend to revise the strategic plan in the next year or so. As NNSA revises its strategic plan, by including fully developed elements of an effective strategic plan, NNSA would help make the strategic plan more useful in measuring goal achievement and assessing accountability.

The full report can be accessed at <https://www.gao.gov/assets/700/699766.pdf>.

Infrastructure Modernization

The Department is responsible for a vast portfolio of infrastructure that consists of world-leading scientific and production tools, and general purpose infrastructure needed to use those tools. The Department has the fourth largest inventory of real property in the Federal Government by square footage, including 11,345 buildings totaling 112.7 million square feet with approximately \$1.9 billion in annual operating and maintenance costs. Modern and reliable infrastructure is critical to support the Department in successfully and efficiently executing its missions now and in the future. According to the Department of Defense's February 2018 *Nuclear Posture Review Report*, in order to remain safe, secure, and effective, a responsive and resilient nuclear weapons infrastructure is essential to the United States' capacity to adapt to shifting requirements. However, the average age of the Department's facilities and support structures is 37 and 41 years, respectively.

While the Department made significant investments in world class experimental facilities, much of the supporting infrastructure that enables the mission and forms the backbone of the Department enterprise is in need of greater attention. Facilities and infrastructure can have a substantial impact on laboratory research and operations in a variety of ways. For instance, poor conditions in laboratory facilities and infrastructure can lead to inadequate functionality in mission performance; negative effects on the environment, safety, and health of the site; higher maintenance costs; and problems with recruiting and retaining high-quality scientists and engineers.

The following reports show some challenges the Department faces in regards to infrastructure modernization.

*Department of Energy: Continued Actions Needed to Modernize Nuclear
Infrastructure and Address Management Challenges
February 2018, GAO-18-374T*

GAO found that NNSA faces challenges related to the affordability of its nuclear modernization programs. In April 2017, GAO found a misalignment between NNSA's modernization plans and the estimated budgetary resources needed to carry out those plans. Specifically, GAO found that NNSA's estimates of funding needed for its modernization plans sometimes exceeded the budgetary projections included in the President's planned near-term and long-term modernization budgets by billions of dollars. GAO also found that the costs of some major modernization programs—such as for nuclear weapon refurbishments—may also increase and further strain future modernization budgets. GAO recommended in April 2017 that NNSA

include an assessment of the affordability of its modernization programs in future versions of its annual plan on stockpile stewardship; however, NNSA neither agreed nor disagreed with that recommendation.

The Department also faces challenges with addressing its environmental liabilities—the total cost of its cleanup responsibilities. In February 2017, GAO found that the Department was responsible for over 80 percent (\$372 billion) of the U.S. Government’s estimated \$450 billion environmental liability. However, this estimate does not reflect all of the Department’s cleanup responsibilities. Notably, this estimate does not reflect all of the future cleanup responsibilities that the Department may face. For example, in January 2017, GAO found that the cost estimate for the Department’s proposal for separate defense and commercial nuclear waste repositories excluded the costs and time frames for site selection and site characterization, and therefore full costs are likely to be billions of dollars more than Department’s reported environmental liabilities. To effectively address cleanup, GAO has made at least 28 recommendations to the Department and other Federal agencies, which could reduce long-term costs as well as environmental risks more quickly. Of these 28 recommendations, 13 remain not implemented.

The Department has taken several important steps that demonstrate its commitment to improving contract and project management, but challenges persist. Specifically, the Department’s revised project management order, issued in May 2016, made several changes in response to recommendations GAO made in prior years, such as requiring that projects develop cost estimates and analyses of alternatives according to our best practices. However, the Department’s recent efforts do not address several areas, such as acquisition planning for major contracts and aspects of program and project management, where the Department continues to struggle. GAO has made several recommendations related to these areas, and the Department has generally agreed with and begun to take action on most of them.

Finally, NNSA faces challenges in implementing its nonproliferation programs. For example, in September 2017, GAO found that selected programs in NNSA’s Office of Defense Nuclear Nonproliferation did not measure performance against schedule and cost baselines, as recommended by program management leading practices because the program management policy for the Office of Defense Nuclear Nonproliferation did not require programs to measure performance in this way.

The full report can be accessed at <https://www.gao.gov/assets/690/689889.pdf>.

*Department of Energy’s Management of
Legacy Information Technology Infrastructure
March 2019, DOE-OIG-19-22*

The Federal Government spends close to \$90 billion annually on information technology (IT) resources. Approximately 80 percent of funds budgeted for IT are dedicated to maintaining legacy IT that is outdated or obsolete. Legacy IT resources are particularly vulnerable to malicious cyber activity and may require additional funding for hardening or support. To address concerns over aging technologies, Congress authorized up to \$500 million to fund the *Modernizing Government Technology Act* that was signed into law in 2017. The law is designed

to improve, retire, or replace existing IT; transition legacy systems to commercial cloud computing services; and support efforts to provide adequate risk-based solutions to address evolving threats to information security. In FY 2018, the Department received \$15 million under the *Modernizing Government Technology Act* to accelerate an enterprise electronic mail migration.

The Department and its contractors operate many types of IT systems and infrastructure to support its diverse missions related to nuclear security, scientific research and development, and environmental management. Prior reviews conducted by the OIG have identified weaknesses related to the existence of outdated software and hardware. We initiated this audit to determine whether the Department effectively managed the lifecycle of legacy IT systems and components. Our review focused on the Department's unclassified information systems and did not include industrial control and national security systems.

We determined that while actions to manage the lifecycle of unsupported IT systems and components had been taken at the sites reviewed, opportunities for improvement exist. For example, the Department, including contractor-managed locations, had not developed a comprehensive plan to identify and replace legacy IT. Specifically, we found that the Pacific Northwest National Laboratory, Lawrence Livermore National Laboratory, SLAC National Accelerator Laboratory, and the Hanford Site had taken actions to identify and reduce legacy systems and components. However, improvements are necessary related to the identification of legacy IT infrastructure, and development and implementation of plans to modernize IT systems and components. Unfortunately, our review of several sites did not reveal any requirements within the Department to identify and eliminate legacy IT; as such, we made a recommendation that, if fully implemented, should improve the Department's management of legacy IT.

The full report can be accessed at https://www.energy.gov/sites/prod/files/2019/04/f61/DOE-OIG-19-22_6.pdf.

Watch List Items

Annually, the OIG also prepares a Watch List to accompany the Management Challenges listing. These areas incorporate issues that, at the current time, do not meet the threshold of a management challenge; however in our view, they warrant special attention by Department officials.

Intellectual Property Theft/Foreign Talents Program

According to the Federal Bureau of Investigations, intellectual property theft involves robbing people or companies of their ideas, inventions, and creative expressions, which can include everything from trade secrets and proprietary products and parts to movies, music, and software. The Federal Bureau of Investigation's website identified this issue as a growing threat, especially, with the rise of digital technologies and Internet file sharing networks. Intellectual property theft costs U.S. businesses billions of dollars a year and robs the Nation of jobs and tax revenues. Recently, the United States imposed tariffs on imports from China and the President's justification for the tariffs included the alleged theft of American intellectual property.

Furthermore, in June 2019, the Department issued Order 486.1, "*Department of Energy Foreign Government Talent Recruitment Programs*," to ensure the continued flow of scientific and technical information, while also ensuring the protection of U.S. competitive and national security interests; and limiting unauthorized transfers of scientific and technical information. As such, the intellectual property theft/foreign talent program is a watch list item for the FY 2020.

Human Capital Management

Human Capital Management is a significant challenge that impacts the ability of Federal agencies to meet performance goals and to execute their missions efficiently. However, the lack of adequate, predictable funding and staffing could negatively affect an agency's ability to meet its mission. In fact, according to the 2016-2020 *Strategic Human Capital Plan*, over 35 percent of the Department's Federal employees will be eligible to retire by 2020, including many of its most experienced and highly skilled professionals. The plan stressed the need for the Department to engage in workforce planning and improve its outreach and recruitment programs in order to sustain a Federal workforce with the science, technology, engineering, and mathematics skills and experience required to accomplish its highly technical mission.

NNSA officials also indicated that Human Capital Management remains an area that continues to present challenges due to the demographics of the workforce combined with the expanding NNSA mission. Consequently, for the FY 2020 Management Challenges report, Human Capital Management remains a Watch List item.

Grant Management

A grant is a way the Government funds ideas and projects to provide public services and stimulate the economy. Grants support critical recovery initiatives, innovative research, and many other programs listed in the Catalog of Federal Domestic Assistance. It is one of many different forms of Federal financial assistance. During FY 2019, [USAspending.gov](https://www.usaspending.gov), the site that tracks Federal spending, reported over 7,000 active grant awards for the Department, about 1,800 of which were obligated in FY 2019. Total obligated amount for FY 2019 was almost \$2 billion.

Furthermore, in FY 2019, OIG's Office of Investigation's press releases included several cases related to grant fraud and the office continues to investigate cases related to grant management. Given the number of grants, dollar value of grant awards, and cases related to grant fraud, Grant Management is on the Watch List in the Management Challenges report for FY 2020.

FEEDBACK

The Office of Inspector General has a continuing interest in improving the usefulness of its products. We aim to make our reports as responsive as possible and ask you to consider sharing your thoughts with us.

Please send your comments, suggestions, and feedback to OIG.Reports@hq.doe.gov and include your name, contact information, and the report number. You may also mail comments to us:

Office of Inspector General (IG-12)
Department of Energy
Washington, DC 20585

If you want to discuss this report or your comments with a member of the Office of Inspector General staff, please contact our office at (202) 586-1818. For media-related inquiries, please call (202) 586-7406.