



OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

SPECIAL REPORT

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November 2018

**COMPILATION OF CHALLENGES AND
PREVIOUSLY REPORTED KEY FINDINGS
AT THE HANFORD SITE FOR FISCAL
YEARS 2012-2018**



Department of Energy
Washington, DC 20585

November 2, 2018

MEMORANDUM FOR THE SECRETARY

April Stephenson

FROM: April G. Stephenson
Acting Inspector General

INFORMATION: Special Report on “Compilation of Challenges and Previously Reported Key Findings at the Hanford Site for Fiscal Years 2012-2018”

INTRODUCTION

The Department of Energy’s Hanford Site was established during World War II to produce plutonium for the Nation’s nuclear weapons. The 586-square-mile Hanford Site is located along the Columbia River in southeastern Washington State. Beginning in the 1940s with the Manhattan Project, the Hanford Site played a pivotal role in the Nation’s defense with the construction and operations of nine nuclear reactors and five large plutonium processing complexes. Today, the Hanford Site includes numerous former nuclear material production areas, active and closed research facilities, waste storage and disposal sites, and large areas of natural habitat and buffer zones. Under the direction of the Department, the Hanford Site workforce is engaged in the cleanup of contaminated facilities, groundwater, and soils resulting from this period of national defense activities. To execute the Hanford Site’s diverse mission, the Department receives an annual appropriation of approximately \$2.3 billion and employs approximately 8,773 Federal and contractor personnel.

The Office of Environmental Management oversees the Hanford Site cleanup. The two Federal offices at Hanford whose mission is environmental cleanup include the Department’s Richland Operations Office and the Office of River Protection. The Richland Operations Office is responsible for nuclear waste and facility cleanup and overall management of the Hanford Site. This includes maintaining safe operations; providing Hanford site-wide services; groundwater pump-and-treat operations; waste site remediation in the River Corridor; repackaging of large/small container contact-handled transuranic mixed waste and remote-handled transuranic mixed waste; and supporting critical infrastructure upgrade projects for site safety and project execution for both the Richland Operations Office and the Office of River Protection.

The Office of River Protection is responsible for cleanup of Hanford Site tank waste. The Office of River Protection’s mission is to retrieve and treat Hanford’s tank waste and close the Tank Farms to protect the Columbia River. This includes the safe storage, retrieval, and treatment of

tank waste currently stored in the 200 Area Tank Farms; construction of a Waste Treatment & Immobilization Plant (WTP) to process and immobilize the tank waste, which, based on the most recent estimate in December 2016, will cost approximately \$16.8 billion; and associated operations, maintenance, engineering, and construction activities.

In order to accomplish its work scope, each office oversees separate contracts held by private companies. The land, facilities, property, projects, and work performed and overseen by the Richland Operations Office and the Office of River Protection constitute the “Hanford Site.”

Due to the complex nature of operations at the Hanford Site and the significant funding involved, as well as the trend of Office of Inspector General findings involving mismanagement, weak internal controls, and fraud committed by contractors and subcontractors, we are presenting a consolidated body of work representing a compilation of Office of Inspector General findings from fiscal years (FYs) 2012–2018. The Office of Inspector General’s objective is to highlight management challenges and key findings that were identified in its previous audits, inspections, and investigations related to the Hanford Site.

HANFORD MANAGEMENT CHALLENGES

Between FYs 2012 and 2018, the Office of Inspector General conducted 38 investigations and 24 audits and inspections at the Hanford Site. A review of the more consequential reports previously issued identified the following Hanford Site management challenges:

- Contract Oversight
 - Contractor Management
 - Subcontract Management
- Quality Assurance
- Project Management
- Safety Culture
- Fraudulent Activities
 - Time cards
 - Small Business
 - Computer Equipment
 - Purchase Cards

In addition, we reviewed all open recommendations related to audits in our scope and provided a status where applicable. If no status is provided, either all recommendations are closed or there were no recommendations or suggested actions.

SUMMARY

The Hanford Site has been plagued with mismanagement, poor internal controls, and fraudulent activities, resulting in monetary impacts totaling hundreds of millions of dollars by the various contractors involved at the site. As many of the weaknesses continue, without more aggressive oversight of contractors and subcontractors, millions of dollars will continue to be at risk for inappropriate charges and potential fraudulent activities. We are hopeful that the consolidated

summary of the previously issued significant Office of Inspector General findings from FYs 2012–2018 provided in this report will serve as evidence of systemic internal control weaknesses and fraudulent activities and ultimately result in the Department strengthening its oversight of Federal operations and contractors.

Although we recognize that the Department has implemented improvements in response to prior Office of Inspector General findings, weaknesses continue with the management of contractors and subcontractors at a level that, in our opinion, results in an unacceptable level of risk of inappropriate charges to the Government.

Below is a summary of the significant Office of Inspector General findings from FYs 2012–2018, with a link to a more detailed discussion of the findings in the Attachment to this report:

Management Challenge	Issue Date	Summary Outcome	Contractor/ Site Office	Report Page
Contract Oversight – <i>Contractor Management</i>	November 2016	\$125 million restitution for false statements and claims involving deficient nuclear quality materials, services, and testing	Bechtel ¹ AECOM/URS ²	2
Contract Oversight – <i>Contractor Management</i>	August 2018	Ineffective processes, procedures, and controls over the Workers’ Compensation Program at the Hanford Site	Penser ³	3
Contract Oversight – <i>Contractor Management</i>	August 2018	System used to manage well information did not contain all current or relevant information	CHPRC ⁴	4
Contract Oversight – <i>Contractor Management</i>	February 2017	Recommended procurement terminations had not occurred, resulting in \$1.9 million of suspension costs	Bechtel	5
Contract Oversight – <i>Contractor Management</i>	December 2012	Unreliable estimates to measure against actual cost performance	CHPRC	6
Contract Oversight – <i>Subcontract Management</i>	February 2017	Ineffective management of quality assurance in procurements	WCH ⁵	8

¹ Bechtel National, Inc. (Bechtel)

² URS Energy and Construction, Inc. (URS is now known as AECOM Energy and Construction, Inc.)

³ Penser North America, Inc. (Penser)

⁴ CH2M Hill Plateau Remediation Company, LLC (CHPRC)

⁵ Washington Closure Hanford, LLC (WCH)

Contract Oversight – <i>Subcontract Management</i>	April 2016	The Department may have inappropriately paid up to \$63.5 million in affiliate fee or profit	MSA ⁶	10
Contract Oversight – <i>Subcontract Management</i>	August 2018	MSA CFO agreed to pay \$124,440 to resolve allegations that he violated the False Claims Act and the Anti-Kickback Act	MSA	11
Quality Assurance	November 2015	Did not identify, resolve, or recover costs of nonconforming items in a timely manner	Bechtel	13
Quality Assurance	September 2013	Missing design control documentation and inability to demonstrate that equipment was appropriately manufactured	Bechtel	15
Quality Assurance	April 2012	Procured and installed WTP vessels that did not always meet quality assurance and/or contract requirements	Bechtel	16
Project Management	April 2017	Management reserve was used to reset the project’s performance measurement baseline	CHPRC	19
Project Management	November 2016	Limited/unreliable project status information	Bechtel	19
Project Management	January 2015	Unable to accurately determine inventory	WRPS ⁷	20
Project Management	March 2014	Missed cost savings of about \$6.2 million annually, the difference between the costs to operate “wet” and “dry” storage for capsules	CHPRC	21
Project Management	September 2014	Problems with ability to plan, manage and execute work, contributing to cost and schedule increases	CHPRC	23
Project Management	July 2013	Incurred an unnecessary \$1.5 million by purchasing unneeded modular facilities and almost \$600,000 in lease costs for facilities that were no longer needed	CHPRC	25

⁶ Mission Support Alliance (MSA)

⁷ Washington River Protection Solutions, LLC (WRPS)

Project Management	October 2012	Department had not included all costs associated with the proposal in existing cost estimates	ORP ⁸	26
Project Management	August 2012	Lack of established criteria increased the uncertainty of the tank farms providing waste feed to WTP	WRPS	27
Safety Culture	February 2016	Corrective action program was not fully effective in managing and resolving issues	Bechtel	29
Safety Culture	November 2016	7 of 52 workers interviewed indicated concerns with reporting, communicating, reprisal, or fear of retaliation related to potential vapor exposures	WRPS	31
Safety Culture	October 2014	Issues Pertaining to the Termination of Ms. Donna Busche, a Contractor Employee at WTP	Bechtel URS	32
Fraudulent Activities – <i>Time Card</i>	January 2017	\$5.275 million settlement for allegations of knowingly submitting false claims to the Department for overtime and premium pay	WRPS	33
Fraudulent Activities – <i>Time Card</i>	March 2013	Global resolution agreement of \$18.5 million, plus an additional \$500,000 towards accountability systems	CH2M Hill ⁹	34
Fraudulent Activities – <i>Small Business</i>	FY 2015	Grantee paid \$420,000 to resolve allegations that it did not legitimately qualify for multiple Small Business Innovation Research grants	unspecified	35
Fraudulent Activities – <i>Small Business</i>	FY 2014	Agreed to pay \$3.2 million to resolve fraud allegations in its award of small business subcontracts	WCH	35
Fraudulent Activities – <i>Fraudulently Obtained</i>	FY 2015	Former Department employee forged Government property transfer documents in order to obtain Government-owned	ORP	35

⁸ The Department of Energy’s Office of River Protection

⁹ CH2M Hill Hanford Group, Inc. and its parent company, CH2M Hill Companies, Ltd.

<i>Computers</i>		computers and equipment		
Fraudulent Activities – <i>Fraudulently Obtained Computers</i>	FY 2015	Individual created 14 fictitious not-for-profit entities and then submitted fraudulent applications for computers and computer-related equipment to the General Services Administration's Computers for Learning program	n/a	35
Fraudulent Activities – <i>Purchase Cards</i>	FY 2012	Multiple investigations involving the improper use of Government purchase cards by contractor employees	unspecified	38
Fraudulent Activities – <i>Purchase Cards</i>	FY 2013	Vendors offered and provided kickbacks to at least 14 Hanford Site Material Coordinators	unspecified	38

Attachment

cc: Deputy Secretary
 Chief of Staff
 Under Secretary for Science
 Assistant Secretary for Environmental Management

Contract Oversight

The Richland Operations Office uses contractors to complete environmental cleanup, provide essential site services and infrastructure management, and provide occupational medical services for workers at the Hanford Site. Prime contractors during FYs 2012 to 2018 included CH2M Hill Plateau Remediation Company, LLC (CHPRC), HPM Corporation, Mission Support Alliance (MSA), and Washington Closure Hanford, LLC (WCH). The Office of River Protection uses contractors to safeguard the nuclear waste stored in Hanford's 177 underground tanks and to manage the waste safely and responsibly until it can be treated in the Waste Treatment and Immobilization Plant (WTP) for final disposition. Prime contractors during FYs 2012 to 2018 included Bechtel National, Inc. (Bechtel), Wastren Advantage, Inc., and Washington River Protection Solutions, LLC (WRPS).

Oversight of the Hanford contracts by the Department 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 that 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. Over the last 7 years, the Department has experienced weaknesses in contract oversight. These contract oversight issues have continued to occur.

Contractor Management

Our collective body of audit, inspection, and investigative work during FYs 2012–2018 identified numerous issues related to contractor management. Specifically, we found issues/weaknesses with contractor quality assurance programs and requirements, including the contractors' ability to manage the quality assurance of procurements. In addition, we found issues with the management of suspended procurements and issues meeting contract and Federal Acquisition Regulation (FAR) requirements for submitting timely and/or well-supported contract change proposals. We also found that the Department did not have effective processes, procedures, and controls over the Workers' Compensation Program at the Hanford Site. Finally, we found that Hanford Environmental Information System (HEIS), used to manage well information such as inspections and decommissioning, did not contain all current or relevant information. As mentioned later in the quality assurance section, we identified issues with the procurement of parts and materials for the WTP, which were caused by weaknesses in Bechtel's quality assurance program.

In February 2017, GAO reported that the Department did not have the capacity to resolve contract and project management problems, nor did the Department demonstrate progress toward implementing measures to resolve high-risk areas. The GAO acknowledged that, to the Department's credit, the Department continued to meet the leadership commitment criteria and partially meet the criteria for having a corrective action plan. The GAO further acknowledged that the Department had improved its monitoring of the effectiveness of corrective measures.

Given the number of major contracts handled by the Department at the Hanford Site, which totaled more than \$30 billion as of 2018, and the number of issues identified during FYs 2012–2018, the area of contract management is a significant management challenge.

The following investigation and audit reports highlight the need for the Department's continued focus on contract management at the Hanford Site.

***United States Settles Lawsuit Against Energy Department Contractors for Knowingly
Mischarging Costs on Contract at Nuclear Waste Treatment Plant
November 23, 2016, Department of Justice Press Release***

The Department of Justice announced that Bechtel, Bechtel Corp., URS Corp. (predecessor in interest to AECOM Global II, LLC), and URS Energy and Construction, Inc. (URS is now known as AECOM Energy and Construction, Inc.) agreed to pay \$125 million to resolve allegations under the False Claims Act. The companies made false statements and claims by charging the Department of Energy for deficient nuclear quality materials, services, and testing that was provided to the WTP at the Hanford Site. The settlement also resolved allegations that Bechtel and Bechtel Corp. improperly used Federal contract funds to pay for a comprehensive, multi-year lobbying campaign of Congress and other Federal officials for continued funding at the WTP.

Between 2002 and the present, the Department of Energy has paid billions of dollars to the defendants to design and build the WTP, which will be used to treat dangerous radioactive wastes that are currently stored at the Department's Hanford Site. The contract required materials, testing, and services to meet certain nuclear quality standards. The United States alleged that the defendants violated the False Claims Act by charging the Government the cost of complying with these standards when they failed to do so. In particular, the United States alleged that the defendants improperly billed the Government for materials and services from vendors that did not meet quality control requirements, for piping and waste vessels that did not meet quality standards, and for testing from vendors who did not have compliant quality programs. The United States also alleged that Bechtel and Bechtel Corp. improperly claimed and received Government funding for lobbying activities in violation of the Byrd Amendment, and applicable contractual and regulatory requirements, which prohibit the use of Federal funds for lobbying activities. The claims asserted against the defendants were allegations only, and there was no determination of liability.

The full press release is available at <https://energy.gov/sites/prod/files/2016/11/f34/DepartmentofJustice.pdf>.

Management of the Workers' Compensation Program at the Hanford Site
August 2018, DOE-OIG-18-44

The Department of Energy uses operating contractors at the Hanford Site to cleanup hazardous and radioactive contamination left over from nuclear weapons production activities. The Department is self-insured and is responsible for paying all costs associated with Hanford Site Workers' Compensation claims for work related injuries and illnesses for contractors that are covered by the Memorandum of Understanding between the Department and Washington State's Department of Labor and Industries (L&I). The Department's Richland Operations Office has a contract with Penser North America, Inc. (Penser) to act on the Department's behalf as a third-party administrator to process all claims for employees of Hanford Site operating contractors designated in a Memorandum of Understanding. On behalf of the Department, Penser makes the initial claim determination and makes a recommendation to allow or deny claims to L&I, who has the authority on allowing or denying Workers' Compensations claims.

In a letter dated March 8, 2017, U.S. Senators Maria Cantwell and Patty Murray requested that the Office of Inspector General (OIG) perform a review of Workers' Compensation issues at the Hanford Site. This request identified several areas of inquiry, including concerns about possible intimidation of workers who file Workers' Compensation claims, Departmental oversight of the Penser contract, qualifications of the medical providers for chemical exposure claims, whether Penser is providing all relevant documentation, and the number of denied claims with chemical exposure as the cause. Our objective was to assess the effectiveness of the Department's processes, procedures, and controls related to the Workers' Compensation Program at the Hanford Site. We determined that the Department did not have effective processes, procedures, and controls over the program, including:

- The Department did not ensure that Penser sent complete documentation packages to L&I for claims.
- The Department had not been billed, and therefore did not pay, what the State of Washington L&I determined to be approximately \$21.8 million over a 16-year period from 2000 through 2016 for Workers' Compensation pension benefits costs.
- We questioned nearly \$38,000 of charges for FY 2015 and 2016 for "indemnity claims" because the documentation appeared to support that Penser should have classified claims as "medical only claims," rather than "indemnity claims." The Department performed a detailed review of these claims and agreed that \$8,485 were not supported and that improvements to internal controls were needed.
- We concluded that the Department's controls over Penser's letter of credit payments and bank reconciliations were inadequate. For example, we identified that Penser received a \$175,000 recovery check in April 2017 but did not completely return the funds to the Department until March 8, 2018.

We observed problems with communication relating to Workers' Compensation claims between the union, Penser, the operating contractors, and Department officials. For injuries such as cuts, abrasions, etc., the Workers' Compensation process appears to work relatively well. For

example, we found that of 628 total claims from October 1, 2014, to May 4, 2017, only 70 claims were denied (11.1 percent). However, for more complicated claims, communication issues between the many parties involved are exacerbated by a fragmented Hanford Site Workers' Compensation process that many workers find frustrating. One group of claims that are often complicated involve reported exposure to chemical vapors. Department officials were aware of real problems in communication and trust with key stakeholders but did not take sufficient action to address these problems.

We attributed the problems identified in this report to inadequate management by Departmental personnel. Specifically, the Department did not provide effective oversight of Penser's Workers' Compensation claim determinations and recommendations to L&I regarding the allowance or denial of claims. Further, the Department did not perform sufficient oversight of the financial and contractual controls of the Penser contract.

During our review, we assessed concerns over potential harassment and intimidation of workers for filing Workers' Compensation claims. However, we did not observe direct evidence to confirm or refute workers' concerns. Our work in this sensitive area indicated that due diligence was exercised, and we have seen no evidence that specific workers were singled out and treated unfairly. At the Hanford Site, we observed that conflict and worker frustration often occurs when complex injury/illness claims are filed, such as those associated with chemical vapors. However, it is important to note that we did not observe evidence that Penser or the Department were treating claims associated with chemical vapors unfairly.

As of September 24, 2018, all three report recommendations remained open.

The full report is available at <https://www.energy.gov/sites/prod/files/2018/08/f54/DOE-OIG-18-44.pdf>.

Followup on Well Decommissioning at the Hanford Site
August 2018, DOE-OIG-18-45

The goal of the Richland Operations Office Soil and Groundwater Remediation Project is to eliminate the risk of contaminated groundwater reaching the Columbia River using a network of wells to extract contaminants and monitor areas of the Hanford Site. Remediation support activities may include groundwater well installation, well decommissioning, environmental sampling, and well maintenance. CHPRC is the contractor responsible for soil and groundwater remediation activities at the Hanford Site.

In January 2005, the Office of Inspector General issued an audit report on *Well Decommissioning Activities at the Hanford Site* (DOE/IG-0670). The audit determined that Richland Operations Office lacked a comprehensive Well Decommissioning Plan. Specifically, the Plan lacked a complete inventory that described the type, age, condition, and location of all wells at the site. Further, the audit found that the well database contained information that was not easily accessed, incorrect, and incomplete. In response to the previous report, Richland Operations Office developed a comprehensive Well Decommissioning Plan and decommissioned

a number of wells using *American Recovery and Reinvestment Act of 2009* (Recovery Act) funds. Richland Operations Office also made significant changes to the well database, the Hanford Environmental Information System (HEIS) and the associated tables within HEIS. Finally, Richland Operations Office developed the Well Attributes Materialized View to assist in managing well information by providing a visual presentation of the data extracted from HEIS. The Well Attributes Materialized View displays current attributes of more than 12,000 wells, such as whether a well has been verified as decommissioned or in use, and when a well was last inspected or maintained. We conducted this followup audit to determine whether the Department effectively managed the well decommissioning program at the Hanford Site.

Our review determined that the Department effectively decommissioned wells at the Hanford Site. However, we found that HEIS, used to manage well information, such as inspections and decommissioning, did not contain all current or relevant information; although, for the 15 wells we reviewed, we found hard-copy documents supporting that well activities had been performed, as appropriate. Additionally, the Well Decommissioning Plan had not been updated since 2008. Specifically, CHPRC did not:

1. Enter well inspection dates in the HEIS database, so the information shown in the Well Attributes Materialized View was not always correct and could not be relied upon; and
2. Update the Well Decommissioning Plan.

As a result, the Well Attributes Materialized View did not accurately reflect the current status of well inspections. Documenting inspection results into HEIS ensures that the Department has the most current information available to promptly identify any wells that are in disrepair and prevent potential pathways for contaminants to reach the groundwater. To its credit, the Department maintained hard-copy inspection and well decommissioning records. However, not documenting inspection results into HEIS prevents the Department from accurately tracking the status of all wells using the Well Attributes Materialized View. Documenting inspection results would provide the Department with a visual snapshot of the current status of more than 12,000 wells at Hanford and ensure adequate oversight of timely inspections and decommissioning.

The full report is available at <https://www.energy.gov/sites/prod/files/2018/08/f55/DOE-OIG-18-45.pdf>.

**Management of Suspended Procurements at the Waste
Treatment and Immobilization Plant Project
February 2017, OIG-SR-17-04**

One of the Department's largest cleanup challenges involves 56 million gallons of hazardous and highly radioactive waste stored in underground tanks at the Hanford Site. The Department's Office of River Protection manages the cleanup project. As part of this effort, the Department contracted with Bechtel to complete the design and construction of the WTP to treat and immobilize the majority of the waste in preparation for permanent disposal. WTP includes four main facilities: Pretreatment, High-Level Waste Vitrification, Low-Activity Waste Vitrification,

and the Analytical Laboratory. In November 2011, the Department notified Bechtel that significant reductions in project funding would occur. As a result, Bechtel began to suspend procurements for parts and materials for the Pretreatment Facility. Although Bechtel suspended activity on a total of 56 procurements, it continued to incur costs for the storage of records, materials, and uncompleted parts and equipment. In late 2014, after the Department decided that certain items would not be used in planned testing or in the actual plant, Bechtel performed an analysis of the 56 procurements to determine ways to reduce costs. Bechtel determined that it cost nearly \$5.3 million a year to maintain the procurements in suspension. Based on its analysis and because of the significant cost, Bechtel recommended terminating 28 procurements, completing 6, and retaining 22 in suspension. In response to Bechtel's analysis, on April 28, 2015, the Office of Inspector General received a congressional request to review "questionable contract practices" related to these procurements.

The Office of Inspector General found that the Department and Bechtel had not fully resolved issues with suspended procurements for WTP's Pretreatment Facility. Specifically, neither the Department nor Bechtel had fully acted to terminate all of the 28 procurements recommended for termination as of 2017. Although Bechtel initially suspended the procurements due to funding constraints, subsequent events resulted in major changes to the project, circumstances that increased the expected duration of the suspensions as well as affected the need for certain items. According to Bechtel officials, substantial actions were taken to manage the suspended procurements, including reviewing and negotiating suspension costs on a regular basis, ensuring inventory control and appropriate storage conditions, performing surveillances as necessary, and meeting all requirements that are applicable to the management of those procurements. However, had the Department and Bechtel taken the actions recommended in Bechtel's analysis to terminate certain suspended procurements, they could have avoided portions of the costs incurred during the suspension period. For example, had the Department and Bechtel acted on the January 2015 recommendations to terminate the five most costly procurements, our analysis revealed that they could have avoided \$1.9 million in suspension costs incurred since that date.

The delays in resolving issues with the suspended procurements resulted primarily from an impasse between the Department and Bechtel over roles and responsibilities, an issue that delayed action being taken on Bechtel's recommendations for terminating the five most costly suspended procurements.

The full report is available at <https://www.energy.gov/sites/prod/files/2017/02/f34/OIG-SR-17-04.pdf>.

The Management of the Plateau Remediation Contract
December 2012, OAS-L-13-03

The Department's Richland Operations Office awarded a contract, effective October 1, 2008, to CHPRC to remediate select portions of the Hanford Site's Central Plateau. The contract, which could be extended for a maximum of 10 years, currently has a contract cost of \$5.6 billion for authorized work. The Plateau Remediation contract work scope includes remediation of the Plutonium Finishing Plant and a number of other environmentally degraded areas related to

nuclear weapons production. The Plutonium Finishing Plant became a highly contaminated nuclear facility while processing plutonium for the Nation's nuclear arsenal for approximately 40 years.

The Department administers its procurements in accordance with the FAR. As part of the contract change proposal and approval process, the Department reviews, negotiates, and approves changes in the work scope from contractor change proposals. The FAR requires that change proposals contain sufficient cost information to allow independent audits to determine if the change is ready for negotiation and incorporation into the contract. Within 180 days of the contractor starting work, the Department is to identify and resolve differences between the work scope specified in the original Request for Proposal and the work scope existing at the time the contract becomes effective. Successful completion of this process allows for the formal approval of the Performance Measurement Baseline, a project management tool that permits the Department to compare actual contractor cost and schedule performance against estimates to the complete contract work scope.

We received an allegation that CHPRC had not met a number of contract terms and conditions and that the Department had not corrected performance issues. The complainant noted that CHPRC had not provided change proposals and performance baselines that met contract and FAR requirements.

Our review largely substantiated the allegations. We found that CHPRC had not always met contract and FAR requirements for submitting timely and/or well-supported contract change proposals. Additionally, the Department had not always formally notified the contractor of needed changes to the work scope in a timely manner, which contributed to delays in finalizing performance baselines. As such, the Department was not always able to effectively measure the contractor's cost performance because it did not have reliable estimates to measure against actual cost performance.

Within 180 days of the contractor starting work, or October 1, 2008, through March 29, 2009, the Department was supposed to resolve differences between the work scope in the Request for Proposal that formed the basis for the original contract cost and the work scope identified at the start of the contract. However, we identified instances where the contractor and the Department were not timely in addressing changes that totaled approximately \$1.1 billion.

The Department was unable to approve substantial contract changes proposed by CHPRC because the contractor's change proposals did not contain appropriate documentation and support. The FAR requires that contractors submit detailed data supporting significant contract cost increases to allow independent auditors to determine whether the proposed cost increases are acceptable for negotiation, and ultimately, for incorporation into the contract.

Between June and December 2010, CHPRC submitted cost proposals that, upon examination, were found to be unsupported. Specifically, independent auditors (Defense Contract Audit Agency and KPMG, LLP) found significant deficiencies during reviews of CHPRC's contract change proposals. Problems with the proposals contributed to extensive delays in completing required audits.

According to CHPRC officials, the company was not able to provide adequate supporting documentation to support cost estimates because of uncertainty about documentation requirements and the cost of work in out-years of the contract. For example, CHPRC cost estimators told us that they did not know the extent of documentation required to be submitted with proposals to be fully compliant with FAR requirements. In addition, CHPRC indicated that it was difficult to support some estimates because the scope of work to be performed was years away from starting and potential subcontractors were reluctant to provide quotations.

CHPRC's inability to provide timely and supported contract change proposals made it difficult for the Department to measure cost performance. The Department requires that contracts align with cost, scope, and schedule performance estimates contained in the Performance Measurement Baseline. The Performance Measurement Baseline estimates, in turn, are used in the contractor's Earned Value Management System (EVMS) to measure actual work scope progress and cost against Performance Measurement Baseline estimates. The Department reviewed and approved the contractor's EVMS in September 2009. The Department uses EVMS data to measure, among other things, the contractor's cost performance—a comparison of the estimated cost to the actual cost. Although CHPRC could not provide support for \$1.1 billion in contract change proposals, the Department provisionally approved incorporating the change proposal estimates in the Performance Measurement Baseline in order to continue remediation work under the contract. Because the contract and Performance Measurement Baseline were not in alignment and all change proposals were not verified through audit, management could not be assured that the EVMS was producing valid data for assessing contractor cost performance.

The full report is available at <https://www.energy.gov/sites/prod/files/OAS-L-13-03.pdf>.

Subcontract Management

The Department and its contractors had not always provided adequate oversight of subcontracts. Many of the contractual provisions that are included in contracts are required to be flowed down into all subcontracts. However, we found issues/weaknesses with how a contractor flowed down quality assurance requirements to its subcontracts. In addition, we found that there were a number of problems related to the management and oversight of the information technology contracts at the Hanford Site. Specifically, we identified weaknesses related to contract awards and work scope, time and material task orders, and affiliate fee or profit.

Given the importance of the Department's subcontracts and the significance of these subcontracting issues, this area has been identified as a management challenge.

Quality Assurance for River Corridor Closure Contract Procurements **February 2017, OAI-M-17-05**

During the Hanford Site's plutonium production mission, the Department operated nine reactors and a large laboratory complex along the Columbia River. In 2005, the Department's Richland Operations Office awarded WCH a \$2.9 billion contract to remediate nearly 220 square miles of the Hanford Site.

To ensure compliance with contract requirements and safe performance of work, the Richland Operations Office included in WCH's contract Department Order 414.1D, *Quality Assurance*, which requires the use of an appropriate consensus quality assurance standard consistent with regulatory requirements. WCH adopted the *American Society of Mechanical Engineers - Quality Assurance Requirements for Nuclear Facility Applications* (NQA-1) as its consensus standard. Specific to procuring material and services, WCH was required to flow down quality assurance requirements specific to the scope of work in its subcontracts and to evaluate the subcontractor's capability of implementing the applied requirements. If the scope of work could affect nuclear safety or mission, WCH was required to flow down the appropriate requirements of NQA-1 in its subcontracts.

We found instances where WCH did not effectively manage quality assurance in its procurements. Specifically, we identified weaknesses in how WCH flowed down quality assurance requirements in its subcontracts and in the subsequent evaluations used to determine whether subcontractors had the capability to implement an NQA-1 quality assurance program. We also found that WCH did not ensure that staff augmentation contracts contained requirements to perform work under WCH's quality assurance program.

We attributed the problems with flow down and supplier evaluations to weaknesses in WCH's implementation of its NQA-1 quality assurance program. Additionally, the Richland Operations Office's oversight activities did not identify some of WCH's weaknesses in implementing its quality assurance program. In particular, WCH did not effectively use the graded approach when implementing its quality assurance program. We identified that WCH used pro-forma documents that allowed the selection of individual paragraphs of applicable NQA-1 requirements but not the entire requirement. WCH should have flowed down applicable NQA-1 requirements in their entirety, and the subcontractor should have used a graded approach for implementing those requirements to comply with the terms of the subcontract. WCH further reduced requirements when it did not fully implement its quality assurance program for supplier evaluations. Its procedure for supplier evaluations only required a desktop review and did not require the supplier to demonstrate that it could implement the requirements of its subcontract. The weaknesses in staff augmentation subcontracts were due to WCH's buyers not using or modifying pro-forma documentation when developing subcontracts. The Richland Operations Office did not execute effective oversight to detect WCH's weaknesses in implementing its quality assurance program. Specifically, the Richland Operations Office did not conduct quality assurance audits to ensure that WCH effectively implemented its quality assurance program, as required by Department Order 414.1D.

The weaknesses identified in WCH's quality assurance program can increase the risk that contractual requirements are not met and ultimately expose the Department to increased financial risk. Not imposing applicable NQA-1 requirements can result in conditions that require rework. Not identifying the appropriate quality assurance requirement can affect cost and schedule, as well as possibly require the submission of a request for equitable adjustment that includes the omitted requirements. On the other hand, imposing NQA-1 requirements for items and services

not important to safety or mission can result in the unnecessary expenditure of funds. In addition, inadequate supplier evaluations may increase the risk of awarding contracts to subcontractors that cannot perform to contract requirements.

As of April 30, 2018, two of the three report recommendations remained open.

The full report is available at https://energy.gov/sites/prod/files/2017/02/f34/OAI-M-17-05_0.pdf.

Management and Oversight of Information Technology
Contracts at the Department of Energy's Hanford Site
April 2016, DOE-OIG-16-10

To help remediate the environmental risks at the Hanford Site, the Richland Operations Office and the Office of River Protection oversee the cleanup work completed by its prime contractors. The Richland Operations Office designed Hanford's Mission Support Contract to provide integrated infrastructure services to the prime contractors performing the cleanup mission. A portion of the contract's scope included information technology (IT) support services related to application hosting services, support for hardware and software, network management, and desktop/user services. In 2009, the Richland Operations Office awarded the \$3 billion Mission Support Contract to MSA, a joint venture that included Lockheed Martin Corporation (Lockheed Martin) as the principal partner. MSA noncompetitively awarded a subcontract for IT support services to its affiliate, Lockheed Martin Services, Inc. (LMSI), valued at an estimated \$232 million over approximately 5 years starting in January 2010.

The Office of Inspector General received a complaint expressing concerns with the Department's oversight of IT functions at the Hanford Site. The complaint alleged, among other things, that MSA's request to subcontract to LMSI had not been formally approved and that LMSI had refused to provide a breakdown of costs. The complainant further alleged that LMSI was likely receiving unallowable affiliate profit. Shortly after the audit began, Richland Operations Office officials stated that they had similar concerns regarding unallowable fee or profit and had made attempts to resolve the issue. Our review largely substantiated that there were a number of problems related to the management and oversight of the IT contracts at the Hanford Site. We identified that several MSA executives also held senior executive positions within Lockheed Martin and, as such, had inappropriately taken actions on excluded activities that resulted in the appearance of a conflict of interest. We identified weaknesses related to contract awards and work scope, time and material task orders, and affiliate fee or profit. In particular, we found that:

- Contrary to the defined scope of work in the Mission Support Contract, MSA entered into a separate subcontract with LMSI to provide services to CHPRC. Similarly, WRPS entered into two separate subcontracts to obtain services directly from LMSI. Ultimately, MSA's actions in this case adversely affected the Department's ability to oversee services included under these subcontracts, activities that cost the Government more than \$114 million.

- Time and materials task orders significantly exceeded the amount proposed in the support contract with LMSI. When requesting consent from the Richland Operations Office on the LMSI subcontract, MSA indicated that time and materials task orders would only cover services not expected to be performed regularly, if at all, and estimated that such task orders would account for less than 12 percent of the total work for FY 2011 and beyond. However, we found that the actual value of time and materials task orders exceeded \$120 million and accounted for nearly 50 percent of the cost of work performed as of October 2014.
- The Department may have paid unnecessary fee or profit when acquiring IT support services. Specifically, we identified potential unallowable profit of more than \$63.5 million. Even though FAR required that all noncommercial goods and services sold or transferred between affiliates were not subject to additional fee or profit, we identified that profit appeared to have been included in rates charged by LMSI. Federal officials also told us that paying LMSI fee or profit for such work resulted in payments that amounted to total markups on LMSI's subcontracts in excess of its costs ranging from 1 to almost 7,000 percent.

The identified weaknesses occurred, at least in part, because MSA had not fully executed the Mission Support contract in accordance with its terms. Richland Operations Office officials told us that excessive costs occurred because MSA ignored Federal direction that LMSI services should be treated as not commercial in nature and, as such, were to be provided at cost. However, the Richland Operations Office had not conducted all contract management activities required to ensure that costs incurred were appropriate and transparent to the Department. In addition, the Richland Operations Office had not promptly acted to compel involved contractors to comply with requirements. We also observed that Richland Operations Office and MSA officials had not ensured that incurred cost audits were conducted in accordance with Federal requirements, a key component of an effective monitoring and oversight program. In light of the issues identified, the Department may have awarded a contract that was not in the best interest of the Government. Specifically, the Department may have inappropriately paid up to \$63.5 million in affiliate fee or profit. In addition, we questioned \$120 million in time and materials costs pending resolution through incurred cost audits.

As of April 30, 2018, one of the recommendations remained open. The open recommendation was to resolve the questioned costs and issues related to affiliate profit described in this report and ensure that appropriate incurred cost audits are performed in an expeditious manner.

The full press release is available at <https://energy.gov/sites/prod/files/2016/04/f30/DOE-OIG-16-10.pdf>.

Chief Financial Officer of Mission Support Alliance Agrees to Pay \$124,440 for Allegedly Accepting Kickbacks from Lockheed Martin
August 6, 2018, Department of Justice Press Release

United States Attorney for the Eastern District of Washington announced that the Chief Financial

Officer (CFO) for the Department's prime contractor, MSA, has agreed to pay \$124,440 to resolve allegations that he violated the False Claims Act and the Anti-Kickback Act when he took at least \$40,000 in illegal kickbacks paid to him by Lockheed Martin.

In August 2009, MSA began performance under a multi-billion dollar services contract with the Department to provide services in support of the environmental cleanup of the Department's Hanford Site. MSA was partly owned by Lockheed Martin and entered into a subcontract worth hundreds of millions of dollars with a subsidiary of Lockheed Martin for the performance of IT services at the Hanford Site. By operation of the prime contract and subcontract, the United States, through the Department, paid 100 percent of the IT services provided by Lockheed Martin at the Hanford Site.

The United States alleged that the CFO, while he was an employee of Lockheed Martin on loan to MSA as MSA's CFO, received at least \$41,480 in illegal kickback payments from Lockheed Martin to improperly obtain or reward favorable treatment for Lockheed Martin in connection with the subcontract and/or prime contract. The United States' allegations included that the CFO assisted in drafting and submitting false statements to the Department regarding the labor rates charged by Lockheed Martin as well as Lockheed Martin's anticipated profit in providing IT services at the Hanford Site. The United States further alleged that the CFO was involved with the resulting submission of false and inflated claims to the Department between March 1, 2010, and February 21, 2012, when he received the \$41,480 illegal kickback payment from Lockheed Martin that rewarded him for the impermissible profit Lockheed Martin reaped as a result of the alleged fraud.

The full press release is available at <https://www.justice.gov/usao-edwa/pr/chief-financial-officer-mission-support-alliance-agrees-pay-124440-allegedly-accepting>.

Quality Assurance

As previously mentioned in the contractor and subcontractor management section, we identified quality assurance issues in audits and investigations. For example, Bechtel, among others, agreed to pay \$125 million to resolve allegations under the False Claims Act that it made false statements and claims to the Department by charging the Department for deficient nuclear quality materials, services, and testing that was provided at the WTP. The defendants improperly billed the Government for materials and services from vendors that did not meet quality control requirements, for piping and waste vessels that did not meet quality standards, and for testing from vendors who did not have compliant quality programs. In addition, we found instances where WCH did not effectively manage quality assurance in its procurements.

In this section, one audit identified significant shortcomings in the Department's process for managing the design and fabrication changes of waste processing equipment procured for the WTP. We attributed this to weaknesses in the Department's oversight of Bechtel's quality assurance program and to Bechtel not effectively implementing its own quality assurance procedures. In another audit, we found that the Department had procured and installed vessels in WTP that did not always meet quality assurance and/or contract requirements. For the vessels that we reviewed, we identified multiple instances where quality assurance records were either

missing or were not traceable to the specific area or part of the vessel. Finally, another audit found that the Department and its contractor had not always effectively executed procurements and material management activities at the Office of River Protection. These problems were caused by weaknesses in Bechtel's quality assurance program.

In May 2015, GAO recommended that the Department (1) consider whether to limit construction on WTP until risk mitigation strategies are developed to address known technical challenges, and (2) determine the extent to which quality problems exist for the facilities' systems that have not been reviewed to determine if additional vulnerabilities exist. However, as of September 2016, the Department had not yet implemented GAO's recommendations.

In April 2018, GAO reported that the Office of River Protection had not ensured that all WTP quality assurance problems had been identified and that some previously identified problems were recurring. For example, a 2016 Department report found quality assurance problems, such as engineering errors and construction deficiencies, that neither the Office of River Protection nor the contractor had identified when the work was conducted. In addition, Department audits found that previously identified quality assurance problems had recurred in key areas, such as the procurement of items that do not meet requirements or perform as specified. According to Office of River Protection Quality Assurance experts, such recurring problems may lead to significant rework at WTP facilities in the future if work is not stopped and the issues are not addressed.

Given that WTP is the Department's largest project and the number of quality assurance issues identified over the years, the area of quality assurance is a significant management challenge. The following reports highlight the need for the Department's continued focus on quality assurance at the Hanford Site.

**Procurement of Parts and Materials for the Waste Treatment
and Immobilization Plant at the Hanford Site**
November 2015, DOE-OIG-16-03

One of the Department's largest cleanup challenges involves 56 million gallons of hazardous and highly radioactive waste stored in underground tanks at the Hanford Site. The Department's Office of River Protection manages the cleanup project. As part of this effort, Bechtel was contracted by the Department to complete the design and construction of WTP to treat and immobilize the majority of the waste in preparation for permanent disposal.

To support construction of the WTP, Bechtel had procured approximately \$4 billion in parts and materials through the end of FY 2014, and instituted steps to ensure that procured parts and materials met specifications and requirements. To help ensure that parts were satisfactory, Bechtel developed several controls to include verification of vendor design submissions, review of the manufacturing or fabrication process, and receipt inspection and testing. Bechtel also developed procedures to identify and resolve the nonconforming items and recover the costs from vendors.

Despite the controls Bechtel instituted, the Department and its contractor had not always effectively executed procurements and material management activities at the Office of River Protection. Specifically, Bechtel did not always:

- Identify nonconforming items resulting from vendor errors in a timely manner. In 44 percent of the 1,365 nonconformances reviewed, Bechtel did not identify the issue until at least 2 years after the items arrived on site. In 25 cases, discovery of nonconformances were not made until 9 or more years after delivery. For example, in September 2013, Bechtel employees identified a black cell pipe spool with a bend that was 90 degrees off from specifications. The pipe spool had been delivered to the Hanford Site in July 2004.
- Resolve issues with nonconforming items in a timely manner. In 22 percent of the cases we reviewed, the issue was not resolved until a year or more after the nonconformance was identified. For example, Bechtel identified one nonconformance case in June 2012, but it sat for more than 2 years waiting to be resolved. Meanwhile, the vendor that provided the material ceased operations in April 2013.
- Recover the costs for resolving nonconformances when the problems were the result of vendor errors. In many cases, Bechtel either canceled efforts to recover the costs or recovered only a portion of the costs incurred to resolve the nonconformance, often due to the length of time that had transpired. For example, Bechtel recovered only \$29,100 of \$138,822 in direct costs incurred for rework performed on High-Level Waste duct support welds.

These problems were caused by weaknesses in Bechtel's quality assurance program. In particular, although Bechtel had procedures in place to prevent or identify nonconforming items, they were not always performed effectively. Additionally, Bechtel's procedures for resolving nonconforming parts and materials did not address timely resolution of these issues. Further, Bechtel's process to recover costs from suppliers had several weaknesses that limited the amount of funds the contractor could recover from vendors for nonconforming parts and materials. Contributing to these weaknesses were Bechtel's failure to effectively implement corrective actions, a lack of timeliness for resolving nonconformances, and inadequate Federal oversight of Bechtel's cost recovery processes for nonconforming items. In the absence of improved processes and procedures for identifying and resolving nonconformances in procured items and materials, the Department will continue to incur unnecessary costs for the construction of the WTP.

The full report is available at <https://energy.gov/sites/prod/files/2015/11/f27/DOE-OIG-16-03.pdf>.

**Department of Energy Quality Assurance: Design Control for the
Waste Treatment and Immobilization Plant at the Hanford Site
September 2013, DOE/IG-0894**

The Department of Energy is constructing the WTP to vitrify approximately 56 million gallons of radioactive and chemically hazardous waste stored at the Hanford Site. To ensure the vitrification process is safe for workers, the public, and the environment, the Department required Bechtel, the contractor for the WTP, to develop and follow a quality assurance program based on the NQA-1 Standard.

Proper design control information for an NQA-1 compliant facility includes the original design, design changes, and approved design deviations. Design control must be robust to preserve alignment between WTP construction and the “Authorization Basis,” the Department’s process for ensuring the safe operations of the facility once construction is completed. The Authorization Basis is the aggregate of all safety-related elements of the project, including hazard assessments and procedures to mitigate identified safety hazards. A well-developed and properly functioning quality assurance process is critical to ensuring that workers and the public are adequately protected from nuclear and other hazards when facility operations begin.

The Office of Inspector General received an allegation that Bechtel was missing design control documentation for the WTP and thus could not demonstrate that equipment was appropriately manufactured. We substantiated the allegation. Our review revealed significant shortcomings in the Department’s process for managing the design and fabrication changes of waste processing equipment procured for the WTP. Specifically, the Department had not ensured that Bechtel:

- Subjected design changes requested by suppliers to the required review and approval by Bechtel’s Environmental & Nuclear Safety Group (Nuclear Safety), the organization responsible for ensuring that design changes do not impact facility safety. In September 2012, we brought several instances in which design changes requested by suppliers had not received required safety reviews to the attention of the Department and Bechtel. Bechtel confirmed the issue and performed an “extent of condition” review of certain design changes to determine the scope of the problem. In its review of a sample of 235 of 4,028 supplier design documents spanning a 3-year period, Bechtel discovered that more than a third of the changes made to supplier design documents had not received the required Nuclear Safety review and approval, and, that the problems were systemic.
- Properly verified that deviations from design requirements that could affect nuclear safety were implemented. Bechtel could not demonstrate that it had verified suppliers’ actions to address deviations from design. For example, we identified that Bechtel approved action to repair a Low-Activity Waste melter lid that did not meet design specifications. Neither Bechtel nor the Department could confirm that the design changes were actually completed and met safety-related design requirements. In short, quality reviewers were unable to determine, with certainty, whether the Low-Activity Waste melter lid would successfully perform its safety function to confine harmful byproducts (nitrogen oxide gases) produced during the waste vitrification process.

The Department’s oversight of Bechtel’s quality assurance program lacked focus. The depth and breadth of the Department’s oversight was not sufficient to identify weaknesses in the implementation or adequacy of Bechtel’s procedures. For example, we found that the Department’s review activity was not sufficiently detailed to identify that Bechtel was not

always following its procedures for requiring the review of design changes by Nuclear Safety. Additionally, although the Department reviews and approves Bechtel's quality policies, it did not review and approve implementation procedures. Further, the Department's oversight activities failed to identify the fact that Bechtel's procedure governing design changes did not meet NQA-1 requirements for quality assurance. Finally, we found that responsible Federal officials were not aware of Bechtel's inadequate support for accepting equipment with design changes that impacted safety.

For its part, Bechtel had also not effectively implemented its own quality assurance procedures. The exclusion of Nuclear Safety from the design change process results from poor implementation of existing procedures. According to Bechtel officials, procedures governing Nuclear Safety review provided "opportunities for interpretation" that led to "incorrect assumptions" by its engineers. These assumptions led Bechtel's engineering group to incorrectly conclude that design changes would not affect the Authorization Basis and, as such, that it was appropriate to bypass Nuclear Safety.

Additionally, Bechtel did not have quality control procedures or processes to ensure that deviations from design or specifications were documented to support product fabrication and delivery. Furthermore, Bechtel did not require suppliers to submit reports detailing actions taken to address needed deviations, documents that would have provided additional confidence that needed design changes and/or repairs were properly completed.

The full report is available at <https://www.energy.gov/sites/prod/files/2013/10/f3/IG-0894.pdf>.

**The Department of Energy's \$12.2 Billion Waste Treatment
and Immobilization Plant-Quality Assurance Issues-Black Cell Vessels
April 2012, DOE/IG-0863**

The Office of Inspector General received allegations concerning aspects of the quality assurance program at the Department's WTP project. In brief, it was alleged that quality assurance records for critically important "black cell" waste processing vessels were not traceable to work performed. To shield plant workers from intense radiation that will occur during WTP operations, processing vessels will be located in sealed compartments called "black cells." Black cells are enclosed rooms where inspection, maintenance, repair, or replacement of equipment or components is impracticable because there is no engineered access. Additionally, there are other vessels in the WTP facilities that are considered "hard-to-reach" because of location and expected difficulty of performing repairs or maintenance. Processing vessels in black cells and hard-to-reach areas must last for WTP's 40-year expected design life without in-service inspection and maintenance.

Our review substantiated the allegation. We found that the Department had procured and installed vessels in WTP that did not always meet quality assurance and/or contract requirements. For the vessels reviewed, we identified multiple instances where quality assurance records were either missing or were not traceable to the specific area or part of the vessel. We also found that the Department paid the WTP contractor a \$15 million incentive fee for

production of a vessel that was later determined to be defective. Although the Department demanded return of the fee, it did not followup on the matter and the fee was never repaid.

The importance of black cells and hard-to-reach components cannot be overstated. Premature failure of these components could potentially impact safety, contaminate large portions of a multi-billion-dollar facility, and interrupt waste processing for an unknown period of time. For these reasons, we made several recommendations designed to strengthen quality assurance controls at WTP. We also recommended a more intense effort to recover the contractor fee for the nonconforming vessel.

Our review of WTP related allegations revealed a number of instances where these quality assurance requirements were not completely followed for processing vessels installed in black cells and/or hard-to-reach areas. Specifically, we found that Bechtel had not obtained or maintained:

- (1) Weld maps, identifying the specific location of each weld; (2) information on welding procedures, the qualifications of the welder, materials used in the vessels and nondestructive examinations and, (3) positive material tests, which ensure that the materials used to fabricate the vessels were compatible with expected operating conditions.
- Radiographs showing the integrity of welds, as required by its contract. Bechtel allowed fabricators to use an alternative nondestructive examination procedure, ultrasonic inspection, that did not produce independently verifiable records such as would be available with the use of radiographs.

In addition, we noted that the Department may have overpaid incentive fee to Bechtel based on its level of performance. Specifically, Bechtel was paid \$30 million in incentive fee for the delivery and installation of vessels into WTP facilities. When the Department learned that one of the vessels was nonconforming, it instructed Bechtel to return \$15 million in performance fee. However, neither the Department's Office of River Protection nor Bechtel could provide evidence that the fee was returned to the Department.

Weaknesses in quality assurance records associated with black cell and hard-to-reach processing vessels occurred because of deficiencies in Bechtel's implementation of its quality assurance program and a lack of Department oversight. Specifically, Bechtel employed inspectors located at contractor locations to witness work performed and execute a progressive and final review and approval of quality assurance record packages. However, Bechtel's acceptance process was inadequate. Additionally, Bechtel's receipt and inspection procedures were deficient in that reviews of quality assurance records that accompanied the vessels were limited to basic procedures, such as determining that the expected numbers of pages of documentation were received. Also, the Department failed to identify weaknesses in Bechtel's processes that allowed the deficiencies to occur, raising questions about the quality of the Department's contract administration and oversight.

The full report is available at https://www.energy.gov/sites/prod/files/IG-0863_0.pdf.

Project Management

A review of Office of Inspector General reports for FYs 2012–2018 showed project management issues at the Hanford Site in the areas of earned value management (EVM), inventory management, cost and schedule, and cost benefit analysis. For example:

- Two audits identified weaknesses related to EVM.
- One audit identified weaknesses related to Inventory Management.
- Four audits identified weaknesses related to Cost and Schedule.
- One audit identified weaknesses related to Cost Benefit Analysis.

In February 2017, GAO designated the Department’s contract management—which has included both contract administration and project management—a high-risk area since 1990. The GAO designated it a high-risk area because the Department’s record of inadequate management and oversight of contractors had left it vulnerable to fraud, waste, abuse, and mismanagement. As in previous years, however, the Office of Environmental Management has struggled to ensure that it has the capacity (both people and resources) to mitigate risks. The Office of Environmental Management has also demonstrated limited progress in contract management, particularly in the area of financial management, and has struggled to stay within cost and schedule estimates for some major projects.

In May 2017, GAO reported that the Secretary of Energy had taken several important steps that demonstrated the Department’s commitment to improving contract and project management. In recent reports, GAO noted progress as the Department had developed and implemented corrective actions to identify and address root causes of persistent project management challenges, as well as progress in the Department’s monitoring of the effectiveness and sustainability of corrective actions. However, the Department’s recent efforts have not fully addressed several areas where the Department continues to have shortcomings.

The following reports highlight the need for the Department’s continued focus on project management at the Hanford Site.

Followup on the K Basin Sludge Removal Project
April 2017, OAI-L-17-04

The K West Reactor Fuel Storage Basin is one of the last facilities along the Columbia River at the Hanford Site that contains nuclear material. The K Basin contains highly radioactive sludge resulting from long-term storage and degradation of spent nuclear fuel. CHPRC, managed by the Department’s Richland Operations Office, has a mission to begin removal of 27 cubic meters of radioactive sludge by September 30, 2018.

To achieve its mission, in March 2015, the Department converted the K Basin Sludge Removal Project to a capital asset project. The K Basin Sludge Removal Project was previously managed as an operations activity from August 2009 through March 2015. The Sludge Removal Project is required to follow the formal Critical Decision process established in Department Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. Using the Critical Decision process, the performance baseline and start of construction was approved in June 2016.

Although the K Basin Sludge Removal Project experienced cost and schedule performance issues throughout its history, according to CHPRC and the Department's records, as of October 20, 2016, the project appeared to be on schedule to meet its milestones. However, we identified a concern where management reserve was used to reset the project's Performance Measurement Baseline, which included completed work scope. This occurred because CHPRC did not follow specific guidance required by the contract on the accepted use of management reserve. Specifically, CHPRC's contract with the Department stated that CHPRC was to establish a Project Control System Description that complied with requirements of the *American National Standards Institute/Electronic Industries Alliance - 748-C Earned Value Management Systems*. As a result, a cost overrun of \$17.9 million was reset for completed work scope. Although we did not question the allowability of these costs, the manner in which the cost overrun was accounted for in the project's earned value management system could be misleading in portraying the historical cost performance of the K Basin Sludge Removal Project.

The Performance Measurement Baseline established in 2016 for the K Basin Sludge Removal Project erased a large negative cost variance of \$17.9 million by resetting the values to zero for multiple completed control accounts. As a result, visibility of past performance issues and cost overruns were made less transparent. In our opinion, using management reserve to reset the baseline cost variances after construction of a project is complete sets a bad precedent for the Department and its contractors. Specifically, it misrepresents the historical project performance and implies that the project is experiencing adequate cost performance. Finally, resetting the baseline will not provide historical costs for future project estimates, as it will suggest that the project did not experience cost overruns and was equivalent to the original budget for the project.

The full report is available at <https://www.energy.gov/sites/prod/files/2017/04/f34/OAI-L-17-04.pdf>

Department of Energy Contractors' Implementation of Earned Value Management
November 2016, OAI-L-17-03

The Department uses EVM as a project management tool to measure the value of completed work against the planned work schedule and estimated cost. The Office of Management and Budget requires Government EVM systems to comply with the guidelines found in the Electronic Industries Alliance, publication 748. These guidelines help ensure proper definition of project work scope and integration with time-phased budgets, reliable analysis and reporting of monthly performance, and accurate recording of project changes. The Department's Office of Project Management Oversight and Assessments (PMOA) is responsible for ensuring that contractors' EVM systems comply with Electronic Industries Alliance, publication 748

guidelines. The PMOA uses the Department's Project Assessment and Reporting System (PARS II) as the Department's central repository and system of record for contractor's EVM cost and schedule performance data. The analytical tools built into PARS II are one of the methods that the Department and its contractors use to identify potential problems in projects. Contractors also use their own corporate project management systems from which they feed data into PARS II through electronic uploads on a monthly basis. As of July 2015, the Department's contractors had 29 post Critical Decision-2 capital asset projects worth approximately \$25 billion that were required to use EVM systems to track and manage project performance.

In February 2012, Bechtel, the contractor for the WTP, which has experienced significant cost and schedule slippage, was granted a waiver from reporting some EVM data by the contracting officer until the project could be baselined again. The PMOA originally expected the new baseline to be completed by December 2012, but it had not yet been completed as of June 2016. In October 2014, the contractor instituted an internal EVM forecast system and suspended comprehensive EVM uploads to PARS II. While limited project status information has been provided to PARS II since that time, PMOA stated that these results may not be fully reliable.

The full report is available at <https://www.energy.gov/ig/downloads/audit-report-oai-l-17-03>.

Materials System Inventory Management Practices
at Washington River Protection Solutions
January 2015, OAS-M-15-01

WRPS is the Department's Office of River Protection's contractor responsible for operation of the Hanford Site Tank Farms. To maintain day-to-day operations and to support ongoing and planned upgrades, WRPS relies on the procurement and management of needed parts and materials.

As part of its overall property management system, WRPS manages inventory needed to support Tank Farm operations through the Tank Farm Material Services System (Materials System), which tracks inventory from receipt to issuance of the parts to the field. Parts are ordered and tracked using either a bill of materials (items being procured to support a specific work order and are tracked using the work order number) or a material request. Although the system allows queries on individual items, the items are processed and tracked within the system by the work order or material request numbers. The Materials System is then used to record information and status as to when items are ordered, received, stored in a warehouse, and issued to the field. As of August 11, 2014, the Materials System listed more than 258,000 items with an estimated acquisition cost of \$4.6 million.

Our review determined that the Office of River Protection had not effectively managed inventory needed to support Tank Farm operations at WRPS. We found that WRPS could not accurately determine the number and value of items held in inventory from the Materials System. Specifically, we found:

- Not all items listed in the Materials System as being held in the company's warehouses

were physically present;

- Many items held in WRPS' warehouses were not listed or were inaccurately listed in the Materials System; and
- WRPS was unable to provide a reasonable estimate of the total value or number of items held in inventory, as required by the terms of the contract.

Inaccuracies in WRPS' Materials System occurred because of internal control weaknesses on the part of both the contractor and the Office of River Protection. Although specifically required under the terms of its contract, WRPS did not comply with FAR requirements to maintain accurate records and perform periodic physical inventories on Materials System items. WRPS' failure to update tracking its Materials System when projects were completed exacerbated inventory problems and resulted in the retention of parts in inventory that were no longer needed to complete work orders. Contributing to the weaknesses, the Office of River Protection's oversight of inventory management practices for the Materials System was insufficient to prevent or detect the control issues we identified. If left uncorrected, these weaknesses increase the risk that inventory items could be lost, diverted, or stolen. Additionally, the Department could incur unnecessary costs and schedule delays.

The full report is available at <https://energy.gov/sites/prod/files/2015/01/f19/OAS-M-15-01.pdf>.

Long-Term Storage of Cesium and Strontium at the Hanford Site
March 2014, OAS-L-14-04

One of the many significant cleanup challenges faced by the Department is the ongoing management of stored cesium and strontium capsules at the Hanford Site's Waste Encapsulation and Storage Facility (WESF). From 1974 to 1985, cesium and strontium were recovered from high-level waste storage tanks at the Hanford Site, packed in corrosion-resistant capsules, and placed in underwater storage at WESF. Currently, 1,936 capsules of radioactive cesium and strontium containing 53 million curies are stored at WESF. The Richland Operations Office's baseline plan for disposing of the capsules, completed in 2007, called for "direct disposal" of the capsules at Yucca Mountain. However, in FY 2010, the Department withdrew its intent to develop a geological repository at Yucca Mountain. The Department's revised goal, as of January 2013, was to have a repository site by 2026 and to begin operations by 2048. Therefore, long-term stewardship of the capsules will require interim storage until final disposal can be achieved.

The March 2011 tsunami and subsequent events at the Fukushima Dai-Ichi Nuclear Power Plant in Okuma and Futaba, Japan highlighted the vulnerabilities to nuclear facilities from possible seismic and natural disasters that are more severe than the facilities' original design, or "beyond design threats." One possible threat is a severe earthquake that may result in loss of power and/or loss of water in the WESF pool. The Office of Environmental Management considered WESF its largest "beyond design threat" facility and has identified movement of the capsules to dry storage as a potential interim measure to mitigate the risk posed by these threats.

In 2013, the Richland Operations Office initiated action to begin to address some of the challenges posed by continued storage of cesium and strontium capsules in the WESF. Such action appears prudent in that continued storage of the capsules in WESF is not cost effective and may pose additional risks to the environment associated with “beyond design threats” at the Hanford Site. While the Richland Operations Office considered options for dry storage, there were no definitive plans to move the capsules to a safer and more cost effective storage system.

We found that the continued storage of the capsules in wet storage at WESF resulted in a higher operating cost than the dry storage alternative under consideration. According to information prepared by CHPRC, the responsible contractor, it would cost approximately \$83 million to \$136 million to move the capsules from WESF into a dry storage facility. Once in dry storage, operating costs would be about \$1 million annually. As of 2013, the Richland Operations Office spent approximately \$7.2 million per year for operations at WESF. Therefore, each year the Richland Operations Office delayed moving the capsules into dry storage, it missed an opportunity to realize cost savings of about \$6.2 million, the difference between the costs to operate wet and dry storage. It is important to note that the cost to construct an interim dry storage facility must be incurred at some point, so the earlier this occurs, the more operating costs can be saved.

In our 2014 report, we noted that WESF was more than 9 years past its design life, and had experienced degradation of key structures and systems relied on for safety. Specifically, the facility began operations in 1974 with a design life of 30 years but had been in service for more than 39 years. Also, the concrete in the WESF pool cells has begun to deteriorate due to years of radiation exposure, according to a Safety Evaluation Report conducted by the Richland Operations Office. Weakened concrete in the walls of the pool increases the risk that a “beyond design threat” earthquake would breach the walls, resulting in loss of fluid, and thus, loss of shielding for the capsules. In 2013, Richland Operations Office officials informed us that the pools walls were still safe despite the damage, citing various design elements in the facility.

In addition to savings opportunities, movement of the capsules to a dry storage facility would allow the capsules to be more safely stored for a longer period of time, action that is crucial given that a permanent repository will not be available until the year 2048. Mindful of this, management had initiated a number of preliminary actions to define its approach to dry storage. In 2018, the Department proposed a deadline of 2025 to have the capsules removed from WESF.

The full report is available at <https://www.energy.gov/sites/prod/files/2014/04/f14/OAS-L-14-04.pdf>.

Follow-Up Audit on The Management of the Plutonium Finishing Plant Project
September 2014, OAS-M-14-11

The Department’s Plutonium Finishing Plant (PFP), located at the Hanford Site, became a highly contaminated nuclear facility while processing plutonium for the Nation’s nuclear arsenal for approximately 40 years. In 2008, the Department awarded CHPRC a contract to decontaminate

and demolish PFP. Completion of work on PFP is the Richland Operations Office's top priority. The PFP work scope requires a well-trained workforce to decontaminate radioactive and chemical residues from gloveboxes, tanks, and process piping prior to being removed in preparation for the future demolition of the facility. Entries to contaminated spaces were performed in accordance with "work packages" that identified the scope and hazards associated with the work and defined the methods and equipment to be used.

CHPRC's initial baseline estimate to remediate PFP was \$581 million, with an expected completion date of September 2013. Due to unforeseen situations with changes in the facility condition, workforce restructuring, permitting issues, and other challenges, the performance baseline estimates were revised to \$753 million, with a completion date of September 2014. These costs included approximately \$311 million in accelerated funding from the Recovery Act to assist in the completion of tasks such as decontamination and removal of PFP's gloveboxes and demolition activities. Despite the influx of the Recovery Act funds, our audit on *Management of the Plutonium Finishing Plant Closure Project* (OAS-RA-L-11-01, November 2010) found that the project was at risk of not meeting the contractor's projected completion date.

The Department encountered problems with CHPRC's ability to plan, manage, and execute work—factors which contributed to both cost and schedule increases. Notably, as of March 2014, the PFP project was expected to be completed in September 2016 at a cost of \$932 million, which was 2 years behind schedule and \$179 million over CHPRC's revised performance baseline. Performance problems included:

- Unavailable or deficient work packages: Richland Operations Office officials noted that during 2012, at least 40 instances where work shifts for glovebox removal on the Remote Mechanical Lines A and C, a critical path task, were not worked due to either unavailable or deficient work packages.
- Insufficient labor resources to perform work: During the same period in 2012, Department project officials reported 47 instances where work shifts involving 9 to 12 employees per team for the Remote Mechanical Lines A and C were not worked.
- Employees not always productively employed: The Defense Contract Audit Agency informed the Department in an October 2012 memorandum that several work teams at PFP appeared to not be performing any sort of work activity. Instead, employees were observed engaging in non-work activities such as reading books, playing chess, and visiting on cell phones for several hours.
- Crane malfunctions in the Plutonium Reclamation Facility at PFP: The 65-year old crane was a "single point failure" for the preferred method for the removal of 196 tanks used to recycle scrap plutonium. The crane was out of service due to malfunctions approximately half of the time since February 2010, when CHPRC completed preparations for the crane necessary to support tank removal activities.
- Productivity issues: Value engineering studies performed by CHPRC and the Department

noted the project experienced downtime, primarily due to work productivity issues such as unavailable work packages. For instance, in a 2013 study project, officials stated that 80 percent of planned work was not performed when scheduled in 2012.

While we recognize that CHPRC acted to address a number of productivity problems, we identified areas of needed improvement in the Richland Operations Office's administration of the CHPRC contract. For example, Richland Operations Office officials stated that the contractor was not fully meeting the expectations of a particular contract requirement regarding project reporting; however, Richland Operations Office officials had not formally notified the contractor of this issue. Improvements in Richland Operations Office's administration of the CHPRC contract are needed to ensure that productivity issues are identified and addressed in a timely manner in the future. In particular, we found weaknesses in the following areas:

- **Contract Requirements:** The Richland Operations Office did not fully enforce contract requirements.
- **Tracking and Trending:** The Richland Operations Office did not adequately track, trend, and resolve these issues using a formal, quality-assured, centralized corrective action system that would have included steps to perform causal analysis.
- **Corrective Action:** Although Richland Operations Office officials informed the contractor that it was required to review and improve its processes through Conditional Payment of Fee actions, the Richland Operations Office did not consistently require the contractor to develop a formal corrective action plan after discovering productivity issues.
- **Audits and Assessments:** Richland Operations Office officials did not perform necessary audits and assessments as required by Department Order 414.1D, *Quality Assurance*.

To address these weaknesses, the Richland Operations Office instituted formal monthly project reviews at the senior Department and contractor management levels, revised its issue management system, formally communicated the need for a more rigorous and formal project productivity issue management process, including the use of corrective action plans or recovery plans to address productivity problems, and scheduled both project and quality assurance formal assessments in its integrated evaluation plan beginning with FY 2015.

The full report is available at https://www.energy.gov/sites/prod/files/2014/09/f18/OAS-M-14-11_0.pdf.

Modular Office Facilities for Recovery Act Program Activities at the Hanford Site
July 2013, OAS-RA-L-13-04

As part of the Recovery Act, the Richland Operations Office designated \$1.3 billion of Recovery Act funding to the Plateau Remediation contract to accelerate CHPRC's work scope from April 2009 through September 2011.

Due to the influx of Recovery Act funding in 2009 and the accelerated schedule, CHPRC hired an additional 1,757 employees, including subcontractors. To provide office space for these temporary employees, CHPRC procured a total of 176 modular facilities consisting of 114 purchased and 62 leased facilities. Modular facilities ranged from single-wide to five-wide modular structures and included space designated for work stations, lunch areas, lockers, showers, and conference rooms. These facilities were acquired at an approximate total cost of \$29 million. This cost included the purchase price of structures, set-up costs, and related costs such as constructing sidewalks, parking lots, and lighting. The Office of Inspector General received an allegation that a number of the facilities CHPRC purchased with Recovery Act funds were either never used or were underutilized.

Our review substantiated the allegation. In particular, we discovered that CHPRC incurred as much as \$1.5 million more than necessary by purchasing unneeded modular facilities and almost \$600,000 in lease costs that could have been avoided by more expediently returning leased facilities that were no longer needed. In fact, we found that 7 of 176 facilities purchased with Recovery Act funds were not utilized through September 30, 2011, the date that most Recovery Act work at the Richland Operations Office ended. We could not determine whether the remaining facilities were underutilized because the contractor's documentation did not adequately justify the need for all of the facilities.

We attributed the problems associated with procurement of facilities that were not used during the Recovery Act period to poor planning and estimating practices at CHPRC. We acknowledge that the Recovery Act work and schedule presented management with tremendous challenges.

Nevertheless, we concluded that the contractor purchased more facilities than necessary to support Recovery Act work because it did not adequately plan for supplemental space prior to procuring additional facilities and did not adequately justify the need for the number of facilities acquired. Notably, CHPRC did not conduct an adequate space utilization assessment on existing facilities prior to purchasing additional modular office facilities. Although not specifically required by the Department, we concluded that such a space utilization assessment was warranted given the number of facilities and cost involved in acquiring the facilities.

CHPRC incurred about \$2.1 million for facilities that were either not needed or no longer needed. We questioned these costs that we considered to be unreasonable per FAR 31.201-3(a), *Determining Reasonableness*, which states, "A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business." These funds could have been better used to support other pressing cleanup priorities at the Hanford Site. We also were concerned that additional Recovery Act funds spent to purchase and/or lease all of the other facilities may not have been efficiently used. However, due

to the limitations and lack of data described in this report, we were unable to determine if this occurred.

The full report is available at <https://www.energy.gov/sites/prod/files/2013/07/f2/OAS-RA-L-13-04.pdf>.

The 2020 Vision One System Proposal for Commissioning and Startup of the Waste Treatment and Immobilization Plant
October 2012, DOE/IG-0871

The Department considered a proposal known as the *2020 Vision One System* (2020 Vision) that would implement a phased approach to commissioning the WTP. As part of the phased approach, the Low-Activity Waste facility would be made operational approximately 15 months before commissioning the remainder of the project. Although the implementation of the phased approach offered potential benefits, early operation of the Low-Activity Waste facility presented significant cost, technological, and permitting risks. These risks could adversely affect the overall success of the River Protection Project's mission of retrieving and treating the Hanford Site's tank waste in the WTP and closing the Hanford Tank Farms to protect the Columbia River.

Despite identified challenges, the Department had not developed a detailed analysis of the costs, benefits, and risks of the proposal even after such steps were recommended by two independent review teams. Specifically, the Department had not included all costs associated with the proposal in existing cost estimates. Department officials told us that they completed a high-level business analysis of certain WTP costs. However, our review found that this effort did not include a cost analysis with sufficient detail to satisfy the recommendations made in the external review reports. Additionally, key technology attributes needed for the proposal may not have been adequately developed to support operations. In particular, proposed near or in-tank pretreatment capabilities did not appear to be at the stage of maturity to support a critical decision to approve the performance baseline. Finally, an apparent lack of resources to meet the needs of an accelerated permitting process could further delay 2020 Vision implementation.

Although it had not made a final decision regarding implementation, the Department instructed its contractor to include a phased waste delivery strategy as part of the ongoing effort to develop a revised baseline for the WTP project. The Department had initially required a baseline change proposal by August 2012. However, because of technical concerns, modification of the baseline was delayed until the tests to address these concerns were completed. To this end, the Department formed a high-level panel of experts to provide advice on technical concerns related to the WTP's "black cells," where waste undergoes various pretreatment processes. The panel's recommendations may impact alternatives under consideration for pretreatment of waste. In light of the decision to modify the WTP baseline and the potential impact of implementing a phased approach, we concluded that the Department should develop a detailed business case that includes a comprehensive cost analysis and risk assessment before making a formal decision to implement the 2020 Vision. The recommended analyses should help ensure that no actions are taken that could inadvertently delay the successful completion of the WTP project. To address

this issue, the 2020 Vision business case (now referred to as Direct Feed Low-Activity Waste Vitrification) has been approved by the Department's General Counsel, Department senior management, and the Department of Justice. The Department of Energy initiated discussions with the Washington State Department of Ecology during the week of September 9, 2013, to discuss proposed strategies to initiate and complete treatment of Hanford's tank waste, including the option of Direct Feed Low-Activity Waste Vitrification.

The full report is available at <https://www.energy.gov/sites/prod/files/IG-0871.pdf>.

Tank Waste Feed Delivery System Readiness at the Hanford Site
August 2012, OAS-L-12-09

The Department's largest cleanup task involves the treatment, immobilization, and disposal of 56 million gallons of hazardous and highly radioactive waste at the Hanford Site. As part of this effort, the Department is constructing the WTP to treat and immobilize the waste in preparation for permanent disposal in a geological repository. Bechtel is the contractor for design and construction of the WTP.

To support the operation of the WTP, the Department will need to complete a system to deliver waste to the WTP. The waste feed delivery system was a series of 30 discrete subprojects involving tasks such as waste retrieval, mixing/blending of waste types, characterization and analysis of waste properties, and transferring of waste. Responsibility for the design, construction, and operation of the system, as well as operation of the Hanford Tank Farms where the waste is currently stored, was contracted to WRPS. As part of the Recovery Act, the Department awarded WRPS approximately \$324 million to accelerate completion of WTP-related infrastructure upgrades for the Tank Farms. Although portions of the waste feed delivery system were in place, much still needed to be installed. Portions of the existing system also required upgrades before the system could support WTP startup and operations.

The Department made progress in completing the waste feed delivery system to support operations of the WTP. We found that the Department completed a number of waste feed delivery subprojects earlier than planned and was on track to complete other critical path activities. We noted, however, that a number of challenges remain for completing the construction and operation of the waste feed delivery system. Specifically, the Waste Acceptance Criteria that defines the specific WTP waste feed criteria and associated controls had not yet been finalized. Uncertainties with tank waste mixing and sampling could also impact the delivery of waste to the WTP. The Department was aware of these problems and told us that it had plans and strategies in place to mitigate the associated risks.

The Department completed a number of waste feed delivery upgrades with Recovery Act funds and reported that it is generally on schedule to complete the remaining subprojects.

Despite its progress, the Department was behind schedule on a near-term priority to procure submersible mixer pumps that are used to mix tank waste prior to feeding waste to the WTP Pretreatment facility. Mixing/sampling demonstration activities were also behind schedule and over budget. These procurements were behind schedule because corrosion/erosion test results

were completed later than planned and delayed the subcontract award for pumps. According to the waste feed delivery Federal Project Director, the test results had since been completed and the subcontract was ready for award. However, the lack of available funding delayed the procurement of the mixer pumps until FY 2013.

Although the waste feed delivery system was aligned with the current baseline schedule at the time to permit completion in time to support commissioning of the WTP, we were concerned that the Waste Acceptance Criteria for the WTP had not been finalized by the time our review was completed. The lack of established criteria increased the risk or uncertainty as to whether the Tank Farm will be able to provide feed to the WTP. The Department recognized this issue and took actions to mitigate the risk by committing to define and finalize the Waste Acceptance Criteria in 2015 as part of its Implementation Plan to address Defense Nuclear Facilities Safety Board Recommendation 2010-2, *Pulse Jet Mixing at the WTP*. According to WRPS officials, there would be adequate time to formulate the waste to meet the Waste Acceptance Criteria if the criteria were finalized by 2015. WRPS will be required to meet the Waste Acceptance Criteria once it is defined.

The full report is available at <https://www.energy.gov/sites/prod/files/OAS-L-12-09.pdf>.

Safety Culture

According to the Institute of Nuclear Power Operations, nuclear safety culture is defined as the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment. Traits of a healthy nuclear safety culture include, among other things, an environment for raising concerns, and problem identification and resolution. Problem identification and resolution is defined as a process in which issues potentially impacting safety are promptly identified, fully evaluated, and promptly addressed and corrected in a manner commensurate with their significance. Identification and resolution of a broad spectrum of problems, including organizational issues, are used to strengthen safety and improve performance. The attributes of problem identification and resolution include:

- **Identification:** The organization implements a corrective action program with a low threshold for identifying issues. Individuals identify issues completely, accurately, and in a timely manner in accordance with the program. Individuals ensure that issues, problems, degraded conditions, and near misses are promptly reported and documented in the corrective action program at a low threshold.
- **Evaluation:** The organization thoroughly evaluates problems to ensure that resolutions address causes and extents of conditions commensurate with their safety significance. Issues are properly classified, prioritized, and evaluated according to their safety significance.
- **Resolution:** The organization takes effective corrective actions to address issues in a timely manner commensurate with their safety significance.

- Trending: The organization periodically analyzes information from the corrective action program and other assessments in the aggregate to identify programmatic and common cause issues.
- Environment for Raising Concerns: A safety-conscious work environment where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment, or discrimination. The organization creates, maintains, and evaluates policies and processes that allow personnel to raise concerns freely.

We found issues/weaknesses with managing and resolving issues outside of their corrective action programs at Bechtel and WRPS. For example, several significant technical issues related to Inadequate Design of Mixing System were managed outside of Bechtel's corrective action program and were closed before the overall issue was resolved. In addition, we identified a concern related to monitoring and tracking actions taken to resolve the recommendations identified in the *Hanford Tank Vapor Assessment Report*. Specifically, we noted that the 10 overarching issues and 47 recommendations identified in the report were not managed in the WRPS Problem Evaluation Request system, the corrective action management system used by WRPS. Additionally, we found that Bechtel's corrective action program for the WTP was not fully effective in managing and resolving issues. We found that corrective actions had not been implemented in a timely manner and that Bechtel failed to follow through on implementing prior corrective action program improvement initiatives. Furthermore, Bechtel does not always classify condition reports at the appropriate significance level. Finally, we reviewed the circumstances surrounding the termination of the employment of Ms. Donna Busche by URS. Ms. Busche asserted whistleblower status based on the disclosure of what she believed to be technical and safety concerns regarding the WTP. She also asserted that her termination was in retaliation for these disclosures.

In May 2017, the GAO reported that management must foster a culture in which staff members are encouraged to identify risks and use their expertise to proactively mitigate them. In July 2016, GAO examined the Department's effort to evaluate the environment for raising concerns without fear of reprisal. The GAO found, among other things, that the Department used flawed and inconsistent methodologies to evaluate the environment for raising safety and other concerns and, therefore, could not reliably judge its openness or ensure that appropriate action was taken in response to evaluation results. The GAO noted that several factors may limit the use and effectiveness of mechanisms for contractor employees to raise concerns and seek whistleblower protections. The GAO also found that the Department infrequently used its enforcement authority to hold contractors accountable for unlawful retaliation against whistleblowers, issuing just two violation notices in the past 20 years. Additionally, in 2013, the Department determined that it did not have the authority to enforce a key aspect of policies that prohibit retaliation for nuclear safety-related issues—despite having taken such enforcement actions in the past.

The following reports highlight the need for the Department's continued focus on safety culture at the Hanford Site.

Corrective Action Program at the Waste Treatment and Immobilization Plant
February 2016, OAI-M-16-06

Bechtel, the contractor responsible for the design, construction, and commission of the WTP, is responsible for establishing and implementing effective programs for reporting and resolving safety and quality problems. These are essential elements in creating a safety conscious work environment. According to Bechtel's Corrective Action Management Program, the *Integrated Issues Management Policy* establishes the Corrective Action Management Program as the primary issues management program for documenting and resolving conditions adverse to quality identified at the WTP. The program is used to manage adverse conditions and technical issues, as well as other issues, recommendations, and suggestions for improvement. The program also provides a mechanism to document issues and initiate the process for evaluating, correcting, and verifying resolution of issues. A condition report is generated to document issues in the corrective action program, which is managed through a graded process based on the significance of the issue. An effective corrective action program promotes prompt identification of issues and appropriate evaluation, tracking, trending, and correction in a timely manner.

Our audit found that the WTP corrective action program was not fully effective in managing and resolving issues. Specifically, we discovered that in some instances, issues were not managed and tracked in the corrective action program, as required. For example, several significant technical issues related to Inadequate Design of Mixing System were managed outside of the corrective action program and were closed before the overall issue was resolved. Inadequate performance of mixing systems at WTP could lead to nuclear criticality accidents, explosions of flammable gases, and mechanical failures of process vessel components. We also noted that corrective actions had not been implemented in a timely manner and that Bechtel failed to follow through on implementing prior corrective action program improvement initiatives. Specifically, Bechtel did not meet any of its goals related to timeliness for the corrective action program. The average age of condition reports was 315 days, well above the target cycle time of 100 days. In addition, apparent cause evaluations exceeded the 45-day target, and root cause evaluations exceeded the 60-day target. Furthermore, the average age of corrective actions significantly exceeded established performance goals. Bechtel also did not always classify condition reports at the appropriate significance level. In a 2014 Bechtel self-assessment, Bechtel determined that 41 percent of the condition reports entered into the corrective action program needed to be reclassified to a higher significance level to align with established criteria. Classification of significance levels had been identified in prior assessments reported in 2011 and 2012, yet this issue continued to recur.

Weaknesses with Bechtel's corrective action program had been reported for years. Although Bechtel acknowledged these weaknesses and developed multiple improvement plans, in several cases initiatives were not fully implemented or sustained. Construction of the WTP is an extremely complex project posing numerous technical challenges. Accordingly, an effective corrective action program is essential to ensure that important quality and safety issues are resolved in a timely manner.

The full report is available at <https://www.energy.gov/sites/prod/files/2016/02/f29/OAI-M-16-06.pdf>.

Department of Energy's Actions to Address Worker Concerns
Regarding Vapor Exposures at the Hanford Tank Farms
November 2016, OIG-SR-17-01

For decades, the Department had been storing and managing millions of gallons of chemical and radioactive waste in the Hanford Tank Farms. Approximately 56 million gallons of this waste are stored in dozens of aging tanks. Tank operations routinely occur to manage the waste, to transfer waste from old or leaking tanks, to perform evaporation activities, and to perform other actions that are referred to as “waste disturbing activities.” Tank waste generates vapors as heat and radiation break down chemical compounds. From time to time, workers at the Tank Farms are exposed to these vapors. When inhaled at high enough concentrations, according to an independent panel of experts, some of these vapors may represent a serious occupational hazard to the Tank Farm workforce. Due to the hazards associated with vapors, the Department and its contractors have engaged in various activities in an attempt to minimize the risk of human exposure. Since 2014, the Department and its tank operations contractor, WRPS, have been engaged in renewed activities to measure, minimize, and mitigate exposure. Nevertheless, incidents of worker exposure to vapors continue to occur. We were informed that some workers may not feel comfortable expressing their concerns about vapors due to fear of retaliation from management.

Seven of the 52 workers we interviewed indicated that they had concerns with reporting, communicating, reprisal, or fear of retaliation related to potential vapor exposures. One of the workers had filed a formal complaint regarding retaliation. The remaining workers we spoke to generally told us that they felt free to discuss their concerns about vapors without fear of retaliation. Additionally, while we found that a number of actions were underway to address the risks posed by vapors, such as evaluating technologies in the Tank Farms, we found that improvements in communication are needed to inform workers about the status of actions and to ameliorate continuing fear of retaliation on the part of some workers.

We reviewed the actions taken to address five tank vapor assessment team recommendations and did not identify any concerns with the timeliness of actions taken, which appeared to be on schedule, according to WRPS information, at the time of our review. Furthermore, we tested the status of actions for the five vapor assessment team recommendations and found objective evidence that claimed corrective actions had occurred, but because of the reasons previously noted, we did not perform work to evaluate the efficacy of corrective actions.

However, we identified a concern related to monitoring and tracking of actions taken to resolve the recommendations identified in the *Hanford Tank Vapor Assessment Report*. Specifically, we noted that the 10 overarching issues and 47 recommendations identified in the report were not managed in the WRPS Problem Evaluation Request (PER) system, the corrective action management system used by WRPS. This system is intended to track, report on, and close all safety or operational issues that are identified, including those that may affect the Tank Farm workers or operations. In our view, the WRPS policy clearly indicated that the issues in the *Hanford Tank Vapor Assessment Report* should have been managed in the PER system. When we discussed our concern about the tracking of actions with management, we were told that management consciously chose to manage the issues outside of the PER system, as a separate

project. Nevertheless, we concluded that there is value to tracking and reporting these issues in the PER system as well, because this process has rigorous standards for issue management and closure, and it requires objective evidence of actions prior to closure. Also, notably, the PER system is available to the workforce, providing the ability to view the underway actions to address the issues and recommendations—possibly providing a valuable communication tool to keep the workforce up-to-date on corrective actions.

Such transparency was not readily apparent to us for one of the reported corrective actions we chose to test. In that case, WRPS management took nearly a month to produce and deliver objective evidence that corrective actions were complete. During an update meeting with Office of River Protection and WRPS officials, management acknowledged this issue and committed to consider tracking and reporting the *Hanford Tank Vapor Assessment Report* recommendations in the PER system. We also noted that the status of corrective actions were not publicly available on the WRPS worker and public outreach portal.

The full report is available at <https://www.energy.gov/ig/downloads/special-report-oig-sr-17-01>.

**Issues Pertaining to the Termination of Ms. Donna Busche,
a Contractor Employee at the Waste Treatment Plant Project
October 2014, DOE/IG-0923**

On March 6, 2014, the Office of the Secretary of Energy requested that the Inspector General review the circumstances surrounding the February 18, 2014, termination of the employment of Ms. Donna Busche by URS. URS is a major subcontractor under the Department of Energy's contract with Bechtel to design and construct the multi-billion dollar WTP at the Department's Hanford Site. Ms. Busche asserted whistleblower status based on the disclosure of what she believed to be technical and safety concerns regarding the WTP. She also asserted that her termination was in retaliation for these disclosures.

Because of a material scope limitation, we were unable to reach a conclusion in this matter. In short, Bechtel and URS told us that they could not provide access to several thousand contractor-generated emails and other documents that we believe were necessary to perform our examination of the Busche termination. On the advice of outside counsel, both contractors took the position that the documents in question were subject to either attorney-client or attorney work product privilege. Also, URS made a unilateral determination that certain documents were not relevant to our examination. Specifically, Bechtel withheld 235 documents and URS withheld 4,305 documents. Of the 4,305 withheld documents, URS' attorney eventually agreed to provide access to a portion of the 2,754 documents that URS had concluded were non-responsive but which were not subject to the asserted attorney-client privilege.

In this matter, it became apparent that there was a fundamental conflict between the need of the Office of Inspector General to have full, unfettered access to all information it deemed relevant to its examination and the position taken by Bechtel and URS and their respective outside attorneys to protect their legal interests. However, despite efforts by senior Department officials, we did not have access to the full inventory of documents which we felt were necessary to conduct our review. Thus, we were unable to complete our inquiry and, accordingly, disclaim

any opinion regarding the circumstances of Ms. Busche's termination.

The allegations resolved in settlement *United States Settles Lawsuit Against Energy Department Contractors for Knowingly Mischarging Costs on Contract at Nuclear Waste Treatment Plant* (mentioned earlier in the report) were initially brought in a lawsuit filed under the *qui tam*, or whistleblower, provisions of the False Claims Act by Ms. Busche and two other contractor employees who worked on the WTP. This Special Review was requested by the Secretary of Energy, and we attempted to examine allegations of reprisal against a whistleblower, Ms. Busche, but we were unable to complete the review due to the denial of access to records by the contractors.

The full report is available at <https://www.energy.gov/sites/prod/files/2014/10/f18/IG-0923.pdf>.

Fraudulent Activities

In May 2017, GAO reported that quality data is needed for the Department to manage its risk of fraud. The Fraud Reduction and Data Analytics Act of 2015 establishes requirements aimed at improving Federal agencies' controls and procedures for assessing and mitigating fraud risks through the use of data analytics. In GAO's March 2017 report, however, they found that because the Department does not require its contractors to maintain sufficiently detailed transaction-level cost data that are reconcilable with amounts charged to the Department, it is not well positioned to employ data analytics as a fraud detection tool. The data were not suitable either because they were not for a complete universe of transactions that was reconcilable with amounts billed to the Department or because they were not sufficiently detailed to determine the nature of costs charged to the Department. The GAO concluded that, without requiring contractors to maintain such data, the Department will not be well positioned to meet the requirements of the Fraud Reduction and Data Analytics Act of 2015 and manage its risk of fraud and other improper payments. The GAO recommended that the Department require contractors to maintain sufficiently detailed transaction-level cost data that are reconcilable with amounts charged to the government. The Department did not concur with GAO's recommendation. Although the Department did not agree with GAO's recommendations, we found that the Hanford Site has struggled with fraudulent activities related to areas such as time card issues, small business, computer thefts, and purchase card embezzlements.

The following reports and investigations highlight the need for the Department's continued focus on fraudulent activities at the Hanford Site.

Time Card Fraud

***Washington River Protection Solutions Agrees to Pay \$5.275 Million
to Settle False Overtime and Premium Pay Allegations
January 23, 2017, Department of Justice Press Release***

WRPS agreed to pay the United States \$5.275 million to settle allegations that it knowingly submitted false claims to the Department for overtime and premium pay and also failed to comply with the contract's internal audit requirements.

Since 2008, WRPS has received millions of dollars from a prime contract with the Department to perform environmental cleanup and maintenance efforts at an area of the Hanford Site known as the Tank Farms. The Tank Farms is a large area of the Hanford Site consisting of underground storage tanks that contain radioactive and hazardous waste from nuclear weapons production. The Government alleged that, upon being awarded the Tank Farms contract in 2008, WRPS was advised by law enforcement of specific concerns about systemic time card fraud being committed by the previous contractor at the Tank Farms, many of whose employees and procedures were retained by WRPS. WRPS allegedly made no actual changes to the timekeeping procedures at the Tank Farms for nearly 5 years and did not take steps, until after July 2013, to curtail the prior fraudulent practices. As a result, the Government alleged that WRPS knowingly charged the Department for overtime for busy work or for work that was not actually performed and premium emergency call-in pay that was not authorized by the Tank Farms contract.

The Government also alleged that WRPS charged the Government for auditing work that was not performed. WRPS allegedly installed as the head of the contractually required Internal Audit Department for the first 3 years of the Tank Farms contract its own general counsel, who allegedly had no auditing experience and failed to provide any meaningful oversight of the Internal Audit Department. The Government alleged that this knowing violation of an important safeguard in the contract enabled the extensive time card fraud. The claims resolved by the settlement are allegations only; there has been no determination of liability.

The full press release is available at [Washington River Protection Solutions Agrees to Pay \\$5.275 Million to Settle False Overtime and Premium Pay Allegations | OPA | Department of Justice](#).

**CH2M Hill Hanford Group Inc. Admits Criminal Conduct, Parent Company
Agrees to Cooperate in Ongoing Investigation and Pay \$18.5 Million
to Resolve Civil and Criminal Allegations
March 7, 2013, Department of Justice Press Release**

In 2013, the Department of Justice, in conjunction with the U.S. Attorney's Office for the Eastern District of Washington, announced that Colorado-based CH2M Hill Hanford Group, Inc. (CHG) and its parent company, CH2M Hill Companies, Ltd. (CH2M Hill) agreed that CHG committed federal criminal violations, defrauding the public by engaging in years of widespread time card fraud. In order to resolve CHG's civil and criminal liability, CH2M Hill entered into a global resolution where it agreed to pay a total of \$18.5 million, commit an additional \$500,000 toward accountability systems, consent to a corporate monitor, and continue actively cooperating with the ongoing fraud investigation.

Between 1999 and 2008, CH2M Hill had a contract with the Department to manage and clean 177 large underground storage tanks containing mixed radioactive and hazardous waste at the Hanford Site (Tank Farms Contract). The Hanford Site was used for the production of nuclear weapons during World War II and the Cold War. According to the statement of facts agreed to

by the United States and CH2M Hill, CHG hourly employees involved in the cleanup routinely overstated the number of hours they worked, and CHG management condoned the practice and submitted inflated claims to the Department that included the fraudulently claimed hours.

The global resolution consisted of CH2M Hill paying \$16,550,000 to resolve its civil liability under the False Claims Act. In addition, CH2M Hill entered into a Non-Prosecution Agreement with the United States Attorney's Office for the Eastern District of Washington to resolve its criminal liability. Under the terms of that agreement, CH2M Hill refunded an additional \$1.95 million in wrongfully obtained profits, dedicated \$500,000 to foster increased accountability at the Hanford Site, and paid for independent monitoring to ensure that CH2M Hill takes adequate corrective actions. As of 2013, eight individuals had pleaded guilty to engaging in the same time card fraud scheme and conspiracy of which CH2M Hill admitted that CHG was involved.

The full press release is available at <https://www.justice.gov/opa/pr/ch2m-hill-hanford-group-inc-admits-criminal-conduct-parent-company-agrees-cooperate-ongoing>.

The following are additional actions taken related to this incident:

**Former Hanford Site Supervisor Pled Guilty to Conspiracy to Commit Wire Fraud
FY 2014**

Two former Hanford Site supervisors pled guilty in U.S. District Court for the Eastern District of Washington to one count of Conspiracy to Commit Wire Fraud. The investigation determined that between October 1999 and October 2008, a former supervisor routinely approved and submitted time cards that falsely claimed hours not worked by subordinates. As part of the plea agreement, one former supervisor agreed to 10 months of incarceration, a criminal fine of \$19,893.94, and 3 years of supervised probation. The other supervisor agreed to incarceration not to exceed 14 months, a criminal fine of \$34,146.60, and 3 years of supervised probation.

**Former Hanford Contractor Employee Suspended in False Time card Investigation
FY 2014**

In 2013, in response to an Investigative Report to Management, PMOA notified our office of the suspension and proposed 3-year debarment of a former contractor employee. The suspension was issued after the former employee pled guilty to one count of conspiracy to violate the Anti-Kickback Act. The former employee's plea agreement calls for incarceration up to 12 months, supervised probation for not longer than 2 years, and a fine of not more than \$26,631.64. The investigation found extensive time card fraud by contractor employees and their management.

**Sentencing in Hanford Time card Investigation
FY 2015**

Two former contractor supervisors and nine former contractor employees were sentenced in the U.S. District Court for the Eastern District of Washington following earlier guilty pleas for conspiracy to defraud the Government. One former contractor supervisor was sentenced to 30 days of incarceration followed by 3 months of home detention; all other individuals were

sentenced to 2 years of probation. Each individual was fined between \$7,500 and \$165,744, for a total of \$766,911 in fines. The investigation determined that between October 1999 and October 2008, the former contractor supervisors and employees routinely submitted falsified time cards and received pay for hours not worked. As previously reported, the investigation resulted in an \$18.5 million global settlement with a former Hanford Site prime contractor and \$115,500 in global settlements with four former Hanford Site managers and supervisors.

Non-Prosecuting Agreement Settlement
FY 2016

The Office of Inspector General was notified that a current Hanford Site prime contractor reimbursed the Department \$470,698 to satisfy the terms of a Non-Prosecution Agreement previously arranged with the U.S. Attorney's Office for the Eastern District of Washington. The investigation determined that between October 1, 2003, and December 16, 2008, former contractor employees and other former Hanford Site employees routinely submitted time cards falsely claiming, and receiving pay for, hours they had not worked. The investigation has resulted in 11 guilty pleas, an \$18.5 million global settlement with a former Hanford Site prime contractor, and \$115,000 in global settlements with four former Hanford Site managers and supervisors.

Small Business Fraud

Civil Settlement Reached in Small Business Innovation Research Grant Fraud Investigation
FY 2015

The U.S. Attorney's Office for the Western District of Washington entered into a settlement agreement with a Department grantee. The grantee agreed to pay \$420,000 to resolve allegations that it did not legitimately qualify for multiple Small Business Innovation Research (SBIR) grants because it did not meet the required small business criteria. The investigation determined that from 2005 through 2013, the grantee made false certifications and representations regarding eligibility to receive more than \$12 million in SBIR and Small Business Technology Transfer grants from different Federal agencies. This was a joint investigation with numerous Federal agencies.

Civil Complaint Filed Against Department Contractors in Connection with False Claims
Violations
FY 2014

The U.S. Attorney's Office for the Eastern District of Washington filed a civil complaint under the False Claims Act. The complaint alleged three Department contractors falsely claimed credit for awarding tens of millions of dollars in Federal subcontracting business to qualified small businesses. The investigation substantiated that a Department prime contractor claimed small businesses were performing subcontract work, but the work was actually performed by another Department subcontractor that does not qualify as a small business.

In 2018, WCH agreed to pay \$3.2 million to resolve fraud allegations in its award of small business subcontracts to clean up part of the Hanford nuclear reservation. Two other businesses named in the lawsuit, Richland's Federal Engineers & Constructors and Sage Tec, reached separate settlements in 2017. The Federal Engineers & Constructors settlement for \$2 million and the Sage Tec settlement for \$235,000 bring the total recovered by the Department of Justice to more than \$5.5 million in the case. The Federal lawsuit started as a whistleblower complaint filed by Savage Logistics, a Hanford-area small business, and its owner. The Department of Justice joined the case in 2013. WCH was accused of awarding two subcontracts worth about \$20 million to Sage Tec in 2010 and 2012, although the Department of Justice alleged it was not a legitimate small business with resources to do the work. The Department of Justice accused Sage Tec—a small, woman-owned company—of being a pass-through front company for Federal Engineers & Constructors, which did much of the work on the subcontracts. WCH, which held contract with the Department of Energy worth \$2.9 billion through September 2016, for cleanup along the Columbia River at Hanford, was required by the Department of Energy to subcontract some work at the site to small businesses and certain types of small businesses, such as women-owned small companies.

Fraudulently Obtained Computers

Guilty Plea by Former Department Employee in Theft of Government Property Investigation FY 2015 (14-0063-I)

A former Department of Energy employee in the Office of River Protection pleaded guilty in Benton County Superior Court to one felony count of Forgery and one misdemeanor count of third degree theft. The investigation determined that the former Department employee, a property management specialist, forged Government property transfer documents in order to obtain Government-owned computers and computer-related equipment valued at approximately \$31,700. The property was recovered in the course of the investigation. As part of the plea agreement, the Department employee was sentenced to 35 days of incarceration and a 1-year probation with the condition of continued enrollment in mental health counseling. This was a joint investigation with the police department in Richland, Washington.

Sentencing in Computers for Learning Program Fraud Investigation FY 2015 (12-0104-I)

An individual was sentenced in the U.S. District Court for the Western District of Washington to 10 years in Federal prison and ordered to pay restitution in the amount of \$7.2 million. The investigation determined the individual created 14 fictitious not-for-profit entities and then submitted fraudulent applications for computers and computer-related equipment to the General Services Administration's Computers for Learning program, which transfers excess Government computers and related peripheral equipment directly to such nonprofit organizations. After receiving the computer-related equipment, the individual converted it to personal use by reselling it. From June 2007 to June 2013, the fictitious entities received computers and computer-related equipment with an acquisition value of more than \$30 million. More than \$7.5 million of this equipment came from 19 Department facilities participating in the program. This was a joint investigation with the General Services Administration Office of Inspector General, Internal

Revenue Service Criminal Investigation Division, U.S. Department of Transportation Office of Inspector General, Department of Justice Office of Inspector General, and the Federal Bureau of Investigation.

Purchase Cards

Purchase Card Fraud Investigations **FY 2012**

The Office of Inspector General conducted a number of investigations involving the improper use of Government purchase cards by contractor employees at the Department's Hanford Site. As previously reported, several contractor employees were convicted, sentenced, and ordered to pay over \$1 million in restitution. Additionally, three companies previously agreed to pay over \$6 million in civil settlements. During this reporting period, a former contractor employee was sentenced to 46 months of incarceration and 3 years of probation, and ordered to pay \$487,000 in restitution for committing wire fraud. Additionally, a vehicle that was refurbished using the embezzled funds was seized by the Government. The former contractor employee was debarred from doing business with the Federal Government for 3 years. Also during this reporting period, seven former Hanford Site contractor employees entered into civil settlement agreements with the Department of Justice and agreed to pay \$83,637 in restitution to settle Anti-Kickback Act allegations.

Former Hanford Site Vendors Sentenced in Purchase Card Investigation **FY 2013**

Two former Hanford Site vendors pled guilty in U.S. District Court for the Eastern District of Washington to violating the Anti-Kickback Act and Misprision of a Felony, respectively. The investigation determined the vendors offered and provided kickbacks to at least 14 Hanford Site Material Coordinators. The kickbacks included cash, tickets to sporting events, and gift cards. As part of the plea agreement, one former vendor agreed to 3 years of supervised probation and 100 hours of community service. The other vendor agreed to 3 years of supervised probation and agreed not to incur any new debt, open additional lines of credit, or enter into financial contracts without the advance approval of the supervising officer. Subsequently, both vendors and their respective companies were debarred by the Department's Contract and Financial Assistance Policy Division from Government contracting for a period of 3 years.

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