

**GAO**

Report to the Subcommittee on Energy  
and Water Development, Committee on  
Appropriations, House of  
Representatives

---

July 2007

# HANFORD WASTE TREATMENT PLANT

Department of Energy  
Needs to Strengthen  
Controls over  
Contractor Payments  
and Project Assets



GAO  
Accountability · Integrity · Reliability

# Highlights

Highlights of [GAO-07-888](#), a report to the Subcommittee on Energy and Water Development, Committee on Appropriations, House of Representatives

## Why GAO Did This Study

In December 2000, the Department of Energy (DOE) awarded Bechtel National, Inc. (Bechtel) a contract to design and construct the Waste Treatment Plant (WTP), one of the largest nuclear waste cleanup projects in the nation. Originally expected to cost \$4.3 billion and be completed in 2011, DOE now estimates that WTP will cost over \$12.2 billion and be completed in late 2019. Weaknesses in DOE's management and oversight of contractors led GAO to designate DOE contract management as a high-risk area since 1990. GAO was asked to determine whether

- (1) DOE's internal controls are designed to provide reasonable assurance against improper WTP payments and
- (2) DOE's controls reasonably ensure proper accountability for WTP assets.

GAO reviewed fiscal year 2005 and 2006 internal controls by analyzing data and documents, interviewing DOE and contractor staff, and physically observing property items.

## What GAO Recommends

GAO makes 11 recommendations to DOE to (1) establish effective invoice review procedures based on the WTP contract's risks, (2) periodically assess the WTP contractor's property management program, and (3) direct the WTP contractor to establish controls to improve accountability for property. While DOE agreed with one recommendation, it also stated its controls were adequate. GAO disagrees.

[www.gao.gov/cgi-bin/getrpt?GAO-07-888](http://www.gao.gov/cgi-bin/getrpt?GAO-07-888).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Linda Calbom at (206) 287-4809 or [calboml@gao.gov](mailto:calboml@gao.gov).

# HANFORD WASTE TREATMENT PLANT

## Department of Energy Needs to Strengthen Controls over Contractor Payments and Project Assets

### What GAO Found

DOE's internal controls over payments to contractors on its WTP project did not provide reasonable assurance against the risk of improper contractor payments, particularly given the project's substantial inherent risks. Several factors combined to pose a risk of improper payments on this project, including the size and complexity of this one-of-a-kind nuclear construction project, escalating cost and schedule estimates, and the thousands of charges Bechtel billed to DOE on each invoice. Despite the risks, in fiscal years 2005 and 2006 DOE performed little or no review of contractor invoices or supporting documents for the \$40 million to \$60 million in charges that Bechtel billed to DOE each month to help ensure the validity of these charges. Instead, DOE officials relied primarily on the Defense Contract Audit Agency's reviews of Bechtel's corporate-wide financial systems and on Bechtel's reviews of subcontractor charges for assurance that the charges were proper. DOE's heavy reliance on others, with little oversight of its own, exposed the hundreds of millions of dollars it spent annually on the project to an unnecessarily high risk of improper payments.

DOE also did not adequately oversee the contractor to ensure accountability for assets purchased with WTP contract funds, relying primarily on the contractor to manage such government property without ensuring the adequacy of the contractor's controls. We found numerous internal control weaknesses with Bechtel's property management program, including poor segregation of duties, property system errors, and inadequate property procedures. For example, Bechtel did not timely prepare and submit required reports of lost or damaged property, taking up to 2 years in some instances to report missing assets, such as computers, to DOE. Bechtel also did not always review subcontractors' property management policies and procedures as required or follow up on subcontractor weaknesses it identified to help ensure that its subcontractors adequately managed and safeguarded WTP property in their possession. These property control weaknesses coupled with the lack of DOE oversight created an environment in which property could be lost or stolen without detection.

### Aerial View of the Hanford Waste Treatment Plant under Construction



Source: DOE.

The Waste Treatment Plant consists of 3 waste processing facilities, an analytical laboratory, and 20 other support facilities. DOE estimates that it will cost over \$12 billion and take almost 20 years to complete.

---

# Contents

---

<b>Letter</b>		<b>1</b>
	Results in Brief	3
	Background	5
	Inadequate DOE Controls Heightened Risk of Improper WTP Contractor Payments	10
	DOE's Oversight Controls for Project Assets Were Inadequate	19
	Conclusions	29
	Recommendations for Executive Action	30
	Agency Comments and Our Evaluation	32
<b>Appendix I</b>	<b>Scope and Methodology</b>	<b>36</b>
<b>Appendix II</b>	<b>Comments from the Department of Energy</b>	<b>41</b>
<b>Appendix III</b>	<b>GAO Contact and Staff Acknowledgments</b>	<b>43</b>
<b>Table</b>		
	Table 1: Fiscal Years 2005 and 2006 WTP Expenses Billed by Bechtel to DOE	11
<b>Figures</b>		
	Figure 1: Aerial View of Hanford Waste Treatment Plant under Construction	6
	Figure 2: Sample Charges from Bechtel Invoice to DOE	14
	Figure 3: Example of Construction Equipment and Tools Being Used at WTP	23

---

---

## **Abbreviations**

DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
DEAR	Department of Energy Acquisition Regulation
DOE	Department of Energy
FAR	Federal Acquisition Regulation
WTP	Waste Treatment Plant

This is a work of the U.S. government and is not subject to copyright protection in the United States. It may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



United States Government Accountability Office  
Washington, DC 20548

July 20, 2007

The Honorable Peter J. Visclosky  
Chairman  
The Honorable David L. Hobson  
Ranking Member  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
House of Representatives

The Department of Energy (DOE) is currently constructing one of the largest and most complex nuclear waste cleanup projects in the nation—the Waste Treatment and Immobilization Plant (WTP) at the Hanford site in southeastern Washington state. DOE awarded Bechtel National, Inc. (Bechtel) an 11-year cost-plus-incentive-fee contract in December 2000 to design, construct, and commission this one-of-a-kind nuclear waste treatment complex.<sup>1</sup> Although DOE originally projected the plant would cost \$4.3 billion and be completed in 2011, it now estimates that the project will cost over \$12.2 billion and be completed in late 2019. Sound financial management of projects, particularly as large and complex as the WTP project, requires effective design of and compliance with internal controls. However, work we have done in the past has found that DOE's controls over these types of contracts are not always effective, largely because of DOE's inadequate management and oversight of contractors. As a result, since 1990 we have designated DOE contract management as a high-risk area.

Given that over \$3 billion has been spent on this project to date with billions more expected to be spent in the future, this report examines whether (1) DOE's internal controls are designed to provide reasonable assurance that improper payments to WTP contractors will not occur or will be detected in the normal course of business and (2) DOE's oversight controls reasonably ensure proper accountability for assets purchased with WTP project funds.

---

<sup>1</sup>A cost-plus-incentive-fee contract is a cost-reimbursement contract that provides for payment of allowable incurred costs to the extent prescribed in the contract. It also provides for the contractor to earn a fee, or profit, based on the contractor's ability to meet established cost targets.

---

To address these objectives, we considered the internal controls relevant to contractor costs and property (assets) that DOE had in place in fiscal years 2005 and 2006. We reviewed applicable DOE directives, policies, and procedures; WTP contract requirements; the Federal Acquisition Regulation (FAR); the Department of Energy Acquisition Regulation; and GAO's *Standards for Internal Control in the Federal Government* to gain an understanding of the applicable internal control requirements. We visited DOE's Office of River Protection, which has oversight responsibility for the WTP project, in Richland, Washington, and performed walk-throughs and observations of DOE's oversight processes, interviewed agency officials, and reviewed related supporting documentation and compared DOE's controls against applicable requirements. Because the Defense Contract Audit Agency (DCAA) and the Defense Contract Management Agency (DCMA) perform reviews and oversight of Bechtel, we met with DCAA and DCMA auditors and with the DCMA corporate administrative contracting officer and reviewed relevant audit reports they prepared to better understand their work related to Bechtel. We also met with contractor staff in Richland, reviewed data extracts from selected Bechtel financial and property systems, performed limited data mining<sup>2</sup> procedures where possible on the data extracts and reviewed supporting documentation, reviewed the contractor's and selected subcontractors' property management policies and procedures, and performed walk-throughs and observations of the contractor's property management processes. We also performed physical observations of selected property items at the WTP site and selected subcontractor sites in Richland and at Bechtel offices in San Francisco, California to test the existence, accuracy, and completeness of a nongeneralizable selection of property items recorded in the contractor's property system. From the procurement system, we selected a nongeneralizable selection of property purchases to observe and to test whether these purchases had been recorded in the property system. The results of our review of these nongeneralizable selections cannot be used to make inferences about the population. Our work was not designed to determine or to project the allowability of all contractor costs or the accountability of all property items. Our scope and methodology are discussed in greater detail in appendix I. We performed our work from June 2006 through May 2007 in accordance with generally accepted government auditing standards.

---

<sup>2</sup>In this context, data mining refers to a search process applied to a data set to identify trends, relationships, and data associations that may indicate potential control weaknesses, noncompliance with requirements, or improper activities.

---

## Results in Brief

DOE's internal controls over payments to the WTP contractor do not provide reasonable assurance against the risk of improper payments, particularly given the WTP project's substantial inherent risks. Several factors combine to pose an inherent risk to the government of improper payments on this project, including the size and complexity of this one-of-a-kind nuclear construction project, the multibillion-dollar cost and schedule overruns the project has already experienced, and the substantial volume of transactions Bechtel bills to DOE on each invoice. As such, the project warrants a commensurate level of internal controls and oversight to help ensure that goods and services billed by WTP contractors have been received and are proper. Despite these risks, in fiscal years 2005 and 2006, DOE performed little or no review of the contractor's invoices or supporting documents for the \$40 million to \$60 million in charges that Bechtel billed to DOE each month. The need for close, ongoing review of invoiced transactions and support is particularly compelling given that the contractor's invoices provided little detail as to the items purchased, contrary to FAR and contract requirements. However, DOE officials chose instead to rely primarily on DCAA's review and approval of Bechtel's corporate-wide financial systems, which DOE officials believed allowed them to rely on the contractor's systems with little or no DOE oversight. In addition, DOE relied primarily on Bechtel to review and validate subcontractor charges without having a process in place to assess whether Bechtel was properly carrying out its subcontractor oversight responsibility. DOE's heavy reliance on others, with little oversight of its own, exposed the hundreds of millions of dollars it spent annually on the WTP project to an unnecessarily high risk of improper payments.

DOE also did not adequately oversee the contractor to ensure proper accountability for assets purchased with WTP contract funds. Under the contract, the contractor is responsible and accountable for all such property in accordance with sound business practice and applicable sections of the FAR. However, under the FAR, DOE is responsible for reviewing the contractor's property program to ensure compliance with the property clauses of the contract. We found that DOE relied primarily on the contractor to manage property without adequate oversight of the contractor's property program. Our review of Bechtel's property management program disclosed numerous internal control weaknesses that hindered accountability and increased the vulnerability of government property to theft or loss. For example, we found that Bechtel relied primarily on one property staff person to record the assets into its government property system, perform annual physical inventories, and update the information in the government property system. We also found errors and inaccuracies in the government property system, such as items

---

listed with incorrect property custodians or locations, and unrecorded property items, such as personal digital assistants. Bechtel also lacked adequate procedures for the physical inventory of construction materials and the custodial accountability of tools, contributing to inadequate accountability of government property. Bechtel did not follow up on off-site property items with expired property passes to ensure accountability for the items, and did not adequately oversee its subcontractors to help ensure that they appropriately managed and safeguarded WTP property that they possessed. Bechtel also did not timely prepare and submit reports of lost or damaged property, taking up to 2 years in some instances to report missing assets, such as computers, to DOE. While the instances of errors and missing assets we identified are not generalizable to the population, they help illustrate the effects of the control weaknesses. These internal control weaknesses over property coupled with the lack of DOE oversight created an environment in which government property could be lost or stolen without detection. During our review, both DOE and Bechtel hired new property managers who in turn have made a number of recent policy and procedural changes that, if properly implemented, should help improve internal controls and oversight of property. However, these actions by themselves will not address all the property vulnerabilities we found.

We are making 11 recommendations to DOE that, if effectively implemented, should improve DOE's oversight of WTP expenditures and strengthen its accountability for WTP-acquired government property. These recommendations are aimed at (1) establishing effective invoice review and approval procedures based on the WTP contract's risks, (2) periodically assessing the WTP contractor's property management program, and (3) directing the WTP contractor to establish controls to improve accountability for government property.

DOE commented on a draft of the report and stated it had assessed the risk of improper payments at contract inception, but agreed with the recommendation to perform an updated risk assessment to ensure adequate oversight and accountability for WTP expenditures. DOE did not specifically comment on the remaining recommendations. DOE stated that it believed the controls in place during the period of review, fiscal years 2005 and 2006, met the requirements and intent of the applicable FAR, DOE, and contract requirements, and that its existing practices adequately prevent unallowable or improper costs. DOE stated it would engage with DCAA to prepare an updated assessment of the risks, revise the current policies and procedures related to contractor billings as necessary, and



---

assess the adequacy of property management staff levels and capabilities to ensure that adequate coverage is provided for oversight of the WTP.

We disagree with DOE's contention that the controls in place during the period of review met all FAR, DOE, and contract requirements, as noted by several examples in our report where DOE's and/or the contractor's controls did not meet these requirements. Further, as reflected in both the report title and objectives, the focus of our report was not limited to DOE's compliance with regulations, but more broadly on the adequacy of its internal controls over contractor payments and project assets. Thus, our report also discusses areas in which DOE had not developed the policies needed to effect adequate internal control, and we continue to believe that DOE cannot rely primarily on others to ensure the propriety of its WTP contract payments. DOE's written comments are provided in appendix II and our detailed response to these comments is provided in the Agency Comments and Our Evaluation section of this report.

---

## Background

DOE's Hanford site in southeastern Washington State was established in 1943 to produce nuclear materials for the nation's defense. Although DOE stopped producing nuclear material at Hanford in 1989, millions of gallons of high-level radioactive waste from production still remain in aging, underground waste tanks, most of which are beyond their design life and many of which have reportedly leaked waste into the soil. Since production ended, DOE has attempted and abandoned several different approaches to treat and dispose of Hanford's tank wastes. DOE's current approach, the WTP project, is intended to separate the waste into high-level and low-activity fractions, and immobilize all of the high-level fraction and about half of the low-activity fraction of Hanford's approximately 56 million gallons of radioactive waste for permanent disposal.<sup>3</sup> To achieve this goal, DOE contracted with Bechtel in 2000 to construct a complex of 3 waste processing facilities, an analytical laboratory, and over 20 smaller, supporting facilities to treat and package the waste. The original contract was for \$4.3 billion, with a completion date of 2011. However, since then numerous problems with the design and construction of the facilities have resulted in several cost and schedule

---

<sup>3</sup>In an effort to accelerate cleanup, DOE has been developing a supplemental technology outside the scope of the WTP to treat the remaining half of the waste. See GAO, *Nuclear Waste: DOE Should Reassess Whether the Bulk Vitrification Demonstration Project at Its Hanford Site Is Still Needed to Treat Radioactive Waste*, [GAO-07-762](#) (Washington, D.C.: June 12, 2007).

---

overruns. DOE currently estimates that the WTP project will cost \$12.2 billion, with a completion date of late 2019. (See fig. 1 for an aerial view of WTP as of March 2007.)

**Figure 1: Aerial View of Hanford Waste Treatment Plant under Construction**



Source: DOE.

DOE relies almost entirely on contractors to carry out its production, research, and cleanup missions. DOE's history of inadequate management and oversight of contractors and of failure to hold its contractors accountable led us in 1990 to designate DOE's contract management, including both contract administration and project management, as a high-risk area vulnerable to fraud, waste, abuse, and mismanagement. Similarly, both DOE and DOE's Office of Inspector General have reported contract and project management as significant DOE management challenges since the 1990s. Over the years, we have also reported on project management weaknesses at WTP.<sup>4</sup> Because of both contractor and DOE management

---

<sup>4</sup>See for example, GAO, *Nuclear Waste: Absence of Key Management Reforms on Hanford's Cleanup Project Adds to Challenges of Achieving Cost and Schedule Goals*, [GAO-04-611](#) (Washington, D.C.: June 9, 2004), and *Hanford Waste Treatment Plant: Contractor and DOE Management Problems Have Led to Higher Costs, Construction Delays, and Safety Concerns*, [GAO-06-602T](#) (Washington, D.C.: Apr. 6, 2006).

---

problems with the project, DOE directed Bechtel to slow down or stop construction activities on two of the major facilities—the pretreatment facility and the high-level waste facility. The construction slowdown caused Bechtel to lay off several hundred construction workers in 2005, and caused Bechtel’s total annual WTP expenditures to drop from \$751 million in fiscal year 2005 to \$498 million in fiscal year 2006. However, Bechtel is preparing to restart construction on the two facilities and hire several hundred more workers in 2007 and 2008. While the majority of Bechtel’s WTP employees are located at or near the WTP construction site in Richland, Washington, some are also located off-site, primarily at Bechtel corporate offices in California and Maryland. DOE officials stated that because of the difficulty of hiring engineers willing to relocate to Richland, Bechtel plans to hire many more off-site employees in the future and is in the process of establishing a satellite office in Oakland, California, and expanding a satellite office in Frederick, Maryland, exclusively for the WTP project.

While our previous reports on WTP primarily discussed DOE’s project management practices, this report addresses aspects of its contract administration practices. Contract administration involves those activities performed by government officials, such as the program office staff, contracting officer and representatives, property administrator, and financial staff, after a contract has been awarded to help ensure that the contractor complies with the terms of the contract and that the government gets what it paid for at an appropriate cost.<sup>5</sup> DOE and the contractor must also comply with applicable provisions of the FAR, which is the primary regulation that federal agencies must follow when acquiring supplies and services with appropriated funds. The Department of Energy Acquisition Regulation establishes uniform acquisition policies that implement and supplement the FAR and is applicable to DOE acquisitions. The contract also specifies the DOE orders and directives that are applicable to the project. These orders and directives may impose requirements on DOE, the contractor, or both.

---

## Contract Requirements

Under the WTP contract, Bechtel must submit an invoice to DOE twice a month for reimbursement of all allowable costs incurred to complete the

---

<sup>5</sup>DOE sometimes uses the terms contract administration and contract management interchangeably to refer to tasks associated with the administration of the contract.

---

contract.<sup>6</sup> Excluding incentive fees, each semimonthly invoice averaged more than \$30 million in costs during fiscal year 2005, and more than \$20 million during fiscal year 2006. DOE's WTP contracting officer was responsible for approving each invoice within a few days so that DOE could pay the contractor within 7 days of receiving the invoice as required under the contract.<sup>7</sup> However, if DOE discovers an overpayment or underpayment after approval, it can make a subsequent adjustment at any time prior to contract closeout.

Under the terms of the contract, the FAR, and the cost accounting standards, reimbursable costs include supplies and services purchased directly for the contract, payments to subcontractors,<sup>8</sup> direct labor, direct travel, other direct costs, and properly allocable and allowable indirect costs.<sup>9</sup> The FAR and the cost accounting standards provide the cost principles and procedures for determining the allowability, allocability, and reasonableness of such costs.<sup>10</sup> Bechtel calculates the indirect costs in each invoice based on the various indirect cost billing rates that Bechtel and the government's corporate administrative contracting officer negotiate and agree to each year. Once agreed upon, the same set of rates applies to all of Bechtel's government contracts. The corporate administrative contracting officer assigned to oversee Bechtel is an official of DCMA, a component of the Department of Defense. DCAA and, to a lesser extent, DCMA, perform various reviews and audits of Bechtel's corporate-wide billing, purchasing, and accounting systems as well as various reviews of direct and indirect costs.<sup>11</sup>

---

<sup>6</sup>Contract clauses B.1 and G.4(b). FAR 31.201-2 specifies that to be allowable, costs must also be reasonable and allocable to the contract.

<sup>7</sup>Contract clauses G.4(b) and I.68 incorporating FAR 52.232-25, *Prompt Payment* (June 1997).

<sup>8</sup>"Subcontractor" means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime contractor or another subcontractor; see FAR 44.101.

<sup>9</sup>Contract clause I.19B incorporating FAR 52.216-7, *Allowable Cost and Payment* (March 2000) and contract clause I.63 incorporating FAR 52.230-2, *Cost Accounting Standards* (April 1998). See also 48 CFR Part 9904, *Cost Accounting Standards*.

<sup>10</sup>FAR 31.105(c), FAR 31.201-2, 48 CFR Part 9904.

<sup>11</sup>Although DCAA performs the majority of Bechtel audits that apply to WTP, DCMA has primary responsibility under FAR 42.302(a)(50) for Bechtel's corporate-wide contractor purchasing system review described in FAR 44.3. See also FAR Part 30, *Cost Accounting Standards Administration* and FAR Part 42, *Contract Administration and Audit Services*.

---

The WTP contract provides that title to property purchased by the contractor for which the contractor is reimbursed by the government passes to the government, and that the contractor is responsible and accountable for all such property. It further requires the contractor to establish and maintain a program for the use, maintenance, repair, protection, and preservation of government property in accordance with sound business practice and with FAR 45.5.<sup>12</sup> The FAR provides additional requirements for the contractor's property control program, such as requirements for the contractor to investigate and report to the DOE property administrator all cases of loss, damage, or destruction of government property and to require and ensure that subcontractors provided government property under the prime contract comply with the FAR requirements.<sup>13</sup> The FAR requires DOE to review and approve the contractor's property control system and to perform reviews to ensure compliance with the government property clauses of the contract.<sup>14</sup> In addition, DOE Order 580.1, *Department of Energy Personal Property Management Program*, sets forth the standards, practices, and performance expectations for the management of personal property owned by DOE, including requirements for DOE property administrators to develop and apply an oversight program, resolve property administration issues, and make recommendations concerning the acceptability of contractor personal property management systems.

---

## Internal Control

Internal control is the first line of defense in safeguarding assets and preventing and detecting fraud and errors. Internal control is not one event or activity but a series of actions and activities that occur throughout an entity's operations on an ongoing basis. It comprises the plans, methods, and procedures used to effectively and efficiently meet missions, goals, and objectives. As required by 31 U.S.C. § 3512(c),(d), commonly referred to as the Federal Managers' Financial Integrity Act of 1982, GAO issues standards for internal control in the federal government.<sup>15</sup> These standards provide the overall framework for

---

<sup>12</sup>Contract clause I.88 incorporating FAR 52.245-5, *Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts)* (January 1986).

<sup>13</sup>FAR 45.504(b) and 45.502(d).

<sup>14</sup>FAR 45.104(a), (b).

<sup>15</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: November 1999).

---

establishing and maintaining internal control and for identifying and addressing major performance and management challenges and areas at greatest risk of fraud, waste, abuse, and mismanagement. The accompanying internal control standards tool provides additional guidance to assist agencies in maintaining or implementing effective internal control and in determining what, where, and how improvements can be implemented.<sup>16</sup> The standards include establishment of a positive control environment that provides discipline and structure as well as a climate that influences the quality of internal control. As we reported in our Executive Guide, *Strategies to Manage Improper Payments: Learning from Public and Private Sector Organizations* (improper payments guide), a lack of or breakdown in internal control may result in improper payments.<sup>17</sup> Improper payments are a widespread and significant problem in government and include inadvertent errors, such as duplicate payments and miscalculations; payments for unsupported or inadequately supported claims or invoices; payments for services not rendered; and payments resulting from outright fraud and abuse.

---

## Inadequate DOE Controls Heightened Risk of Improper WTP Contractor Payments

DOE's controls over payments to contractors were not effectively designed to adequately reduce the risk of improper payments, particularly given the inherent financial risks of the WTP project. Specifically, several factors combine to pose a significant inherent risk of improper payments to the government on this project, including the size and complexity of the project, escalating cost and schedule estimates, and the significant volume of transactions Bechtel bills to DOE each invoice. However, despite these risks, DOE performed little or no review of the contractor's invoices in fiscal years 2005 and 2006 or of supporting documents for the almost \$1.25 billion Bechtel billed to DOE on these invoices. Instead, DOE relied primarily on DCAA's review and approval of Bechtel's financial systems and on Bechtel's review and approval of subcontractor charges. DOE's heavy reliance on others, with little oversight of its own, exposed the hundreds of millions of dollars it spent annually on the project to an unnecessarily high risk of improper payments.

---

<sup>16</sup>GAO, *Internal Control Management and Evaluation Tool*, [GAO-01-1008G](#) (Washington, D.C.: August 2001).

<sup>17</sup>GAO, *Strategies to Manage Improper Payments: Learning From Public and Private Sector Organizations*, [GAO-02-69G](#) (Washington, D.C.: October 2001). This guide resulted from GAO's study of a number of private and public sector organizations and the actions they took and considered effective in reducing improper payments.

## WTP Project Has Significant Inherent Risks

The WTP is a long-term project that DOE currently estimates will cost over \$12 billion and take almost 20 years to complete. The size and complexity of the project and the escalating cost and schedule estimates pose a significant inherent risk to the government of improper payments that warrants a commensurate level of internal controls and oversight to help mitigate such risk. Table 1 illustrates the major categories of expenditures billed by Bechtel and reimbursed by DOE for the project in fiscal years 2005 and 2006.

**Table 1: Fiscal Years 2005 and 2006 WTP Expenses Billed by Bechtel to DOE**

Dollars in millions		
WTP expenses	FY 2005	FY 2006
Salaries and benefits	\$293.2	\$180.7
Construction materials and supplies	215.8	132.7
Subcontracts and consultants	131.2	93.8
Overhead and general and administrative costs	56.0	53.1
Incentive fees	20.7	14.5
Relocation and temporary assignments	12.2	3.9
Real property rental and operating expenses	7.3	7.4
Automotive and construction equipment and operating expenses	6.1	0.6
Office furniture, computers, and supplies	2.5	3.8
Other	6.2	7.4
<b>Total expenses</b>	<b>\$751.2</b>	<b>\$497.8</b>

Source: GAO analysis of Bechtel billing system data.

As discussed in GAO's improper payments guide, the risk of improper payments increases in programs with a significant volume of transactions or emphasis on expediting payments.<sup>18</sup> Bechtel bills DOE for thousands of transactions totaling tens of millions of dollars on every semimonthly invoice. In addition, the WTP contract specifies that DOE pay the contractor within 7 days of receipt of a proper invoice rather than the 30 days normally allowed under the Prompt Payment Act before it becomes liable for a late payment interest penalty.<sup>19</sup> This large volume of

<sup>18</sup>GAO-02-69G.

<sup>19</sup>Contract clauses G.4(b) and I.68 incorporating FAR 52.232-25, *Prompt Payment* (June 1997). See also 31 U.S.C. §§ 3901–3907. Contract clause I.68 also specifies the information that must be included in a proper invoice.

---

transactions combined with the expedited payment terms increases the risk of improper payments.

In addition, as a cost-plus-incentive-fee contract, the WTP contract type has its own inherent risks. Specifically, cost-reimbursement contracts (1) place maximum risk with the government and minimum risk with the contractor and (2) provide the contractor with little financial incentive to control costs. In some cases, the government may incorporate incentives within the fee structure to encourage the contractor to control costs, which DOE did in Bechtel's contract by providing the potential for Bechtel to earn incentive fees based on the relationship of total allowable costs to certain cost targets.<sup>20</sup> In this case, however, the current contract incentives are no longer meaningful because the current cost and schedule goals are no longer achievable due to the cost overruns and schedule delays that have already occurred. The FAR specifies that a cost-reimbursement contract may be used only when appropriate government surveillance during contract performance will provide reasonable assurance that efficient methods and effective cost controls are used.<sup>21</sup> Further, GAO's *Standards for Internal Control in the Federal Government* states that internal control should provide for an assessment of the risks the agency faces from both external and internal sources. It also states that once risks have been identified, they should be analyzed for their possible effect, including estimating the risk's significance, assessing the likelihood of its occurrence, and deciding how to manage the risk and what actions should be taken. Despite these requirements, DOE did not perform or document any type of formal risk assessment as a basis for determining the level of surveillance and internal controls it would use to manage the substantial risks associated with this project. Consequently, the low level of contractor oversight carried out by DOE was not commensurate with the high level of risk, thereby increasing the vulnerability of the contract payments to waste, fraud, and abuse.

---

### DOE Performed Little or No Review of Contractor Invoices

Despite the project's risks, in fiscal years 2005 and 2006 DOE performed little review of contractor invoices or supporting documents for the millions of dollars in charges that Bechtel billed to DOE twice a month. GAO's *Standards for Internal Control in the Federal Government* states

---

<sup>20</sup>Contract clause B.4. See also FAR 16.405-1 for a further description of cost-plus-incentive-fee contracts.

<sup>21</sup>FAR 16.301-3(a)(2).



---

that internal control activities—such as approvals, authorizations, verifications, reconciliations, and reviews—should help ensure that actions are taken to address risks. It further states that control activities are an integral part of an entity’s planning, implementing, reviewing, and accountability for stewardship of government resources and achieving effective results.

In fiscal years 2005 and 2006, Bechtel invoiced DOE twice a month for WTP expenses, averaging \$20 million to \$30 million and thousands of transactions per invoice. According to DOE officials, because of the size and volume of transactions in each invoice, the contractor did not provide supporting documents for the individual charges with each invoice but instead agreed to make them available to DOE upon request. DOE officials stated that prior to fiscal year 2005, a DOE accountant would judgmentally select from each invoice a few of the individual charges listed and request the contractor to provide the supporting documents for them. However, after a reorganization in fiscal year 2005 placed the contracting officer and the accounting staff that performed the invoice reviews in separate branches, DOE discontinued the reviews and instead conducted only an annual review of a few dozen transactions selected from two or three invoices. The contracting officer who was responsible for approving the invoices for payment said that DOE reduced the frequency of its invoice reviews in fiscal years 2005 and 2006 based on the results of the prior reviews. Consequently, he stated that his review of the invoice was limited primarily to ensuring that the contractor used the correct overhead and indirect cost billing rates; did not make any large, obvious mistakes; and properly treated any specific, unusual transactions he was expecting based on the project’s progress.

However, we found the lack of detail on the invoices for direct costs other than labor hindered DOE’s ability to identify potentially improper charges, obvious mistakes, or unusual transactions based on the invoice alone.<sup>22</sup> For example, a standard invoice review procedure would include looking for items with descriptions of potentially unallowable charges. However, this type of review was impossible to perform on WTP billings because neither the contractor’s invoices nor the billing system that generated them provided adequate descriptions of the charges. The FAR and the WTP contract require a proper contractor’s invoice to include the

---

<sup>22</sup>Because more detailed information was available on labor costs, we were able to perform selected data queries on labor charges and did not identify any significant exceptions.

description, quantity, unit price, and extended price of supplies delivered or services performed.<sup>23</sup> However, the contractor's invoice does not provide, and DOE has not required, purchase descriptions. Instead, Bechtel's invoices list most transactions under broad cost categories such as "construction material & supplies" or "subcontracts, consultants, & outside services" with vendor or subcontractor names, dates, and amounts. Thus, the lack of transaction descriptions would make it difficult for the contracting officer to identify obvious mistakes or unusual transactions, as well as potentially improper charges. Fig. 2 illustrates the level of detail provided, taken from an actual page of an invoice billed to DOE.

**Figure 2: Sample Charges from Bechtel Invoice to DOE**

PAGE: 1		OTHER DIRECT COST SCHEDULE - JOB: 24590 - 010 FOR PERIOD ENDING 06/07/06 INVOICE: 24590-606100			
N/C	REFERENCE NO.	DATE	DESCRIPTION	AMOUNT	HOURS
CONSTRUCTION MATERIAL & SUPPLIES					
310	003350360 18479	05/23/06	Supplier 1	2,464.77	
310	005831342 14759A	05/11/06	Supplier 2	5,077.06	
310	062550301 1742	05/26/06	Supplier 3	6,050.00	
310	099148363 2324837	05/11/06	Supplier 4	19,859.04	
310	107598963 194816	05/31/06	Supplier 5	173.97	
310	107598963 194821	05/31/06	" "	3,083.30	
310	107598963 201603	06/01/06	" "	26,363.64	
310	107598963 201717	05/31/06	" "	2,410.76	
310	107598963 201719	05/31/06	" "	2,927.35	
310	107598963 202109	05/31/06	" "	2,516.89	
310	107598963 204133	05/31/06	" "	49,025.95	
310	107598963 205105	05/31/06	" "	36,938.51	
310	107598963 205106	05/31/06	" "	4,575.01	
310	107598963 205107	06/01/06	" "	43,947.45	
310	1170BS11 57510	05/22/06	Supplier 6	1,102.70	
310	1170BS11 5755	05/22/06	" "	36,125.00	
310	1170BS11 5756	05/22/06	" "	18,063.00	
310	1170BS11 5758	05/11/06	" "	14,054.00	
310	1170BS11 5759	05/22/06	" "	2,844.20	
310	144431400 010	05/22/06	Supplier 7	172,769.30	
310	784156630 15344	05/22/06	Supplier 8	93,717.02	
310	804270726 22030421NA	05/02/06	Supplier 9	137,692.40	
310	966625303 10648	06/05/06	Supplier 10	11,192.52	

"Description" portion of invoice provides names of suppliers (redacted in this figure and replaced with Supplier 1, Supplier 2, etc.) but provides no additional description of items purchased or services performed

Source: DOE and GAO.

Notes: N/C stands for natural classification, which the contractor uses to identify the type of expense. For example, N/C 310 stands for construction materials and supplies. The reference number is used by the contractor to locate the hard copy support in its files for the corresponding transaction.

<sup>23</sup>Contract clause I.68 incorporating FAR 52.232-25, *Prompt Payment* (June 1997).

---

DOE's WTP project directors, who were responsible for overseeing the design and construction of designated WTP facilities and thus had more knowledge of daily work activities, received an abbreviated version of the invoice twice a month for review. However, we found that the abbreviated invoice provided only summary totals for labor, other direct costs, and indirect costs and did not provide even the limited transaction detail that was included in the full invoice. Thus, the project directors' reviews were limited primarily to assessing whether the total costs billed for their respective projects appeared reasonable given their projects' annual budgets and progress. Although these project directors had project knowledge, the lack of invoice detail prevented them from performing any meaningful review of specific costs. For example, one report the project directors received for project management purposes was a biweekly report showing the construction materials Bechtel used during that period. However, the abbreviated invoice did not show the type and amount of materials purchased or used, or even a summary total of construction materials billed. Thus, the information on the two documents could not be compared and neither could be meaningfully used to confirm or question individual costs being billed to DOE.

According to DOE officials, there was no requirement specifying how frequently invoices should be reviewed or how such reviews should be performed. DOE had previously issued a local directive, dated September 23, 2002, specific to the WTP project that provided DOE staff with instructions for reviewing Bechtel's semimonthly invoices.<sup>24</sup> However, DOE officials stated the directive is inactive because it supplemented the WTP contract management plan that was undergoing revision, even though the plan had not been updated since July 11, 2002. According to DOE's acquisition guide, voucher (invoice) processing and review is an important aspect of contract management, and thus the guide recommends that the contract management plan discuss the process for reviewing and approving invoices and discuss the roles and responsibilities of individuals who are directly involved in the process. The lack of a current contract management plan and corresponding requirements for invoice review—specifying an appropriate level, extent, and responsibilities—further impedes the effective administration of the WTP contract.

---

<sup>24</sup>ORP M 131.7 R1, *ORP Review of Bechtel National Inc. Semimonthly Invoices*, September 23, 2002. This was a revision of a previous version issued November 15, 2001.

---

## DOE Placed Undue Reliance on DCAA and Other Entities

The manager of the DOE staff that previously performed the invoice reviews stated that he did not believe that the FAR required DOE to review the invoiced charges because DCAA had already audited and considered Bechtel's accounting system to be adequate. Specifically, he stated that FAR 32.503-4 allowed DOE to rely on the internal controls of Bechtel's accounting system because DCAA had certified Bechtel's system; thus the invoice reviews DOE performed in the past were beyond what the FAR required. However, FAR 32.500 explicitly states that that section of the FAR does not apply to payments under cost-reimbursement contracts and, therefore, FAR 32.503-4 does not apply to the WTP contract. Instead, the FAR recognizes that cost-reimbursement contracts carry a greater degree of risk to the government, and specifies that cost-reimbursement contracts should have appropriate government surveillance during performance to provide reasonable assurance that efficient methods and effective cost controls are used.

GAO's *Standards for Internal Control in the Federal Government* states that internal control should be designed to ensure that ongoing monitoring occurs in the course of normal operations, is performed continually, and is ingrained in the agency's operations. While the standards acknowledge that separate evaluations can also be useful by focusing directly on the controls' effectiveness at a specific time, both ongoing monitoring activities and separate evaluations of the internal control system should be considered in assessing the continued effectiveness of internal control. Consequently, while external reviews such as DCAA's can supplement an overall system of internal control, they are not a substitute for them. Although DCAA conducts several types of audits of Bechtel, it generally conducts its reviews at the corporate-wide level and not at the level specific to a particular contract. Bechtel maintains one overall accounting system that includes various feeder and subsystems—such as the timekeeping and billing systems—for the entire corporation.<sup>25</sup> DCAA audits these systems on a cyclical basis, such that each system is reviewed only once every 3 to 4 years, and these systems audits are not intended to determine the allowability of specific costs. Although DCAA performs annual incurred cost audits that do examine the allowability of the contractor's direct and indirect costs, there is a significant time lag between when a calendar year closes and when the audit takes place. For example, as of the end of fiscal year 2006 the most recent audit DCAA

---

<sup>25</sup>While Bechtel's field locations use a variety of local accounting systems, the accounting information from the local systems is uploaded to the corporate system monthly.

---

completed of Bechtel's incurred costs covered calendar year 2003. This delay was caused in part by the typical 8 months that it may take for the contractor to submit its final indirect cost rate proposal for the year reviewed and in part by a backlog of incurred cost audits at DCAA.<sup>26</sup> In addition, DCAA's incurred cost audits of Bechtel express an opinion on the allowability of both direct and indirect costs for all of Bechtel's government contracts and subcontracts. Although the WTP project accounts for a substantial portion of Bechtel's total federal contract dollars, the 2003 incurred cost audit report listed over 50 applicable Bechtel contracts.<sup>27</sup> Consequently, WTP was just one of many contracts included in the audit's scope of review.

In addition, DOE relied primarily on Bechtel to review and validate subcontractor charges without having an adequate process in place to assess whether Bechtel was properly carrying out this responsibility. While we recognize that under the FAR the government does not have privity of contract, that is, a direct contracting relationship, with the prime contractor's subcontractors,<sup>28</sup> the government should have a process in place to ensure that the prime contractor is providing adequate oversight and effective cost control of its subcontractors' expenditures. This need is even more pronounced when both the prime contract and the subcontract are cost-reimbursable contracts. In fiscal years 2005 and 2006, Bechtel had over 150 subcontracts open, of which 7 were cost-reimbursable subcontracts with a total contract value of \$495 million. DOE's internal controls for ensuring the propriety of subcontractor costs were limited primarily to including selected subcontractor purchases during its periodic reviews of Bechtel's invoices. However, as noted previously, during the period of our review DOE performed little review of the contractor's

---

<sup>26</sup>Bechtel bills the government for indirect costs during a given year based on forward pricing rates that Bechtel calculates based upon its estimate of the costs it will incur. After the year is over, it prepares a final indirect cost rate proposal based on the actual costs incurred. DCAA staff stated they usually require the contractor to provide additional information or other changes to the final rate proposal before it is considered acceptable for audit, and this further adds to the delays. For example, for calendar year 2003 Bechtel submitted its original final rate proposal in August 2004, but did not submit its final revised proposal until January 2006.

<sup>27</sup>According to DCAA, in calendar year 2003, the WTP contract accounted for about half of Bechtel's total federal contract dollars, excluding its management and operating contracts. WTP makes up a smaller portion in subsequent years, due largely to a significant increase in Bechtel's total federal contract dollars beginning in calendar year 2004.

<sup>28</sup>FAR 42.505(b)(1).

---

invoices. DOE officials stated they also rely on DCMA's contractor purchasing system review of Bechtel, which includes reviewing the contractor's controls for subcontracting. However, similar to the DCAA system reviews described above, DCMA's contractor purchasing system review of Bechtel is a corporate-wide review performed only about once every 3 years, and the review is not intended to determine the allowability of specific costs. Because a substantial portion of Bechtel's WTP expenditures goes to subcontractors, for which DOE ultimately pays, DOE should have a process in place to provide reasonable assurance that it can rely upon Bechtel's controls to ensure subcontractors' expenditures are allowable and necessary.

The use of cost-reimbursement contracts places special responsibilities on the contracting agency to monitor and control costs by using good contract management and administration practices, including proper internal controls. By not adequately monitoring charges, DOE may not be identifying errors or the weaknesses that allowed them to occur and thus is providing no deterrent to future errors or improprieties. Although DOE officials stated that they were comfortable with the current level of review because they had not found a significant number of errors in the past, as noted in the *Strategies to Manage Improper Payments* guide, most improper payments associated with federal programs go unidentified typically because of factors such as insufficient oversight or monitoring.

DOE recently took some steps to begin strengthening its oversight of contractor payments. Based on weaknesses identified in its limited fiscal year 2006 annual review of transactions selected from two invoices, DOE began performing monthly invoice reviews in fiscal year 2007. While this is a step in the right direction, it is no substitute for a comprehensive approach that includes an appropriate assessment of risk that could then be used as a basis to design a system of internal control that would be effective in reducing the risk of improper payments. In addition, without sufficient detail in the invoices from which the transactions are selected, such reviews are minimally effective in identifying potential improper payments.

---

## DOE's Oversight Controls for Project Assets Were Inadequate

DOE did not perform adequate oversight to reasonably ensure that Bechtel had established proper accountability for assets purchased with WTP project funds.<sup>29</sup> The FAR and the contract require the contractor to establish a property management program to safeguard and account for such assets.<sup>30</sup> The FAR also requires DOE to review the contractor's property program to ensure compliance with the property clauses of the contract.<sup>31</sup> However, we found that DOE relied primarily on the contractor to manage WTP property without adequate oversight to help ensure that the contractor complied with these requirements. As a result, until recently DOE management was largely unaware of numerous internal control weaknesses in the contractor's property management system, which exposed WTP assets to loss or misuse. While new property managers for DOE and Bechtel have begun addressing the internal control weaknesses we identified, both DOE and the contractor will need continued vigilance in their oversight and management of WTP property to help ensure that it is adequately safeguarded and tracked.

---

## DOE Did Not Ensure the Contractor Maintained Adequate Accountability over Property

DOE reimbursed Bechtel more than \$100 million and \$200 million in fiscal years 2006 and 2005, respectively, for property purchased for the direct construction of the WTP facilities or to support the construction activities. Such property varies by type and value and includes (1) construction materials, which may be consumed during construction and incorporated into an end product (e.g., cement and pipes); (2) plant equipment, which is personal property of a capital nature and used for administrative or general plant purposes (e.g., cranes and vehicles); (3) sensitive items, which are personal property susceptible to theft and misappropriation (e.g., computers and audiovisual equipment); and (4) tools, which include both inexpensive handheld tools as well as power tools costing thousands of dollars.

Despite the hundreds of millions of dollars in WTP funds expended to acquire property over the years, DOE performed little oversight of

---

<sup>29</sup>We use the terms property and assets interchangeably throughout this section to refer to all WTP property items (excluding real property) for which the contractor is expected to maintain some level of accountability.

<sup>30</sup>FAR 45.502(a),(b) and contract clause I.88 incorporating FAR 52.245-5, *Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts)* (January 1986).

<sup>31</sup>FAR 45.104.

---

Bechtel's property management program, relying primarily on the contractor to meet property requirements and self-report its compliance. Although the contractor was responsible for the day-to-day management of the property, the FAR required DOE to (1) review and approve the contractor's property management system and (2) ensure compliance with the government property clauses of the contract.<sup>32</sup> In addition, DOE's own policies required DOE to maintain records of approvals and reviews of contractors' property management systems.<sup>33</sup> Nonetheless, besides issuing a letter dated November 21, 2002, approving Bechtel's property control system, DOE did not document its review of the system and could not provide any supporting documentation demonstrating what it reviewed as the basis for approving the system. The DOE official responsible for the approval told us that he reviewed the contractor's policies and procedures and spot-checked implementation of procedures on site but did not formally document his assessment or corrective actions he required of the contractor. Consequently, there was no documentary evidence available from which we or DOE could evaluate the adequacy of the original assessment and any corrective actions.

Moreover, DOE did not perform sufficient reviews after its 2002 approval of Bechtel's property management system to help ensure that Bechtel followed property procedures and complied with FAR and contract requirements. GAO's *Standards for Internal Control in the Federal Government* states that internal control should be designed to provide reasonable assurance regarding prevention of or prompt detection of unauthorized acquisition, use, or disposition of an agency's assets. However, the DOE official responsible for the oversight of WTP assets from May 2005 to May 2006 stated that he never went out to the WTP site to review procedures, observe property management operations, or conduct spot checks of property because he did not have the time to perform such reviews. While DOE received some reports from the contractor related to property—such as periodic reports of lost, damaged, or destroyed government property and Bechtel's annual performance measures report that included limited summary-level data, such as percentage of items located during physical inventories—it accepted these reports without performing on-site observations or reviewing any supporting documentation to validate the information. In addition, DOE relied solely on Bechtel to ensure that subcontractors maintained

---

<sup>32</sup>FAR 45.104.

<sup>33</sup>Department of Energy Acquisition Regulation 945.102-71.



---

adequate accountability for government property they possessed without having a process in place to assess whether Bechtel was properly carrying out this responsibility.

DOE officials acknowledged that DOE oversight of WTP property management has been inadequate and attributed this control weakness to a staffing shortage. According to DOE's personal property director at DOE headquarters and the WTP contracting officer, a dedicated DOE property administrator should have been assigned to the WTP project, but DOE had difficulty filling the position. As a result, DOE did not assign a property administrator dedicated to the WTP project until June 2006, over 5 years after it awarded the contract. In the meantime, DOE assigned to the DOE Richland Office's property management officer the oversight responsibility for all government property at Hanford—including WTP property—held by DOE and several contractors. Although DOE's written responsibilities for such property officers identify them as the leader of an appraisal team responsible for ensuring that DOE contractors established and maintained effective property management programs, a former property officer stated that he was never assigned staff to assist him with his oversight responsibilities. The lack of dedicated DOE staff to oversee management of WTP property was further exacerbated by the high turnover rate of property officers assigned to Hanford. DOE officials stated that there have been four property officers at Hanford within the past 5-½ years, and that they were assigned other collateral duties in addition to their property oversight responsibilities.

Ongoing monitoring of the contractor's program to safeguard and account for WTP assets located both on- and off-site is critical for preventing and detecting the loss and misuse of such assets. Had DOE implemented effective oversight controls, it may have identified the numerous weaknesses in the contractor's property management program described below and could have directed the contractor to take corrective actions sooner.

---

**Contractor Did Not Have Adequate Controls for Maintaining Property Accountability**

We identified several weaknesses with Bechtel's property management program that increased the risk of theft, loss, or misuse of government assets. The WTP contract provides that title to property purchased by the contractor for which the contractor is reimbursed by the government passes to the government, and that the contractor is responsible and accountable for all such property in accordance with sound business

---

practice and with applicable provisions of FAR 45.5.<sup>34</sup> As part of these responsibilities, the FAR requires the contractor to establish and maintain a program to control, protect, preserve, and maintain all government property.<sup>35</sup> As of September 30, 2006, Bechtel reported that it had about \$65 million in its inventory of capital equipment and sensitive property and \$16 million in its tools inventory related to the WTP project.<sup>36</sup> Bechtel had about \$100 million in its construction materials inventory as of May 2007.<sup>37</sup> (See fig. 3 for a sample of equipment and tools used at WTP.)

---

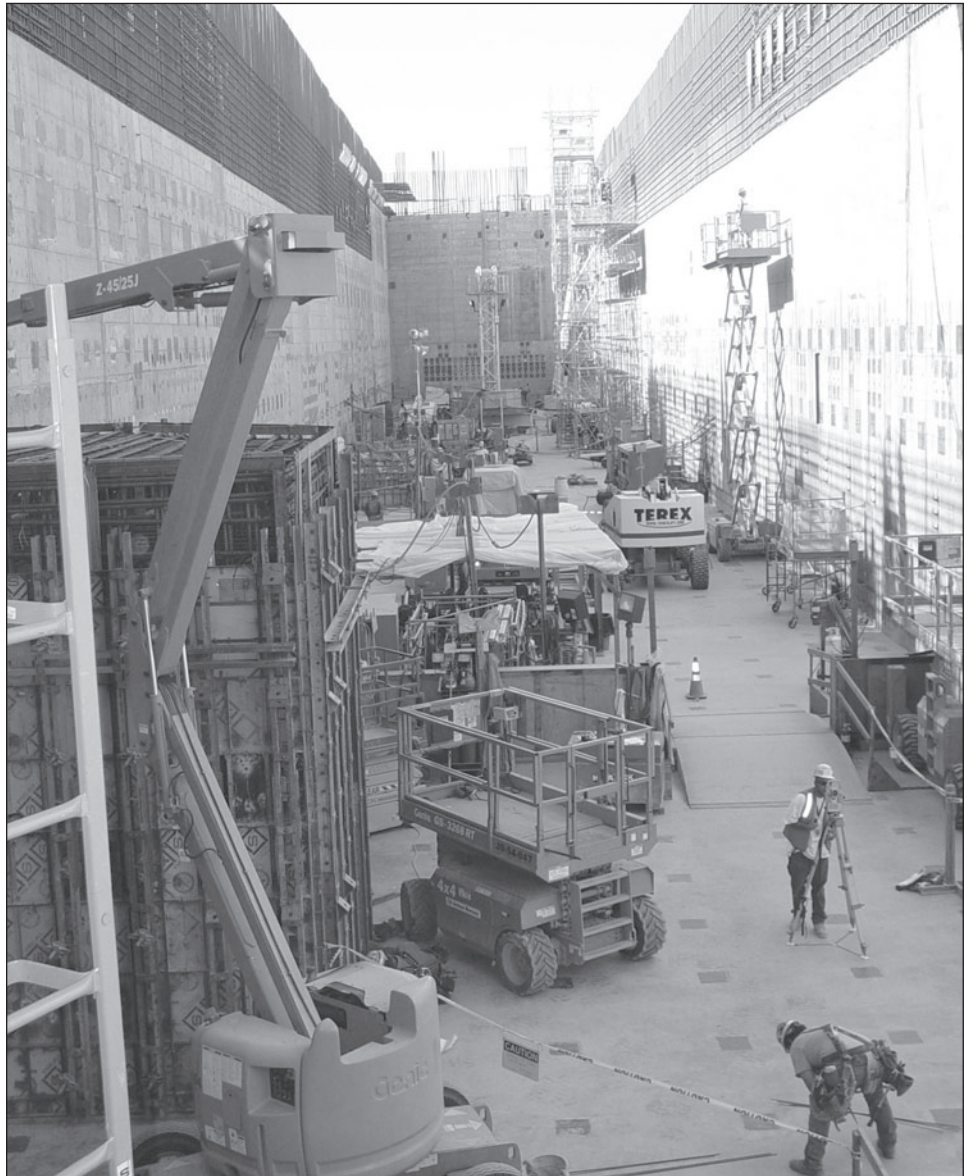
<sup>34</sup>Contract clause I.88 incorporating FAR 52.245-5, *Government Property (Cost-Reimbursement, Time-and-Materials, or Labor-Hour Contracts)* (January 1986).

<sup>35</sup>FAR 45.502(a).

<sup>36</sup>In fiscal years 2005 and 2006, Bechtel used multiple databases to track its property inventories. It used its government property system to track its inventory of plant equipment and tools valued at \$5,000 or more (capital equipment) and sensitive items at various lower dollar thresholds. It used its Toolhound database to track its inventory of tools regardless of value; thus Bechtel tracked some items in Toolhound that it also tracked in its government property system. As of September 30, 2006, Bechtel's government property system had \$6.5 million in tools recorded. It used the Bechtel procurement system to track its inventory of construction materials.

<sup>37</sup>The construction materials amount is based on the most current available materials inventory report as of the date of our inquiry.

**Figure 3: Example of Construction Equipment and Tools Being Used at WTP**



Source: DOE.

Our review of Bechtel's property management program disclosed numerous internal control weaknesses that exposed government assets to an increased risk of theft, loss, or misuse and decreased the likelihood of detecting such incidents in a timely manner:

- 
- **Inadequate segregation of duties.** GAO's *Standards for Internal Control in the Federal Government* state that key duties and responsibilities should be divided among different people to reduce the risk of error or fraud. The FAR and Bechtel's own policies require that personnel who perform the physical inventory not be the same individuals who maintain the property records.<sup>38</sup> However, during our review, one Bechtel employee was primarily responsible for reviewing the procurement system to identify accountable property purchased, bar coding property when received, entering new property items into Bechtel's government property system, performing annual physical inventories, and updating the government property system for the results of the inventory. In addition, no one reviewed the data she entered into the property system. Bechtel management attributed this control weakness to reduced staffing caused by the construction slowdown.
  - **Inaccurate property system data.** Bechtel used its government property system to track its inventory of capital equipment and sensitive items. Thus, Bechtel's property procedures required it to maintain the government property system in a manner sufficient to keep database records current and accurate. For example, the procedures state that property management staff are responsible for updating the property records with current locations and custodians. However, during our physical observations of selected property items, we identified items recorded in Bechtel's government property system with the wrong custodian or location and items recorded in the system that were actually missing. We also identified property that Bechtel had purchased and received but not recorded in the government property system, such as personal digital assistants, copiers, and computer equipment. Bechtel's property management staff explained that the failure to record the items was caused in part by property staff errors in determining whether to record certain items and to receiving staff's failure to promptly notify property staff of newly acquired property. Bechtel property staff recorded the assets in their property system after we brought them to their attention.
  - **Inadequate inventory procedures.** The FAR requires the contractor to conduct periodic physical inventories of all government property in its possession or control. It also requires the contractor, with the approval of the government property administrator, to establish the

---

<sup>38</sup>FAR 45.508.

---

type, frequency, and procedures for such inventories.<sup>39</sup> However, we found that Bechtel's procedures did not specify the frequency or type of inventory required for construction materials, and DOE approved Bechtel's inventory procedures for materials without an established time frame. Consequently, Bechtel's property manager stated that while it had performed some spot inventories of selected materials at various times, Bechtel had not performed a complete inventory of materials in fiscal years 2005 or 2006 because of staffing shortages. Bechtel property management staff also stated that they inventory all assets recorded in Bechtel's government property system annually, yet we identified about 900 items recorded as of September 30, 2006, that the system showed had not been inventoried within the prior year.<sup>40</sup> Bechtel staff claimed that the information in the property system was wrong and that the items had been inventoried, but could not provide adequate documentation to support their claim. We selected 32 of these items for observation and could not locate 4 of them. Records in the government property system as of September 30, 2006, for these 4 missing items—3 computers and 1 projector that are considered sensitive assets—showed that they had not been inventoried in over 2 years.

- **Inadequate policies and procedures for the accountability of tools.** Bechtel acquires a large number of tools at substantial cost for the WTP construction project, billing the government \$2.3 million for tools in fiscal year 2005 alone. Tools are easily pilferable, and while many tools may be considered nominal in cost, some cost thousands of dollars and thus warrant commensurate controls to safeguard them effectively. However, we identified several weaknesses with Bechtel's management of tools. For example, because Bechtel lacked adequate inventory procedures for tools, workers could check out tools from the main tool crib indefinitely without the tools ever being inventoried to ensure that they still existed and were being utilized. Additionally, employee exit procedures were not consistently followed to ensure that terminated employees returned their tools before leaving. We selected for observation five tools that property records showed were assigned to former employees, and found that all five were missing. Furthermore, our review of the tools database and human resource

---

<sup>39</sup>FAR 45.508.

<sup>40</sup>Bechtel's written procedures require physical inventories of plant equipment every 3 years and of sensitive assets annually. However, property management staff stated that in practice, they inventory all items recorded in the government property system annually.

---

records showed that some workers checked out tools the day before or the day of their termination dates. Bechtel also lacked adequate guidelines for the disposal of tools damaged through normal wear and tear. Specifically, until recently there was no requirement to obtain Bechtel or DOE property management approval to dispose of worn tools. As a result, warehouse staff independently designated over \$90,000 of tools as “worn” and disposed of them without any management concurrence required.

- **Lack of compliance with property checkout procedures.** Bechtel’s property procedures required employees to obtain a property pass for items removed from project-controlled areas, and to renew the pass annually if the asset was still needed off-site by presenting the item to the property staff for inspection. We reviewed Bechtel’s government property system and found that about 100 of the 300 items checked out—primarily computers—had expired property passes, some of which had expired as far back as March 2005. We selected 10 assets with expired property passes to observe, and could only locate 9 of them. The missing item, whose property pass had expired in March 2006, was also one of the computers discussed previously that had not been recently inventoried. Bechtel property staff stated they query the government property system monthly to identify and alert custodians of property passes that are about to expire, but could not explain how they missed the expired passes we identified.
- **Lost, damaged, or destroyed property items not promptly reported.** Although the FAR requires the contractor to investigate and report to DOE all cases of loss, damage, or destruction of government property, Bechtel did not always submit such reports to DOE timely.<sup>41</sup> For example, Bechtel did not report to DOE the loss of 3 laptop computers and 2 projectors until 2 years after it first identified them as missing. In April 2007, Bechtel reported to DOE another 15 computers, a printer, and a projector as missing. Bechtel’s government property system indicated and Bechtel’s property staff confirmed that Bechtel first identified at least 2 of these items as missing as far back as 2002. Part of the cause for these delays was that until August 2006 neither Bechtel nor DOE had policies requiring specific time frames for investigating and reporting such incidents. Bechtel officials acknowledged that they should have reported these missing assets more promptly but stated that the delays were caused by Bechtel staff

---

<sup>41</sup>FAR 45.504(b).

---

not always promptly reporting lost or damaged government property to Bechtel property staff, and by property staff delaying submitting the reports in hopes that the missing assets would eventually be found. These delays in reporting missing assets, particularly computers that may contain sensitive or proprietary information, decreased the opportunity for DOE to require a timely and thorough investigation into the losses and to require Bechtel to promptly implement controls to help avert future losses of a similar nature.

- **Inadequate oversight of subcontractors with WTP assets.** Bechtel works with numerous subcontractors that supply materials and services to help construct WTP facilities, some of which possess WTP property. The FAR requires the prime contractor to ensure that its subcontractors adequately care for and maintain government property and ensure that it is used only for authorized purposes.<sup>42</sup> This is particularly important since the subcontractors generally maintain the property records for government property they purchase and use, rather than Bechtel. Consequently, Bechtel's property procedures require its property manager to review and approve its subcontractors' government property programs. However, Bechtel did not adequately perform such reviews or follow up on subcontractors' property management issues. For example:
  - Although Bechtel policy required it to audit its subcontractors' government property programs, one subcontractor refused to be audited by Bechtel because the subcontractor claimed that it already had a property program approved and audited by the government. Even though that program had no relevance to the WTP contract, Bechtel never audited the subcontractor. In addition, this subcontractor refused to provide Bechtel a copy of its property policies and procedures, citing proprietary concerns. Thus, Bechtel had no basis for and never assessed the adequacy of this subcontractor's property management program.
  - The subcontractors' property management policies were not always complete or consistent with Bechtel's property policies. For example, one subcontractor's policy lacked formal procedures for reporting lost, damaged, or destroyed government property and thus did not have any requirements for reporting such items promptly. Another subcontractor's policy for tracking sensitive

---

<sup>42</sup>FAR 45.510.

---

items was inconsistent with Bechtel's own policy. Specifically, the subcontractor's dollar threshold for tracking sensitive items, such as cameras and video equipment, was higher than Bechtel's threshold. As a result, WTP assets susceptible to theft and misuse were not being consistently tracked in the property systems for inventory control purposes.

- Bechtel did not timely follow up on subcontractor property management issues it identified through its audit and oversight to ensure that the subcontractors properly implemented corrective actions. For example, during an April 2005 subcontractor audit, Bechtel identified several government assets that were not marked with indication of government ownership as required by the FAR.<sup>43</sup> In its audit report, Bechtel indicated that it would perform a follow-up review within 30 days to ensure that corrective actions were implemented; however, it could not provide us any documentation that such follow-up was performed. During our visit to that subcontractor in February 2007, we saw several government assets that were not marked as government property. During the same April 2005 audit, Bechtel discovered a missing computer and instructed the subcontractor to submit a lost property report, which the subcontractor submitted in June 2005. Bechtel rejected the report and requested a revision, but did not follow up with the subcontractor to ensure that a revised report was submitted. Consequently, Bechtel did not receive a revised report until February 2007, which it subsequently submitted to DOE.

---

## DOE and Bechtel Are Implementing Corrective Actions

DOE has recently taken steps to increase its oversight of Bechtel's WTP property management program. At the time we began our audit, DOE hired a property administrator responsible solely for overseeing the WTP property management program. This property administrator has taken on a more active oversight role through his procedural and compliance reviews. For example, since his arrival in mid-2006 he has issued specific requirements to the contractor for reporting lost, damaged, or destroyed property more timely; directed the contractor to perform a materials inventory at least annually; issued guidelines for performing inventories of tools checked out to workers; and performed several on-site inspections identifying instances of noncompliance and corrective actions for Bechtel

---

<sup>43</sup>FAR 45.506.



---

to address.<sup>44</sup> In addition, he has directed the contractor to prepare and submit for his approval a detailed inventory plan for construction materials specifying the inventory type, frequency, and detailed procedures.

For its part, Bechtel has also initiated a number of corrective actions to improve its management of government property. Bechtel also hired a new property manager in mid-2006 who in turn hired several additional property staff to better address the segregation-of-duties issue and to help implement requirements. The new property manager has developed and issued new policies, such as a policy requiring Bechtel and DOE property management concurrence prior to disposing of worn tools. In addition, he implemented a new property database system and tasked his staff with correcting errors in the property system. He stated he also plans to review Bechtel's receiving process and tools accountability.

Because the policy and procedural changes primarily occurred after our review period, we have not assessed the effectiveness of the changes. If implemented properly, these should help improve the contractor's management of government property and DOE's oversight of the contractor's program. However, additional issues remain which, if not addressed, will continue to expose government property to an increased risk of theft, loss, or misuse.

---

## Conclusions

DOE's oversight of contractor billings and property management on the WTP project did not have the level of internal controls that would be expected of a project of this magnitude and complexity. DOE's lack of appropriate oversight controls for contractor invoices significantly increased its vulnerability to improper payments. Further, DOE did not establish basic oversight controls to reasonably ensure that Bechtel and its subcontractors appropriately tracked and safeguarded the millions of dollars in property and equipment purchased for the project. Given that DOE has estimated that it will likely spend at least another \$9 billion on the WTP project over the next decade or more, it is critically important

---

<sup>44</sup>For example, DOE's property administrator issued a memo directing Bechtel to notify him by e-mail within 24 hours of the discovery of lost, damaged, or destroyed property. It also requires Bechtel to follow up such notification with a formal lost, damaged, or destroyed property report within 7 calendar days after the discovery of an incident related to sensitive property, 14 calendar days for property valued at \$5,000 or greater, and 45 calendar days for all other property.

---

that it establish appropriate oversight and controls commensurate with the risks involved in this costly, complex project. This is particularly important in the near term as the project ramps back up and the contractor begins to hire hundreds of additional workers in Hanford and at off-site locations. The recent corrective actions taken to date, if effectively implemented, are positive first steps to improving DOE's oversight of contractor payments and property management. DOE management's commitment and continued attention to these areas will be essential to establishing a lasting and more effective administration of the WTP contract.

---

## Recommendations for Executive Action

To improve DOE's oversight of and accountability for WTP expenditures, we recommend the following 11 actions. To improve DOE's review and approval process for contractor billings, we recommend that the Secretary of Energy direct the Assistant Secretary for Environmental Management or designee to:

- Perform an assessment of the risks associated with WTP contract payments, including subcontractor payments, which should include comprehensively identifying the risks, performing a risk analysis of their possible effects, and identifying the actions—both preventive and detective—to be taken to mitigate those risks.
- Based on the results of the risk assessment, establish appropriate policies and procedures for effective review and approval of the prime contractor's invoices. Such policies and procedures should specify the steps to be performed for review and approval, the individuals responsible for carrying out these steps, the level of invoice detail needed to perform an appropriate review, and the appropriate documentation to be maintained of that review process.
- Establish a policy and procedures to periodically assess the prime contractor's oversight of subcontractor payments to determine if there are any deficiencies and corrective actions needed and assess whether the controls can be sufficiently relied on to ensure that subcontractor payments are allowable, reasonable, and in compliance with all FAR and contract requirements.

To strengthen DOE's accountability for contractor-acquired government property, we recommend that the Secretary of Energy direct the Assistant Secretary for Environmental Management or designee to:

- 
- Follow DOE's existing requirements to periodically document and assess the contractor's property management program for compliance with the FAR and DOE policy.
  - Follow DOE's existing requirements to document the adequacy of corrective actions planned and implemented by the contractor to address weaknesses identified in DOE's assessments of the contractor's property management program.
  - Direct the contractor to implement control procedures to help ensure the timeliness and accuracy of information entered into the property systems.
  - Review the adequacy of Bechtel's proposed inventory plan for construction materials once submitted, and ensure that the approved plan is properly implemented.
  - Direct the contractor to establish appropriate controls to ensure that employee exit procedures requiring terminated employees to return tools before they leave are followed.
  - Direct the contractor to establish a formal policy and procedures for property staff to (1) periodically monitor the government property system for assets with property passes that are due to expire soon, (2) notify property custodians with such assets to renew their property passes or return the items if no longer needed, and (3) ensure that such assets are verified as required.
  - Direct the contractor to establish control procedures to help ensure that Bechtel staff and subcontractors report lost or damaged government assets to property management in a timely manner so that they can be forwarded to DOE within recently established time frames.
  - Establish procedures to periodically assess the prime contractor's oversight of its subcontractors in possession of government property to ensure that the prime contractor (1) audits applicable subcontractors' property management programs as required, (2) reviews applicable subcontractors' property management policies and procedures for completeness and consistency, and (3) follows up on and documents resolution of corrective actions in a timely manner.

---

## Agency Comments and Our Evaluation

We provided a draft of this report to DOE for its review and comment. In its written comments, DOE stated it had assessed the risk of improper payments at contract inception, but agreed with the recommendation to perform an updated risk assessment to ensure adequate oversight and accountability for WTP expenditures. It did not specifically comment on the remaining recommendations. DOE stated in the letter that it would engage with DCAA to update the assessment of the risks, revise the current policies and procedures related to contractor billings as necessary, and assess the adequacy of property management staff levels and capabilities to ensure that adequate coverage is provided for oversight of the WTP. However, while not disputing the specific facts contained in the report, the letter states that DOE believes (1) the controls in place during the period of review, fiscal years 2005 and 2006, met the requirements and intent of the applicable federal acquisition regulation, DOE orders, and contract terms; (2) the combination of the contractor's billing systems, DCAA's ongoing audits, and the recurring DOE review of selected invoices adequately prevent unallowable or improper costs, and (3) the property management weaknesses and corrective actions reflected in our reported findings and recommendations were self-identified by DOE and the contractor. DOE also provided technical comments that we subsequently discussed with DOE officials and incorporated as appropriate.

We disagree with DOE's contention that the controls in place during the period of review met the requirements and intent of the applicable FAR requirements, DOE orders, and WTP contract terms. For example, as noted in our report, the FAR and the WTP contract require that a proper contractor's invoice include the description, quantity, and unit price of supplies delivered or services performed, but Bechtel's invoice did not include such detail and DOE did not enforce the requirement. DOE's policies required it to maintain records of its reviews of contractors' property management systems, but DOE could not produce any documentation demonstrating what it reviewed as the basis for approving Bechtel's property management system. The FAR requires that personnel who perform the physical inventory not be the same individuals who maintain the property records, but at the time of our review one property staff member was performing both of these duties. These and other examples in our report illustrate that DOE's and the contractor's controls did not always meet FAR, DOE, or WTP contract requirements.

Further, as reflected in both the report title and objectives, the focus of our report was not limited to DOE's compliance with regulations, but more broadly on the adequacy of its internal controls over contractor payments and project assets. The *Standards for Internal Control in the*

---

*Federal Government*, with which DOE as a federal agency must comply, state that internal control is an integral part of managing an organization, and involves providing reasonable assurance that the agency not only complies with applicable laws and regulations, but also operates efficiently and effectively, including the use of the entity's resources. Internal control is to serve as the first line of defense in safeguarding assets and preventing and detecting errors and fraud. Internal control helps organizations achieve desired results through effective stewardship of public resources. Our report discusses several areas in which DOE had not developed the policies needed to effect adequate internal control. For example, there was no requirement specifying how frequently contractor invoices should be reviewed or how such reviews should be performed. Similarly, until August 2006 neither Bechtel nor DOE had policies requiring specific time frames for reporting lost, damaged, or destroyed property items. Thus, while taking 2 years to report such property to DOE may not have violated any specific FAR, DOE, or contract requirements up to that point, such practices did not constitute acceptable internal control.

Regarding the contractor billing process, DOE stated that it assessed the risk of improper payments at contract inception and believes the combination of the contractor's billing systems (based upon DCAA's assurances), DCAA's ongoing audits, and the recurring DOE review of selected invoices adequately prevent unallowable or improper costs. We disagree. The WTP project has changed significantly since contract inception. Numerous DOE and contractor problems and project management weaknesses over the years have contributed to an almost threefold increase in the project's estimated cost and an almost twofold increase in the completion schedule since the contract began in December 2000. Thus, a risk assessment performed at contract inception does not reflect current conditions and risks and thus does not provide a proper foundation for designing an adequate system of internal control.

Further, while we agree that a DCAA audit of contract costs can provide a detective control to help determine whether contractor costs were proper, reliance on an after-the-fact audit is not an acceptable replacement for the type of real-time monitoring and oversight of contractor costs—preventive controls—that we found to be deficient. Also, as noted in our report, while the FAR allows contracting agencies to rely on DCAA's certification of the contractor's accounting system for certain types of payments, the FAR explicitly excludes payments under cost-reimbursement contracts from this provision, recognizing that cost-reimbursement contracts carry a greater degree of risk to the government and therefore must have appropriate surveillance during performance to provide reasonable

---

assurance that efficient methods and effective cost controls are used. It is important that DOE establish a control environment that includes specific control activities to prevent questionable or improper payments to begin with or that detects them soon after they occur so that they can be resolved in a timely manner. Primary reliance on an audit of contractor costs by DCAA 3 years after DOE reimbursed the contractor for such costs is not adequate given the magnitude of the contract.

With regard to DOE's invoice reviews, we noted in our report that DOE began performing monthly invoice reviews in fiscal year 2007, which we believe is a step in the right direction. However, we continue to maintain that the effectiveness of such reviews is hindered by the lack of detail in the invoices from which the transactions are judgmentally selected. Given the many challenges and events that have occurred on this project since the contract began, a proper and current assessment of the risks that is then used as the foundation for designing an overall system of internal control is needed to effectively reduce the risk of improper payments. DOE has committed to updating its assessment of the risks and revising its policies and procedures as necessary, and we will continue to monitor its progress in addressing our recommendations in this area.

With regard to the property management issues identified, we commend DOE and the contractor for taking a more aggressive approach in the last year toward improving the WTP property management program, which we recognized in our report. Throughout our fieldwork, we raised issues and concerns regarding property management weaknesses we observed, some of which we recognize were also being identified by DOE and the contractor concurrent with our review. For example, during our initial site visit in June 2006 we obtained some of the contractor's reports of lost, damaged, and destroyed property and noted significant delays in Bechtel's reporting of these assets. During the same week, DOE issued a memo to the contractor questioning these delays, and subsequently issued a new policy in August 2006 to improve the timeliness of such reporting. However, we disagree with DOE's contention that all of the weaknesses and corrective actions reflected in our findings and recommendations were self-identified by DOE and the contractor. Our audit work identified many internal control weaknesses that were not identified before we raised them or did not result in corrective action until after we brought them to DOE's or the contractor's attention during the course of our audit.

For example, it was our data mining queries of the property databases that identified the assets checked out to employees with expired property passes, property items purchased and received that had not been recorded

---

in the government property system, and tools that were still assigned in the property records to former employees. Our physical observations of selected property items identified items recorded in Bechtel's government property system with the wrong custodian or location and items recorded in the tools database that were missing. Our inquiries and walk-throughs of operations identified still other weaknesses. For example, after Bechtel told us on May 14, 2007, that a complete materials inventory had not been done for 2005 or 2006, DOE issued a memo to the contractor on May 17, 2007, expressing disappointment in Bechtel's inability to provide us with materials inventory results, and directed the contractor to begin conducting annual materials inventories starting in 2007. We were encouraged by the fact that as we asked questions and raised concerns with both DOE and contractor staff throughout our audit, they typically took prompt action to address these issues. Continued focus on this area with prompt, corrective actions consistent with our recommendations will go a long way toward reducing the risk of theft, loss, or misuse of WTP assets.

---

We are sending copies of this report to other interested congressional committees and to the Secretary of Energy. We will also make copies available to others upon request. In addition, this report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions on this report, please contact me at (206) 287-4809 or by email at [calboml@gao.gov](mailto:calboml@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix III.



Linda M. Calbom  
Director, Financial Management and Assurance

---

# Appendix I: Scope and Methodology

---

For this review, we considered internal controls in place during fiscal years 2005 and 2006 at the Department of Energy (DOE) and at Bechtel National, Inc. (Bechtel) related to the Hanford Waste Treatment and Immobilization Plant (WTP) project. To perform our work, we reviewed the WTP contract; the Federal Acquisition Regulation (FAR); DOE's Acquisition Regulation (DEAR) and other DOE directives, policies, procedures; and GAO's *Standards for Internal Control in the Federal Government* to gain an understanding of the applicable requirements. We made site visits to Richland, Washington, to perform work at DOE's Office of River Protection, Bechtel's WTP project office, and the WTP work site. We also met with Defense Contract Audit Agency (DCAA) and Defense Contract Management Agency (DCMA) auditors and with the DCMA corporate administrative contracting officer and reviewed copies of relevant reports they had prepared based on their reviews of Bechtel to obtain an understanding of DCAA's and DCMA's reviews and oversight of Bechtel. We also coordinated with DOE Inspector General staff to determine whether they had performed audit work that may be relevant to our review, and met with Bechtel internal audit staff and obtained copies of their reports. Our work was not designed to determine or estimate the allowability of all contractor costs or the accountability of all property items.

---

## Data Reliability

To assess the reliability of data we used for this report, we performed the following steps:

- Because Bechtel maintains the billing system that generates the hard copy invoices it provides to DOE, we requested data extracts from its billing system representing charges that Bechtel billed to DOE in fiscal years 2005 through 2006. These extracts contained the amounts billed to DOE for labor and other direct costs.<sup>1</sup> To assess the reliability of the billing data extracts for purposes of our review, we (1) compared total WTP disbursements to Bechtel per DOE's accounting records to the total amount of invoices Bechtel billed to DOE for the period, (2) compared the invoiced total to Bechtel's schedule of amounts billed to DOE, (3) compared the amounts shown for labor and other direct costs on Bechtel's schedule to the billing data extracts we received for the period of review, and (4) reviewed other documents to verify the

---

<sup>1</sup>Labor and other direct costs accounted for about 85 to 90 percent of the total amounts billed to DOE in fiscal years 2005 and 2006. The remaining amounts billed consisted primarily of indirect costs and contract fees.



amount of adjustments and other items billed. We also performed electronic testing of selected data elements, reviewed existing information about the data and the system that produced them, and interviewed Bechtel officials knowledgeable about the system. We determined that the billing data extracts were sufficiently reliable for the purposes of this report.

- Because the billing system did not contain detailed information—such as purchase descriptions—for other direct costs that would enable us to sufficiently perform data mining, we worked with Bechtel staff to identify an alternative system. Bechtel’s procurement system was the primary system that contained detailed purchase descriptions;<sup>2</sup> however, it did not directly feed or otherwise interface with the billing system.<sup>3</sup> In addition, Bechtel officials stated that the procurement system was not designed with commensurate controls to be a source system. We worked with Bechtel staff to attempt to identify a potential work-around to link the billing system charges to the corresponding purchases in the procurement system using data from the accounts payable system; however, results of our electronic testing showed that the linkages between the data were not sufficiently reliable to perform data mining.
- The billing data extracts contained detailed information on nonmanual labor costs, such as the amount of straight time and overtime paid per employee per pay period. However, because Bechtel pays its manual, or craft, labor costs directly to the unions in aggregate weekly totals, the billing data only reflect these aggregate payments. Thus, we requested a data extract of the craft labor payroll system. We assessed the reliability of the payroll data by comparing the payroll system totals to the related billing system totals for manual labor, reviewed existing information about the data and the system that produced them, and interviewed Bechtel officials knowledgeable about the data. We determined that the data were sufficiently reliable for the purposes of this report.

---

<sup>2</sup>Bechtel’s purchase card system contains item descriptions for purchase card purchases; however, only 1 percent of other direct costs billed to DOE in fiscal years 2005 through 2006 came from that system.

<sup>3</sup>Instead, Bechtel staff manually enter data from the hard copy vendor and subcontractor invoices into the accounts payable system, which in turn feeds into the billing system.

- We assessed the reliability of extracts from Bechtel’s human resource system for nonmanual labor by performing electronic testing of required data elements, reviewing existing information about the data and the systems that produced them, and interviewing Bechtel officials knowledgeable about the systems.<sup>4</sup> We determined that the data were sufficiently reliable for the purposes of this report.
- Based on our property walk-throughs, we determined that controls over property were weak and that the two property databases used to track these items were incomplete and thus unreliable. Therefore, we used the property system data to perform selected internal control tests to illustrate the effects of their weak property controls, as discussed further below.

---

## Payment Controls

To determine whether DOE’s internal controls were adequately designed to prevent and detect improper payments, we used GAO’s *Standards for Internal Control in the Federal Government* as a basis to assess the internal control structure—control environment, risk assessment procedures, control activities, information and communications, and monitoring efforts of DOE over contractor payments. Further, we reviewed the contract requirements, the FAR, the DEAR, and other relevant DOE policies, procedures, and guidance. We interviewed program oversight and financial management personnel regarding policies and procedures that were in place over contractor payments, performed walk-throughs of key processes, and reviewed supporting documentation to gain an understanding of DOE’s controls over contractor payments. We interviewed Bechtel staff to gain an understanding of their billing process and controls. We performed data mining on billing system nonmanual labor data, manual labor payroll data extracts, and human resource data extracts to query for records with certain characteristics, such as payments made to employees after termination dates and employees with high numbers of hours paid during a pay period; followed up on query results with Bechtel staff; and obtained and reviewed supporting data to corroborate explanations.

---

<sup>4</sup>Bechtel officials stated that because Bechtel hires craft employees through the labor unions, they are not considered permanent Bechtel employees, and thus Bechtel does not maintain records on these employees in its human resource database. Instead, it maintains limited human resource data on these employees in its payroll system.

---

## Property Controls

To determine whether DOE's oversight controls reasonably ensured proper accountability over WTP property, we used our *Standards for Internal Control in the Federal Government* as a basis to assess the internal control structure—control environment, risk assessment procedures, control activities, information and communications, and monitoring efforts of DOE over contractor payments. Further, we reviewed the contract requirements, the FAR, the DEAR, and other relevant DOE policies, procedures, and guidance. We also reviewed contractor and selected subcontractor property management policies and procedures. We interviewed the DOE headquarters personal property management division director as well as former and current DOE officials responsible for the oversight of Bechtel's management of WTP property to understand the level and extent of DOE oversight controls over the contractor's property management system. Additionally, we interviewed Bechtel property management staff, requested and reviewed relevant documentation, and performed walk-throughs to gain an understanding of Bechtel's internal controls and procedures over property management. We also performed the following tests.

- **Data queries.** We performed data mining queries on data extracts from Bechtel's government property system and its Toolhound system to identify records with certain characteristics, such as property not recently inventoried or items with expired property passes. We followed up on selected results with Bechtel property staff and reviewed related documentation. We also selected a nongeneralizable sample of items from our query results with different attributes to physically observe as described further below.
- **Physical observations.** We selected assets using three different methods to perform physical observations. First, based on our query results, we selected a limited number of assets from Bechtel's government property system and Toolhound database to observe at the WTP project site, selected WTP subcontractors in Richland, and Bechtel offices in San Francisco in order to test for existence of the assets and accuracy of recording. Second, to test for completeness of Bechtel's and the subcontractors' government property systems, we selected a limited number of assets we observed at WTP and subcontractor sites and determined whether they had been properly tagged as government property and recorded in the respective property systems. Third, we selected a limited number of transactions from Bechtel's procurement, accounts payable, and purchase card databases that appeared to be potential property purchases; reviewed the supporting documents to determine whether they were in fact property purchases; traced the items to the government property system where

possible to determine if they had been recorded; and physically observed some of the items. For all items observed, we reviewed supporting documentation, such as invoices, packing slips, and material receiving reports; verified the assets' serial numbers, custodians, locations, and other key identifying information; and compared this information to the applicable property systems. Because we only selected a limited number of transactions from each method in order to test for different attributes, the results of our review cannot be used to make inferences about the population.

- **Contractor compliance with reporting requirements.** We reviewed reports on lost, damaged, and destroyed property that Bechtel provided to DOE to assess the timeliness of the reports. We also queried the property databases and reviewed subcontractor inventory records for items indicated as lost or missing, and compared them against copies of the lost property reports to determine whether Bechtel had reported them to DOE. We requested and reviewed copies of the contractor's audits and reviews of applicable subcontractors' property management programs.

We provided DOE with a draft of this report for review and comment. DOE's Assistant Secretary for Environmental Management provided written comments, which are reprinted in appendix II. We also had subsequent oral discussions with DOE officials to clarify the written comments. We also provided key DCAA and DCMA officials with draft excerpts of the report relating to their respective agencies, and incorporated as appropriate oral and written comments we received from them. Our work was performed from June 2006 through May 2007 in accordance with generally accepted government auditing standards.

# Appendix II: Comments from the Department of Energy



Department of Energy  
Washington, DC 20585

July 2, 2007

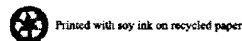
Ms. Linda M. Calbom  
Director  
U.S. Government Accountability Office  
Financial Management & Assurance  
441 G Street, N.W.  
Washington, D. C. 20548

Dear Ms. Calbom:

Thank you for the opportunity to review the Government Accountability Office (GAO) proposed report entitled, *Hanford Waste Treatment Plant: Department of Energy Needs to Strengthen Controls over Contractor Payments and Project Assets (GAO-07-888)*. The U.S. Department of Energy (DOE) agrees with the recommendations by the GAO to perform an updated risk assessment to ensure adequate oversight and accountability for expenditures for the Waste Treatment and Immobilization Plant (WTP) project. DOE believes the controls in-place at the time of the period of the review, fiscal years 2005 and 2006, met the requirements and intent of the applicable Federal Acquisition Regulation, Departmental Orders, and terms of the contract.

For the contractor billing process, DOE assessed the risk of improper payments at contract inception, and subsequently entered into an inter-agency agreement with the Defense Contract Audit Agency (DCAA). DCAA performs ongoing audits of the contractor, including annual audits of costs charged to the WTP contract, and has assured DOE that the contractor's processes are adequate to ensure interim billings are proper. DOE has reviewed many of the contractor's invoices for cost allowability. DOE believes the combination of the contractor's billing systems, DCAA's ongoing audits, and the recurring DOE review of selected invoices, are adequate to protect the Government's interest in preventing unallowable or improper costs. Consistent with DOE's endeavor for continual improvement and the GAO recommendations, DOE will engage with DCAA to update the assessment of the risks, and revise the current policies and procedures as necessary.

For the property management process, DOE established a dedicated property management position for WTP and the position was filled in May 2006. The new DOE property administrator and the new contractor property manager initiated an aggressive DOE and contractor assessment process in June 2006. This assessment identified the need for improved guidance and oversight by DOE and specific corrective actions by the contractor. The programmatic weaknesses and corrective actions which were self-identified by DOE and the contractor were shared with GAO and are reflected in the GAO findings and recommendations. Additionally, we will assess the adequacy of personal property staffing levels and capabilities to ensure that adequate coverage is provided for oversight of the WTP.




We request the following correction be made to the report: Page 5, Under Background. Change: "DOE's current approach , the WTP, is intended to stabilize and prepare approximately half of Hanford's 56 million gallons of radioactive waste for permanent disposal: ..." to "DOE's current approach, the WTP, is intended to separate the waste into high-level and low-activity fractions, immobilize 100% of the high-level fraction, and immobilize approximately 40% of the low-activity fraction of Hanford's 53 million (approximately) gallons of radioactive waste for permanent disposal: ..."

Also, we recommend on pages 30 and 31, the following change for implementing the GAO recommendations: "...we recommend the Secretary of Energy direct the Assistant Secretary for Environmental Management..." to "...we recommend the Assistant Secretary for Environmental Management to direct the following:"

If you have any questions or comments please contact Mr. James M. Owendoff of my staff at (202) 586-8670.

Sincerely,

  
James A. Rispoli  
Assistant Secretary for  
Environmental Management

---

# Appendix III: GAO Contact and Staff Acknowledgments

---

## GAO Contact

Linda Calbom, (206) 287-4809 or calboml@gao.gov

---

## Staff Acknowledgments

In addition to the individual named above, Doreen Eng, Assistant Director; Jessica Gray; R. Ryan Guthrie; Mary Ann Hardy; Delores Lee; Jenny Li; and Ting-Ting Wu made significant contributions to this report. Others who made important contributions included Richard Cambosos; Tim DiNapoli; and Wil Holloway.

---

## GAO's Mission

The Government Accountability Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

---

## Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site ([www.gao.gov](http://www.gao.gov)). Each weekday, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to [www.gao.gov](http://www.gao.gov) and select "Subscribe to Updates."

---

## Order by Mail or Phone

The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. Government Accountability Office  
441 G Street NW, Room LM  
Washington, D.C. 20548

To order by Phone: Voice: (202) 512-6000  
TDD: (202) 512-2537  
Fax: (202) 512-6061

---

## To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: [www.gao.gov/fraudnet/fraudnet.htm](http://www.gao.gov/fraudnet/fraudnet.htm)

E-mail: [fraudnet@gao.gov](mailto:fraudnet@gao.gov)

Automated answering system: (800) 424-5454 or (202) 512-7470

---

## Congressional Relations

Gloria Jarmon, Managing Director, [JarmonG@gao.gov](mailto:JarmonG@gao.gov) (202) 512-4400  
U.S. Government Accountability Office, 441 G Street NW, Room 7125  
Washington, D.C. 20548

---

## Public Affairs

Paul Anderson, Managing Director, [AndersonP1@gao.gov](mailto:AndersonP1@gao.gov) (202) 512-4800  
U.S. Government Accountability Office, 441 G Street NW, Room 7149  
Washington, D.C. 20548