



GAO

Accountability \* Integrity \* Reliability

United States Government Accountability Office  
Washington, DC 20548

---

August 6, 2004

Congressional Requesters

Subject: *Sandia National Laboratories: Further Improvements Needed to Strengthen Controls Over the Purchase Card Program*

The Sandia National Laboratories (Sandia) operate in Albuquerque, New Mexico and Livermore, California. Sandia is a government-owned, contractor-operated national laboratory of the Department of Energy's (DOE) National Nuclear Security Administration (NNSA).<sup>1</sup> The Lockheed Martin Corporation manages the lab under a cost-reimbursable contract with NNSA. Lockheed Martin is paid a management fee to operate the lab and is reimbursed for all allowable costs charged to the contract.

During the fall of 2002, the Federal Bureau of Investigation began investigating two Los Alamos National Laboratory employees for alleged misuse of lab credit cards. Other allegations of theft and misuse of government funds at Los Alamos soon followed. In light of the problems identified at Los Alamos, you asked us to review selected procurement and property management practices at two DOE and two NNSA contractor labs, including Sandia.<sup>2</sup>

This report summarizes the information provided during our June 14, 2004 briefing to your staff on these issues as they relate to Sandia. The enclosed briefing slides highlight the results of our work and the information provided.<sup>3</sup> Specifically, we reviewed Sandia's purchase card program and property management practices to determine whether (1) internal controls over the lab's purchase card (Pcard) program provided reasonable assurance that improper purchases would not occur or would be detected in the normal course of business, (2) purchase card expenditures made under the contract properly complied with lab policies and other applicable requirements and were reasonable in nature and amount and thus were allowable costs payable to the contractor under the contract, and (3) property controls over selected asset acquisitions provided reasonable assurance that accountable assets

---

<sup>1</sup>The National Nuclear Security Administration (NNSA) was created in fiscal year 2000 as a separately organized agency within DOE. As part of its national security mission, NNSA has responsibility for the institutional stewardship of three national security laboratories.

<sup>2</sup>The four labs we reviewed were DOE's Lawrence Berkeley National Laboratory and Pacific Northwest National Laboratory, and NNSA's Lawrence Livermore National Laboratory and Sandia National Laboratories.

<sup>3</sup>Separate briefings were provided for each of the labs reviewed, which we also summarized in separate letters.

would be properly recorded and tracked.<sup>4</sup> Our review covered selected transactions that occurred during fiscal year 2002 and the first half of fiscal year 2003 (October 1, 2001, through March 31, 2003), which were the most current data available when we requested the data for our review. This report also includes 10 recommendations for action—9 related to actions needed to be taken by Sandia and 1 related to action needed to be taken by the NNSA contracting officer for Sandia.

## Results in Brief

Internal control weaknesses in Sandia's Pcard program increased the lab's risk of improper purchases. These control weaknesses primarily related to the review and approval processes, which are key controls in the Pcard program. Specifically, during the majority of our review period, cardholders who were managers were allowed to approve their own purchases. Of the nonstatistical selection of 141 transactions obtained through data mining<sup>5</sup> for fiscal years 2002 and the first half of fiscal year 2003, 15 purchases (11 percent) were made by such cardholders and thus did not have any independent review and approval. In addition, approving officials did not review cardholders' monthly statements in a timely manner for 14 of 49 (29 percent) transactions tested.<sup>6</sup> For example, one purchase of a digital camera wasn't approved until 16 months after purchase. We also found 7 of the 141 nonstatistically selected transactions lacked an invoice, credit card slip, or other sales documentation. This may partly be due to the fact that lab policy did not require monthly approvers to verify purchases listed in the cardholder statements against supporting documents. We further found that Sandia required purchases of restricted items to be preapproved, but did not require documentation of such approvals for the majority of our review period. Thirty-one of the 36 (86 percent) restricted item purchases we reviewed totaling \$92,857 did not have any documented preapproval. Consequently, neither we nor the lab could determine whether this control was being effectively implemented.

These control weaknesses likely contributed to the approximately \$479,645 in improper, wasteful, and questionable purchases we identified during our review. While relatively small compared to the approximately \$102 million in purchase card activity that occurred during the review period, it demonstrates vulnerabilities from weak controls that could be exploited to a greater extent. Specifically, we found 10 improper split purchases—that is, groups of two or more similar transactions that were split to circumvent single purchase limits—consisting of 24 transactions totaling \$372,321. Eleven purchases totaling \$3,606 we determined to be wasteful because

---

<sup>4</sup>Throughout this document, references to purchases and transactions refer to those made by the contractor employees of the lab that are charged to the NNSA contract. Although the lab's purchase cards are issued by the contractor, purchases charged to the NNSA contract are ultimately reimbursed and thus paid for by the federal government. Similarly, property purchased that is charged to NNSA becomes government property.

<sup>5</sup>Data mining applies a search process to a data set, analyzing for trends, relationships, and interesting associations. For instance, it can be used to efficiently query transaction data for characteristics that may indicate potentially improper activity.

<sup>6</sup>We were unable to test the timeliness of supervisory approval for the remaining 92 transactions selected. According to Sandia officials, during a computer conversion all of the approval dates were changed to December 23, 2002. Thus, we could only perform this test on transactions that occurred after the conversion.

they were excessive in cost compared to other alternatives and/or of questionable need, such as four laser pointers costing \$228 each, when other laser pointers were available for \$90-\$120 each. Another 15 transactions totaling \$103,718 we considered questionable because they were missing key documentation that would enable us or the lab to determine what was purchased and whether the purchases were proper and reasonable. Because we only tested a small portion of the transactions we identified that appeared to have a higher risk of fraud, waste, or abuse, there may be other improper, wasteful, and questionable purchases in the remaining untested transactions.

Sandia also did not ensure that acquired property and equipment were tracked properly and in a timely manner. Of 43 assets in our nonstatistical selection of Pcard transactions, 21 (49 percent) totaling \$39,113 were not recorded in Sandia's property management system at the time we provided the lab with the list of assets selected. We performed a physical observation of 88 assets, which included selected assets identified from the nonstatistical selection of 141 Pcard transactions as well as assets selected from the property database because they were still assigned to separated employees or there were multiple assets with the same serial number. All 88 were either found or—in the case of 12 assets—the lab indicated that the items had been disposed of or written off. However, because they only record the bar-code number and not the asset's serial number on the disposal form or the write-off report, we could not verify that the 12 assets had actually been disposed of or written off. Furthermore, our physical observation revealed several inaccuracies in the property database, including data discrepancies, incorrect location information, and inaccurate property custodians listed.

The lab has made a number of recent policy and procedural changes that, if properly implemented, should help improve internal controls over its Pcard purchases. However, additional improvements are needed to further reduce the risk of improper and wasteful purchases.

### **Recommendations for Executive Action**

In order to address the issues identified in our review, we recommend that the Administrator of NNSA direct the Sandia National Laboratories' Director to take the following nine actions.

- To strengthen internal controls over the purchase card program and reduce the lab's exposure to improper, wasteful, and questionable purchases:
  - Cancel purchase card accounts for cardholders who perform oversight functions for the purchase card program to help ensure appropriate independence and separation of duties between these functions.
  - Require approving officials to attend initial and periodic refresher training on Pcard policies and procedures to help ensure their knowledge of purchasing requirements remains current.

- Emphasize during training for cardholders and approving officials the laboratory's policies on (1) timely cardholder reconciliation and supervisory review of transactions, (2) split purchases, (3) transaction documentation requirements, (4) preapproval requirements for restricted items, (5) prohibited purchases, and (6) considering best value in making and approving purchases. Training should also include reminding these staff of the criteria for accountable assets and the requirements to notify property management to ensure accountable assets purchased are identified, bar-coded, and entered into the property management system.
- Require approving officials to verify purchases on cardholders' monthly statements to the detailed sales receipts, invoices or other independent support showing the description, quantity, and price of individual items for all purchases made to help ensure that purchases are adequately documented and are proper purchases before approving. This should include verifying that there is documented approval for all purchases of restricted items.
- Implement tools, such as data mining, for use by Pcard program staff in reviewing cardholder purchases for improper purchases. These tools should be used to systematically monitor for potential split purchases, unusual vendors, restricted items without approval, and other potentially improper or wasteful purchases.
- Consider modifying the Pcard system so that purchases that are not reconciled timely by the cardholder are charged to a temporary suspense account rather than to each cardholder's default project and task codes.
- To help improve Sandia's controls over the purchasing, recording, and safeguarding of assets, we recommend the following.
  - Require that key information such as the property custodian, location, serial number, and item description are verified against the information entered into the property database during physical inventory counts.
  - Develop a report to enable property management staff to review recent Pcard purchases for accountable assets that require recording in the property management system.
  - Require that serial numbers for items being disposed or written off be listed on the disposal forms or inventory write-off reports.

We also recommend that the Administrator of NNSA direct the NNSA contracting officer for the lab to review the improper, wasteful, and questionable items we identified to determine whether any of these purchases should be repaid to NNSA.

## Agency Comments

We obtained comments on a draft of this briefing from NNSA headquarters officials. They generally agreed with the findings and recommendations, and indicated that the lab has made a number of improvements to their controls in light of the problems identified at Los Alamos.

We also obtained comments from NNSA's Sandia Site Office, who disagreed with the recommendation to require approving officials to verify purchases listed on cardholders' statements against detailed sales receipts or invoices, indicating that to do so would be labor intensive and cost prohibitive. They suggested periodic reviews of statistical samples and data mining instead. While we endorse periodic reviews of sample transactions and data mining as part of an overall system of internal control, they are not a substitute for adequate supervisory review. The approving official's review of transactions is one of the most critical controls for helping to ensure that purchases are necessary and proper. Without reviewing independent, detailed support for the individual items purchased, a reviewer cannot ensure that the actual items purchased were reasonable and proper, thus increasing the risk of improper purchases.

Lab officials indicated that their efforts over the past 18 months have resulted in many process and internal control changes, and further changes are being considered. For example, Sandia management is considering making training for approving officials mandatory and is looking into the purchase of data mining software. In addition, the Pcard manager informed us that the account of the staff member responsible for monitoring Pcard activities was cancelled on June 8, 2004.

The lab also provided technical and clarifying comments, which we incorporated as appropriate.

## Scope and Methodology

To determine if Sandia's internal controls over its Pcard program provided reasonable assurance that improper purchases would not occur or would be detected in the normal course of business, we reviewed Sandia's contract with NNSA and applicable provisions of the DOE Acquisition Regulation (DEAR) and the Federal Acquisition Regulation (FAR), performed walkthroughs of key processes, interviewed Sandia and NNSA management and staff, and compared the results to the lab's policies and GAO's *Standards for Internal Control in the Federal Government*.<sup>7</sup> These standards provide the overall framework for 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 and are based on internal control guidance for the private sector.<sup>8</sup>

---

<sup>7</sup>U.S. General Accounting Office, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

<sup>8</sup>*Internal Control—Integrated Framework*, Committee of Sponsoring Organizations of the Treadway Commission (COSO).

To determine whether Pcard expenditures complied with lab policies and other applicable requirements and were reasonable in nature and amount, we performed data mining on fiscal year 2002 and the first half of fiscal year 2003 Pcard transactions to identify indicators of potential noncompliance with policies and procedures and to identify purchases that appeared to be from unusual vendors, purchases made on weekends, during the holidays, or at fiscal year-end, and purchases of attractive assets. Based on the results, we (1) identified 50 potential split purchases and tested all of them to determine whether they were in fact split purchases and (2) tested a nonstatistical selection of 141 transactions for evidence of supervisory review and approval, adequacy of supporting documentation, and reasonableness of the purchases.

To determine if property controls over selected asset acquisitions provided reasonable assurance that accountable assets would be properly recorded and tracked, we performed walkthroughs to observe property controls, reviewed property management policies and procedures, tested accountable property items selected in the nonstatistical selection to determine whether these assets had been entered into the lab's property system prior to our review, performed data mining on the property database to identify possible database errors or inaccuracies such as property assigned to terminated employees and multiple property items with the same serial number, and performed a physical observation of selected assets to determine whether they could be properly accounted for.

We requested oral comments on a draft of the enclosed briefing slides from the Administrator of NNSA or his designee and have included any comments as appropriate in the letter and enclosed slides. While we identified some improper, wasteful, and questionable purchases, our work was not designed to determine the full extent of such purchases. We conducted our work on all four labs from March 2003 through May 2004 in accordance with generally accepted government auditing standards.

-----

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after its date. At that time, we will send copies of this report to the Ranking Minority Member, House Committee on Energy and Commerce; the Secretary of Energy; the Administrator of NNSA; and the Sandia National Laboratories Director. Copies will also be made available to others upon request. In addition, the report will be available at no charge on our home page at <http://www.gao.gov>. If you have any questions about this report, please contact me at (202) 512-9508 or Doreen Eng, Assistant Director, at (206) 287-4858. You may also reach us by e-mail at [calboml@gao.gov](mailto:calboml@gao.gov) or [engd@gao.gov](mailto:engd@gao.gov). Additional contributors to this assignment were Stephanie Chen, David Elder, Barbara House, Kelly Lehr, Gail Luna, and Lien To.



Linda M. Calbom  
Director, Financial Management and Assurance

Enclosure

List of Requesters

The Honorable Sherwood Boehlert, Chairman  
The Honorable Bart Gordon, Ranking Minority Member  
Committee on Science  
House of Representatives

The Honorable Joe Barton, Chairman  
Committee on Energy and Commerce  
House of Representatives

The Honorable Jerry Costello  
The Honorable James Greenwood  
The Honorable W.J. "Billy" Tauzin  
House of Representatives

June 14, 2004, Briefing



---

## Sandia National Laboratories

---

### **Further Improvements Needed to Strengthen Controls Over the Purchase Card Program**

Briefing to the Staff of the Committees on Science and  
Energy and Commerce, House of Representatives

June 14, 2004

---





- Introduction and Objectives
- Results in Brief
- Background
- Scope and Methodology
- Internal Control Weaknesses
- Improper, Wasteful, and Questionable Purchases
- Property Management Weaknesses
- Recent Policy and Procedural Changes
- Conclusions
- Recommendations
- Agency Comments



## Introduction and Objectives

- Sandia is a government-owned, contractor-operated national laboratory of the Department of Energy's (DOE) National Nuclear Security Administration (NNSA).<sup>1</sup> It is managed by the Lockheed Martin Corporation under a cost-reimbursable contract with NNSA. Lockheed Martin is paid a management fee to operate the lab and is reimbursed for all allowable costs charged to the contract.
- During the fall of 2002, the Federal Bureau of Investigation began investigating two Los Alamos National Laboratory employees for alleged misuse of lab credit cards. Other allegations of theft and misuse of government funds at Los Alamos soon followed.
- In light of the problems identified at Los Alamos, you asked us to review selected procurement and property management practices at two DOE and two NNSA contractor labs, including Sandia.<sup>2</sup>

<sup>1</sup>NNSA was created in fiscal year 2000 as a separately organized agency within DOE. As part of its national security mission, NNSA has responsibility for the institutional stewardship of the three national security laboratories which includes Sandia.

<sup>2</sup>The four labs we reviewed were DOE's Lawrence Berkeley National Laboratory and Pacific Northwest National Laboratory, and NNSA's Lawrence Livermore National Laboratory and Sandia National Laboratories.



- The objectives of our review of the Sandia National Laboratories were to determine whether:
  - Internal controls over Sandia's purchase card (Pcard) program provided reasonable assurance that improper purchases would not occur or would be detected in the normal course of business.
  - Purchase card expenditures made under the contract (1) properly complied with lab policies and other applicable requirements and (2) were reasonable in nature and amount and thus were allowable costs payable to the contractor under the contract.
  - Property controls over selected asset acquisitions provided reasonable assurance that accountable assets would be properly recorded and tracked.



- Our review covered selected transactions that occurred during fiscal year 2002 and the first half of fiscal year 2003 (October 1, 2001, through March 31, 2003), which were the most current data available when we requested the data for our review.
- Throughout this document, references to purchases and transactions refer to those made by the contractor employees of the lab that are charged to the NNSA contract. Although the lab's purchase cards are issued by the contractor, purchases charged to the NNSA contract are ultimately reimbursed and thus paid for by the federal government. Similarly, property purchased that is charged to NNSA becomes government property.



Internal control weaknesses in Sandia's Pcard program increased the lab's risk of improper purchases. Our review of a nonstatistical selection of 141 transactions, while not projectable to the universe of transactions, indicated a number of control weaknesses. For example,

- During the majority of our review period, cardholders who were managers were allowed to approve their own purchases. Fifteen of the 141 purchases we reviewed were made by such cardholders and thus did not have any independent review and approval.
- Approving officials did not timely review cardholders' monthly statements for 14 of 49 transactions tested. In some instances, statements were not approved up to 16 months after purchase.
- Sandia required purchases of restricted items to be preapproved, but did not require documentation of such approvals for the majority of our review period. Thirty-one of the 36 restricted item purchases we reviewed totaling \$92,857 did not have any documented preapproval. Consequently, neither we nor the lab could determine whether this control was being effectively implemented.



These control weaknesses likely contributed to the approximately \$479,645 in improper, wasteful, and questionable purchases we identified during our review. These included:

- Ten improper split purchases—that is, groups of 2 or more similar transactions that were split to circumvent single purchase limits—consisting of 24 transactions totaling \$372,321.
- Eleven purchases totaling \$3,606 that we determined to be wasteful because they were excessive in cost compared to other alternatives and/or of questionable need, such as four laser pointers costing \$228 each, when other laser pointers were available for \$90-\$120 each.
- Fifteen transactions totaling \$103,718 that we considered questionable because they were missing key documentation that would enable us or the lab to determine what was purchased and whether the purchases were proper and reasonable.



Sandia also did not ensure that acquired property and equipment were properly tracked.

- Of 43 assets tested, 21 (49 percent) totaling \$39,113 were not recorded in Sandia's property management system at the time we provided the lab with the list of assets selected.
- Furthermore, our physical observation revealed several inaccuracies in the property database, including data discrepancies, incorrect location information, and inaccurate property custodians listed.

The lab has made a number of recent policy and procedural changes that, if properly implemented, should help improve internal controls over its Pcard purchases. We are making 10 recommendations to address issues raised in our review that require additional action.



- NNSA headquarters officials generally agreed with the findings and recommendations. The Sandia Site Office of NNSA disagreed with the recommendation to require approving officials to verify cardholders' purchases against receipts, suggesting instead to review samples and perform data mining. While these are good controls, they are not a substitute for adequate supervisory review of independent, detailed support for individual items purchased. Lab officials indicated they have made a number of improvements and additional actions are being considered.





- Sandia is a nuclear weapons lab that was established in 1949 in Albuquerque, New Mexico, and expanded to Livermore, California in 1956.
- The lab's 8,300 staff are employees of the Lockheed Martin Corporation. Its fiscal year 2004 budget is expected to be about \$2.2 billion.
- The lab's Pcard program was established in 1996 and has about 1,800 cardholders.
- During fiscal year 2002, the lab made about \$68 million in Pcard purchases.



- Most cardholders have a \$25,000 single purchase limit and monthly limit, although selected employees may have higher transaction and/or monthly limits, which range from \$35,000 to \$500,000.
- Sandia's property management department provides policy and oversight for property management at the lab.
- Staff within the property management department are responsible for supporting Sandia employees in tracking and maintaining records of accountable property.



- Items that qualify as accountable assets are recorded and tracked in the lab's property management system. Sandia's accountable assets consist of both "equipment" and "attractive" (sensitive or attractive to theft) items.
  - Equipment consists of items costing at least \$5,000 with a useful life of at least 2 years.
  - Attractive property are items susceptible to misappropriation for personal use or readily convertible into cash. This includes cameras, personal computers, and portable power tools costing at least \$1,000; and firearms and two-way radios regardless of acquisition cost.
  - Pcards are not to be used to purchase accountable assets without prior approval.
- The lab's property management system had about 52,000 NNSA-owned accountable assets with a total recorded acquisition cost of about \$1 billion.



## Scope and Methodology

To determine if Sandia's internal controls over its Pcard program provided reasonable assurance that improper purchases would be prevented or detected in the normal course of business, we

- Reviewed Sandia's contract with NNSA and applicable provisions of the DOE Acquisition Regulation (DEAR) and the Federal Acquisition Regulation (FAR),
- Performed walkthroughs of key processes, interviewed Sandia and NNSA management and staff, and compared the results to the lab's policies and GAO's *Standards for Internal Control in the Federal Government*. These standards provide the overall framework for 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 and are based on internal control guidance for the private sector.<sup>3</sup>

<sup>3</sup>*Internal Control — Integrated Framework*, Committee of Sponsoring Organizations of the Treadway Commission (COSO).



To test specific control activities and determine whether Pcard expenditures complied with lab policies and other applicable requirements and were reasonable in nature and amount, we first obtained from the lab the database of purchase card transactions for fiscal year 2002 and the first 6 months of fiscal year 2003. We separately obtained from the lab's Pcard issuing bank the total dollar value of Pcard purchases for the period to compare to the database for completeness.

- *Data mining.* We performed data mining on the Pcard transaction database to identify indicators of potential noncompliance with policies and procedures.
- We looked for potential split purchases (i.e., groups of two or more similar transactions that potentially were split to circumvent single purchase limits), cardholders with multiple purchase cards, and former employees who had active purchase card accounts after their separation dates.



- We forwarded the results of all transactions that met specific criteria to the lab for a response and related documentation that we then used to assess these transactions.
- *Nonstatistical selection.* We performed additional data mining on Pcard transactions to first identify purchases that appeared to be from unusual vendors, purchases made on the weekends, during the holidays, or at fiscal year-end, and purchases of attractive assets.
- As these analyses yielded thousands of transactions, we then made a nonstatistical selection of 150 of these transactions totaling \$246,035, taking into account factors such as item description, amount, and frequency of similar purchases, among other things.



- After obtaining the supporting documentation, we found that nine transactions were reversed for various reasons, such as three charges made by unknown perpetrators with stolen Pcards, two due to vendor errors, and one accidental personal use that was repaid the month after purchase. Because we verified that all nine transactions had been reversed, we eliminated these from the selection.
- We used the remaining 141 transactions totaling \$225,727 to test specific control activities, such as segregation of duties, evidence of supervisory review and approval, and adequacy of supporting documentation, as well as to examine the allowability and reasonableness of the purchases.

To determine if property controls over selected asset acquisitions provided reasonable assurance that accountable assets would be properly recorded and tracked, we

- Performed walkthroughs to observe property controls,
- Reviewed property management policies and procedures,



- Tested accountable property items selected in the nonstatistical selection to determine whether these assets had been entered into the lab's property system prior to our review,
- Performed data mining on the property database to identify possible database errors or inaccuracies such as property assigned to terminated employees and multiple property items with the same serial number, and
- Performed a physical observation of selected assets to determine whether they could properly be accounted for.

While we identified some improper, wasteful, and questionable purchases, our work was not designed to determine the full extent of improper purchases. We conducted our work on all four labs from March 2003 through May 2004 in accordance with generally accepted government auditing standards.





## Internal Control Weaknesses

During the period of our review, Sandia's internal controls did not provide reasonable assurance that improper Pcard purchases would not occur or would be detected in the normal course of business. Weaknesses we identified included the following.

**Segregation of Duties:** Sandia did not ensure that Pcard duties were adequately separated to minimize the risk of waste, fraud, or abuse.

- The *Standards for Internal Control in the Federal Government* states that key duties and responsibilities should be divided or segregated among different people to reduce the risk of error or fraud. This should include separating the responsibilities for authorizing transactions, processing and recording them, reviewing the transactions, and handling any related assets.



- During the majority of our review period, the lab's policy allowed cardholders that were managers to approve their own purchases. Consequently, 15 out of the 141 (11 percent) Pcard transactions we tested totaling \$18,253 had not been reviewed or approved by a second party because the cardholder was a manager.
- In addition, one of the Pcard staff responsible for monitoring Pcard activities for compliance was also a cardholder. This creates a conflict of interest between the cardholder and program oversight role, elevating the risk that spending improprieties would not be detected.



**Supervisory Review:** The approving official's review of each purchase card transaction is one of the most important controls to help ensure that all purchases are appropriate. We found that this critical control was compromised because of untimely supervisory review.

- After cardholders reconciled the charges listed on their monthly statements to supporting documents, approving officials were required to review and approve the monthly statements within about a month of the statement date. However, we found that 14 of the 49 transactions we could test<sup>4</sup> (29 percent) totaling \$21,437 were approved from 3 to 16 months after the cardholder's statement date. For example, one purchase of a digital camera wasn't approved until 16 months after purchase.
- Without timely review and approval of purchases, the lab's ability to deter improper purchase card use, file a dispute, or return an item if the charge or purchase is improper is severely limited.

<sup>4</sup>We were unable to test the timeliness of supervisory approval for the remaining 92 transactions selected. According to Sandia officials, during a computer conversion all of the approval dates were changed to December 23, 2002. Thus, we could only perform this test on transactions that occurred after the conversion.



**Transaction Documentation:** We also identified weaknesses in the documentation of transactions, including transactions that lacked key supporting documentation to identify specifically what was purchased and the related cost, as well as documented approval for restricted purchases.

- GAO's *Standards for Internal Control in the Federal Government* states that transactions and other significant events need to be clearly documented, and the documentation should be readily available for examination.
- Sandia cardholders were required to retain their receipts for 3 years for purchases of \$2,000 or less and 7 years for purchases over \$2,000.



- We found seven of the transactions (5 percent) totaling \$4,845 in the nonstatistical selection lacked an invoice, credit card slip, or other sales documentation.
  - Without such documentation, the laboratory did not have any independent evidence of the description and quantity of what was purchased and/or the price paid.
  - One contributing factor to the missing documentation may partly be the fact that lab policy did not require monthly approvers to verify purchases listed in the cardholder statements against supporting documents. Therefore, there was no supervisory review to help ensure such documentation was retained.



- Although Sandia required cardholders buying designated restricted items to obtain approval before purchase, it did not require documentation of such approvals until January 2003. As a result, 31 of the 36 (86 percent) restricted item purchases we reviewed totaling \$92,857, did not have any documented preapproval for the purchase. Consequently, there was no assurance that such approval had actually been obtained. Examples of some of these included:
  - Radios: 20 2-way radios totaling \$10,961.
  - Computers: 9 computers totaling \$25,384.
  - Cameras: 3 cameras and accessories totaling \$19,083.



**Reconciliation of transactions:** Cardholders were to reconcile their transactions electronically on the Pcard system to supporting documents monthly to verify that the charges were correct, input the item descriptions, and record the proper project and task codes for each transaction. If the cardholder did not perform this reconciliation, the Pcard system automatically charged the transactions to the cardholder's default project and task codes which may or may not be appropriate for each purchase.

- Each cardholder must establish a default project and task code when they open a Pcard account. The project and task codes determine whether costs are charged to the NNSA contract, a contract for another agency or sponsor, or absorbed by the contractor as in the case of unallowable costs. These codes also indicate the specific project or overhead account that the expense is to be charged to.



- Since each cardholder may make purchases for many requesters and purposes, their default codes may not be appropriate for some purchases. If the cardholder's default codes are for a specific NNSA project and they make purchases that are not supposed to be charged to the contract, failure to perform the monthly reconciliation will result in these purchases initially being charged to NNSA. If uncorrected, NNSA may reimburse the lab for these non-NNSA expenditures.
- Until December 2002, Pcard administrators did not run any exception reports to identify cardholders who did not reconcile their purchases to ensure such transactions were properly recorded.





**Training:** Although approving officials play a critical role in helping to ensure that purchases are allowable and reasonable, they were not required to attend any training to help ensure they were knowledgeable about current Pcard policies and procedures.

- GAO's *Standards for Internal Control in the Federal Government* states that training should be aimed at developing and retaining employee skill levels to meet changing organizational needs. Qualified and continuous supervision should be provided to ensure that internal control objectives are achieved.
- Lab officials told us that approving officials were given e-mail reminders and periodic newsletters reminding them of Pcard policies. In addition, Web-based and classroom training is available for approving officials, but is voluntary. However, as discussed later, we identified many instances where approving officials had approved improper purchases. Consequently, required training for approving officials—who are responsible for ensuring that the purchases they approve comply with requirements—is essential.



## Improper, Wasteful, and Questionable Purchases

We also identified improper, wasteful, and questionable purchases totaling \$479,645 indicating additional areas where controls could be improved. As discussed below, most of these related to split purchases.

**Improper Purchases:** We identified 24 transactions totaling \$372,321 of improper purchases, which we defined as purchases that violated the NNSA contract or lab policy. All of these improper purchases were improper “split” purchases. Sandia’s purchase card policy prohibits splitting purchases into more than one transaction to circumvent single purchase limits. Using data mining techniques, we identified 50 potential split purchases—that is, groups of two or more similar transactions that potentially were split to circumvent single purchase limits. After reviewing the supporting documents, we determined 10 were in fact split purchases consisting of 24 transactions totaling \$372,321.



- For example, a cardholder purchased one 61-inch plasma screen costing \$32,048. Because the total exceeded her single purchase limit of \$25,000, the total was split into two separate transactions so that the two individual charges fell below the limit.
- We also identified three potential split purchases consisting of 10 transactions totaling \$98,945 for which the lab was unable to provide sufficient documentation to determine whether these were in fact split purchases. However, based on the available information, these transactions shared similar characteristics—i.e., multiple purchases by a cardholder at one vendor on the same day that in total exceeded the cardholder’s single purchase limit—with the types of transactions that we were able to confirm as being split purchases, and therefore, we considered these transactions to be potentially improper.



**Wasteful Purchases:** We also identified 11 purchases totaling \$3,606 that we determined to be wasteful—that is, were excessive in cost compared to other available alternatives and/or were of questionable need.

- We considered them excessive in cost when compared to available alternatives that would meet the same basic need, or of questionable need when they appeared to be items that were a matter of personal preference or convenience, were not part of the usual and necessary equipment for the work the employees were engaged in, and/or did not appear to benefit NNSA.



---

Examples of wasteful purchases we identified included:

- \$912 for four laser pointers costing \$228 each. We found laser pointers available ranging from \$90 to \$120 each.
- \$350 for an air purifier from Sharper Image. We question both the need for this item as well as the cost, given that other air purifiers are available for \$100-\$220, and there was no documented medical need.
- \$170 to a limousine service for a 15-passenger vehicle and driver to take a visiting researcher and his family to the airport. Door-to-door van shuttle service costs about \$65.



**Questionable Purchases:** We identified 15 transactions totaling \$103,718 that we classified as questionable because there was insufficient documentation to determine what was actually purchased, and whether purchases were proper and reasonable.

- Five of these transactions totaling \$4,773 were purchases from the following vendors, for which the cardholders or the lab indicated they couldn't find the receipts:
  - Skymall.com - \$175
  - Staples - \$1,504
  - IGO.com<sup>5</sup> - \$114
  - CompUSA - \$2,778
  - Hilton Hotels - \$201

<sup>5</sup>This Internet vendor sells mobile electronics such as mobile phones, notebook computers, and PDAs.



- As mentioned previously, we also identified three potential split purchases consisting of 10 transactions totaling \$98,945 for which the lab was unable to provide sufficient supporting documentation to determine whether these were in fact split purchases. Because of this lack of documentation, we also could not determine whether the purchases were proper and therefore consider these to be questionable.

While the \$479,645 of improper, wasteful, and questionable transactions is relatively small compared to the \$102 million in purchase card activity that occurred during our review period, it demonstrates vulnerabilities from weak controls that could be exploited to a greater extent. In addition, because we only tested a small portion of the transactions we identified that appeared to have a higher risk of fraud, waste, or abuse, there may be other improper, wasteful, and questionable purchases in the remaining untested transactions.



**Property Management:** *GAO's Standards for Internal Control in the Federal Government* requires agencies to establish physical control to secure and safeguard vulnerable assets. Such assets should be periodically counted and compared to control records. Sandia policy requires that equipment and attractive property be tagged with bar-code property numbers and tracked in the property management system through this unique identifier.

Sandia's property controls did not provide reasonable assurance that accountable assets would be properly recorded and tracked. We identified the following weaknesses in Sandia's controls over property:





- In our review of the nonstatistical selection of Pcard transactions, we found that 21 out of the 43 accountable assets purchased (49 percent) with a value of \$39,113 had not been recorded in the lab's property management system prior to the items being selected for our review. This can be attributed at least in part to the following:
  - Items purchased using a Pcard were not required to be delivered to the lab's central receiving department. If they were delivered there, those items were not opened by central receiving to determine the contents, but were simply passed on unopened to the requestor's building.
  - As a result, the end user was responsible for determining whether the items were equipment or attractive assets and, if so, contacting property management to bar-code the item(s) and enter them into the property management system. Consequently, these assets were at greater risk of not being recorded in the property management system.



- We performed a physical observation of 88 assets, which included selected assets identified from the nonstatistical selection of Pcard transactions as well as assets selected from the property database because they were still assigned to separated employees or there were multiple assets with the same serial number. While we did not find any missing assets, we did note the following:
  - Five items totaling \$502,317 were entered under the wrong serial number in the property database. For example, we observed two assets that had the same serial number in the property database, and found that both had been entered incorrectly in the database. In another example, the serial number we obtained from the vendor matched the serial number on the asset, but the serial number entered into the database under the bar-code number on the asset was incorrect.



- Lab officials informed us that 12 items totaling \$89,574 had been subsequently disposed of or written off and provided us copies of the documentation. However, because they only record the bar-code number and not the asset's serial number on the disposal form or the write-off report, we could not verify whether the correct item was disposed of or written off.
- Nine items totaling \$231,438 were located in a different building than that indicated in the property database. Inaccurate location information makes it more difficult to maintain accountability for lab assets.
- Eight items totaling \$233,809 were assigned to a different custodian than that listed in the database. Consequently, the lab did not have the proper accountable party recorded for the assets.



## Recent Policy and Procedural Changes

During or subsequent to the period covered by our review, Sandia took a number of steps to improve its oversight and control over purchases and property. According to the Pcard program manager, these changes included the following:

- Beginning in December 2002, the Pcard program office began running monthly reports to monitor and follow up on potential problems, including reports on the following:
  - Items that were reconciled to the default project and task codes,
  - Monthly statements that had not been approved by the supervisors, and,
  - Disputed items.



- Beginning January 2003, managers who were cardholders were no longer allowed to approve their own purchases. They are now required to have their monthly statements approved by the next (higher) level manager.
- After January 2003, cardholders were required to obtain documented approval from their manager and the Pcard office before purchasing restricted items. In the case of approved purchases of property items, the documented approval included instructions to the end user and their management to obtain bar-codes for the items and enter them into the property management system.

Because these changes primarily occurred subsequent to our review period, we have not assessed the effectiveness of the changes. If implemented properly, these should help improve the lab's oversight of its Pcard purchases. However, additional issues remain which, if not addressed, will continue to expose the lab to improper and wasteful purchases.



Although Sandia had established some internal controls over its Pcard program and property management functions, weaknesses in the design and operation of these internal controls limited their effectiveness. The lab has made some changes to its Pcard policies and procedures in response to weaknesses identified. While these are positive steps, management needs to ensure that it gives continued attention to ongoing monitoring of compliance with policies and procedures, continually assessing and addressing the risks and evaluating and improving the effectiveness of its controls to reduce its exposure to improper, wasteful, or potentially fraudulent purchases.



We recommend that the Administrator of NNSA direct the Sandia National Laboratories' Director to take the following nine actions:

- To strengthen internal controls over the purchase card program and reduce the lab's exposure to improper, wasteful, and questionable purchases,
  - Cancel purchase card accounts for cardholders who perform oversight functions for the purchase card program to help ensure appropriate independence and separation of duties between these functions.
  - Require approving officials to attend initial and periodic refresher training on Pcard policies and procedures to help ensure their knowledge of purchasing requirements remains current.



- Emphasize during training for cardholders and approving officials the laboratory's policies on (1) timely cardholder reconciliation and supervisory review of transactions, (2) split purchases, (3) transaction documentation requirements, (4) preapproval requirements for restricted items, (5) prohibited purchases, and (6) considering best value in making and approving purchases. Training should also include reminding these staff of the criteria for accountable assets and the requirements to notify property management to ensure accountable assets purchased are identified, bar-coded, and entered into the property management system.
- Require approving officials to verify purchases on cardholders' monthly statements to the detailed sales receipts, invoices or other independent support showing the description, quantity, and price of individual items for all purchases made to help ensure that purchases are adequately documented and are proper purchases before approving. This should include verifying that there is documented approval for all purchases of restricted items.





- Implement tools, such as data mining, for use by Pcard program staff in reviewing cardholder purchases for improper purchases. These tools should be used to systematically monitor for potential split purchases, unusual vendors, restricted items without approval, and other potentially improper or wasteful purchases.
- Consider modifying the Pcard system so that purchases that are not reconciled timely by the cardholder are charged to a temporary suspense account rather than to each cardholder's default project and task codes.



- To help improve Sandia's controls over the purchasing, recording, and safeguarding of assets, we recommend the following:
  - Require that key information such as the property custodian, location, serial number, and item description are verified against the information entered into the property database during physical inventory counts.
  - Develop a report to enable property management staff to review recent Pcard purchases for accountable assets that require recording in the property management system.



- Require that serial numbers for items being disposed or written off be listed on the disposal forms or inventory write-off reports.
- We also recommend that the Administrator of NNSA direct the NNSA contracting officer for the lab to review the improper, wasteful, and questionable items we identified to determine whether any of these purchases should be repaid to NNSA.



**Agency Comments**

- We obtained comments on a draft of this briefing from NNSA headquarters officials. They generally agreed with the findings and recommendations, and indicated that the lab has made a number of improvements to their controls in light of the problems identified at Los Alamos.
- We also obtained comments from NNSA's Sandia Site Office, who disagreed with the recommendation to require approving officials to verify purchases listed on cardholders' statements against detailed sales receipts or invoices, indicating that to do so would be labor intensive and cost prohibitive. They suggested periodic reviews of statistical samples and data mining instead.
- While we endorse periodic reviews of sample transactions and data mining as part of an overall system of internal control, they are not a substitute for adequate supervisory review. The approving official's review of transactions is one of the most critical controls for helping to ensure that purchases are necessary and proper. Without reviewing independent, detailed support for the individual items purchased, a reviewer cannot ensure that the actual items purchased were reasonable and proper, thus increasing the risk of improper purchases.



- Lab officials indicated that their efforts over the past 18 months have resulted in many process and internal control changes, and further changes are being considered. For example, Sandia management is considering making training for approving officials mandatory and is looking into the purchase of data mining software. In addition, the Pcard manager informed us that the account of the staff member responsible for monitoring Pcard activities was cancelled on June 8, 2004.
- The lab also provided technical and clarifying comments, which we incorporated as appropriate.

---

## 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

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

---

---

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.