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United States Government Accountability Office
Washington, DC 20548

August 6, 2004

Congressional Requesters

Subject: *Lawrence Berkeley National Laboratory: Further Improvements Needed to Strengthen Controls Over the Purchase Card Program*

The Lawrence Berkeley National Laboratory (Lawrence Berkeley) located in Berkeley, California, is a government-owned, contractor-operated Department of Energy (DOE) national laboratory. The University of California manages the lab under a cost-reimbursable contract with DOE. The university 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 NNSA[1] and two DOE contractor labs, including Lawrence Berkeley.[2]

This report summarizes the information provided during our June 14, 2004 briefing to your staff on these issues as they relate to Lawrence Berkeley. The enclosed briefing slides highlight the results of our work and the information provided.[3] Specifically, we reviewed Lawrence Berkeley'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

[1]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.
[2]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.
[3]Separate briefings were provided for each of the labs reviewed, which we also summarized in separate letters.

accountable assets would be properly recorded and tracked.[4] 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 seven recommendations for action—six related to actions needed to be taken by Lawrence Berkeley and one related to action needed to be taken by the DOE contracting officer for Lawrence Berkeley.

Results in Brief

Internal control weaknesses in Lawrence Berkeley's Pcard program increased the lab's risk of improper purchases. These included weaknesses in supervisory review and approval of transactions, documentation, and segregation of duties. Specifically, of the nonstatistical selection of 144 transactions obtained through data mining[5] for fiscal years 2002 and the first half of fiscal year 2003, we found that cardholder monthly statements for 35 (24 percent) were not signed by approving officials in a timely manner or were not signed at all. For example, two statements were signed only after they were selected for our review—more than 2 years after the two purchases were made. We also found that 31 (22 percent) of the 144 nonstatistically selected transactions we reviewed, totaling $38,680, lacked sufficient documentation such as an invoice, credit card receipt, or other sales documentation necessary to validate the dollar amount, quantity, and nature of the items purchased. This was due in part to the fact that monthly approvers were not required to verify purchases listed in the cardholder statement against supporting documents. This weakness in the review and approval function combined with the insufficient documentation of transactions created an environment where improper Pcard purchases could occur with little risk of detection. Further, two key personnel responsible for overseeing the lab's Pcard program were also cardholders, creating a lack of independence between their cardholder role and their Pcard administration role.

These control weaknesses likely contributed to the approximately $326,396 in improper, wasteful, and questionable purchases we identified during our review.[6] While relatively small compared to the approximately $24 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 improper purchases consisting of:

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

[5]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.

[6]This is the net total after adjusting for transactions totaling $8,559 that were in multiple categories. Five transactions totaling $7,852 were both improper because the cardholders failed to obtain required pre-approvals for restricted items, and wasteful because they were excessive in cost. In addition, $707 in sales tax that we considered wasteful is included in the transaction amounts of other transactions we considered improper, wasteful, or questionable.

- Twenty-one improper split purchases—that is, groups of two or more similar transactions that were split to circumvent single purchase limits—consisting of 60 transactions totaling $160,011.

- Thirty-two restricted items purchased totaling $47,139 that did not have documented pre-approval as required.

- One purchase charged by a cardholder's monthly approver against the cardholder's account while the cardholder was out on disability leave.

We also considered 23 transactions totaling $10,911 as wasteful because they were excessive in cost when compared to other alternatives and/or were of questionable need, such as $985 for three Bose noise-canceling headsets and $403 for an air purifier from The Sharper Image. We considered 51 transactions totaling $116,894 as questionable because they had insufficient 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.

Lawrence Berkeley did not ensure assets were accounted for and tracked properly and in a timely manner. For example, our data mining tests showed 303 assets totaling $3.5 million were assigned to persons who no longer worked at the lab. The majority of these assets were subsequently reassigned in April 2004, shortly before we conducted a physical observation of assets. In addition, 28 assets totaling $363,759 had been transferred from the Lawrence Livermore National Laboratory to Lawrence Berkeley in August 2003. However, Lawrence Berkeley did not enter these assets into the property database until we brought them to their attention in April 2004. All of the 100 assets selected for physical observation were either found or the lab provided documentation that the asset had been transferred or retired. However, we found several inaccuracies between the physical assets and the information recorded in the property database, including inaccurate serial numbers, incorrect property custodians, and inaccurate location information. These types of inaccuracies make the assets more susceptible to undetected loss or theft.

Subsequent to our review period, the lab made a number of policy and procedural changes that, if properly implemented, should help improve internal controls over its Pcard program and accountability for property. This included the implementation of a new Pcard program that significantly changed the lab's Pcard process. 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 Secretary of Energy direct the Director of the Lawrence Berkeley National Laboratory to take the following six actions:

- To strengthen internal controls over the purchase card program and reduce the lab's vulnerability to improper, wasteful, and questionable purchases, we recommend the following:

    - Cancel purchase card accounts for cardholders who also perform oversight functions over the purchase card program to help ensure appropriate independence and separation of duties between these functions.

    - Establish policies and procedures requiring that purchasers maintain a copy of the detailed sales receipt, invoice, or other independent support showing the description, quantity, and price of individual items purchased.

    - Require approving officials to review (1) sales receipts, invoices, or other independent support showing the description, quantity, and price of individual items purchased and (2) restricted items approvals before approving purchases to ensure such items were obtained and documented where applicable.

    - Implement tools, such as data mining, for the Pcard program or other review staff to use in reviewing cardholder purchases for improper purchases. These tools should be used to systematically monitor for split purchases, unusual vendors, and other potentially improper or wasteful purchases, and to monitor timeliness of reconciliations and supervisory approvals.

- To help improve Lawrence Berkeley's controls over the purchasing, recording, and safeguarding of assets, we recommend the following:

    - Establish a policy requiring property management to provide a report of all missing assets detected during physical inventories to Lawrence Berkeley Security.

    - Establish a process to test the accuracy of key information recorded in the property management system, including the serial number, assigned custodian, location, and bar-code number.

We also recommend that the Secretary of Energy direct the DOE 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 DOE.

Agency Comments

Lab and local DOE officials agreed with all of the recommendations except for the recommendations to (1) require sales documentation such as a receipt or invoice and (2) require approving officials to review sales documentation and restricted item

approvals before approving purchases. They indicated that the new Pcard program has the data to support item price, quantity, and description via the requisition, monthly cardholder statement, and receiving data.

While the new system as described by lab officials may have improved the segregation of duties which is an important part of a good system of internal control, it does not substitute for independent, detailed supporting documentation of the description, quantity, and cost of items purchased in all cases. Without such detail, a reviewer would not be able to determine if the original order amounts were correct or whether additional items were purchased under that order. Consequently, sufficient, independent evidence for the individual items purchased and corresponding supervisory review of such evidence is necessary to help reduce the risk of improper purchases.

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

Scope and Methodology

To determine if Lawrence Berkeley'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 Lawrence Berkeley's contract with DOE and applicable provisions of the DOE Acquisition Regulation (DEAR) and the Federal Acquisition Regulation (FAR), performed walkthroughs of key processes, interviewed lab and DOE management and staff, and compared the results to the lab's policies and GAO's *Standards for Internal Control in the Federal Government*.[7] 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.[8]

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 sensitive assets. Based on the results, we (1) identified 62 potential split purchases and tested all of them to determine whether they were in fact split purchases and (2) tested a nonstatistical selection of 144 transactions for evidence of supervisory review and approval, adequacy of supporting documentation, and reasonableness of the purchases.

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[7]U.S. General Accounting Office, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).
[8]*Internal Control—Integrated Framework*, Committee of Sponsoring Organizations of the Treadway Commission (COSO).

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 Secretary of Energy 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.

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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; and the Lawrence Berkeley National Laboratory 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 or engd@gao.gov. Additional contributors to this assignment were Stephanie Chen, Barbara House, Kelly Lehr, Gail Luna, Lien To, and LaDonna Towler.

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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

Lawrence Berkeley National Laboratory

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

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Introduction and Objectives

- The Lawrence Berkeley National Laboratory (Lawrence Berkeley) is a government-owned, contractor-operated Department of Energy (DOE) national laboratory. It is managed by the University of California under a cost-reimbursable contract with DOE. The university 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 NNSA[1] and two DOE contractor labs, including Lawrence Berkeley.[2]

[1]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.

[2]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.

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Introduction and Objectives (cont'd)

- The objectives of our review of the Lawrence Berkeley National Laboratory were to determine whether:
  - 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.
  - 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.

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Introduction and Objectives (cont'd)

- 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. According to lab officials, the program has been significantly changed since the period of 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 DOE contract. Although the lab's purchase cards are authorized by the contractor, purchases charged to the DOE contract are ultimately reimbursed and thus paid for by the federal government. Similarly, property purchased that is charged to DOE becomes government property.

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Results in Brief

Internal control weaknesses in Lawrence Berkeley's Pcard program increased the lab's risk of improper purchases. Our review of a nonstatistical selection of 144 transactions, while not projectable to the universe of transactions, indicated a number of control weaknesses. For example:

- Cardholder monthly statements for 35 of the 144 transactions reviewed (24 percent) were not signed by approving officials timely or at all.
- 31 (22 percent) of the 144 transactions we reviewed totaling $38,680 lacked sufficient documentation such as an invoice, credit card receipt, or other sales documentation necessary to validate the dollar amount, quantity, and nature of the items purchased.
- Two key personnel responsible for overseeing the lab's Pcard program were also cardholders, creating a lack of independence between their cardholder role and their Pcard administration role.

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Results in Brief (cont'd.)

These control weaknesses likely contributed to the approximately $326,396[3] in improper, wasteful, and questionable purchases we identified during our review, such as:

- 21 improper split purchases—that is, groups of two or more similar transactions that were split to circumvent single purchase limits—consisting of 60 transactions totaling $160,011,
- 32 restricted items purchased totaling $47,139 that did not have documented pre-approval as required,
- 23 transactions totaling $10,911 we considered wasteful because they were excessive in cost when compared to other alternatives and/or were of questionable need, such as $985 for three Bose noise-canceling headsets,

[3]This is the net total after adjusting for transactions totaling $8,559 that were in multiple categories. Five transactions totaling $7,852 were both improper because the cardholders failed to obtain required pre-approvals for restricted items, and wasteful because they were excessive in cost. In addition, $707 in sales tax that we considered wasteful is included in the transaction amounts of other transactions we considered improper, wasteful, or questionable.

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Results in Brief (cont'd.)

- 51 transactions totaling $116,894 we considered questionable because they had insufficient documentation that would enable us or the lab to determine what was purchased and whether the purchases were proper and reasonable.

Lawrence Berkeley did not ensure assets were properly and timely accounted for and tracked. For example:

- 28 assets totaling $363,759 had been transferred from the Lawrence Livermore National Laboratory to Lawrence Berkeley in August 2003. However, Lawrence Berkeley did not enter these assets into the property database until we brought them to their attention in April 2004.

- Our physical observation of assets revealed several inaccuracies in the property database, including inaccurate serial numbers, incorrect property custodians, and inaccurate location information.

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Results in Brief (cont'd.)

- Subsequent to our review period, the lab made a number of policy and procedural changes that, if properly implemented, should help improve internal controls over its Pcard program and accountability for property. This included the implementation of a new Pcard program that significantly changed the lab's Pcard process. We are making seven recommendations to address issues raised in our review that require additional action.

- Lab and local DOE officials disagreed with the recommendations to (1) require detailed sales documentation such as receipts or invoices and (2) require approving officials to review such documents, indicating the new Pcard system eliminates the need for such documentation. We disagree. While the new system as described to us by lab officials may have improved the segregation of duties which is an important part of a good system of internal control, it does not substitute for independent, detailed supporting documentation of the description, quantity, and cost of items purchased in all cases.

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Background

- Lawrence Berkeley, a multi-program energy research laboratory located in Berkeley, California, has been operated by the University of California since 1943.

- The lab's 4,300 staff are University of California employees. It has an annual budget of about $500 million.

- The lab's Pcard program was established in 1996. In response to recent reviews, the lab began reducing the number of cardholders. As of March 2002, the lab had 295 active Pcards. By April 2003 the lab had 84 active Pcards. After implementation of its new distributed procurement unit in November 2003, the lab had 25 active Pcards.

- During fiscal year 2002, the lab made about $17 million of Pcard purchases.

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Background (cont'd.)

- Most cardholders had a $5,000 single purchase limit and a $25,000 monthly limit, although selected employees such as some procurement buyers had single purchase limits up to $50,000 and monthly limits up to $200,000.

- Lawrence Berkeley's property management branch provides policy and oversight for property management at the lab.

- Staff within the property management branch along with division property representatives are responsible for tracking and maintaining records of accountable property.

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Background (cont'd.)

- Items that qualify as accountable assets are recorded and tracked in the lab's property management system. Accountable assets include both "controlled" and "sensitive" items.
  - Controlled property is equipment costing at least $5,000 and having a service life of at least 2 years.
  - Sensitive property is equipment costing less than $5,000 that is considered susceptible to misappropriation for personal use or readily convertible into cash. Until fiscal year 2004, Lawrence Berkeley limited its definition of sensitive assets to just computers.
- As of March 31, 2003, the lab's property management system contained over 15,000 DOE-owned accountable assets with a recorded acquisition cost of over $551 million.

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Scope and Methodology

To determine if Lawrence Berkeley'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 Lawrence Berkeley's contract with DOE and applicable provisions of the DOE Acquisition Regulation (DEAR), and the Federal Acquisition Regulation (FAR),

- Performed walkthroughs of key processes, interviewed lab and DOE 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.[4]

[4] *Internal Control — Integrated Framework*, Committee of Sponsoring Organizations of the Treadway Commission (COSO).

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Scope and Methodology (cont'd)

To test specific control activities and determine whether purchase card 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.

We then selected transactions using the following methods:

- *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 (groups of two or more similar transactions that potentially were split to circumvent single purchase limits), cardholders with multiple purchase cards, and transactions on cards assigned to employees on leave or former employees.

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Scope and Methodology (cont'd)

- We forwarded the results of all transactions that met specific criteria to the lab for a response and for the related supporting 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 sensitive assets.

  - As these analyses yielded thousands of transactions, we first made a nonstatistical selection of 150 of these transactions taking into account factors such as item description, amount, and frequency of similar purchases, among other things.

  - Based on our review of the supporting documents, we found that five transactions were made by unknown perpetrators with stolen Pcards, and one was the result of a vendor error. Because we verified that all six transactions were subsequently credited back by the bank, we eliminated these from the selection.

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Scope and Methodology (cont'd)

- We used the remaining 144 transactions totaling $283,311 to test specific control activities, such as 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,

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Scope and Methodology (cont'd)

- 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.

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Internal Control Weaknesses

During the period of our review, Lawrence Berkeley'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:

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 inadequate and/or untimely supervisory review.

- After cardholders reconciled the charges listed on their monthly statements to supporting documents, lab policy required approving officials to review each purchase listed on the cardholder's monthly statement within 30 days and sign the statement, indicating that they approved all of the purchases and that the purchases were proper and reasonable.

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Internal Control Weaknesses (cont'd.)

- We found that cardholders' monthly statements for 12 (8 percent) of the transactions tested totaling $16,486 had not been approved. This includes two statements that were signed only after they were selected for our review – more than 2 years after these two purchases were made.
  - One statement was not signed because the cardholder worked in the procurement department. Lab officials stated that at the time, five procurement cardholders were not required to have any post-approval of purchases because they had authority to commit government funds. However, without such approval, there was no check and balance to ensure their purchases were proper.
- Statements for another 23 transactions (16 percent) totaling $125,580 were approved from 2 to 12 months after the cardholder's statement date. For example, one purchase of a laptop computer wasn't approved until 11 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 was improper is severely limited.

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Internal Control Weaknesses (cont'd.)

Transaction Documentation: We identified a number of transactions that lacked key supporting documentation to verify specifically what was purchased and the related cost.

- 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.
- Lawrence Berkeley's Pcard policy required the cardholder to maintain the following for 3 years after purchase: (1) pre-approval request form, (2) packing slips or sales receipts, and (3) monthly transaction statement.
- We found 31 of the transactions (22 percent) totaling $38,680 in the nonstatistical selection lacked an invoice, credit card slip or other sales documentation.

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Internal Control Weaknesses (cont'd.)

- 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.

- This lack of documentation was largely due to two factors.

  - If cardholders maintained the packing slip, they were not required to maintain the sales receipt or invoice. However, packing slips often do not show the costs of the items purchased. Because an order can be shipped in multiple packages, without cost detail it is difficult to determine whether one packing slip represents the entire order.

  - Lab policy did not require monthly approvers to verify purchases listed in the cardholder statement against supporting documents.

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Internal Control Weaknesses (cont'd.)

Segregation of Duties: Two key personnel who were responsible for overseeing Lawrence Berkeley's Pcard program were also cardholders.

- As program administrators, they were responsible for helping to ensure and enforce cardholder compliance with Pcard policies by monitoring purchases and taking disciplinary actions such as warnings, suspensions, and/or card cancellations.
- They were also the primary contacts with the issuing bank, and thus have the authority to order new cards and request credit limit increases.
- Allowing these administrators to be cardholders created a conflict of interest between the cardholder and program oversight role, elevating the risk that spending improprieties would not be detected.

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Improper, Wasteful, and Questionable Purchases

These weaknesses in internal controls created an environment that exposed the lab to improper, wasteful, and questionable purchases. Our limited testing identified $326,396[5] in such purchases, as follows:

Improper Purchases: We identified 92 transactions totaling $207,150[6] of improper purchases, which we defined as purchases that violated the DOE contract or lab policy. These included the following:

- *Split Purchases*. Lawrence Berkeley's purchase card policy prohibits splitting purchases into more than one transaction to circumvent single purchase limits. Using data mining techniques, we identified 62 potential split purchases—that is, groups of 2 or more similar transactions that potentially were split to circumvent single purchase limits. After reviewing the supporting documents, we determined that 21 (34 percent) were in fact split purchases consisting of 60 transactions totaling $160,011.

[5]This is the net total after adjusting for transactions totaling $8,559 that were in multiple categories. Five transactions totaling $7,852 were both improper because the cardholders failed to obtain required pre-approvals for restricted items, and wasteful because they were excessive in cost. In addition, $707 in sales tax that we considered wasteful is included in the transaction amounts of other transactions considered improper, wasteful, or questionable.

[6]This is the net total of improper purchases after adjusting for one $575 transaction that was improper for two reasons: (1) the transaction was for a restricted item but did not have the required pre-approval and (2) it was an unauthorized purchase action as described further below.

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Improper, Wasteful, and Questionable Purchases (cont'd.)

- For example, one cardholder purchased machine tools for $8,369 but made two separate charges for $3,587 and $4,782 on the same day to circumvent their $5,000 single purchase limit.

- During our testing for split purchases, we also identified 13 additional instances consisting of 31 transactions totaling $91,455 for which the lab was unable to provide sufficient supporting documentation for us to determine whether these purchases were proper. However, based on the available information, these transactions shared similar characteristics—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 confirmed as being split purchases, and therefore, we consider these transactions to be potentially improper.

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Improper, Wasteful, and Questionable Purchases (cont'd.)

- *Purchases of Restricted Items Without Prior Approval*. Lawrence Berkeley's purchase card program requires cardholders buying restricted items to obtain prior approval from a specified contact depending on the item. Of the 144 transactions reviewed, 57 transactions totaling $164,012 were for the purchase of restricted items. For 32 (56 percent) of these restricted item purchases totaling $47,139, approval was not obtained prior to purchase. Examples of these include the following:

  - Food for meetings and off-site meeting costs require pre-approval, yet we identified 12 purchases of food and associated meeting costs such as room rentals totaling $18,252 that did not have prior approval.

  - We identified two transactions for cell phones totaling $854 made without prior approval, even though cell phones are a restricted item.

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Improper, Wasteful, and Questionable Purchases (cont'd.)

- A cardholder purchased five recliners totaling $2,145 for the fire department dormitory without prior approval, even though furniture is a restricted item.

- The lab had discovered five of these 32 violations totaling $8,521 through its periodic reviews of cardholder activity.

- The lack of prior approval for restricted items increases the risk of improper or erroneous purchases and payments.

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Improper, Wasteful, and Questionable Purchases (cont'd.)

- *Unauthorized purchase action.* We found that a cardholder's monthly approver used the cardholder's Pcard to rent a truck for $575 without the cardholder's knowledge. This occurred while the cardholder was out on disability leave.
  - Lawrence Berkeley's policy prohibits the lending or sharing of Pcards. However, the lab did not have systematic procedures to suspend cardholder accounts when cardholders were on extended leave.
  - The approving official stated he did it because it was an emergency. However, he could have requested another cardholder to make the purchase.

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Improper, Wasteful, and Questionable Purchases (cont'd.)

Wasteful Purchases: We also identified 23 purchases totaling $10,911 that we determined to be wasteful—that is, were excessive in cost compared to other available alternatives and/or of questionable need.

- We identified nine transactions totaling $9,925 that we considered excessive in cost when compared to available alternatives that would meet the same basic needs, 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 DOE.

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Improper, Wasteful, and Questionable Purchases (cont'd.)

Examples of wasteful purchases we identified included:

- Three Bose noise-canceling headsets totaling $985. The two cardholders that made these purchases indicated they were needed due to noisy offices or work environments. However, similar commercially available headsets are available for $85-$150.
- An air purifier for $403 from The 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.
- $384 for working meals (breakfast and lunch) for 12 people. The amount paid for lunch exceeded the lab's meal guidelines.

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Improper, Wasteful, and Questionable Purchases (cont'd.)

- We also identified 14 transactions in which the cardholders were charged sales tax totaling $986 for tax exempt purchases. Although cardholders obtained a refund of the tax paid on 4 other transactions we reviewed, they did not do so for these 14 transactions.

- The fact that cardholders had to subsequently contact the vendors to get the sales tax credited where paid also indicates that cardholders were not fully aware of the proper policy that no sales tax be paid.

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Improper, Wasteful, and Questionable Purchases (cont'd.)

Questionable Purchases: We identified 51 transactions totaling $116,894 that we classified as questionable because there was insufficient documentation to determine what was actually purchased, how many items were purchased, the cost of the items purchased, and whether the purchase was proper and reasonable.

- From our nonstatistical selection of 144 transactions, we identified 20 purchases totaling $25,439 for which the cardholders were unable to provide adequate purchase documentation to determine what was purchased. Some of these included purchases from:
  - Kragen Auto Parts - $126
  - Amazon.com - $114
  - Sears Roebuck - $170
  - Lucky Dog Pet Shop - $200
  - Paypal[7] - $796

[7]Paypal is a third party online payment facilitator that accepts credit card payments from purchasers and remits the payments to sellers.

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Improper, Wasteful, and Questionable Purchases (cont'd.)

- As mentioned previously, we also identified 31 transactions that made up 13 potential split purchases totaling $91,455 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 could not determine whether the purchases were proper and therefore also consider these to be questionable purchases.

While the $326,396 of improper, wasteful, and questionable transactions is relatively small compared to the $24 million in purchase card activity 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.

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Property Management Weaknesses

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. Lawrence Berkeley policy requires that controlled and sensitive property be tagged with barcode property numbers and tracked in the property management system.

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

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Property Management Weaknesses (cont'd.)

- Property management system not updated timely. We found inaccuracies in the property management system that indicate changes in status are not being updated timely.

  - Our data mining tests showed 303 assets totaling $3,540,044 were assigned to persons who no longer worked at the lab. All of these assets were subsequently reassigned to the current property custodians or the assets were taken out of service after the beginning of our audit. The majority of these assets were reassigned in April 2004 shortly before we conducted the physical observation.

  - 28 assets totaling $363,759 that had been transferred from the Lawrence Livermore National Laboratory to Lawrence Berkeley in August 2003 were not entered into the property database until the last week of April 2004, when we were conducting the physical observation of property. These had been removed from Lawrence Livermore's property database when the assets were transferred.

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Property Management Weaknesses (cont'd.)

- Notification of missing assets. The lab's property management branch did not inform Lawrence Berkeley Security of lost or missing items identified during its annual physical inventory. Consequently, lab security may be unaware of patterns or trends in missing property that could be indicators of theft.
  - Property management produces an annual report of all property written off as a result of the physical inventory of property. The lab sends a letter to DOE with the inventory results, but does not provide a copy of the inventory write-off report to Lawrence Berkeley Security.
  - Property management only notifies lab security of items suspected of being stolen.

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Property Management Weaknesses (cont'd.)

Results of Physical Observation

- We selected 100 assets to perform a physical observation. This included 76 assets selected from the nonstatistical selection of Pcard transactions as well as assets selected from the property database because they were still assigned to separated employees in the database or because there were multiple assets recorded with the same serial number. The remaining 24 assets were identified to us as assets either transferred or loaned from the Lawrence Livermore National Laboratory to Lawrence Berkeley.
    - All of the assets were either found or the lab provided documentation that the asset had been transferred or retired.
    - Of the 76 lab assets selected, we identified numerous errors and inaccuracies in the property database. In some cases, assets contained multiple errors. These errors included the following:

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Property Management Weaknesses (cont'd.)

- Thirteen items had the incorrect serial number recorded.
- Twelve items were shown in the property database assigned to the wrong property custodian.
- Seven items were found at a different location than the location recorded for that item in the property database.
- Two items were entered into the property database twice under two different bar-code numbers.
- Two items were recorded with incorrect asset descriptions.

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Recent Policy and Procedural Changes

Subsequent to the period covered by our review, Lawrence Berkeley took a number of steps to improve its oversight and control over purchases and property, largely in response to weaknesses identified by Lawrence Berkeley internal audit and DOE reviews. Lab officials informed us of the following changes:

- Beginning October 2002, approving officials were required to attend training on Pcard policies and procedures.
- As of March 2003, all cardholders were required to have supervisory review of their monthly statements.

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Recent Policy and Procedural Changes (cont'd)

- In August 2003, the lab established the Distributed Procurement Unit (DPU) to improve controls over Pcard purchases.
  - The DPU consists of about 22 trained administrators who are both buyers and cardholders. All of the DPU administrators work for the procurement department. In addition, the DPU coordinator and two DPU supervisors are cardholders. Beginning November 2003, only these 25 cardholders were allowed to make Pcard purchases for the entire lab.
  - About 400 employees are authorized as requisition preparers. The requisition preparers enter all of the order information into the lab's procurement system, which then routes the request to a requisition approver for approval. The requisition is then routed to a procurement supervisor who assigns it to a DPU administrator to make the purchase.

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Recent Policy and Procedural Changes (cont'd)

- In the same month as the DPU was implemented, the lab's receiving department began opening all packages received and recording receipt of the items into their Pcard system. Previously, Pcard purchases were not opened and not recorded by the receiving department, but instead were simply passed on to the addressee.

- The DPU administrators are responsible for reconciling their transactions monthly and submitting their monthly statement to one of two DPU supervisors for review and signature. Thus, these two DPU supervisors are responsible for reviewing all Pcard purchases for the entire lab, which is their primary responsibility.

- The DPU administrators are not required to retain receipts or invoices. According to lab officials, they do not consider these documents necessary since the data exists in the Pcard system and bank statement.

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Recent Policy and Procedural Changes (cont'd)

- Training for the DPU administrators and approving officials includes emphasizing the laboratory's policies on (1) timely supervisory review of transactions, (2) split purchases, (3) transaction documentation requirements, (4) pre-approval requirements for restricted items, and (5) considering reasonableness of price in making and approving purchases.

- The lab also established a procedure to reduce the purchase limits of cardholders that go on extended leave to zero.

- Beginning October 2003, all three of the University of California laboratories began using new, consistent criteria for determining sensitive property. Prior to that, Lawrence Berkeley's criteria for sensitive property only included computers, thus, items such as PDAs, digital cameras, and portable projectors were not bar-coded or tracked in its property management system.

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Recent Policy and Procedural Changes (cont'd)

- Beginning March 2004 the lab assigned a financial systems analyst independent of the PCard program to review purchase card transactions. The auditor periodically selects a cardholder, and systematically reviews each cardholder's transactions for factors such as adequate supporting documentation, appropriateness of items purchased, reasonableness of price, monthly statement reviews and possible split purchases. While currently there is no plan as to how often each cardholder will be audited, the lab reported that as of April 2004, 11 of 25 cardholders had been audited with no significant findings.

- Because these changes primarily occurred after 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 purchases and property management. However, additional improvements are needed to further reduce the risk of improper and wasteful purchases.

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Conclusions

Lawrence Berkeley has implemented a number of noteworthy internal controls over its Pcard program and property management functions. However, weaknesses in certain control areas made the lab vulnerable to, and in some instances contributed to, improper, wasteful, and questionable purchases. In response to recent audits, the lab implemented a new Pcard system after our period of review. While this is a positive step, further strengthening of controls is needed and management needs to ensure that it gives continued attention to ongoing monitoring of compliance with established policies and procedures.

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Recommendations

We recommend that the Secretary of Energy direct the Director of the Lawrence Berkeley National Laboratory to take the following six actions.

- To strengthen internal controls over the purchase card program and reduce the lab's vulnerability to improper, wasteful, and questionable purchases, we recommend the following.
  - Cancel purchase card accounts for cardholders who also perform oversight functions over the purchase card program to help ensure appropriate independence and separation of duties between these functions.

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Recommendations (cont'd.)

- Establish policies and procedures requiring that purchasers maintain a copy of the detailed sales receipt, invoice, or other independent support showing the description, quantity, and price of individual items purchased.

- Require approving officials to review (1) sales receipts, invoices, or other independent support showing the description, quantity, and price of individual items purchased and (2) restricted items approvals before approving purchases to ensure such items were obtained and documented where applicable.

- Implement tools, such as data mining, for the Pcard program or other review staff to use in reviewing cardholder purchases for improper purchases. These tools should be used to systematically monitor for split purchases, unusual vendors, and other potentially improper or wasteful purchases, and to monitor timeliness of reconciliations and supervisory approvals.

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Recommendations (cont'd.)

- To help improve Lawrence Berkeley's controls over the purchasing, recording, and safeguarding of assets, we recommend the following:
  - Establish a policy requiring property management to provide a report of all missing assets detected during physical inventories to Lawrence Berkeley Security.
  - Establish a process to test the accuracy of key information recorded in the property management system, including the serial number, assigned custodian, location, and bar-code number.

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Recommendations (cont'd.)

- We also recommend that the Secretary of Energy direct the DOE 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 DOE.

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Agency Comments

- Lab and local DOE officials agreed with all of the recommendations except for the recommendations to (1) require sales documentation such as a receipt or invoice and (2) require approving officials to review sales documentation and restricted item approvals before approving purchases. They indicated that the new Pcard program has the data to support item price, quantity, and description via the requisition, monthly cardholder statement, and receiving data.

- While the new system as described by lab officials may have improved the segregation of duties which is an important part of a good system of internal control, it does not substitute for independent, detailed supporting documentation of the description, quantity, and cost of items purchased in all cases. Without such detail, a reviewer would not be able to determine if the original order amounts were correct nor whether additional items were purchased under that order. Consequently, sufficient, independent evidence for the individual items purchased and corresponding supervisory review of such evidence is necessary to help reduce the risk of improper purchases.

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

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