



U.S. Department of Energy  
Office of Inspector General  
Office of Audits and Inspections

# Audit Report

Management Letter on the  
Department of Energy's Isotope  
Development and Production for  
Research and Applications  
Program's Fiscal Year 2009 Balance  
Sheet Audit



KPMG LLP  
Suite 12000  
1801 K Street, NW  
Washington, DC 20006

January 30, 2012

Mr. Gregory Friedman, Inspector General  
Dr. Jehanne Gillo, Director, Facilities and Project Management Division, Office of Nuclear Physics  
U.S. Department of Energy  
Washington, DC 20585

Dear Mr. Friedman and Dr. Gillo:

We have audited the balance sheet of the United States Department of Energy's (Department or DOE) Isotope Development and Production for Research and Applications Program (the Program) (a component of the Department) as of September 30, 2009, and have issued our report thereon dated January 30, 2012. In planning and performing our audit of the balance sheet, in accordance with auditing standards generally accepted in the United States of America, we considered the Program's internal control over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinion on the balance sheet, but not for the purpose of expressing an opinion on the effectiveness of the Program's internal control. Accordingly, we do not express an opinion on the effectiveness of the Program's internal control.

During our audit, we noted certain matters involving internal controls and other operational matters that are presented in Exhibit A for your consideration. These comments and recommendations, all of which have been discussed with the appropriate members of management and have been communicated through the issued Findings and Recommendations, are intended to improve the Program's internal controls or result in other operating efficiencies. These comments are in addition to the material weaknesses and significant deficiencies presented in our *Independent Auditors' Report*, dated January 30, 2012, included in the Program's *Fiscal Year 2009 Annual Report and Balance Sheet*.

Our audit procedures are designed primarily to enable us to form an opinion on the balance sheet, and therefore may not bring to light all weaknesses in policies or procedures that may exist. We aim, however, to use our knowledge of the Program's organization gained during our work to make comments and suggestions that we hope will be useful to you.

Management's reaction to our comments and recommendations has not been subjected to the auditing procedures applied in the audit of the balance sheet and, accordingly, we express no opinion on it.

We appreciate the courteous and professional assistance that Program personnel extended to us during our audit. We would be pleased to discuss these comments and recommendations with you at any time.

This communication is intended solely for the information and use of the Program's management and the Department's Office of Inspector General, and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

**KPMG LLP**

**Management Letter**  
**Index to Exhibit A and Listing of Other Exhibit**

*Comments Related to Internal Controls and Other Operational Matters (with parenthetical references to findings and recommendations issued during the engagement)*

***Exhibit A***

Inventory

**Finding 1:** Inventory Transfer Not Recorded Timely (**09-ISO-INV-01**) A.1

**Finding 2:** Inventory Accounting Matters (**09-ISO-INV-02, 09-ISO-INV-03, 09-ISO-INV-04, 09-ISO-INV-05**) A.2

Sales and Collections

**Finding 3:** Insufficient Allowance for Uncollectible Accounts Analysis (09-ISO-SALES-01) A.5

***Acronyms***

***Exhibit B***

## COMMENTS

### Inventory

#### **Finding 1:** Inventory Transfer Not Recorded Timely (**09-ISO-INV-01**)

During fiscal year (FY) 2008, Los Alamos National Laboratory (LANL) transferred approximately \$133,000 of radioactive isotope Strontium to Brookhaven National Laboratory (BNL). BNL then sold the transferred inventory during FY 2008. However, LANL and BNL did not record the inventory transfer in their accounting records until September 2009. When the transfers initially occurred during FY 2008, LANL and BNL were not in agreement as to the quantity shipped/received. LANL and BNL did not reach agreement on the details of the transfer until FY 2009. The Program's inventory balance was overstated by approximately \$133,000 at September 30, 2008 and for most of FY 2009.

#### **Recommendations:**

We recommend the National Nuclear Security Administration's (NNSA) Field Chief Financial Officer, working in conjunction with the Manager of the Los Alamos Site Office, direct LANL to strengthen existing control procedures to ensure that inventory transfer details are agreed upon by all parties at the time of transfer, to allow for timely recording of the related accounting activities.

Additionally, we recommend the Manager of the Brookhaven Site Office direct BNL to strengthen existing control procedures to ensure that inventory transfer details are agreed upon by all parties at the time of transfer, to allow for timely recording of the related accounting activities.

#### **Management Reaction:**

LANL – In part of our commitment to continuous improvement, this issue was self-identified between the LANL and BNL sites during fiscal year end closing of FY08 and was immediately addressed with a robust process several years prior to this KPMG recommendation. The corrective actions resulting from this self-identified issue, include new protocols requiring both LANL and BNL to verify the quantities upon shipping and receipt of transferred material, in order for the accounting transfers to be booked within one month of the transfer by both parties. Special care is given to transfers that occur near the end of a FY. The process now requires sites to send electronic copies of all shipping documentation to the other party for validation. Accounting transfers do not occur until validation has been confirmed from both sites. This new process has been in use since FY09 and has been employed for several transfers overseen by HQ. This process appears to be a robust measure to address this self-identified item and the summary as listed in the KPMG recommendation. We therefore maintain the position that the recommendation has already been addressed and should be closed.

BNL – The Brookhaven Site Office concurs with the recommendation and will request Brookhaven Science Associates, the M&O [Managing and Operating] contractor at BNL, to strengthen existing control procedures to ensure inventory transfer details are agreed upon by all parties at the time of transfer, to allow for timely recording of the related accounting activities.

**Finding 2: Inventory Accounting Matters (09-ISO-INV-02, 09-ISO-INV-03, 09-ISO-INV-04, 09-ISO-INV-05)**

While performing testwork over the Program's inventory activity and balances during FY 2009, we noted the following deficiencies:

1. Errors and inconsistencies existed in the sites' year-end inventory schedules. For example:
  - Sales amounts for Rubidium-87 and Samarium-152 were inverted in the excess inventory quantity (EIQ) analysis at Oak Ridge National Laboratory (ORNL); this did not result in a dollar error on the analysis.
  - On LANL's initial inventory rollforward, mathematical inaccuracies existed for Ge-68 and Sr-82 in the columns "Inventory Cost to Compute FY 10 Cost Std." and "Inventory @ 9/30/09 (COST)."
  - On LANL's initial inventory rollforward, total "Inventory @ 9/30/09 (COST)" of \$282,294 did not agree to the Standard Accounting & Reporting System (STARS) (\$268,445).
  - The unit costs in BNL's inventory rollforward for Ge-68, Ni-63, Sr-82, Be-7 and Zn-65 were calculated incorrectly.
  - The sales/orders for Ge-68, Sr-82, and Be-7 on BNL's inventory rollforward did not agree with ORNL's sales report.
  - On BNL's EIQ analysis, total excess inventory was not mathematically accurate.
  - In BNL's lower of cost or market (LOCM) analysis, the quantities on hand for Fe-55, Ni-63, Sr-82 and Zn-65 did not agree to our recalculation.
2. We observed inconsistency in the sites' processes of accounting for inventory. For example, we found:
  - ORNL does not perform a decay analysis. However, decay should have been recorded for Th-229, Tc-99, U234>99.8%, U234<99.0% and Po-209.
  - Pacific Northwest National Laboratory (PNNL) does not annually complete EIQ and LOCM analyses.
  - BNL does not record cost of goods sold entries. Rather, it records all such costs in operating expenses. This practice is inconsistent with other Program sites.

**Recommendations:**

We recommend that the Managers of the ORNL, LANL, BNL, and PNNL Site Offices direct their respective sites to:

1. Strengthen controls to ensure that the year-end inventory schedules are properly reviewed by individuals knowledgeable of the inventory processes and calculations before the related entries are recorded in the general ledger.
2. Obtain from the Director, Facilities and Project Management Division, Office of Nuclear Physics, the annual distribution to all sites of current Program-wide accounting guidance related to inventory valuation calculations and recording of cost of goods sold, and develop and implement periodic monitoring procedures to ensure adherence to that guidance.

In addition, we recommend that the Director, Facilities and Project Management Division, Office of Nuclear Physics ensure the annual distribution to all sites of current Program-wide guidance related to inventory valuation calculations and recording of cost of goods sold.

**Management Reaction:**

ORNL – Nonconcur. Oak Ridge contends that year-end inventory schedules are appropriately calculated and are the basis for the input of correct information into the general ledger. The current ORNL practices assure that inventory calculations and the recording of cost of goods sold are consistent with DOE accounting guidance specific to inventory accounting.

LANL – The NNSA Field Chief Financial Officers has some concerns surrounding this finding. The first concern is its timing. Issuance two years subsequent to the conduct of the fieldwork hardly seems relevant, especially since no follow-up work was performed to determine if the conditions still exist. Secondly, in the current year (FY11) and previous years, documentation has always been provided by the auditee, suggesting that records have been readily available. The recommendations, considered separately from the findings, are appropriate in any circumstance. Accordingly, based on information available at this time, we non-concur with the findings presented, and to our knowledge, the recommendations have already been addressed.

BNL – The Brookhaven Site Office concurs with the recommendations in principle, and recognizes the importance of supporting documentation for accurate year-end inventory reporting. During the factual accuracy review, BSA, the managing and operating contractor at BNL, provided comments that disagreed with some of the conditions noted above. Specifically, BSA stated that they confirmed that year-end inventory calculations were correct. In addition, in FY 2011, the administrative responsibilities of the Isotope Program moved from one department to another within BNL. Based on this information, BSO will direct BSA to:

- 1) Perform a self assessment and take corrective actions, as appropriate, to ensure controls are adequate to ensure year-end inventory schedules are properly reviewed by individuals knowledgeable of the inventory processes and calculations before the related entries are recorded in the general ledger; and
- 2) Obtain from the Director, Facilities and Project Management Division, Office of Nuclear Physics, the annual distribution to all sites of current Program-wide accounting guidance related to

inventory valuation calculations and recording of cost of goods sold, and develop and implement periodic monitoring procedures to ensure adherence to that guidance.

PNNL – The Pacific Northwest Site Office (PNSO) concurs with the recommendation to obtain current inventory accounting guidance from Program Headquarters. PNSO will obtain specific program accounting guidance for projects conducted at PNNL for the Facilities and Project Management Division, Office of Nuclear Physics from the Director, Facilities and Project Management Division, Office of Nuclear Physics related to inventory valuation calculations and recording of cost of goods sold and direct the laboratory to implement accordingly. In addition, the inventory balance is reported on DOE-EM's financial statements. Inventory adjustments are provided to DOE-RL to process appropriate accounting entries in STARS.

Office of Nuclear Physics - Management partially concurs with the recommendation, specifically providing:

NP considers the Condition that ORNL does not perform a decay analysis for Th-229, Tc-99, U234>99.8%, U234<99.0% and Po-209 to be immaterial. These isotopes with extremely long half lives decay to less than a recordable dollar amount. Hence, decay entries for these long lived isotopes have not been required by the Isotope Program. This has been an acceptable practice in all previous audits.

NP considers the Condition that PNNL does not annually complete EIQ and lower of cost or market (LOCM) analyses to be immaterial. These entries have not been required by the Isotope Program for the Sr-90 at PNNL. Sr-90, which has a 30 year half life, is only purified as needed to fill customer orders. This isotope is market-driven and has been sold every year for the last five years.

NP concurs with the Condition that BNL does not record cost of goods sold entries. Rather, it records all such costs as operating expenses. NP will work with the Manager of the Brookhaven Site Office to develop and implement periodic monitoring procedures to ensure cost of goods sold are properly recorded.

NP concurs in principle and will work with the HQ Office of Finance and Accounting to provide appropriate guidance related to inventory valuation calculations and recording cost of goods sold. The Isotope Program will ensure the annual distribution to all sites of current Program-wide guidance related to inventory valuation calculations and recording of cost of goods sold. However, the EIQ guidance has become obsolete for radioactive isotopes and those will only apply to stable isotopes. The EIQ analysis was suggested during the early 1990's audits mainly for the stable isotopes. We believe that this is still relevant for the stable isotopes inventory today, but no longer useful for the radioactive isotopes. Radioactive isotopes are only produced as needed/ordered (a just-in-time approach) and very little inventory is carried forward. Hence, there is little remaining inventory and that which remains is a small percentage of the total annual manufactured cost and costs of goods sold. Further, any radioisotope inventory that is carried forward is sold within the first two months of the new year. Regarding the lower of cost or market analysis, we believe it is no longer applicable for radioactive isotopes given that these isotopes are produced as needed to fill customer orders.

**Auditor Response:**

ORNL – We did note certain errors in ORNL’s inventory schedules. Although these errors were not material to the Program’s FY 2009 balance sheet, they are indicative of insufficient reviews of the inventory schedules after they are prepared by the Program.

LANL - Management’s response did not directly address our recommendations or dispute their content. Based on the documentation and communications received during our inventory audit work, which extended over the course of many months as a result of unanticipated delays in receiving such information, we believe that our conclusions are appropriate.

BNL - While the Brookhaven Site Office agreed with our recommendations in principle, they did comment that they did not agree with some of the conditions noted above. Versions of the inventory schedules that were provided to us did have errors noted in them. Although these errors were not considered material to the Program’s FY 2009 balance sheet, they are indicative of insufficient reviews of the inventory schedules after they are prepared by the Program.

Office of Nuclear Physics - We agree that the conditions noted were not material to the Program’s FY 2009 balance sheet. However, these conditions are indicative of inventory accounting inconsistencies among the Program’s sites that we believe should be addressed via the distribution of Program-wide inventory accounting guidance.

**Sales and Collections**

**Finding 3:** Insufficient Allowance for Uncollectible Accounts Analysis (09-ISO-SALES-01)

ORNL does not have procedures in place to analyze all accounts receivable balances at year-end to estimate the amount of accounts receivable that is uncollectible. Adjustments to the allowance for uncollectible accounts are based on actual uncollected invoices at a point in time. A system configuration control within the general ledger flags delinquent invoices based on programmed dunning and referral parameters established by the Department. Only when an overdue invoice is flagged for referral to the Department’s Headquarters for collection is the creation of an allowance for uncollectible accounts considered. Without a comprehensive analysis of its year-end accounts receivables to estimate the amount of uncollectible receivables, ORNL is at risk to overstate net accounts receivable in the Program’s year-end financial statements.

**Recommendations:**

We recommend that the Manager of the ORNL Site Office direct ORNL to develop and implement:

1. Procedures to estimate its allowance for uncollectible accounts at fiscal year-end, at a minimum, through a comprehensive and documented analysis of all accounts receivable; and
2. Internal controls such that the estimated allowance for uncollectible accounts is reviewed by ORNL management prior to posting to the general ledger.



**Management Reaction:**

Recommendation #1 – Concur. ORNL will evaluate opportunities for improving the documentation associated with the analysis performed in establishing an allowance for uncollectible accounts. ORNL will seek detail guidance from DOE in establishing the process for estimating the allowance. Actions planned will be completed by September 28, 2012. ORNL has policies and procedures in place that are followed to ensure that a reasonable allowance for uncollectible accounts is properly reported. Under the current methodology, ORNL performs a monthly analysis of all accounts receivable balances to determine if accounts are overdue and to determine if accounts need to be referred to DOE for collection. If it is unlikely the collection will occur, an adjustment is made to the uncollectible allowance. These adjustments occur throughout the fiscal year.

Recommendation #2 – Concur. ORNL will implement appropriate additional management review and approval to the process currently being performed. Actions planned will be completed by September 28, 2012.

**ACRONYMS**

BSA	Brookhaven Science Associates
BNL	Brookhaven National Laboratory
BSO	Brookhaven Site Office
Department or DOE	Department of Energy
EIQ	Excess Inventory Quantity
EM	Environmental Management
FY	Fiscal Year
HQ	Headquarters
LANL	Los Alamos National Laboratory
LOCM	Lower of Cost or Market
M&O	Managing and Operating
NP	Office of Nuclear Physics
NNSA	National Nuclear Security Administration
ORNL	Oak Ridge National Laboratory
PNNL	Pacific Northwest National Laboratory
PNSO	Pacific Northwest Site Office
RL	Richland
STARS	Standard Accounting and Reporting System