



OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

INSPECTION REPORT

DOE-OIG-23-35

September 2023

**SENSITIVE AND HIGH-RISK
PROPERTY MANAGEMENT AT THE
BROOKHAVEN NATIONAL
LABORATORY**



Department of Energy
Washington, DC 20585

September 29, 2023

MEMORANDUM FOR THE MANAGER, BROOKHAVEN SITE OFFICE, AND THE
ACTING DIRECTOR, OFFICE OF ASSET MANAGEMENT

SUBJECT: Inspection Report on Sensitive and High-Risk Property Management at the
Brookhaven National Laboratory

The attached report discusses our review of sensitive and high-risk property at the Brookhaven National Laboratory. This report contains three recommendations that, if fully implemented, should help ensure that Brookhaven National Laboratory's property management program is compliant with Federal regulations. Management fully concurred with our recommendations.

We conducted this inspection from January 2022 through July 2023 in accordance with the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspection and Evaluation* (December 2020). We appreciated the cooperation and assistance received during this inspection.

A handwritten signature in black ink, appearing to read "Anthony Cruz", written over a light yellow rectangular background.

Anthony Cruz
Assistant Inspector General
for Inspections, Intelligence Oversight,
and Special Projects
Office of Inspector General

cc: Deputy Secretary
Chief of Staff



Department of Energy Office of Inspector General

Sensitive and High-Risk Property Management at the Brookhaven National Laboratory (DOE-OIG-23-35)

WHY THE OIG PERFORMED THIS INSPECTION

With the size and scale of operations at the Brookhaven National Laboratory (BNL), there is a wide assortment of high-risk or sensitive property utilized. The Department of Energy's Brookhaven Site Office is tasked with overseeing property management at BNL.

We initiated this inspection to determine whether BNL's property management program is sufficient to adequately classify, account for, and disposition sensitive and high-risk property.

What Did the OIG Find?

We determined that BNL's property management program was insufficient to adequately classify, account for, and disposition sensitive and high-risk property. Specifically, we found that BNL did not: classify its property as sensitive or high-risk, and items were not always identified as subject to export control requirements; properly account for property by conducting appropriate physical inventories of sensitive and high-risk property; and sufficiently disposition loaned property or Security Operations Division non-weapons inventory.

These issues occurred because BNL's property management policies and procedures did not fully incorporate 41 Code of Federal Regulations 109, *Department of Energy Property Management Regulations*, requirements related to sensitive and high-risk property. Additionally, the Brookhaven Site Office's oversight of BNL's sensitive and high-risk property program was insufficient.

What Is the Impact?

By not classifying, accounting for, and dispositioning its sensitive and high-risk property, BNL is at risk for potential adverse impact on public health and safety, the environment, national security interests, and proliferation concerns. Proper classification of both sensitive and high-risk property is important to ensure that only authorized individuals have access to it. Unauthorized access could lead to loss, theft, or misuse of technologies, technical data, and information.

What Is the Path Forward?

To address the issues identified in this report, we made three recommendations that, if fully implemented, should help ensure that sensitive and high-risk property is properly classified, accounted for, and dispositioned.

BACKGROUND

Brookhaven National Laboratory (BNL) is 1 of 10 Department of Energy Office of Science (Science) national laboratories. BNL is managed by Brookhaven Science Associates, a partnership between Stony Brook University, Battelle, and six universities under a management and operating contract. BNL's approximate 2,500 personnel lead and support diverse research teams that address the Department's mission to ensure the nation's security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions. BNL's Procurement and Property Management Group (PPM) is responsible for property management services in accordance with the contract. These responsibilities include identification of property, maintenance of records and accountability of property, assignment of property, loans of property and equipment, and property disposition.

The Brookhaven Site Office (BHSO) oversees the contract with Brookhaven Science Associates and provides technical direction and business management oversight of Brookhaven Science Associates. The Science Consolidated Service Center provides professional services in such areas as real property and infrastructure, procurement, and safeguards and security to the entire Science complex. Science's Organizational Property Management Officer (OPMO) is organizationally located within the Science Consolidated Service Center and responsible for establishing and administering the personal property management program consistent with applicable laws, regulations, practices, and standards.

41 Code of Federal Regulations (CFR) 109, *Department of Energy Property Management Regulations*, states that contractors shall establish, implement, and maintain a system that provides for an efficient personal property management program. The system shall be consistent with the terms of the contract; prescribed policies, procedures, regulations, statutes, and instructions; and directions from the contracting officer.

41 CFR 109 defines sensitive personal property (sensitive property) and high-risk personal property (high-risk property) as:

- **Sensitive Property:** Items that require special control and accountability due to unusual rates of loss, theft, misuse, or national security or export-control considerations, which includes weapons, ammunition, explosives, and information technology equipment with memory capabilities.
- **High-Risk Property:** Items with potential impact on public health and safety, the environment, national security interests, or proliferation concerns must be controlled, and disposed of, in other than the routine manner. The category of high-risk property includes, but is not limited to, automatic data processing equipment, export-controlled property¹, hazardous property, and proliferation sensitive property.

We initiated this inspection to determine whether BNL's property management program is sufficient to adequately classify, account for, and disposition sensitive and high-risk property.

¹ Export control property is property whose export is subject to licensing by the Department of Commerce, the Department of State, the Nuclear Regulatory Commission, or authorized by the Department of Energy.

PROPERTY MANAGEMENT PROGRAM INSUFFICIENT

We determined that BNL's property management program was insufficient to adequately classify, account for, and disposition sensitive and high-risk property. Specifically, BNL did not classify its property as sensitive or high-risk, and it did not properly account for its sensitive and high-risk property. Further, BNL had not properly dispositioned some sensitive and loaned property.

Sensitive and High-Risk Property Not Appropriately Classified

We found that BNL did not classify its property as sensitive although 11,198 of its 17,264 items (approximately 65 percent of the total fiscal year (FY) 2021 inventory) met the 41 CFR 109 definition of sensitive property.² These items accounted for approximately \$75 million of the FY 2021 total inventory value (15 percent). In addition to not being classified as sensitive property, some of these items such as information technology equipment were also subject to export-control requirements.

Moreover, BNL did not classify 783 of its 17,264 items (5 percent of the total FY 2021 inventory) as export-controlled, high-risk property.³ These items included lasers, oscilloscopes, chemical /biological equipment, and centrifugal separators that accounted for approximately \$183 million of the total inventory value (37 percent). Export-controlled property is specifically included among the 41 CFR 109 categories of high-risk property. Export-control requirements regulate how technologies (sensitive and high-risk property), technical data, and information are shipped, transferred, or transmitted to foreign countries. These requirements are intended to protect U.S. economic interests and foreign policy goals, as well as to prevent the acquisition of technologies, technical data, and information by parties hostile to the U.S. Further, we found that BNL did not consistently classify high-risk property when applicable. For example, we found that BNL did not identify radioactive magnets as high-risk. 41 CFR 109 requires property be correctly identified and tracked during the acquisition process and appropriately classified upon receipt. However, BNL did not do this at acquisition for the property mentioned above.

Proper classification at acquisition of both sensitive and high-risk property is important to ensure that only authorized individuals have access to it. Unauthorized access could lead to loss, theft, or misuse of technologies, technical data, and information.

When we discussed these issues with BHSO officials, they stated that BNL's requisition process had procedures to identify export-controlled property. However, a recent BNL assessment identified opportunities to improve the process.

² To identify these results, we compared the categories identified as sensitive in 41 CFR 109 such as weapons and ammunition, information technology equipment with memory capability, cameras, and communications equipment to the 17,264 items on the FY 2021 property inventory list.

³ To identify items that should have been classified as export-controlled, high-risk property, we compared BNL's FY 2021 property inventory list of 17,264 items to selected categories listed in the Department of Commerce's *Export Administration Regulations*.

Sensitive and High-Risk Property Not Appropriately Accounted For

BNL did not properly account for its sensitive and high-risk property. For example, by not properly classifying property as sensitive and high-risk, not all applicable sensitive and high-risk property was included in BNL's physical inventory verification process. 41 CFR 109 requires 100 percent annual physical inventory verification of high-risk and sensitive property. This process includes, among others, actual verification of the location and existence of property. Additionally, by not including all sensitive and high-risk property items in its inventories during its FY 2020 inventory, BNL did not conduct a 100 percent verification of the property it had previously identified as high-risk. Instead, BNL conducted statistical sampling, which 41 CFR 109 allows if the OPMO approves the deviation. Although BNL requested a deviation to the 100 percent inventory requirement due to COVID-19 impacts, the OPMO did not approve the request. When we discussed this with BHSO, an official stated that although BNL was under minimally safe operations due to COVID-19, it still performed an inventory count that was less rigorous than required.

Further, we found that from FY 2018 through FY 2021, PPM did not conduct any unannounced periodic inventory verification of property held by BNL's Security Operations Division (SOD). SOD's property inventory includes items such as weapons, ammunition, and explosives, which are sensitive property items. BNL procedure SM-203, *Inventory Procedures for Police Group Equipment*, states that to ensure the integrity of monthly weapons inventories, PPM personnel shall periodically conduct unannounced inventories. According to BNL officials, PPM conducts annual inventory verification of the armory property; however, BNL could not support that it had conducted unannounced inventory verifications of the property.

Sensitive Items Not Sufficiently Dispositioned

We found that BNL had not disposed of non-weapon sensitive property. Specifically, a SOD official stated that SOD had held body armor in its inventory past its expiration period. The official also stated that SOD had not disposed of the body armor because it did not know how. The official stated that SOD contacted PPM for guidance on the disposal of non-weapon SOD property and was advised that there were no specific procedures on how to do it. However, 41 CFR 109 requires that items contained on the *U.S. Munitions List* be disposed of using the Department of Defense's *Defense Demilitarization Manual* (DEMIL). Body armor is specifically included on the *U.S. Munitions List*. When we discussed this with BHSO officials, they stated that there are provisions to keep such items for training purposes. However, we did not find any Department policy that allowed body armor to be held as training equipment. As of April 2023, SOD continued to hold this property in its inventory. According to a National Institute of Justice guide related to body armor, body armor used past its service life cycle loses its efficiency and protection for wearers. Although not a specific Department guide, this guidance is applicable because the *U.S. Munitions List* references the National Institute of Justice as a source for the use and classification of body armor.

Additionally, PPM had not properly dispositioned loaned property. From FY 2019 through FY 2021, BNL loaned three items. We reviewed documentation for these loaned items and found it did not include the required 41 CFR 109 memorandum detailing: (1) the loan period; (2) delivery

time; (3) method of payment and transportation; and (4) point of delivery and return. Moreover, two of the three loans exceeded the initial domestic loan period of 1 year. 41 CFR 109 states that the loan period shall not exceed 1 year but may be renewed in 1-year increments with each subsequent extension requiring approval from a higher level of management.

CONTRIBUTING FACTORS

These issues occurred because BNL's property management policies and procedures did not fully incorporate Federal requirements related to sensitive and high-risk property. Additionally, BHSO's oversight of BNL's sensitive and high-risk property program was insufficient.

BNL's Policies and Procedures Did Not Fully Incorporate Federal Requirements

BNL did not fully incorporate Federal requirements related to sensitive and high-risk property into its policies and procedures. For example, BNL did not consider all items that could be categorized as sensitive and high-risk property. 41 CFR 109 requires sensitive and high-risk property, as well as property subject to export controls, be controlled and disposed of in other than the routine manner because of its potential impact on public health and safety, the environment, national security interests, and proliferation concerns. However, BNL excluded many of these items in its sensitive and high-risk property policies and procedures because BNL concluded 41 CFR 109 did not apply to it. For example, BNL excluded classifying sensitive property items such as information technology equipment, communications equipment, and cameras in its property policies and procedures. Additionally, 41 CFR 109 classifies export-controlled property as sensitive and potentially high-risk. We did not identify any exemptions or deviations to sensitive and high-risk property requirements in BNL's contract. Finally, BNL did not incorporate the DEMIL for applicable sensitive and high-risk property items, as required by the CFR. In fact, its policies and procedures did not mention any destruction requirements or specify any destruction processes for property items subject to the DEMIL.

Additionally, the OPMO identified that BNL's policies and procedures did not incorporate all 41 CFR 109 requirements. Specifically, in June 2018, the OPMO issued a draft report, *Technical Assessment of the Brookhaven National Laboratory Personal Property Management System*⁴, which identifies that BNL procedures were not consistent with the standards and practices found in 41 CFR 109. In response to the assessment, BHSO and BNL dissented to the findings and recommendations, stating that BNL implemented Department property regulations in accordance with Department Order 580.1A (Order), *Department of Energy Personal Property Management Program*. However, we found that the requirements lacking in BNL's policies and procedures were substantially the same as those referenced in the Order and the underlying regulations.

BNL had access to other resources to help it manage its property program. Specifically, each Department site has access to the Department's Export Compliance Assistance Program, which raises awareness of export compliance responsibilities; assists in developing strategies for

⁴ 41 CFR 109 requires that, at a minimum of every 3 years after the date of approval of a designated contractor's property management system, the OPMO or Property Administrator must make an appraisal of the personal property management operation of the contractor.

complying with all U.S. export control laws and regulations; and delivers export compliance training to Federal employees, their staff, and contractors across the Department. Additionally, any organization may submit its export compliance program to the Department of Commerce's Bureau of Industry and Security for review. During our inspection, we found no evidence that BNL used available resources to assist with export control functions.

To its credit, during our inspection, BNL conducted a review of its export compliance control program. That review identified program gaps and made 51 recommendations for improvement.

Insufficient BHSO Oversight

BHSO's oversight of BNL's sensitive and high-risk property program was insufficient. For example, BHSO did not ensure that BNL adhered to the requirements of 41 CFR 109 to properly classify and account for sensitive and high-risk property. 41 CFR 109 requires that the results of physical inventories shall be reconciled with property records; and the results of these physical inventories reported to the OPMO annually. However, we found that the lists submitted to the OPMO did not contain complete and accurate information.

Finally, we found that BHSO allowed BNL to operate an uncertified property management program. 41 CFR 109 requires that the OPMO appraise the contractor's property management operation at a minimum of every 3 years. After that appraisal is complete, BHSO can certify the property management program based on the OPMO's recommendation. However, BHSO last certified BNL's property management system when its contract was renewed in 2014. BNL's property management recertification was due in 2017. From 2017 through 2021, BHSO issued a series of extensions for BNL's property management program instead of conducting its own review or implementing the OPMO's 2018 recommendations. In 2021, BHSO's Contracting Officer conditionally approved BNL's property management system; however, the approval did not include the list of deficiencies that need to be corrected before the property management system could be certified, as required by 41 CFR 109.

To address deficiencies and comply with 41 CFR 109, BNL developed a plan to fully implement 41 CFR 109 by November 2022. In January 2022, BHSO approved BNL's implementation plan, which addressed some concerns identified in this inspection. For example, PPM will now track and control sensitive property that meets the 41 CFR 109 requirements and has modified BNL's procedures. However, based on the findings in this report, additional improvements will be necessary to meet 41 CFR 109 requirements such as identifying and tracking export-control property at acquisition and updating property management guides and procedures to incorporate the disposition of property subject to DEMIL requirements. In December 2022, BHSO certified BNL's property management system.

DEPARTMENT GUIDANCE CONCERNS

During our inspection, we found contradictions between 41 CFR 109 requirements and information contained in the Department's property management guidance, Department Guide 580.1-1A, *Personal Property* (Guide). For example, 41 CFR 109 has specific requirements for the frequency and accuracy of sensitive and high-risk property physical inventories. However,

the Guide allows management discretion to plan and approach physical inventory from a cost-effective, risk-based standpoint. The inventory scheduling, type, and method only need to align with management expectations, which may not align to 41 CFR 109. 41 CFR 109 also states that domestic loans of property shall not exceed 1 year but may be renewed at 1-year increments. The yearly renewals require an authorization from higher level management or the head of the field organization. However, the Guide states that domestic loans can be requested in 3-year increments, which directly contradicts 41 CFR 109. Ultimately, 41 CFR 109 states that implementing procedures, instructions, and guides that are necessary to clarify or to implement 41 CFR 109 should be consistent with the contents of the regulations. The contradictions between 41 CFR 109 and the Guide can lead to confusion and inconsistent application of property management regulations across the Department.

IMPACT

By not classifying, accounting for, and dispositioning its sensitive and high-risk property, BNL is at risk for potential adverse impact on public health and safety, the environment, national security interests, and proliferation concerns. Proper classification of both sensitive and high-risk property is important to ensure that only authorized individuals have access to it. Unauthorized access could lead to loss, theft, or misuse of technologies, technical data, and information.

RECOMMENDATIONS

We recommend that the Manager, BHSO:

1. Direct BNL to ensure its property management policies and procedures are consistent with 41 CFR 109 requirements; and
2. Review and assess the adequacy and effectiveness of BNL's property management program.

We recommend that the Acting Director, Office of Asset Management:

3. Review and update the Guide to ensure it is consistent with the provisions of 41 CFR 109.

MANAGEMENT RESPONSE

BHSO management and the Office of Asset Management fully concurred with our recommendations. Further, BHSO management expressed that our report did not adequately portray BNL's property management program and the controls to adequately classify, account for, and disposition sensitive and high-risk property. Specifically, BHSO management asserted that the inspection was performed without accounting for the Order, which was part of BNL's contract, and solely relied upon 41 CFR 109. Therefore, BHSO management considered many of the concerns noted in our report to be inaccurate and misleading.

Management's comments are included in Appendix 3.

INSPECTOR COMMENTS

Management's comments and proposed actions are generally responsive to our recommendations. However, we disagree that our inspection did not consider the Order's requirements and that our conclusions were inaccurate and misleading. For example, we noted in our report that BNL implemented Department property regulations in accordance with the Order. We also found that the requirements lacking in BNL's policies and procedures were substantially the same as those referenced in the Order and the underlying regulations. Further, nothing in the Order relieves BNL from following the requirements found in 41 CFR 109, as it was incorporated by reference.

Appendix 1: Objective, Scope, and Methodology

OBJECTIVE

We initiated this inspection to determine whether Brookhaven National Laboratory's (BNL) property management program is sufficient to adequately classify, account for, and disposition sensitive and high-risk property.

SCOPE

The inspection was performed from January 2022 through July 2023 at BNL in Long Island, New York. The scope of the inspection was limited to a review of BNL's property management activities from October 2018 through September 2021. The inspection was conducted under Office of Inspector General project number S22DN012.

METHODOLOGY

To accomplish our inspection objective, we:

- Reviewed applicable laws, regulations, policies, and procedures, and tested for compliance with key provisions.
- Reviewed prior reports by the Office of Inspector General and external audit or review groups relevant to our objective.
- Reviewed inventory and disposition records maintained by BNL to determine if property was properly classified as high-risk or sensitive and disposed of appropriately.
- Interviewed key officials from BNL and the Department of Energy involved with property management.
- Judgmentally selected 20 items from BNL's fiscal year 2021 property inventory list of 17,264 items to verify required documentation was maintained for each item.
- Analyzed BNL's fiscal year 2021 property inventory list to identify unclassified sensitive inventory.
- Judgmentally selected 10 of 76 retirement notices containing information technology equipment with memory capability items to verify they were properly sanitized and dispositioned. Because our test work was based on a judgmental sample, the results cannot be projected to the entire population.

We conducted our inspection in accordance with the *Quality Standards for Inspection and Evaluation* (December 2020) as put forth by the Council of the Inspectors General on Integrity and Efficiency. We believe that the work performed provides a reasonable basis for our conclusions.

We held an exit conference with management officials on September 28, 2023.

Appendix 2: Prior Report

Inspection Report on *Property Management at the Hanford Site* (DOE-OIG-22-20, January 2022). The inspection found that Mission Support Alliance, LLC (MSA) did not always appropriately account for or disposition exceeded high-risk or sensitive property (HRSP). Specifically, MSA did not appropriately characterize items as HRSP, when applicable. In addition, MSA did not always designate property as high-risk or export-controlled for those who received it at disposition. Further, MSA did not adequately account for Hanford Patrol Protection Force non-weapon HRSP items. Finally, MSA could not always provide evidence that it sanitized or destroyed excess hard drives prior to disposition. The inspection attributed these shortcomings to MSA's inadequate management of the HRSP program because it did not fully incorporate Federal requirements related to HRSP, and MSA did not maintain a proper record-keeping system. In addition, the Department of Energy did not perform sufficient oversight of MSA's HRSP program. Richland Operations Office/Office of River Protection management concurred with the two recommendations made in the report.

Appendix 3: Management Comments



Department of Energy
Office of Science
Brookhaven Site Office
P.O. Box 5000
Upton, New York 11973
September 22, 2023

MEMORANDUM FOR ANTHONY CRUZ
ASSISTANT INSPECTOR GENERAL FOR INSPECTION,
INTELLIGENCE, OVERSIGHT, AND SPECIAL PROJECTS
OFFICE OF INSPECTOR GENERAL

FROM: ROBERT P. GORDON
BROOKHAVEN SITE OFFICE MANAGER Robert P. Gordon
OFFICE OF SCIENCE Gordon
Digitally signed by Robert P. Gordon
Date: 2023.09.22
15:25:08 -0400

SUBJECT: Response to Office of Inspector General Inspection Report on
Sensitive and High-Risk Property Management at the
Brookhaven National Laboratory

Overall Management Response

Thank you for the opportunity to review and comment on the subject draft report. While I am providing this response, it reflects the concurrence of the DOE Office of Asset Management and the Office of Science Organizational Property Management Officer (OPMO). The Brookhaven Site Office (BHSO) has reviewed the draft report and concurs with the recommendations. However, previous comment resolution efforts have not achieved a satisfactory level of agreement on a number of issues in the report, most notably regarding the Office of Inspector General's (OIG) omission of DOE Order 580.1 as a criteria.

The report does not adequately portray the Brookhaven National Laboratory's (BNL's) property management program and the controls to adequately classify, account for, and disposition of high-risk and sensitive property. BHSO asserts that the inspection was performed without accounting for DOE Order 580.1, which was in DOE's Management and Operating Contract at Brookhaven National Laboratory at the time of the audit¹, and solely used Title 41 Code of Federal Regulations (CFR) Chapter 109. By not considering the requirements in DOE Order 580.1, many of the concerns depicted in the report are inaccurate and misleading. BHSO notified the OIG of this concern during the factual accuracy stage, but the review and report were not altered. Without consideration of the prime contract approved system in place at that time, the OIG's characterization of the misclassification of 65% (11,198 items) is misleading and lacks necessary context as it infers that BNL did not account for "High-Risk" and/or "Sensitive" property versus

¹ DOE Order 580.1 is no longer the approved system in the prime contract. During the review, BNL was implementing a transition plan to remove the Order and insert 41 CFR 109. The transition was completed in December 2022, after the audit was completed.

Appendix 3: Management Comments

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accounting for the property under the classifications defined in the approved system in place during the review period.

The Department's response to the recommendations follows below.

Recommendation 1: The Manager, BHSO, direct BNL to ensure its property management policies and procedures are consistent with 41CFR109 requirements.

Management Response: BHSO concurs with the recommendation and will direct Brookhaven Science Associates, the Management and Operating contractor to:

- Update Property Management policies and procedures to ensure they reflect 41 CFR 109.
- Perform an internal self-assessment to ensure its Property Management policies and procedures are consistent with CFR requirements.

Estimated Completion Date: July 31, 2024

Recommendation 2: The Manager, BHSO, review and assess the adequacy and effectiveness of BNL's property management program.

Management Response: BHSO concurs with the recommendation:

- BNL is scheduled for a triennial assessment of their property management assessment in Fiscal Year 2024 by the Office of Science Consolidated Service Center - Property Management Team.

Estimated Completion Date: September 30, 2026

Recommendation 3: The Director, Office of Asset Management, review and update the Guide to ensure it is consistent with the provisions of the 41 CFR 109.

Management Response: The Office of Asset Management concurs with the recommendation.

Estimated Completion Date: July 31, 2024*

*Review and publication of the Guide will follow the Directives Review Board (DRB) process outlined in [DOE Order 251.1D, Departmental Directives Program](#), for the Directives Prioritization and Development processes.

FEEDBACK

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Washington, DC 20585

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