



U.S. ENVIRONMENTAL PROTECTION AGENCY

## OFFICE OF INSPECTOR GENERAL

### *Science and Research*

# To Ensure Greater Use of Scientific Equipment, the Office of Research and Development Should Use an Enterprise Approach to Property Management

Report No. 15-P-0115

March 16, 2015



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**Abbreviations**

CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
NERL	National Exposure Research Laboratory
NHEERL	National Health and Environmental Effects Research Laboratory
NRMRL	National Risk Management Research Laboratory
OIG	Office of Inspector General
ORD	Office of Research and Development
RTP	Research Triangle Park

**Cover photo:** A plasma mass spectrometer in the EPA's National Exposure Research Laboratory in Research Triangle Park, North Carolina. (EPA OIG photo)

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# At a Glance

## Why We Did This Review

We conducted this review to determine whether the U.S. Environmental Protection Agency (EPA) Office of Research and Development (ORD) has adequate controls over research equipment utilized for decision-making.

Science provides the foundation for credible decision-making. As the scientific research arm of the EPA, ORD uses sensitive and often expensive equipment. ORD's reported capital equipment totals nearly \$73 million. Property management regulations require that agencies identify and reassign any idle equipment and maintain adequate inventory controls and accountability systems. We reviewed usage of a sample of 99 pieces of scientific equipment in three national laboratories.

**This report addresses the following EPA goal or cross-agency strategy:**

- *Embracing EPA as a high-performing organization.*

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The full report is at: [www.epa.gov/oig/reports/2015/20150316-15-P-0115.pdf](http://www.epa.gov/oig/reports/2015/20150316-15-P-0115.pdf)

## *To Ensure Greater Use of Scientific Equipment, the Office of Research and Development Should Use an Enterprise Approach to Property Management*

### What We Found

Our review of a sample of research equipment within three laboratories found that approximately 30 percent (or 30 of 99 pieces) had not been used for 2 to 14 years, and 6 percent (or six of 99 pieces) were obsolete. Equipment used for air and water research sat idle either because there was no ongoing research necessitating its use or because it was being kept as backup equipment. Laboratories did not comply with federal property regulations, which require equipment inspection walkthroughs every 2 years and the creation of equipment pools to maximize the use of idle equipment and identify obsolete pieces.

**By not effectively managing property, 30 percent of a sample of scientific equipment sat idle in three laboratories.**

The EPA does not manage its scientific equipment as a business unit or enterprise. ORD managers and staff are not aware of federal property management requirements. While ORD established the position of a National Asset Manager, ORD has not created a comprehensive, officewide scientific equipment list that would make ORD's resources visible throughout the agency for key research decision-making. Additionally, ORD does not have clear lines of authority for equipment accountability and usage. Program risks exist as a result, including valuable scientific equipment sitting idle when there might be a demand for it elsewhere in ORD or the agency. Additionally, ORD could waste funds by purchasing duplicative research equipment. To minimize risks, ORD should ensure compliance with applicable federal property regulations. Better property management would aid decision-making on the use of and need for risk management and exposure research equipment, and would position ORD to rethink its equipment from an enterprise perspective.

### Recommendations and Planned Corrective Actions

We recommend that the Assistant Administrator for ORD develop an ORD equipment list, create an equipment pool, establish regular equipment utilization walkthroughs, and conduct independent reviews of equipment procedures. We also recommend that the Assistant Administrator define the role and authority of the National Asset Manager, and excess obsolete equipment identified during our site visits. ORD suggested additional wording for our first recommendation, which we accepted. ORD agreed with all recommendations, which are resolved and open with corrective actions pending.

### Agency Actions Prompted by OIG Work

ORD's National Asset Manager started developing an ORD-wide list of capital equipment, and two laboratories started identifying idle equipment to excess.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

THE INSPECTOR GENERAL

March 16, 2015

**MEMORANDUM**

**SUBJECT:** To Ensure Greater Use of Scientific Equipment, the Office of Research and Development Should Use an Enterprise Approach to Property Management  
Report No. 15-P-0115

**FROM:** Arthur A. Elkins Jr.

A handwritten signature in black ink, appearing to read "Arthur A. Elkins Jr.", is placed next to the name in the "FROM:" field.

**TO:** Lek Kadeli, Acting Assistant Administrator  
Office of Research and Development

This is our report on the subject evaluation conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. EPA managers, in accordance with established audit resolution procedures, will make final determinations on matters in this report.

The EPA offices with primary responsibility over the issues discussed in this report include the laboratories within the Office of Research and Development as well as the Office of Administrative and Research Support, which houses the National Asset Manager. Additionally, the EPA's Office of Administration and Resources Management administers the personal property management program.

**Action Required**

You are not required to provide a written response to this final report because you provided agreed-to corrective actions and planned completion dates for the report recommendations. The OIG may make periodic inquiries on your progress in implementing these corrective actions. Please update the EPA's Management Audit Tracking System as you complete planned corrective actions. Should you choose to provide a final response, we will post your response on the OIG's public website, along with our memorandum commenting on your response. You should provide your response as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended.

We will post this report to our website at <http://www.epa.gov/oig>.

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## Purpose

We conducted this review to determine whether the U.S. Environmental Protection Agency (EPA) Office of Research and Development (ORD) has adequate controls over research equipment—including safeguarding, maintenance, calibration and utilization—to ensure that equipment may be relied upon for EPA decision-making and reporting. During our review we decided to shift the focus from data reliability to equipment utilized for decision making.

## Background

Science at the EPA provides the foundation for credible decision-making to safeguard human health and ecosystems from environmental pollutants. ORD is the scientific research arm of the EPA and its research helps provide the underpinning of science and technology for the agency. ORD conducts research in 14 facilities across the country, including three national laboratories we reviewed:

- ***National Exposure Research Laboratory (NERL)***. NERL develops and applies innovations in exposure science (i.e., study of methods, measurements and models to assess and predict exposure of humans and ecosystems to harmful environmental stressors). Headquartered in Research Triangle Park (RTP), North Carolina, NERL conducts its work across six divisions in four geographic locations.
- ***National Health and Environmental Effects Research Laboratory (NHEERL)***. NHEERL serves as the agency's focal point for scientific research on the effects of contaminants and environmental stressors on human health and ecosystem integrity. Also headquartered in RTP, NHEERL conducts work across seven divisions in eight locations.
- ***National Risk Management Research Laboratory (NRMRL)***. NRMRL focuses on environmental problem-solving to determine what environmental risks exist and how to manage those risks to protect human health and the environment. Headquartered in Cincinnati, Ohio, NRMRL conducts its work in five divisions in four locations.

To accomplish its mission, ORD uses sensitive and often expensive laboratory and field testing equipment. ORD's reported capital equipment—those pieces over \$75,000—totaled nearly \$73 million.<sup>1</sup> ORD's fiscal years 2013 and 2014 Federal Managers' Financial Integrity Act assurance letters list scientific equipment as a key area in internal control risk assessment protocols.

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<sup>1</sup> This amount reflects purchases through ORD's Procurement and Acquisition of Capital Equipment system. The amount does not reflect any purchases over \$75,000 that individual laboratories made on their own, nor does it include any scientific equipment valued at less than \$75,000 (e.g., pipettes, balances).

Additionally, ORD included annual equipment and physical property inventories as part of multi-year review plans.

Within the past 2 years, ORD created a National Asset Management position. The National Asset Manager serves as the ORD-wide property liaison, coordinates annual equipment and property inventories, and facilitates property transfer or disposal throughout ORD. The National Asset Manager also indicated that each ORD laboratory division has officers for property management, accountability and utilization.

Federal property management regulations in the Code of Federal Regulations (CFR), at 41 CFR 101, include the following requirements:

<b>Section 101-25.109-1</b>	Federal laboratories must be inspected at least every 2 years to determine if any idle or unneeded equipment exists. Equipment identified as idle or unneeded shall be reassigned as needed within the laboratory, placed in an equipment pool, or declared excess and made available to other agencies.
<b>Section 101-25.109-2</b>	Federal laboratories shall establish equipment pools so that laboratory and research equipment can be shared or allocated on a temporary basis to laboratory activities and individuals whose average use does not warrant the assignment of the equipment on a permanent basis. <sup>2</sup>

Federal regulations at 41 CFR 101 also requires the agency head to ensure compliance and conduct periodic independent reviews to determine effectiveness and make modifications.<sup>3</sup>

Additionally, the Federal Property and Administrative Services Act requires that each agency:

1. Maintain adequate inventory controls and accountability systems for the property under its control.
2. Continuously survey property under its control to determine which is excess property, and promptly report such property to the administrator.<sup>4</sup>
3. Perform the care and handling of such excess property.
4. Transfer or dispose of such property as promptly as possible in accordance with authority delegated by and regulations prescribed by the administrator.<sup>5</sup>

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<sup>2</sup> This section goes on to note that: "Where the establishment of a physical pool would be economically unfeasible due to excessive transportation and handling costs, limited personnel resources, or limited space, pooling may be accomplished by means of equipment listings." Elsewhere in this report we describe the need for such a list.

<sup>3</sup> Section 101-25.109-1(d).

<sup>4</sup> The Act distinguishes excess and surplus property. Excess property is that no longer required by a federal agency, whereas surplus property is that no longer required by any federal agency. 40 U.S.C. §102(3), 40 U.S.C §102(10).

<sup>5</sup> 40 U.S.C. §524(a)(5).

5. Make reassignments of property among activities within the agency when such property is determined to be no longer required for the purposes of the appropriation from which it was purchased.
6. Transfer excess property under its control to other federal agencies.
7. Obtain excess property from other federal agencies.<sup>6</sup>

EPA Policy 4832, *Personal Property and Procedures Manual*, describes the agency's roles and responsibilities regarding personal property. The EPA's Office of Administration and Resources Management administers the personal property management program but, outside headquarters, delegates specific responsibilities to Regional and Assistant Administrators. The agency's personal property program is managed in the Compass Data Warehouse through 24 accountable areas based on geographic locations. For example, each ORD facility has its own accountable area. Overall responsibility for managing day-to-day property management activities resides with custodial officers<sup>7</sup> such as those at the ORD laboratory division level.

## Agency Actions Prompted by OIG Work

As a result of our EPA Office of Inspector General (OIG) work, ORD's National Asset Manager has started developing an ORD-wide list of capital equipment. In addition, two national laboratories started excessing idle equipment found during our site visits.

## Responsible Offices

The EPA offices with primary responsibility over the issues discussed in this report include the laboratories we reviewed within ORD as well as the Office of Administrative and Research Support, which houses the National Asset Manager. Additionally, as noted above, the EPA's Office of Administration and Resources Management administers the personal property management program.

## Scope and Methodology

We conducted our review from April 2014 to January 2015. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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<sup>6</sup> 40 U.S.C. §524(b)(3).

<sup>7</sup> ORD fills custodial officer positions with laboratory staff. EPA's Office of Administration and Resources Management staffs the property accountable and utilization officer positions.



To address our objective, we reviewed relevant materials pertaining to the use, calibration, maintenance and safeguarding of scientific equipment, including applicable federal regulations and EPA policies and procedures. We interviewed key staff within ORD, the three national ORD laboratories in our scope, and the Office of Administration and Resources Management.

To test controls over ORD scientific equipment, we made two site visits. We first visited NERL, NHEERL and NRMRL facilities in RTP, North Carolina, given their close proximity to each other and high dollar value equipment within each laboratory (the three laboratories have 117 items each valued over \$100,000). Next we visited NERL and NRMRL facilities in Cincinnati, Ohio, to test controls over equipment in a smaller facility. For each site visit, we used Compass Data Warehouse<sup>8</sup> information to develop judgmental samples of scientific equipment to review. Our samples included equipment with acquisition costs that ranged from \$25,000 to \$100,000 and equipment with costs over \$100,000. We also randomly selected items while touring each laboratory.

- In RTP the sample included 49 pieces of equipment valued at \$7.1 million:
  - 11 pieces between \$25,000 and \$100,000.
  - 27 pieces over \$100,000.
  - 11 randomly selected pieces that each had an acquisition cost of less than \$25,000.
- In Cincinnati the sample included 50 pieces of equipment valued at \$9.8 million:
  - 19 pieces between \$25,000 and \$100,000.
  - 29 pieces over \$100,000.
  - 2 randomly selected pieces that each had an acquisition cost of less than \$25,000.

To test safeguarding, we observed that ORD housed all scientific equipment in our sample in secure locations (i.e., buildings had security guards, badges were required for building access, and rooms housing equipment were locked). To test maintenance, calibration and usage, we developed a standard template to review each piece of scientific equipment in our sample. For example, we checked equipment logs and other records to ensure that labs performed calibration and maintenance. Our calibration testing focused on equipment in Cincinnati where, after providing laboratory staff with an equipment list in advance, we saw evidence of calibration documentation for all actively used pieces in our sample. We could not opine on the quality of calibrations; rather, we determined whether they were conducted. Determining the quality of calibrations for data reliability would require a detailed assessment of quality assurance materials outside of our revised scope on equipment used for decision making. Regarding usage, our

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<sup>8</sup> The Compass Data Warehouse is an electronic interface used to access two separate databases (Momentum and Maximo) housing the agency's financial and property management data.

testing determined the date equipment was last utilized. At the close of our testing, we queried individual laboratories to verify our sampling results and obtain justifications for any equipment not utilized in the past 2 or more years.

Three prior reports relate to our review:

- The first, issued in 2011 by the U.S. Government Accountability Office,<sup>9</sup> found that the EPA had not taken an agencywide, coordinated approach to managing its scientific efforts and did not manage its laboratory facilities as part of an interrelated portfolio. It recommended, among other things, that the EPA develop a coordinated planning process for its scientific activities and improve physical and real property planning decisions across all laboratories. The EPA generally agreed with these findings and recommendations. The EPA said that, beginning in fiscal year 2011, the agency added coding to track operating costs at program-funded laboratory facilities not previously tracked. The EPA also said it would review options for improving data reliability and completeness for the remaining labs within its laboratory enterprise. Additionally, to address some of the recommendations, the EPA formed a cross-agency workgroup led by the Office of the Science Advisor. One initiative by this group was to commission the National Academy review mentioned in the next bullet.
- In September 2014, the National Academy of Sciences<sup>10</sup> similarly observed how EPA laboratories could become more effective and efficient through rethinking the agency's laboratories from an enterprise perspective. That report noted that the EPA's laboratories have various processes for managing and acquiring laboratory equipment, but the processes and inventory tools are not connected throughout the agency. The report recommended that the EPA link inventory of equipment over \$500,000 in all laboratories, without regard to mission, to an agencywide accessible process. The report also recommended that the EPA explore shared use of laboratory equipment in other parts of the agency before investment in large capital equipment. The report did not indicate whether the EPA agreed with the findings and recommendations.<sup>11</sup>
- In December 2014, the EPA OIG issued a report<sup>12</sup> on the need for better management of personal property in EPA warehouses. That report found that the EPA did not adequately inventory property nor provide adequate oversight to ensure effective and efficient use of EPA resources. The

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<sup>9</sup> U.S. Government Accountability Office report, *Environmental Protection Agency: To Better Fulfill Its Mission, EPA Needs a More Coordinated Approach to Managing Its Laboratories* (GAO-11-347), July 25, 2011.

<sup>10</sup> National Academy of Sciences report, *Rethinking the Components, Coordination, and Management of the U.S. Environmental Protection Agency Laboratories* (ISBN 978-0309-31237-0), September 5, 2014.

<sup>11</sup> ORD said that, as a rule, the EPA does not respond to specific National Academy report recommendations as it does with Government Accountability Office and EPA OIG reports.

<sup>12</sup> EPA OIG report, *EPA Needs Better Management of Personal Property in Warehouses* (Report No. 15-P-0033), December 8, 2014.

report recommended, among other things, holding management and staff accountable for timely transfer or disposal of excess personal property according to agency policy, and updating agencywide policy to prevent long-term storage of personal property beyond a year that does not satisfy an immediate need. The agency agreed with all recommendations and the OIG closed the two recommendations we cited at the time of report issuance. Specifically, the agency noted in its Management Audits Tracking System that Property Bulletin 14-004 (dated January 8, 2014) addresses transaction times and accountability for timely transfer or disposal of personal property as well as long-term property storage. The EPA further noted that long-term storage should not be determined by immediate need but rather by whether an item that will be needed in the future is readily available from outside sources, or whether it is more cost effective to store the item for future use.

## Results of Review

The EPA does not manage its scientific equipment as a business unit or enterprise. ORD managers and staff are not aware of federal property management requirements in 41 CFR 101 that require regular equipment inspection walkthroughs every 2 years and equipment pools to maximize utilization. The Federal Property and Administrative Services Act requires regular monitoring to timely identify and dispose of obsolete items. ORD has not created a comprehensive, officewide scientific equipment list that would make ORD's resources visible officewide and agencywide for key research decision-making. Additionally, ORD does not have clear lines of authority or responsibility over equipment accountability and usage. While the National Asset Manager position is new to ORD within the past 2 years, the current manager said he received no formal training, has had very little coordination with custodial officers, and initially focused on buildings more than equipment.

Our review of a sample of research equipment within three laboratories charged with risk management and exposure research found that 30 percent (or 30 of 99 pieces) had not been utilized for 2 to 14 years, as shown in Table 1:

**Table 1: Number and dollar value of idle equipment in sample**

	Number sampled	Value of sample*	Number idle	Value of idle equipment	Percent idle of total sampled
NERL	33	\$3,030,639	15	\$1,034,117	45.45%
NHEERL	18	3,490,172	2	107,604	11.11%
NRML	48	10,218,803	13	1,811,382	27.08%
<b>TOTAL</b>	<b>99</b>	<b>\$16,739,614</b>	<b>30</b>	<b>\$2,953,103</b>	<b>30.30%</b>

\* Value based on acquisition amounts pulled from EPA's Compass Data Warehouse.

Source: OIG analysis of equipment sampled at three national laboratories.

The laboratories cited various reasons for idle equipment:

- **NERL.** Of the 15 pieces of idle equipment, seven pieces pertained to a rivers and streams research project that ended in June 2012. Additionally, two idle pieces were used for large-scale nutrient analyses no longer being done. NERL said that remaining idle pieces were either obsolete (two pieces), would be used in future water research (two pieces), or would be made available ORD-wide (one piece).
- **NHEERL.** Both pieces of idle equipment had not been used in 3 years. The idle pieces—a flow cytometer and an animal transfer station—pertain, respectively, to the EPA’s National Ambient Air Quality Standards and ORD’s Air, Climate, and Energy research programs. NHEERL justified retaining both pieces of idle equipment as backup in case primary pieces of research equipment failed.
- **NRMRL.** For its 13 pieces of idle equipment, NRMRL said:
  - One piece with an unknown last usage date is being used for parts.
  - Two pieces not utilized since 2012 needed repair. NRMRL used the two items for monitoring organic chemical synthesis reactions and reducing chemicals formed during drinking water disinfection. For one item, NRMRL did not have the funds to purchase a new computer and operating system to run the equipment. NRMRL plans to purchase these items and utilize the equipment once repaired. Similarly, for the other item, the equipment was idle while awaiting a replacement computer, software upgrade and installation of a new detector. All have since been received and the instrument is now back in use.
  - Four pieces are obsolete.<sup>13</sup> One item, a formaldehyde monitor to evaluate emissions in buildings/materials, has not been used since 2002. Additionally, a laser used to improve data on compounds for exposure assessments has not been used since 2001.
  - Six pieces have no related active research. These pieces were last used from 2009 to 2011 and pertained to—among other areas—mercury, indoor air, vapor intrusion and particulate matter.

Staff on ORD’s Management Council and its Capital Equipment Committee said they were unfamiliar with regulatory requirements. As such, ORD’s National Asset Manager said that independent walk-throughs presently occur every 3 to 4 years and that, instead of equipment pools, ORD sends informal emails on available equipment to agency personal property managers. While ORD’s National Asset Manager said divisions annually certify property inventories, we nevertheless found idle equipment that laboratories agreed were obsolete and could be excessed.

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<sup>13</sup> These four pieces, together with the two NERL pieces mentioned in the first bullet, means that six of 99 pieces we sampled (or 6 percent) were obsolete.

During our review, ORD could not provide us with a comprehensive officewide list of all of its scientific equipment. ORD said that it uses the agency's Compass Data Warehouse and a complete inventory can be obtained from this database. Nevertheless, ORD did not provide us with a complete inventory. ORD's National Asset Manager is developing an ORD-wide list of equipment valued at \$75,000 or more, but it does not include equipment valued at less than \$75,000. Additionally, the Office of Administration and Resources Management's Agency Property Management Officer recognized that the current accountable area structure—based on geographic locations—is incompatible with the requirements of EPA Policy 4832. As a result, the Agency Property Management Officer said that each program office, such as ORD, will be moving to a single accountable area. ORD said that the EPA is soon launching a new property system (Sunflower) which should make it easier [than Compass] to navigate and create sub-inventories.

Risks exist by not managing ORD property as a program or an interconnected business division. For example, unclear lines of authority could lead to idle scientific equipment due to confusion over the person(s) responsible to ensure usage. Moreover, absent an ORD-wide equipment list, ORD does not know the total value of its scientific equipment and, further, could misspend funds by purchasing duplicative items. Additionally, ORD research staff—and agency program office customers—may not know whether a needed item for air and water research is available for use. As such, valuable scientific equipment could sit idle when there might be a demand for it elsewhere in ORD or the agency.

According to ORD, there may be good reasons to retain equipment:

- Keeping older pieces of equipment as backups for newer instrumentation can result in potential cost savings due to having a readily available source of spare parts for some types of equipment.
- The cost to ship high-priced and sensitive equipment across the country can be very expensive and the equipment can be damaged.
- Moving sensitive analytical equipment often voids the manufacturer's warranty and makes it difficult to have a maintenance contract.
- When an analytical instrument is shipped to another lab, that lab must have the expertise to operate, repair and maintain the instrument.
- Even though equipment is not currently being utilized, it still contributes to the lab's research capabilities, which allows the lab to quickly adapt to changing mission without having to repurchase the equipment.

## Conclusion

To minimize risks of having idle equipment and/or misspending funds on duplicative equipment, ORD should develop and implement a plan to enhance program controls and ensure compliance with federal property regulations. Better property management would aid in decision-making on the utilization of current equipment as well as the need to purchase new equipment for environmental risk management and exposure research.

## Recommendations

We recommend that the Assistant Administrator for Research and Development:

1. Develop an ORD equipment list and a system to manage it that will meet requirements established by the Federal Property and Administrative Services Act and by the EPA Office of Administration and Resources Management—which has EPA-wide responsibility for developing and establishing an effective and efficient agencywide property management program—to maintain adequate inventory controls and accountability systems for the property. The equipment list should have standard fields/nomenclature understood by all laboratories. The information compiled should also be relevant to equipment list users.
2. Create an equipment pool that provides relevant and accurate data which is updated and maintained per requirements in federal property management regulations.
3. Establish regular equipment utilization walkthroughs and formal reporting and follow-up of the results thereof, including updates to equipment lists per requirements in federal property management regulations.
4. Conduct independent reviews of the equipment pool procedures to ensure their continued effectiveness per requirements in federal property management regulations.
5. Define the role, responsibility and authority of the National Asset Manager within the framework of the EPA's personal property policies and procedures.
6. Excess obsolete equipment identified during OIG site visits.

## Agency Comments and OIG Evaluation

In its response to our official draft report, ORD did not agree with the wording of Recommendation 1 and suggested some specific additional wording to reflect the property management responsibility that ORD shares with the EPA's Office of Administration and Resources Management. We agreed and made the proposed changes. ORD subsequently agreed with Recommendation 1, which is resolved and open with agreed-to actions due for completion in October 2015.

ORD agreed with Recommendations 2 through 6, and each is resolved and open with agreed-to actions due for completion in June 2015.

Appendix A includes ORD's full response to the official draft report and the OIG's comments.

## ***Status of Recommendations and Potential Monetary Benefits***

RECOMMENDATIONS						POTENTIAL MONETARY BENEFITS (in \$000s)	
Rec. No.	Page No.	Subject	Status <sup>1</sup>	Action Official	Planned Completion Date	Claimed Amount	Agreed-To Amount
1	9	Develop an ORD equipment list and a system to manage it that will meet requirements established by the Federal Property and Administrative Services Act and by the EPA Office of Administration and Resources Management—which has EPA-wide responsibility for developing and establishing an effective and efficient agencywide property management program—to maintain adequate inventory controls and accountability systems for the property. The equipment list should have standard fields/nomenclature understood by all laboratories. The information compiled should also be relevant to equipment list users.	O	Assistant Administrator for Research and Development	10/1/15		
2	9	Create an equipment pool that provides relevant and accurate data which is updated and maintained per requirements in federal property management regulations.	O	Assistant Administrator for Research and Development	6/1/15		
3	9	Establish regular equipment utilization walkthroughs and formal reporting and follow-up of the results thereof, including updates to equipment lists per requirements in federal property management regulations.	O	Assistant Administrator for Research and Development	6/1/15		
4	9	Conduct independent reviews of the equipment pool procedures to ensure their continued effectiveness per requirements in federal property management regulations.	O	Assistant Administrator for Research and Development	6/1/15		
5	9	Define the role, responsibility and authority of the National Asset Manager within the framework of the EPA's personal property policies and procedures.	O	Assistant Administrator for Research and Development	6/1/15		
6	9	Excess obsolete equipment identified during OIG site visits.	O	Assistant Administrator for Research and Development	6/1/15		

<sup>1</sup> O = Recommendation is open with agreed-to corrective actions pending.  
C = Recommendation is closed with all agreed-to actions completed.  
U = Recommendation is unresolved with resolution efforts in progress.

## ***Agency Response to Official Draft Report and OIG Comments***

February 11, 2015

### **MEMORANDUM**

**SUBJECT:** Response to the Office of Inspector General (OIG) Draft Report, *To Ensure Greater Use of Scientific Equipment, the Office of Research and Development Should Use an Enterprise Approach to Property Management*, Project Number OPE-FY14-0024

**FROM:** Lek Kadeli, Acting Assistant Administrator /s/

**TO:** Arthur A. Elkins, Jr., Inspector General  
Office of Inspector General

Thank you for the opportunity to respond to the OIG draft report titled *To Ensure Greater Use of Scientific Equipment, the Office of Research and Development Should Use an Enterprise Approach to Property Management*. As you know, sound science is a foundation of EPA's work and its mission to protect human health and the environment. One way we ensure sound laboratory analysis and scientific results in ORD is by safeguarding, maintaining, and properly calibrating our laboratory instruments and equipment. ORD agrees with and appreciates the OIG's acknowledgement that ORD had no significant, reportable issues related to safeguarding, maintaining or calibrating laboratory research instruments and equipment.

ORD is in full agreement with recommendations 2 – 6 described in the OIG draft report. ORD corrective actions for OIG recommendations 2 – 6 are outlined in Table 1 on page 3 of this memorandum.

ORD does not agree with the wording of recommendation 1 in the draft OIG report because it does not include sufficient context for evaluation and accountability. The current wording of the OIG recommendation 1 is

“Develop an ORD equipment list and a system to manage it, per requirements in the Federal Property and Administrative Services Act, to maintain adequate inventory controls and accountability systems for the property. The equipment list should have standard fields/nomenclature understood by all laboratories. The information compiled should also be relevant to equipment list users.”



After a detailed review of the draft OIG report, ORD believes that the wording in recommendation 1 should be expanded to include the following essential context:

“Develop an ORD equipment list and a system to manage it that will meet requirements established by the Federal Property and Administrative Services Act and by the EPA Office of Administration and Resources Management (OARM)—which has EPA-wide responsibility for developing and establishing an effective and efficient agency-wide property management program—to maintain adequate inventory controls and accountability systems for the property. The equipment list should have standard fields/nomenclature understood by all laboratories. The information compiled should also be relevant to equipment list users.”

One reason to change the wording in recommendation 1 is that the draft OIG report acknowledges (on page 3) that EPA’s Office of Administration and Resources Management (OARM) has agency-wide responsibility for developing and establishing an effective and efficient Agency-wide property management program—and that the 4832 EPA Personal Property Policy and Procedures manual is the Agency’s primary and authoritative reference for property management. A second reason to change the wording in recommendation 1 is that the draft OIG report does not include one important fact: that ORD works with OARM and with the systems it establishes for effective and efficient property management. A third reason to change the wording in recommendation 1 is that the ORD revision more accurately describes the context for evaluation and accountability.

The ORD corrective actions for this recommendation—based on the recommended change in wording to recommendation 1—are outlined in Table 2 on page 4 of this memorandum.

**OIG Comment #1:** We concur with ORD’s suggested edits to our first recommendation and revised our report accordingly.

In summary, to address the OIG’s overall findings and recommendations, ORD will take actions described in Tables 1 and 2 to improve its protocols for documenting and managing utilization of laboratory equipment, for identifying potential laboratory equipment for pooling, and for removing obsolete laboratory equipment during walk-throughs. ORD is looking forward to strengthening its systematic approach in these areas to ensure improved use of its laboratory instruments and equipment.

Should you or your staff have any questions, please contact Pai-Yei Whung, Director of ORD/OARS, at 919-541-7963.

cc: Tom Burke  
Bob Kavlock  
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ORD Laboratory Directors

**Table 1.**  
**ORD Corrective Actions based on ORD Agreement with Proposed OIG Recommendations**  
**#2-6**

No.	OIG Recommendation	Responsible Office	ORD Corrective Action	Estimated Completion Date
2	Create an equipment pool that provides relevant and accurate data which is updated and maintained per requirements in federal property management regulations.	ORD/ OARS National Asset Manager	ORD will create an equipment pool of available equipment. The equipment pool will be maintained by the National Asset Manager.	6/1/2015
3	Establish regular equipment utilization walkthroughs and formal reporting and follow up of the results thereof, including updates to equipment lists per requirements in federal property management regulations.	ORD/OARS National Asset Manager, Division Managers and Division Property Specialist	The National Asset Manager will ensure each site is aware of the biannual requirement to perform equipment utilization walkthroughs. This requirement is different than an annual property inventory. A list of underutilized equipment will be maintained at each site. Obsolete equipment will be excessed.	6/1/2015
4	Conduct independent reviews of the equipment pool procedures to ensure their continued effectiveness per requirements in federal property management regulations.	ORD/OARS National Asset Manager and Property Specialist	The National Asset Manager and a selection of property specialists will review the equipment pool procedures for ORD. Findings/Recommendations will be forwarded to ORD Management for review/implementation.	6/1/2015
5	Define the role, responsibility and authority of the National Asset Manager within the framework of the EPA's personal property policies and procedures.	ORD/OARS Management	Specific roles, responsibilities, and authority will be reflected in the National Asset Manager Position Description.	6/1/2015
6	Excess obsolete equipment identified during our site visits.	ORD/OARS National Asset Manager, Division Managers and Division Property Specialist	The National Asset Manager will work with the property specialist to ensure this is accomplished. Prior to excessing obsolete equipment, items will be placed in the pool of available equipment (see Finding 2) if deemed necessary.	6/1/2015

**OIG Comment #2:** We believe ORD's planned corrective actions address our recommendations. We will monitor the EPA's Management Audit Tracking System for more specificity on ORD's completed actions to address our recommendations. These recommendations are resolved and open with agreed-to actions pending.

**Table 2.**  
**ORD Corrective Actions based on the ORD Change to Proposed OIG Recommendation # 1**

No.	OIG Recommendation	ORD Proposed Change to OIG Recommendation	Responsible Office	ORD Corrective Actions	Estimated Completion Date
1	Develop an ORD equipment list and a system to manage it, per requirements in the Federal Property and Administrative Services Act, to maintain adequate inventory controls and accountability systems for the property. The equipment list should have standard fields/nomenclature understood by all laboratories. The information compiled should also be relevant to equipment list users.	Develop an ORD equipment list and a system to manage it that will meet requirements established by the Federal Property and Administrative Services Act and by the EPA Office of Administration and Research Management (OARM)—which has EPA-wide responsibility for developing and establishing an effective and efficient agency-wide property management program—to maintain adequate inventory controls and accountability systems for the property. The equipment list should have standard fields/nomenclature understood by all laboratories. The information compiled should also be relevant to equipment list users.	ORD/OARS National Asset Manager	<p>1. As ORD develops its equipment list and management system, ORD initially will use the existing inventory database used by EPA and OARM—the Compass Data Warehouse (CDW). Although cumbersome, the CDW has standard fields and a complete ORD inventory can be obtained with this database.</p> <p>2. When EPA and OARM launch the agency’s new property management system (Sunflower) later in FY15, ORD will transition its inventory data base to this system.</p> <p>3. The ORD National Asset Manager also will work with OARM to determine if changes are required to the EPA Personal Property Manual to comply with requirements in the Federal Property and Administrative Services Act.</p>	10/1/15

**OIG Comment #3:** We concur with ORD’s edits to our first recommendation and we revised our report accordingly. We believe ORD’s planned actions address our recommendation. We will monitor the EPA’s Management Audit Tracking System for more specificity on ORD’s completed actions to address our recommendation. This recommendation is resolved and open with agreed-to actions pending.

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