



New York State Office of the State Comptroller
Thomas P. DiNapoli

Division of State Government Accountability

Disposal of Electronic Devices

Department of Agriculture and Markets



Report 2012-S-70

April 2013

Executive Summary

Purpose

To determine if those electronic devices approved for sale as surplus equipment by the Department of Agriculture and Markets (Department) through the Office of General Services (OGS) are permanently cleaned of all data, including personal, private and sensitive information. The audit covers the period of June 1, 2012 through November 9, 2012.

Background

Office of Cyber Security Policy requires all State entities to establish formal procedures to address the risk that personal, private or sensitive information may be improperly disclosed. This policy also requires that all laptops containing, or with access to, State information must be encrypted. One way information can be compromised is through careless disposal of electronic devices. Agencies may dispose of electronic devices on their own; however, OGS' Surplus Unit provides this service for many State agencies. At the time of our audit, the Department had 132 electronic devices (laptops, desktop computers, tablets, cameras, cell phones, and a printer) ready for disposal through OGS' Surplus Unit. Agencies are required to remove all information prior to disposal and, if sending them to OGS, to certify in writing that the devices no longer contain any retrievable information. OGS' Surplus Unit does not accept any responsibility for clearing the data from these devices.

Key Findings

- Fifteen of the 132 electronic devices readied for surplus still contained data, even though the Department had certified that all memory devices had been removed.
- One of the hard drives contained personal, private and sensitive information related to an employee who had previously been assigned the computer, including the person's name, social security number, date of birth and certain health-related data.
- The printer hard drive and cameras also contained retrievable data, and the cell phones had not been programmed back to their original manufacturer settings.

Key Recommendation

- Reinforce policies and procedures to ensure that all hard drives are removed from electronic devices and properly disposed of prior to authorizing the equipment for surplus.

Other Related Audits/Reports of Interest

[Office of General Services: Disposal of Electronic Devices \(2012-S-4\)](#)

[Office for the Aging: Disposal of Electronic Devices \(2012-S-39\)](#)

**Office of the State Comptroller
State of New York**

Division of State Government Accountability

April 25, 2013

Darrel J. Aubertine
Commissioner
Department of Agriculture and Markets
10 B Airline Drive
Albany, NY 12235

Dear Commissioner Aubertine:

The Office of the State Comptroller is committed to helping State agencies, public authorities and local government agencies manage government resources efficiently and effectively and, by so doing, providing accountability for tax dollars spent to support government operations. The Comptroller oversees the fiscal affairs of State agencies, public authorities and local government agencies, as well as their compliance with relevant statutes and their observance of good business practices. This fiscal oversight is accomplished, in part, through our audits, which identify opportunities for improving operations. Audits can also identify strategies for reducing costs and strengthening controls that are intended to safeguard assets.

Following is a report of our audit of the Department of Agriculture and Markets entitled *Disposal of Electronic Devices*. This audit was performed according to the State Comptroller's authority under Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law.

This audit's results and recommendations are resources for you to use in effectively managing your operations and in meeting the expectations of taxpayers. If you have any questions about this report, please feel free to contact us.

Respectfully submitted,

*Office of the State Comptroller
Division of State Government Accountability*

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This report is also available on our website at: www.osc.state.ny.us

Background

In today's electronic age, unauthorized disclosure of personal, private and sensitive information has become an extremely high-risk area. Various laws and regulations, including the State Technology Law, impose strict requirements on organizations to properly safeguard the information they collect.

In New York, Office of Cyber Security Policy requires all State entities to establish formal processes to address the risk that personal, private or sensitive information may be improperly disclosed through careless disposal or re-use of electronic devices. Personal computers, tablets and smart phones pose a particular concern because they can easily be returned to the manufacturer or sold to the public while still containing personal identifiable information. The policy therefore requires that all electronic media (i.e. hard drives and other memory components) in these devices be securely overwritten or physically destroyed to prevent the unauthorized disclosure of sensitive information. This policy also requires that all laptops containing, or with access to, State information must be encrypted.

Agencies may dispose of electronic devices on their own. However, OGS' Surplus Unit provides this service for many State agencies. The Surplus Unit does not always take physical custody of the equipment, but instead arranges for the sale or transfer directly by the owner agency. The Surplus Unit does not assume responsibility for removing information from electronic devices or testing devices to ensure information has been removed. Instead, it requires each agency to remove all information and to certify, in writing, that they have done so prior to authorizing an item for disposal. Once an item is ready for surplus, the Surplus Unit will offer electronic devices for reuse to State agencies and public authorities, then to municipalities and then to school districts. If the items are not transferred to these entities, the Surplus Unit will make them available for sale to the public.

Audit Findings and Recommendation

Removal of Information

During July and August 2012, we tested all 132 electronic devices (laptops, desktop computers, tablets, cell phones, cameras and a printer) that the Department had forwarded for disposal through OGS' Surplus Unit. Although the Department had certified to OGS that the memory devices had been removed from each item, 15 memory devices (11 percent) were still installed and contained retrievable data. We found memory devices in various types of surplus electronic equipment, including two laptops, six tablets, three cameras, three cell phones and one printer.

One of the hard drives contained personal, private and sensitive information related to the employee who had previously been assigned the computer. Information such as the employee's name, social security number, date of birth and certain health-related data was present in many personal and business-related documents, as were a number of personal photographs. The printer hard drive also contained retrievable data from documents that had been printed using the device. Further, memory cards retrieved from the cameras had not been wiped clean and the cell phones had not been programmed back to the original manufacturer settings.

We reviewed the Department's prescribed method for preparing equipment for surplus and found it to be appropriate, if followed. In accordance with these policies and procedures, staff are required to store all equipment in a secure location. All memory storage devices are supposed to be removed and either re-used or destroyed by staff or a third party contractor. Contractors must provide signed verification that the destruction process was witnessed. Before equipment leaves the premises for disposal or surplus by OGS, staff should confirm that all memory devices have been removed and sign an inventory sheet in acknowledgement. Properly applied, these procedures should provide appropriate assurance that information will not be improperly disclosed. However, this assurance is not absolute. As demonstrated by our audit tests, there is always a risk that errors may occur.

We met with the Department's Information Technology officials to determine the cause of the problems we found and the reasons why these procedures failed. We learned that the surplus equipment process is handled by one individual; a mid-level Information Technology professional whose work in this area is not verified by any other staff members. For most of the cases we identified, it appears that this individual simply overlooked the memory devices. Officials further explained that although the individual was unaware of how to remove the hard drive from the printer, he never requested assistance or reviewed the printer manual for instruction. In addition, officials reported that the cameras were added to the group of surplus equipment by a different employee in error. However, the individual responsible for overseeing the process still signed off on these items without ensuring that the data storage media had been removed or wiped clean.

Officials agreed to reinforce their procedures and to take other steps to ensure that devices do not contain sensitive information.

Recommendation

1. Reinforce policies and procedures to ensure that all hard drives are removed and properly disposed of prior to authorizing the electronic devices for surplus.

Audit Scope and Methodology

The objectives of our audit were to determine if electronic devices being surplused had been permanently wiped clean of all personal, private and sensitive information, and also whether the Department had developed formal processes to minimize the risk of unauthorized disclosure of such information when disposing of its equipment. The audit covers the period of June 1, 2012 through November 9, 2012.

To accomplish our audit objectives, we reviewed relevant industry standards, State laws and agency policies and procedures. We also interviewed representatives of the Department to gain an understanding of their policies and procedures for disposal of electronic devices. We tested all 132 electronic devices which the Department had readied and listed for surplus with OGS. Using forensic software, we examined the contents of electronic media contained in these devices while taking steps to ensure that the actual data was unaffected by our testing. For the memory devices we found with retrievable data, we reviewed and analyzed the data to determine whether it contained sensitive information.

We conducted our 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.

In addition to being the State Auditor, the Comptroller performs certain other constitutionally and statutorily mandated duties as the chief fiscal officer of New York State. These include operating the State's accounting system; preparing the State's financial statements; and approving State contracts, refunds, and other payments. In addition, the Comptroller appoints members to certain boards, commissions and public authorities, some of whom have minority voting rights. These duties may be considered management functions for purposes of evaluating organizational independence under generally accepted government auditing standards. In our opinion, these functions do not affect our ability to conduct independent audits of program performance.

Authority

This audit was done according to the State Comptroller's authority as set forth in Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law.

Reporting Requirements

A draft copy of this report was provided to the Department of Agriculture and Markets officials for their review and comment. Officials agreed with our recommendation and reported having already taken steps to implement it. A complete copy of their response is included at the end of this report.

Within 90 days after final release of this report, as required by Section 170 of the Executive Law, the Commissioner of the Department of Agriculture and Markets shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendation contained herein, and where the recommendation was not implemented, the reasons why.

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Vision

A team of accountability experts respected for providing information that decision makers value.

Mission

To improve government operations by conducting independent audits, reviews and evaluations of New York State and New York City taxpayer financed programs.

Agency Comments



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Andrew M. Cuomo
Governor

Darrel J. Aubertine
Commissioner

March 20, 2013

Mr. John F. Buyce, CPA, CIA, CGFM
Office of the State Comptroller
Division of State Government Accountability
110 State Street, 11th Floor
Albany, New York 12236

Dear Mr. Buyce:

Enclosed is the Department's response to the Office of the State Comptroller's draft report 2012-S-70, *Department of Agriculture and Markets: Disposal of Electronic Devices*. We welcome your agency's review and recommendation, acknowledging that within every organization there are opportunities to implement additional or enhanced controls. In that regard, we have adjusted our procedures accordingly.

The audit report included a single recommendation to "reinforce policies and procedures to ensure that all hard drives are removed from electronic devices and properly disposed of prior to authorizing the equipment for surplus." The Department's policy regarding the surplus of electronic devices has been updated to reflect that of our ITS cluster, Environment & Energy. The Department has also added the additional measure of conspicuously marking all equipment that has had the memory removed to prevent comingling of equipment prior to disposal.

I am confident that the actions taken to address your recommendation will enable the Department to achieve compliance in the future. Please contact Ms. Tracy Robbins, the Department's Director of Internal Audit, if you have any questions regarding our response or require any additional information or documentation. Ms. Robbins can be reached at (518) 457-1179.

Sincerely,

A handwritten signature in cursive script, reading "Darrel J. Aubertine".

Darrel J. Aubertine
Commissioner