



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

Division of State Government Accountability

Oversight of Hazardous Materials and Waste

State University of New York



Report 2017-S-51

December 2018

Executive Summary

Purpose

To determine if SUNY institutions have developed adequate controls to effectively safeguard campus communities against hazardous materials and waste. This audit covered the period from January 1, 2015 through May 4, 2018.

Background

The State University of New York (SUNY) is the largest comprehensive system of public education in the nation, comprising 64 autonomous campuses. In 2015-16, SUNY served nearly 1.3 million students, with approximately 91,000 faculty and staff. Campuses are located throughout the State, and SUNY maintains a central administrative office in Albany. For fiscal year 2015-16, SUNY had a budget of \$13 billion, including State support totaling \$4 billion, and over \$1 billion in total research activity.

In order to promote a safer and more environmentally responsible SUNY community, SUNY's System Administration established the Environmental Health & Safety Office (EHSO). The EHSO serves as a technical resource to provide tools, training, and communication for the campuses on best practices and compliance issues, including compliance with SUNY's own requirements as well as local, State, and federal regulations for environmental management and occupational safety and health.

Hazardous materials are defined and regulated in the United States primarily by laws and regulations administered by the U.S. Environmental Protection Agency (EPA), the U.S. Occupational Safety and Health Administration, and the U.S. Department of Transportation. Generally, a hazardous material is any item or agent (biological, chemical, radiological, and/or physical) that has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.

The EPA and the New York State Department of Environmental Conservation have detailed regulations defining hazardous waste. The EPA states that, simply defined, a hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste is generated from many sources, ranging from industrial manufacturing process wastes to batteries, and may come in many forms, including liquids, solids, gases, and sludge.

Key Findings

- Based on our visits to two University Centers (University at Buffalo [Buffalo] and Stony Brook University [Stony Brook]) and five campuses (Plattsburgh, New Paltz, Polytechnic Institute [Poly], Oneonta, and Cobleskill), we found there is significant variation in the adequacy of controls over hazardous materials.
- At most of the non-university center campuses, we found select areas in which controls over hazardous materials could be improved. However, these weaknesses were not pervasive throughout all areas of internal controls. In contrast, the University Centers had weaknesses

throughout all the areas of internal controls we reviewed. For example, Buffalo's system of internal controls over hazardous materials purchasing, access, and accounting is inadequate to provide reasonable assurance that students and campus communities are safeguarded from exposure. These weaknesses prevent proper monitoring and accounting for hazardous materials, compliance with legal requirements, and enforcement of restricted access to hazardous materials.

- SUNY officials have established controls over and complied with hazardous waste regulations that provide reasonable assurance that students and communities are safeguarded against exposure to hazardous waste. Officials have implemented controls to safeguard hazardous waste and comply with standards set forth by the various oversight agencies at the federal, State, and local levels.

Key Recommendations

To SUNY Administration:

- Provide guidance and support to campus officials in designing and implementing a system of internal controls that provide reasonable safeguards against intentional or accidental misuse of hazardous materials.
- Work with campuses to improve controls over access, procurement, or accounting for hazardous materials as necessary to further reduce risks relating to controls over hazardous materials.

To SUNY Institutions:

- Improve controls over access, procurement, or accounting for hazardous materials as necessary to further reduce risk relating to hazardous materials. This may include (but not be limited to):
 - Assessing risks to access, procurement, and accounting of hazardous materials and implementing controls to address them.
 - Monitoring and enforcing compliance with already established procedures in the Chemical Hygiene Plan, lease agreements, and other university policies.

Other Related Audit/Report of Interest

[Department of Environmental Conservation: Selected Aspects of Inactive Hazardous Waste Site Remediation Cost Recovery \(2014-S-14\)](#)

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

Division of State Government Accountability

December 3, 2018

Kristina M. Johnson, Ph.D.
Chancellor
State University of New York
SUNY System Administration
State University Plaza
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Albany, NY 12246

Dear Chancellor Johnson:

The Office of the State Comptroller is committed to helping State agencies, public authorities, and local government agencies manage government resources efficiently and effectively. By doing so, it provides 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 entitled *Oversight of Hazardous Materials and Waste*. The audit was performed pursuant 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.

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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Background

The State University of New York (SUNY) is the largest comprehensive system of public education in the nation, comprising 64 institutions (4 of which are University Centers), including research universities, academic medical centers, liberal arts colleges, community colleges, and agricultural and technical institutes across the State. In 2015-16, SUNY served nearly 1.3 million students and employed approximately 91,000 faculty and staff. For fiscal year 2015-16, SUNY had a budget of \$13 billion, including State support totaling \$4 billion, and over \$1 billion in total research activity.

A variety of hazardous materials are used at SUNY campuses, including items such as: cadmium nitrate tetrahydrate, which may intensify fires, is toxic if swallowed, is harmful in contact with skin or inhaled, and may cause cancer; and arsenic oxide, which may be fatal if swallowed and harmful if inhaled, causes eye and skin irritation, and can cause severe respiratory and digestive tract irritation with possible burns, blood abnormalities, lung damage, central nervous system effects, cardiac disturbances, and liver and kidney damage.

SUNY campuses use hazardous materials, and generate hazardous waste, in a variety of both classroom-related (e.g., laboratory operations, photo processing) and non-classroom-related (e.g., facilities operations and maintenance, and construction and renovation) activities. Due to their properties (e.g., toxicity, flammability, explosiveness, corrosiveness), such substances pose inherent and potentially large-scale and harmful risks. Robust controls over hazardous materials are essential to ensure student and campus safety and to protect campus communities and the environment.

To promote a safer, more environmentally responsible SUNY community, SUNY's System Administration (SUNY Admin) established the Environmental Health & Safety Office (EHSO). Led by the Director of Environmental Health & Safety, the EHSO serves as a technical resource for the campuses, providing tools, training, and communication on best practices and compliance with local, State, and federal regulations; as well as SUNY's own requirements governing environmental management, including hazardous materials and waste, occupational safety and health, and building and fire codes. Each campus has designated employees responsible for ensuring its hazardous waste and material programs comply with all applicable rules, regulations, and laws.

OSHA's definition of hazardous chemicals is: any chemical that is classified as a physical or health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or a hazard not otherwise classified. A health hazard is a chemical that is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure), skin corrosion or irritation, serious eye damage or irritation, respiratory or skin sensitization, germ cell mutagenicity, carcinogenicity, reproductive toxicity, specific target organ toxicity (single or repeated exposure), or aspiration hazard. A physical hazard is one that is considered to be explosive, flammable (gases, aerosols, liquids, or solids), oxidizer (liquid, solid, or gas), self-reactive, pyrophoric (liquid or solid), self-heating, organic peroxide, corrosive to metal, gas under pressure, or in contact with water emits flammable gas.

In general, a hazardous material is any item or agent (biological, chemical, radiological, and/or physical) that has the potential to cause harm to humans, animals, or the environment either by itself or through interaction with other factors. Both the U.S. Occupational Safety and Health Administration (OSHA) and the U.S. Environmental Protection Agency (EPA) further define hazardous chemicals and substances (hereafter called hazardous materials) in greater detail. Hazardous

materials are regulated primarily by laws and regulations administered by the EPA, OSHA, and the U.S. Department of Transportation. Furthermore, the U.S. Department of Homeland Security's (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) program identifies and regulates high-risk chemical facilities to ensure they have security measures in place to reduce the risks associated with these chemicals. Where quantities of certain hazardous materials maintained on site exceed CFATS' established thresholds, campuses are required to report the information to DHS.

Pursuant to regulations promulgated by OSHA (29 CFR 1910.1450), every SUNY campus is required to have a Chemical Hygiene Plan, a written program stating the policies, procedures, and requirements to protect workers from the health hazards associated with hazardous chemicals used in the workplace. The Chemical Hygiene Plan must include, among other things: standard operating procedures relevant to safety and health considerations for each activity involving the use of hazardous chemicals; criteria being used to determine and implement control measures to reduce exposure to hazardous materials (e.g., engineering controls); designation of personnel responsible for implementing this plan; and provisions for additional worker protection for working with particularly hazardous substances. SUNY campuses are also required to review and evaluate the effectiveness of their Chemical Hygiene Plan at least annually and update as necessary.

In addition, as of January 2008, SUNY Admin requires every campus to develop and maintain an Emergency Response Plan designed to protect life, protect critical facilities, and restore campus operations in the event of an emergency. Among other requirements, the Emergency Response Plan must contain:

- An emergency plan for each campus unit that also identifies the individuals (by name or position) responsible for maintaining and evaluating the sufficiency of the plan.
- A campus-wide hazard analysis that examines the likely hazards that could affect the campus and forms the basis for the entire emergency planning process.
- A statement signed and dated by the campus president endorsing the Emergency Response Plan and supporting its implementation.

Although campuses develop their own Chemical Hygiene Plan, tailored to address their specific needs, each campus' Plan generally (six of the seven we visited) requires school laboratories to maintain an inventory of their stores of chemicals and to update the inventory as chemicals are purchased or removed from service. Because hazardous materials are used daily in labs for teaching and other activities, maintaining a perpetual inventory is not always feasible. Therefore, each school designs inventory controls based on the needs of their campus. This may include monthly or biannual reconciliations by individuals in charge of specific labs or some other campus-specific requirement. State and federal regulations permit this type of inventorying.

School officials may also establish controls over access to, as well as procurement of, hazardous materials, based on the needs of their campus. This flexibility applies to use of the State's procurement card (p-card) system. As established in the Office of the New York State Comptroller's *Guide to Financial Operations* (GFO), SUNY schools are required to use p-cards for small-dollar purchases (< \$500) to facilitate a cost-effective method of procurement beginning April 1, 2018; SUNY schools are otherwise able to establish their own controls based on SUNY Admin

recommendations. While there are inherent benefits and risks associated with p-card programs, the GFO requires agencies to develop appropriate controls and accountability over procurement, and offers a tool to assist agencies in assessing controls related to purchasing, receiving, and other areas. If certain types of purchases are considered riskier than others, SUNY officials may add any controls they deem necessary to mitigate these risks (e.g., restricting merchant category codes on p-cards, adding additional layers of review). Adequate internal controls over procurement may: provide management with reasonable assurance regarding the achievement of operational objectives; help to establish standards of performance; ensure compliance with laws, regulations, policies, and procedures; reduce opportunities for fraud and prevent loss of resources; and ensure public confidence. These controls are all the more critical for purchases of hazardous materials to ensure accountability – that is, that quantities of purchases are carefully monitored and that only authorized individuals are making purchases for a necessary business purpose.

Campuses are also responsible for properly managing their hazardous waste, which can include, for example, spent batteries and solvents, waste laboratory chemicals, waste paints, and waste oil. As defined by the EPA, hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste is regulated by the EPA and the New York State Department of Environmental Conservation (DEC). DEC requires the submission of annual reports, and conducts regular inspections for each campus to ensure it is meeting the requirements for storage and disposal of hazardous waste.

Audit Findings and Recommendations

SUNY officials have established adequate controls over and complied with regulations to provide reasonable assurance that students and campus communities are safeguarded against exposure to hazardous waste. However, we determined similar controls over hazardous materials – specifically, the key areas of access, procurement, and accounting – could be improved. Based on our visits to two University Centers (University at Buffalo [Buffalo] and Stony Brook University [Stony Brook]) and five campuses (Plattsburgh, New Paltz, Polytechnic Institute [Poly], Oneonta, and Cobleskill), we found that, although campuses may have established procedures to manage these key aspects of control, they were not always followed or enforced. The inherent dangerous properties of these types of substances aside, control weaknesses create the potential to jeopardize the health and safety of student and campus communities by accidental or intentional exposure to these materials.

At most campuses, we found controls that needed improvement. However, with the exception of the University Centers, the weaknesses we identified were not pervasive throughout all internal control areas. The University Centers, on the other hand, had control weaknesses in all areas of internal controls that we reviewed. At Buffalo and Stony Brook – sizable schools that specialize in medicine and research – undermanaged hazardous materials can pose significant threats. At Buffalo – SUNY’s largest university – systemic weaknesses undermined proper monitoring and accounting of hazardous materials, compliance with legal requirements, and enforcement of restricted access to hazardous materials. Of equal concern was Buffalo officials’ lack of openness and responsiveness when we brought these issues, and the potential risks, to their attention. The risk of health and environmental consequences that can result from poorly controlled hazardous materials – not to mention the liability to the State – should not be underestimated. While we identified similar issues at Stony Brook, officials, demonstrating a supportive attitude toward internal controls, were responsive to our findings, and stated they plan to tighten controls.

We recommend that SUNY Admin work with campuses to implement a system of internal controls over access, procurement, and accounting of hazardous materials to ensure the safety of all their students, faculty, and community; improve accountability; and mitigate the risks of a significant event.

Hazardous Materials

Generally, each SUNY school is responsible for establishing its own hazardous materials controls, including policies and procedures, based on their needs and other factors specific to their campus. Given their individualized approach to controls, our audit tested a range of criteria, and not all criteria applied to all schools. For this reason, it is difficult to draw comparisons across schools. Instead, we present our findings as stand-alone issues of significance for each school.

We focused our testing on access, procurement, and accounting for hazardous materials as well as completion of certain aspects of the Chemical Hygiene Plan and Emergency Response Plan. We took these into consideration not only as separate and distinct aspects but also as they factored

into a functioning system of internal controls related to our audit objective. For those schools that required inventories under their Chemical Hygiene Plan, we attempted to match inventory and procurement records to determine if materials were accounted for. For most campuses, we generally were able to locate the bulk of the chemicals on their inventory lists, however, all but one school had hazardous materials that we could not account for.

As previously discussed, accounting for materials that are continuously being used can be problematic. The limitations of material inventorying were factored into consideration of the findings and were only a limited piece of our review of internal controls as a whole over hazardous materials. The amount and type of hazardous materials we could not account for varied by the schools depending on the school size and type of chemicals in use.

University Centers

University at Buffalo

Buffalo's system of internal controls over hazardous materials purchasing, access, and accounting is not adequate to provide reasonable assurance that students, staff, and campus communities are safeguarded from exposure. Where procedures have been established, they are not sufficiently robust to prevent circumvention. Lacking the necessary controls, Buffalo's hazardous materials are vulnerable to mismanagement at the very least and potential exploitation at worst, predisposing students and the campus community to the risk of exposure.

Access. We tested key access controls for five departments, and found none of the departments developed their own internal policies, as required by university procedures. Additionally, none of them maintained a complete or accurate list of master and sub-master keys and key holders' names. For one department that uses a card entry system, we tested access for a sample of 30 employees. For 27 (90 percent), the department did not maintain any documentation supporting their authorized access. There is thus no certainty that only authorized employees have access to areas with hazardous materials and that individuals who could create or increase a hazard do not. There was also confusion among those individuals charged with maintaining access controls as to what their responsibilities actually were. Ultimately, there is limited assurance that only authorized persons have access to areas storing hazardous materials. When we brought these issues to the attention of school officials, they were not open or responsive to the risk raised, stating Buffalo is too large to implement an effective key control system.

Procurement. We found there are minimal controls over purchasing of hazardous materials and limitations to what is recorded by Buffalo's procurement system. These limitations not only diminish officials' ability to monitor and track purchases, but also restricted our ability to fully test controls over purchases of hazardous materials.

Buffalo's own Electronic Requisition Policy, which was not provided to auditors until after the draft report was issued, states all expenses require a business purpose. The policy further states that the business purpose explanations should be sufficiently detailed to allow the reviewer to determine that the transaction was program- or grant-related in nature. However, during our site visit, Buffalo's purchasing officials

No additional controls over purchasing hazardous materials on p-cards have been implemented. Although we have seen additional controls implemented at other schools, officials stated they accept the risk that purchases of hazardous materials may be made by unauthorized individuals on p-cards and do not intend to change their processes.

stated that purchases using Buffalo's electronic requisition system are reviewed only to ensure that funds are available and are charged to correct sources – and not for need, reasonability, or any other factor. Procurement officials further stated, in regards to the purchase of hazardous materials specifically, no additional controls have been established to mitigate risk, such as requiring a business justification or pre-approval. Officials stated procurement does not have the knowledge to determine business justification. In addition, purchasing officials stated that anyone with a p-card can purchase anything (i.e., there is no difference between the head of finance or a lab tech). There are no approvals, only the initial granting of a p-card. Furthermore, Buffalo does not require purchases to be delivered to a central clearinghouse. In fact, Buffalo officials even noted that purchasers can have any quantity of items, including hazardous material, directly delivered to their offices or even their homes.

Inventory. Buffalo's Chemical Hygiene Plan requires laboratories to maintain a periodic inventory of their hazardous materials. We selected a sample of ten labs to test for the inventory requirements, but found our ability to test was limited due to Buffalo's incomplete systems and poor record maintenance. For example, data for one lab was not usable, and we had to remove the lab from testing. Of the remaining nine labs, only two met all the requirements of the Chemical Hygiene Plan. For example, several of the labs' chemical inventories were missing building, room number, number of containers, container size, date acquired, physical state of the chemical, etc.

As a result of these inventory and record maintenance deficiencies, we could not determine, nor could officials provide, assurance that Buffalo's storage of hazardous materials did not exceed CFATS' established thresholds at the time of our visit:

- Buffalo officials could not provide reliable records to determine if purchases were or were not in line with quantities covered under CFATS.
- Buffalo officials could not provide evidence to verify they had knowledge of any hazardous materials being maintained on site by entities that lease campus space from the school. Buffalo's lease agreements require lessees to provide inventory of materials quarterly to Buffalo officials. Buffalo officials were not aware of this term in the lease until we brought it to their attention and did not require inventories be submitted; therefore, none were.

At the closing meeting for this audit and in response to our preliminary findings, Buffalo officials stated that they have extensive procedures, which they follow, and work closely with DHS to ensure they meet CFATS requirements. As evidence, officials provided us with a copy of a survey that they sent to all principal investigators in 2008, requesting them to list the quantity of any chemicals in their lab covered under CFATS. Officials also stated they verified the information on the survey through audits. While these procedures may have provided assurance of the quantities of CFATS chemicals on site in 2008, they are not performed annually. Officials stated that in 2011, DHS no longer required Buffalo to be subject to additional regulatory requirements. They informed auditors that they verify CFATS materials through lab inspections and "other means," but did not provide support for either. For

Discussions with officials on site revealed inconsistencies in stated procedures. For example, contractors sign leases that require them to provide inventories of materials maintained on site to the campus. However, campus officials say they cannot ask for the information because it is proprietary. Nonetheless, they also claim they do walk-throughs to gather this information.

confidentiality reasons, they could not provide us with any detailed information. Officials also noted they perform walk-throughs of contractor space, which would provide the campus with knowledge of the type and amount of materials stored that may pertain to CFATS, but provided no information or support to confirm this statement.

Again, after the issue of this draft, SUNY officials provided us with documentation to support leased space inspections they purported occurred during our audit scope period. However, the documentation provided minimal assurance that these inspections occurred or would serve to determine whether Buffalo exceeds CFATS thresholds for hazardous materials.

Plan Documentation. We found that Buffalo has completed its Chemical Hygiene Plan containing all the required components. However, based on conflicting statements made to us by officials, it is not clear whether the plan is evaluated annually, as required. During our initial discussions, we were told the plan was not evaluated annually. Later in the audit, officials stated that the plan is, in fact, evaluated on a regular basis, but they could not provide evidence to support this.

As of November 2017, Buffalo had not yet completed its Emergency Response Plan—a requirement that SUNY established in 2008 as a defense against a hazardous materials event. Specifically, Buffalo officials have yet to complete emergency plans for individual campus units, and have not identified the individuals (by name or by position) responsible for maintaining and evaluating the sufficiency of these unit plans. Officials provided us with a “Comprehensive Emergency Management Plan” drafted in June 2017. However, the document does not address all the required components. Buffalo officials stated they have established an Incident Management Team that aligns with DHS’ best practices and also plans and performs emergency drills. However, while these additional controls may mitigate some risks, they do not suffice in place of a complete Emergency Response Plan.

When we reported on the various control weaknesses to Buffalo officials, officials were not open and responsive to the issues we raised. We recognize that Buffalo, like all SUNY campuses, is allowed to establish a level of control based on campus-specific needs; however, as the largest university in the SUNY system, and therefore having greater risk and greater stakes, we found this attitude concerning. It is precisely Buffalo’s size that demands disciplined controls: It is more vulnerable to misuse, whether intentional or accidental, of hazardous materials as it conceivably purchases more of these materials than any of the other schools and has the largest student and faculty population of any campus in the State.

Stony Brook University

We found control weaknesses over access, purchasing, and accounting of hazardous materials at Stony Brook as well. Consequently, Stony Brook officials have less assurance that the risk of campus and community exposure to hazardous materials is reasonably mitigated. In response to our initial findings, officials acknowledged some of these risks and stated they plan on tightening controls to address some of them.

Access. Based on our testing of two databases used to control key access as well as on-site observations, we identified weaknesses in Stony Brook’s oversight of access to restricted hazardous materials areas and little key accountability. For instance:

- In testing key access for a sample of 22 individuals who were identified as currently possessing keys to hazardous material areas, we found 12 individuals (55 percent) for whom officials could not provide any documentation that the issuance of a key was authorized (e.g., no formal key request, no signature acknowledging key receipt).
- Seven of these 12 individuals were no longer employed by Stony Brook. Although school policy requires employees to return assigned keys prior to issuance of the final paycheck, officials stated this policy is not enforced at separation.

Our access testing was aligned with our inventory testing, which included areas with hazardous materials – and which are secured with traditional key locks versus an electronic card system. Our testing therefore did not encompass access security within the electronic card system, which is in use in more than half of Stony Brook’s buildings (29 of 47).

During our testing, we identified two locations that may contain hazardous materials and dangerous biological agents (including one Biological Safety Lab 2¹) that were inadequately secured. Despite locks on the doors, we were able to gain entry without keys.

Procurement. As part of our testing, we sought to track Stony Brook’s hazardous materials purchases, from procurement to receiving to inventory. However, deficiencies in each area inhibited our efforts.

- Per our request, Procurement officials provided us with a spreadsheet of purchases for calendar year 2017, but could not assure us that it accounted for all purchases for a specific lab because Stony Brook’s system tracks purchases by individuals, not labs. We found limitations to what is recorded by Stony Brook’s procurement system. Additionally, a number of people (340) within the school have a p-card, which makes these purchases hard to track. Stony Brook has not implemented any additional controls over p-card purchases of hazardous materials, such as requiring a business justification or pre-approvals.
- According to Central Receiving officials, unless specified otherwise, only items bought using a purchase order go through Central Receiving – purchases made using a p-card do not. Also, Central Receiving staff “do not check the package” if it is labeled as hazardous. Therefore, Central Receiving cannot reconcile any aspect of a “hazardous” package’s contents (e.g., quantity, type of material) with the packing slip or original purchase order.

Inventory. Stony Brook’s current Chemical Hygiene Plan requires staff to maintain a chemical inventory for each lab. However, we found that lab staff do not always do this. According to officials, the inventory requirement was added to its plan as a best practice. Rather than enforce the inventory requirement, officials stated they hope to remove it in a revised Chemical Hygiene

¹ Biological safety labs are classified as level 1, 2, or 3, with level 1 labs housing the least threatening agents and level 3 labs housing the most dangerous. Level 2 labs contain agents that pose moderate hazards to personnel and the environment. Access to the laboratory should be restricted when work is being conducted.

Plan – a move that would weaken controls rather than comply with existing procedures. SUNY Admin stated it would support this decision.

We were unable to test controls over CFATS requirements due to confidentiality restrictions. However, Stony Brook officials stated they have taken the following steps to ensure CFATS compliance:

- Conducted an initial assessment at all labs and gathered information regarding the materials related to CFATS to determine if they are at the threshold.
- Developed a program to track all purchases of these materials to ensure they do not exceed the threshold.
- Established a practice of monitoring based on annual reports from both their hazardous materials vendor and procurement department related to the purchasing of those specific chemicals. Stony Brook officials provided us with email correspondence requesting reports for purchases of hazardous materials covered under CFATS be sent to the Environmental Health and Safety department (EHS).

We selected a sample of ten labs to test the Chemical Hygiene Plan inventory requirements. Only four of the ten met all inventory requirements. Of the remaining six labs, five were missing at least one requirement and one did not have an inventory at all. For example, several of the labs were missing quantity, location, and manufacturer of the chemicals. Despite these limitations, for the nine labs with inventories, our testing found that over 90 percent of the materials were accounted for.

Plan Documentation. We reviewed Stony Brook’s current Chemical Hygiene Plan and found it was complete and met all the requirements. However, the Chemical Hygiene Plan is required to be reviewed annually and updated as needed. We were not provided with support that the plan was reviewed annually and it has not been updated since 2001. Therefore, it may or may not account for current conditions. Stony Brook’s Emergency Response Plan was complete and up to date.

Non-University Centers

None of the five non-university centers we visited had internal control weaknesses throughout all areas we tested. However, as was the case with the University Centers, we identified areas of concern at several of these smaller schools that should be addressed. Although the risk of a hazardous materials incident might be less for these campuses, the potential impact remains just as significant. It is thus imperative that the schools take appropriate action to ensure robust controls in all areas.

Access

We identified access controls to be adequate at Poly and Cobleskill. At New Paltz and Oneonta, we found controls could be improved, and at Plattsburgh, we didn’t obtain enough documentation to draw a conclusion on the key system. Key findings for each follow:

- Poly’s procedures over access to designated areas constitute their strongest risk-mitigating control to safeguard against accidental or intentional exposure to hazardous materials.
 - Access requests are reviewed by the Chief of University Police, in conjunction with the Director of Facilities.
 - There is appropriate separation of duties as well as controls over temporary and permanent restrictions. For example, Poly uses a temporary badging system that automatically discolors the badge after 24 hours.
- Cobleskill maintains a listing of keys. Once a year, the EHS director requires that each faculty member who was issued a key must present the key before they can receive their paycheck. Rooms containing hazardous materials were locked during our visit.
- At Plattsburgh, we were not provided with accurate information to draw any conclusion on the adequacy of the key system.
 - Staff provided documentation for a key system that is no longer in use in the areas containing hazardous materials, but did not provide information on the system they are currently using.
 - We reviewed the current card reader system and determined it provides adequate access controls to those areas where it has been implemented.
- Although New Paltz has established procedures to limit access to hazardous materials in its labs, certain access controls are not being implemented as intended. For example:
 - Despite signs indicating that rooms should be locked or only accessed by authorized personnel, we were able to access 16 labs and prep rooms without the use of a key, card, or assistance from school officials.
 - We were able to physically access hazardous materials that were either on open shelving or in unlocked cabinets.
 - Officials stated that labs and buildings are generally left open during the day when classes are in session; however, we note that at the time of our site visit, no classes were in session, almost all of the rooms we entered were empty, and there were few people in the building.
- Oneonta has record-keeping procedures regarding the issuing, reissuing, and reconciling of keys; however, the procedures are not being followed. Because there is no documentation identifying the employees who were issued keys or employees who are in possession of particular keys, we were unable to conduct any testing in this area. Without access controls, Oneonta is vulnerable to unauthorized access to areas containing hazardous materials, limiting officials’ ability to safeguard against intentional or accidental misuse of hazardous materials.

Procurement

At our site visits to the five non-university centers, we found Cobleskill, Oneonta, and Poly had established adequate systems to ensure that purchasing and receiving of hazardous materials are appropriately controlled. For example, at Cobleskill, the ability to purchase hazardous materials is limited to two individuals, and the EHS director reviews purchases. Also, certain extremely hazardous materials require the EHS director’s approval before purchase. At Poly, all hazardous material purchases go through a robust chain of custody: a listing of materials is approved for purchase by Poly’s Environmental Health and Services department; once approved, materials

may be purchased by the procurement department or authorized individuals; and, upon delivery, shipments go through Central Receiving for processing before distribution to the lab.

At both Plattsburgh and New Paltz, we identified weaknesses that may expose the schools to risks. At Plattsburgh, for instance, one person – the Science Programs and Facility Support Professional – is responsible not only for placing hazardous materials orders but also receiving the materials and inventorying them. This lack of segregation of duties across parts of the purchasing process increases the risk of error, waste, and otherwise inappropriate activity, which can go undetected. Plattsburgh should consider separating these tasks among employees to reduce these risks.

New Paltz established procurement procedures that were intended to restrict p-card purchasing of hazardous materials to authorized employees only. However, in reviewing p-card statements for the period January 1, 2017 through September 30, 2017, we found one instance of an unauthorized purchase of a hazardous material that officials were unaware of. While officials acknowledged that this individual should not have been able to make the purchase, they stated there is a business need for the employee to use the p-card for this hazardous material purchase, and the employee will be added as an authorized user for these types of purchases.

Inventory

At Poly, the regular (i.e., teaching) labs do not maintain an inventory of hazardous materials, nor are they required to under the school's Chemical Hygiene Plan. The remaining four schools are required by their Chemical Hygiene Plan to maintain inventories. In testing inventories, we found adequate controls at Plattsburgh and Cobleskill, but found some areas of weakness at New Paltz and Oneonta. Among our specific findings:

- Cobleskill maintained inventories in accordance with the Chemical Hygiene Plan requirements, and we were able to locate all of the hazardous materials selected for review from the school's inventory during our visit.
- Plattsburgh maintained inventories in accordance with its plan's requirements, and we were able to account for 78 percent of the materials selected in our sample.
- New Paltz maintained inventories of materials in all ten rooms we tested, as required by its Chemical Hygiene Plan. However, at the time of our visit, we were only able to locate 43 percent of the materials in our sample.
- Oneonta officials could only provide us with a partial listing of the labs that contained hazardous materials. In addition, some of the labs did not maintain an inventory, as required. We verified inventories of hazardous materials that were available for three departments, and were able to account for 72 percent of the materials on the lists provided.

Plan Documentation

All five schools had a complete and current Chemical Hygiene Plan; however, only two – Oneonta and Cobleskill – also had complete and updated Emergency Response Plans.

New Paltz did not include a hazard analysis in its Emergency Response Plan, as required. A hazard analysis identifies the likely hazards that could affect the campus in the event of an emergency, and forms the basis for the entire emergency planning process.

Poly's Emergency Response Plan was incomplete. The Police Chief, who was recently promoted from the Utica campus and is responsible for developing the Emergency Response Plan, stated it was about 85 percent complete. However, officials stated they have a separate plan in case of emergency that does reference hazardous materials.

Hazardous Waste

SUNY officials have established adequate controls over, and complied with, hazardous waste regulations to provide reasonable assurance that students and communities are safeguarded against exposure from hazardous waste.

For all of the campuses visited, we generally found adequate records to support that hazardous waste was stored and disposed of properly. All of the schools used private contractors permitted in hazardous waste disposal to remove waste from the campus. We verified that DEC audited each campus' hazardous waste storage and disposal procedures. In all but one case, DEC had audited the campus within three years.

Recommendations

To SUNY Administration:

1. Provide guidance and support to campus officials in designing and implementing a system of internal controls that provide reasonable safeguards against intentional or accidental misuse of hazardous materials.
2. Work with campuses to improve controls over access, procurement, or accounting for hazardous materials as necessary to further reduce risks relating to controls over hazardous materials.

To SUNY Institutions:

3. Improve controls over access, procurement, or accounting for hazardous materials as necessary to further reduce risks relating to hazardous materials. This may include (but not be limited to):
 - Assessing risks to access, procurement, and accounting of hazardous materials and implementing controls to address them.
 - Monitoring and enforcing compliance with already established procedures in the Chemical Hygiene Plan, lease agreements, and other university policies.

Audit Scope, Objective, and Methodology

This audit sought to determine if SUNY institutions have developed adequate controls to effectively safeguard communities against hazardous materials and waste. This audit covered the period from January 1, 2015 through May 4, 2018.

To accomplish our objective, we reviewed relevant laws and regulations and SUNY's policies related to hazardous materials and waste. We also became familiar with and assessed SUNY's internal controls as they related to our audit objective. The controls established by the various SUNY schools varied greatly based upon the size of the school, uses of the hazardous materials, and overall internal control environment of the school. Therefore, each school was evaluated based upon the procedures they had in place while following the overall SUNY guidelines. We held meetings with SUNY officials to gain an understanding of their oversight of hazardous materials and waste. We performed site visits to seven SUNY schools (Buffalo, Stony Brook, Plattsburgh, New Paltz, Oneonta, Polytechnic Institute, and Cobleskill). We judgmentally selected the schools based on various factors, including student population, amount of waste generated, types of degrees offered, and reports of non-compliance. We also assessed the data reliability of the SUNY schools we visited and determined, in most instances, the information lacked sufficient reliability. As such, we limited our use of the data contained within the systems. The data that was provided to us contained information for hazardous material counts, procurement, and key and card access between January 1, 2017 and January 26, 2018. In some instances, we used the data we received from the systems to select samples for testing and to provide background information. We verified this data against information contained in hard copy files and our own physical observations of items. We used the hard copy information and our observations to form the basis for our findings instead of the information in the systems.

We were not able to verify the accuracy and completeness of the amounts of hazardous materials and waste in each laboratory because hazardous material inventory is updated throughout the year and not maintained perpetually. Instead, we selected random and judgmental samples of items recorded as being on hand and then verified that they were either present in the lab or had been appropriately disposed of, even if the inventory list had not yet been updated at the time it was provided to us. In total, we randomly selected 8 labs and judgmentally selected 51 labs based on quantity of materials and waste, for a total of 59 labs. From those labs, we randomly selected 173 materials and judgmentally selected 587 materials based on the quantity of materials and waste, for a total of 760 materials. The scope of our hazardous material testing was January 1, 2017 through January 18, 2018. Those judgmentally selected were chosen based on several factors, including financial transactions, volume, and/or inventory availability. We used physical observation to determine if the materials were accounted for.

We were not able to verify the accuracy and completeness of the amounts of keys and cards because our testing indicated the data was not reliable. We judgmentally selected samples of records to verify that access was appropriate. In total, we judgmentally selected 1,108 keys and cards based on several factors, including number of keys assigned, title of employee, and audit liaison assessment. The scope of our testing was January 1, 2017 through January 26, 2018.

We were not able to verify the accuracy and completeness of the number of procurement transactions because not all transactions were related to our scope and we could not verify them against the inventory we tested because, as stated above, we were not able to verify the accuracy or completeness of that data. We selected judgmental samples of materials recorded as being purchased and then attempted to verify that they were either present in a lab or had been appropriately disposed of, even though the inventory list had not yet been updated at the time it was provided to us. We judgmentally selected the purchases based on various factors including date of purchase and purchase description. The scope of our procurement testing was January 1, 2017 through January 18, 2018.

The results of our sampling work support the findings, conclusions, and recommendations in this report. However, those results can't be projected back to the entire population of hazardous materials and waste.

As is our normal practice, we requested that SUNY officials provide us with a letter of representation to affirm that they have made all relevant records and related data available for audit, and that they have complied with all applicable laws, rules, and regulations or have disclosed any exceptions and material irregularities to the auditors. The letter of representation is also intended to confirm any significant oral representations made to the auditors and thereby reduce the likelihood of misunderstandings. SUNY provided us with a representation letter dated May 10, 2018. However, SUNY later provided a binder of documentation on July 26, 2018 in response to the draft report. This documentation was all available to SUNY during the course of our audit. Therefore, we have limited assurance all material information was provided to us during the course of our audit, as SUNY officials attested to in their representation letter.

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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

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.

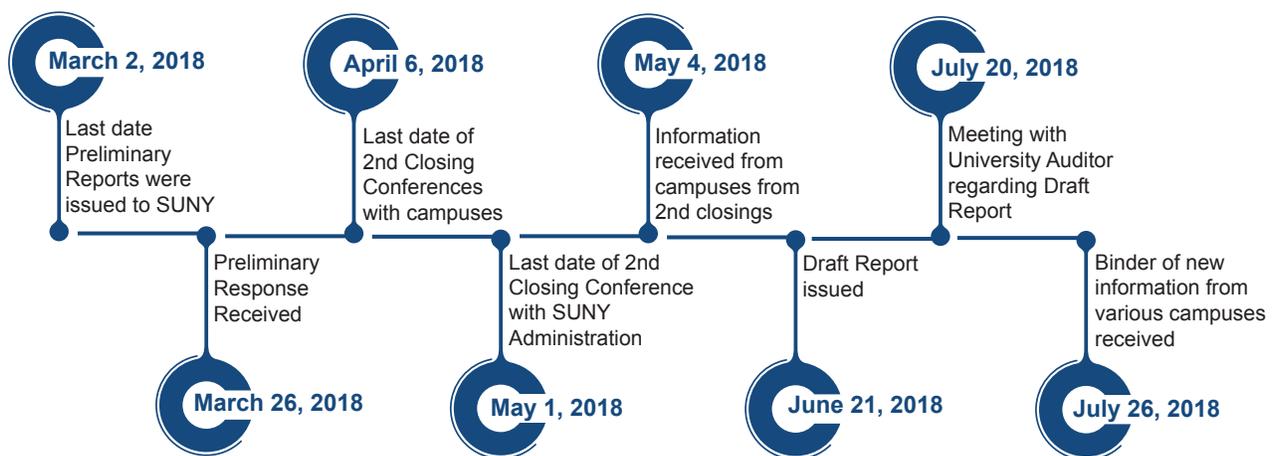
Authority

The audit was performed pursuant 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

We provided a draft copy of this report to SUNY officials for their review and formal written comment. Their comments were considered in preparing this final report and are attached at the end in their entirety. SUNY disagrees with many of the report's findings and conclusions. Our rejoinders to those comments are included in the report's State Comptroller's Comments, which are embedded in SUNY's response.

SUNY officials provided significant amounts of supplemental information to us after we presented initial findings to them, and then again after the draft report was issued. Much of the supplemental information could have been provided to the auditors during our site visits. We provided campus officials numerous chances to provide supporting documentation for our findings and supplied the campuses with guidance on what types of information they could provide as appropriate evidence to satisfy our requirements. We are disappointed that much of this information was only provided after the issuance of our draft report, and well after the corresponding events took place. In addition, some of the information provided contradicts statements made by officials during our site visits and follow-up meetings. When records are not contemporaneous with the events in question, they are of limited evidentiary value. The timeline below depicts key events in the audit process, including timing of SUNY responses to OSC preliminary reports, various meetings held with the campuses regarding the findings, and the extended time period during which our auditors considered information that SUNY provided.



Within 90 days of the final release of this report, as required by Section 170 of the Executive Law, the Chancellor of the State University of New York 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 recommendations contained herein, and if the recommendations were 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 and State Comptroller's Comments



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August 16, 2018

Brian Reilly
Audit Director
Office of the State Comptroller
Division of State Government Accountability
110 State Street - 11th Floor
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Dear Mr. Reilly,

In accordance with Section 170 of the Executive Law, we are providing our comments to the audit report on the State University of New York Oversight of Hazardous Waste and Materials. The State University of New York System Administration and campuses (collectively referred to as "SUNY") are strongly committed to protecting the health and safety of our students, faculty, and staff (collectively referred to as "Campus Community") and this commitment extends to the prevention of intentional or accidental misuse of hazardous materials. As such, System Administration and the campuses take countless proactive and preemptive steps to provide a safe and secure environment. SUNY has qualified staff and resources to help ensure compliance with federal and State regulations associated with environmental health and safety by providing guidance, training and tools to support the campuses and to help ensure our campuses are safe. The campuses have dedicated, trained, and qualified staff with decades of experience in hazardous waste and materials. Substantial resources are committed to developing and maintaining strong compliance and risk reduction programs. SUNY is gratified that the audit's review of this subject matter did not find fault with a majority of the Campus' procedures for safeguarding the Campus Communities.

I. Ensuring the Health and Safety of the Campus Community

SUNY takes seriously the responsibilities that come with handling hazardous materials and waste and the faculty and staff work diligently to protect the Campus Community. SUNY endeavors to use minimal amounts of the least hazardous materials to meet our purposes. Chemicals, the focus of the audit, are used in multiple contexts on our campuses and are essential to our custodial and maintenance departments as well as our teaching and research laboratories. The audit of chemicals was limited to reviewing controls over three areas related to laboratories: (1) access, (2) procurement, and (3) inventory. The audit did not look at the multiple layers of controls in place across SUNY campuses to safeguard the Campus Community.

SUNY believes appropriate controls are in place to safeguard the Campus Community. The key elements of SUNY's comprehensive campus wide safety programs clearly substantiate SUNY's

To Learn
To Search
To Serve



efforts in this area and also support that SUNY has the necessary controls in place to safeguard the Campus Community. SUNY commits significant resources, provides substantial oversight, and takes numerous preemptive measures, including routine laboratory safety training and emergency drill activities, to help ensure the health and safety of the Campus Community. Examples of these measures include:

State Comptroller's Comment – Auditors test not only the design of controls, but also their implementation. We reviewed various aspects of the measures listed below and found, in several areas, that although there may have been written procedures, they were not always being followed. For example, we found improper storage of hazardous materials, including those that were not locked up to prevent access, unsecured materials piled on carts being eroded by exposure to the hazardous materials stored on them, and rooms left open—some that even had signs stating to “keep door closed at all times.” (Note: We have photos providing evidence of these issues. While they were not included in the draft, they are available for SUNY officials' review.)

1. SUNY employs numerous robust preventative measures which include: written procedures for safely handling hazardous chemicals and materials, documented risk assessments, general and specialized safety committees, safety training, proper labeling, chemical segregation and storage, personal protective equipment (safety glasses and gloves, etc.), specialized facilities (environmental chambers and ventilation, etc.), proper signage, safety data sheets, among others.
2. Training in the use of hazardous materials for non-laboratory personnel is conducted in compliance with Occupational Safety and Health Administration (OSHA) Hazard Communication Standard. Laboratory personnel are trained in laboratory safety and local procedures as required by the campus' written Chemical Hygiene Plan as part of compliance with OSHA's Occupational Exposure to Hazardous Chemicals in Laboratories. Additionally, personnel receive training in hazardous waste management and the transportation of hazardous materials as required by the Environmental Protection Agency, NYS Department of Environmental Conservation (DEC), and Department of Transportation.
3. Hazardous materials are heavily regulated by many federal agencies including OSHA, Environmental Protection Agency, Department of Transportation, Department of Homeland Security (DHS), as well as State agencies such as the NYS Department of Environmental Conservation, NYS Department of Health, and the NYS Department of Labor. Many of these entities have multiple programs addressing various aspects of chemical safety, all of which have associated risk assessments informing the scope and details of the regulatory programs. SUNY campuses have extensive compliance programs.
4. As a result of the highly regulated environment surrounding environmental health and safety concerns, SUNY is routinely subject to numerous external audits, reviews and inspections by a variety of external agencies such as, DEC, DHS and NYS Public Employees Safety and Health Bureau. The University at Buffalo alone was subjected to

over 1,400 regulatory inspection hours by external agencies in the last three years. For example, the Department of Homeland Security conducted a limited inspection in July 2018 at University at Buffalo and identified no deficiencies with the campus' compliance program for Chemical Facility Anti- terrorism Standards (CFATS).

State Comptroller's Comment - As noted in the report, we could not determine, nor could officials provide, assurance that Buffalo's storage of hazardous materials did not exceed CFATS' established thresholds at the time of our visit. Further, we were not provided any information or documentation of this July 2018 review by the Department of Homeland Security, as it occurred after the scope of our audit and during the time period this draft response was being prepared. Therefore, we cannot determine if this limited inspection addressed the issues already identified in our audit report relating to Buffalo's reporting under CFATS.

5. The campuses employ Environmental Health & Safety (EH&S) professionals who assist with prevention of and response to chemical, biological, radiological, and other hazardous materials incidents at the campuses. The EH&S offices serve as technical resources and provide tools, training, and communication for the campuses on best practices and compliance issues (including compliance with SUNY requirements, and local, State, and federal level regulations for environmental management and occupational safety and health). The EH&S Office at System Administration supports these efforts.

State Comptroller's Comment - While EH&S staff provide guidance on specific State and federal regulations and specific SUNY administrative policies, we found the unit staff provide little guidance on areas not covered under regulations. For example, EH&S does not provide guidance on access to or inventory controls over hazardous materials. EH&S officials specifically stated they do not do this, as there are no State or federal regulations for access or inventory controls.

6. SUNY employs numerous mitigation and response programs which include:
 - Emergency Response Plans (ERP) are developed which outline how each campus intends to prepare for, prevent, respond to, and recover from emergencies including those that involve hazardous materials and waste that occur on campus or affect the campus. Each ERP is tailored to address the specific needs of that campus.

State Comptroller's Comment - We reviewed Emergency Response Plans at each campus visited. We found that not all of the plans were complete or up to date, as documented throughout the report.

- Appropriate campus faculty and staff receive training in the Incident Command System (ICS) and National Incident Management System (NIMS) that corresponds with their identified roles and responsibilities in an emergency. These comprehensive systems are a national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines to address a full spectrum of potential incidents, hazards, and impacts.

- Emergency response drills and training exercises using the concepts of ICS/NIMS are conducted regularly to exercise the emergency operations centers and enhance the coordination, training, and response capabilities of campus personnel internally, as well as with local emergency response agencies. Additionally emergency evacuations are practiced regularly in compliance with the NYS Fire Code and NYS Education Law.
- SUNY State University Police is a fully empowered State law enforcement agency. SUNY's State operated campuses employ fully sworn police officers in each of their police departments. These professionals are fully trained officers who staff their departments on a 24/7 hour basis consistent to manage the activities of a college campus. Training includes community emergency response, CPR/AED/ First Aid, emergency deployment, safety, bomb incidents, etc. SUNY police officers are on site and very knowledgeable about the footprint and layout of their campus, which enhances their ability to respond to any emergency or need. SUNY police departments also include inspectors who are trained to investigate crimes and other matters affecting the safety and security of their campus. In addition, SUNY partners with DHS, Federal Bureau of Investigation, and others, as necessary.

State Comptroller's Comment - We spoke with University police officers at three campuses. These officers identified and corroborated some of the risks found as part of our audit. For example, one officer noted that the return of keys is not a priority. At another campus, officers noted a lack of administrative support related to the implementation of tighter access controls.

- To support all of the above, SUNY utilizes emergency response equipment, fire protection systems, mass communication systems, and strong building and fire code enforcement programs supplemented by annual third party inspections. Some campuses employ 24/7 fire marshal services and NYS Type 2 Hazmat teams who have the ability to use advanced equipment to detect the presence of known or unknown gases, vapors, chemicals, and other substances and have a cache of equipment to conduct leak intervention, plugging, patching, chemical neutralization, and decontamination.

II. Audit Results and Conclusions

SUNY recognizes that audits often provide opportunities for enhancement and improvement of processes and procedures. The Campuses gained some valuable insight and noted opportunities for enhancement such as maintaining documentation supporting proper access controls. However, after several discussions with OSC and careful consideration of the audit report, SUNY disagrees with many of the report's findings and conclusions. The following represent a few areas of disagreement:

1. SUNY does not concur with the audit testing methodology which required finding every chemical including other non-hazardous materials, such as sand, on a list of chemicals for a specific laboratory since these lists are updated on a periodic and not perpetual basis. In

general, most campus Chemical Hygiene Plans will require that when a new chemical is introduced to a laboratory it be added to the list of chemicals used in that laboratory and the OSHA compliant Safety Data Sheets (SDS) should also be available in the laboratory. Over time, chemicals may be fully used, returned to a storage room, or transferred to another laboratory. Looking for chemicals from a list which is updated periodically is not an effective audit test since it is unlikely all chemicals will be found. If the purpose was to support conclusions regarding the Campus' ability to safeguard the Campus Community, then the auditors should have selected a sample of chemicals present in a laboratory, tested that the applicable SDS were present, and that the chemicals were properly stored and labeled.

State Comptroller's Comment - SUNY's characterization of our testing methodology is incorrect. Our testing methodology was determined by the requirements of each campus' own Chemical Hygiene Plan, which SUNY EH&S requires and each campus designs to meet its own needs. Additionally, the Chemical Hygiene Plans have many requirements; the focus of our testing was the inventory requirements outlined in the various Plans. We used the inventories provided by SUNY officials and conducted our testing based on those, not the Safety Data Sheets.

2. SUNY does not concur with the audits insistence that all chemicals go through a central receiving area. In many cases, delivery of chemicals directly to the laboratories is a safer method as the chemicals will be received by trained staff and are often delivered by shipping carriers also trained in handling hazardous materials. Delivering directly to the laboratories means chemicals will be handled by fewer intermediaries and can be properly secured and stored promptly. This enhances safety, rather than reducing it.

State Comptroller's Comment - Auditors did not insist, nor does the report recommend, that hazardous materials go through a central receiving area. Rather, it recommends that controls over procurement be improved and that risks be assessed and controls be implemented as necessary to address such risks. For instance, one risk the audit identified is that purchasing staff on site stated that purchases can go to any location, including an office or an individual's home, where these materials would not be safeguarded from improper handling. We refer to central receiving only as it relates to other procurement weaknesses.

3. The audit suggests that a campus' inability to track chemical purchases by laboratory is a shortcoming. SUNY disagrees with this assessment and notes that chemicals may be purchased and used in multiple laboratory areas and not attributed to one specific laboratory location. Collaboration among laboratories is the hallmark of a vital research community, and reflects efficiencies in purchasing. There is no known requirement that the procurement system must track chemical purchases by laboratory. Additionally, the auditors tried to reconcile purchasing records to chemical inventory supplies, a traditional financial inventory accounting process. This audit method does not measure the adequacy of SUNY's controls for safeguarding Campus Communities.

State Comptroller's Comment - We did not state that material purchases needed to be

tracked by laboratory. Auditors attempted to use purchasing records in instances where campuses did not maintain inventories in accordance with their Chemical Hygiene Plans. Limitations of the procurement system were only disclosed to explain why this testing was not feasible. As noted in the first State Comptroller's Comment on page 25, we used inventories maintained by the campuses for our reconciliations.

4. The audit fails to note that the procurements made through Buffalo's e-requisition system require a secondary review and approval at the department level. This is an appropriate control since the department representatives would have the requisite knowledge to determine the appropriateness of the business justification.

State Comptroller's Comment - As noted in our report, Buffalo procurement officials stated that no additional controls have been established to mitigate risk, such as requiring business justifications or pre-approvals for purchases of hazardous materials. Officials stated procurement does not have the knowledge to determine business justifications. After our site visit and after the draft report was issued, SUNY provided documentation to support Buffalo's use of business justifications for hazardous materials purchases. However, SUNY provided only a copy of the University policy (which was requested on site and not provided until the response to the draft was being processed) and a screenshot of the e-requisition dropdown menu for a business justification. Neither the policy nor the screenshot supported that this function was actually used for hazardous material purchases. Therefore, while this may be a function of the system, based on comments from procurement officials and a lack of additional support, we cannot conclude business justifications are routinely used for hazardous material purchases.

5. OSC tested two separate access control aspects: (1) security of the doors for rooms potentially containing hazardous chemicals and (2) documentation related to granting access to areas containing hazardous chemical materials. While SUNY generally agrees there are opportunities to improve maintaining documentation related to granting access, it is disappointing that the audit did not report that for most campuses, laboratory doors were found to be appropriately secured. In fact, the auditors found all laboratory doors at University at Buffalo were properly secured.

State Comptroller's Comment - SUNY's characterization of our testing methodology is, once again, incorrect. We tested not only physical access and authorization, but also whether the campuses tracked what keys were issued and to whom. As access controls are interrelated, deficiencies in one area adversely diminish properly functioning controls in other areas. Specifically, Buffalo officials could not trace or determine how many keys were issued for rooms containing hazardous materials or who possessed said keys. With key access available to an undetermined number of labs and to an unknown number of persons, the fact that all the doors were found to be locked does not mitigate the risk of access from unauthorized individuals to hazardous materials. Our report also notes that we found access controls as a whole to be adequate at both SUNY Cobleskill and SUNY Poly.

6. We are disappointed that the audit continues to voice concerns regarding Buffalo's compliance with CFATS given that the campus worked closely with the Department of Homeland Security (DHS) who promulgated and enforces the regulations. DHS assisted in the refinement of the campus program to develop adequate controls. DHS has been satisfied with the Buffalo's program, as was noted in correspondence from DHS provided to the auditors. Furthermore, as previously noted within our response, DHS conducted a limited inspection in July 2018 and identified no deficiencies with the campus' compliance program for CFATS.

State Comptroller's Comment - As noted in the report, we could not determine, nor could officials provide, assurance that Buffalo's storage of hazardous materials did not exceed CFATS' established thresholds at the time of our visit. Further, we were not provided with any information or documentation of this July 2018 review by the Department of Homeland Security, as it occurred after the scope of our audit and while this draft response was being prepared. Therefore, we cannot determine if this limited inspection addressed the issues already identified in our audit report relating to Buffalo's reporting under CFATS.

7. SUNY disagrees with the misleading characterization of leased space inspections at Buffalo. In response to OSC's concerns regarding leased spaces, the Campus indicated that inspections of leased spaces were conducted and the inspections included reviewing the type of chemicals in use within the space. The auditors were provided with an example inspection summary report document associated with the inspection for the one leased location. The auditors were also provided with an example of the handwritten notes documented at the time of the inspection matching the summary report for the leased space. The handwritten inspection notes identified the date and room location of the inspection. While handwritten, these represent contemporaneous and accurate records of the inspections, and while additional documentation was offered, none was requested.

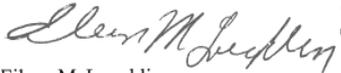
State Comptroller's Comment - During the audit, we received conflicting information from Buffalo officials regarding the leased space. For example, officials stated they could not obtain inventories from lessees as that information is proprietary, even though the lease specifically requires inventories. This is the same official who, per SUNY Buffalo's documentation, conducted the inspections. Also, SUNY did not provide a completed inspection report for its leased space—a blank copy of the standard inspection checklist was provided, accompanied by a handwritten note listing three room numbers. After reviewing the blank inspection checklist document, we found that, for the 15 areas that would be covered under the review, only 2 addressed hazardous chemicals, and those sections did not call on the inspectors to specifically inventory or review hazardous chemicals. Also, we were not provided with any policy or procedure on how frequently these inspections occur.

It should be noted that inspections of leased space were not incorporated in the procedures SUNY stated they followed to determine compliance under CFATS, dating back to 2008 when they were first required to report. Moreover, this information was not provided until after our draft report was issued and after we spoke with both Buffalo and SUNY officials several times regarding our concerns. When we reported on the various control weaknesses to Buffalo

officials, they were not open and responsive to the issues we raised. Although it is not standard practice to accept additional documentation after the draft report is issued, SUNY officials requested we take additional support, which had not been provided previously, into consideration. We agreed, and requested that officials include everything they wished us to consider in preparing the final report. The aforementioned documentation was all that was offered and provided.

In response to the recommendations, SUNY System Administration will continue to provide guidance and support to the campuses regarding risks related to hazardous materials and waste and compliance with the numerous regulations to which SUNY is subject. As there is no higher priority than the Safety of our Campus Community, the campuses will also continue to identify and assess the risks associated with hazardous materials and waste, design effective controls to mitigate those risks, and proactively prepare for emergencies, and balance those needs with the need for appropriate documentation and controls on purchasing systems.

Sincerely,



Eileen McLoughlin
Senior Vice Chancellor for Finance and Chief Financial Officer

Copy: Chancellor Johnson, Ms. Bee-Donohoe, Ms. Boyle, Ms. Garvey, Mr. Haelen, Mr. Megna, Ms. Montalbano, Mr. Dermody/Plattsburgh, Mr. Diamond/SUNY Poly, Mr. Kaczmarczyk/Stony Brook, Ms. Kearney-Saylor/University at Buffalo, Ms. Majak/New Paltz, Mr. Panico/Stony Brook, Mr. Squair/Oneonta, Ms. Morrell/OSC, Ms. Pratt/OSC