



STATE OF NEW YORK
OFFICE OF THE STATE COMPTROLLER

December 16, 2021

Major General Raymond F. Shields, Jr.
Adjutant General
Division of Military and Naval Affairs
330 Old Niskayuna Road
Latham, NY 12110-3514

Re: Lead Contamination of State Armories
Report 2021-F-22

Dear Major General Shields:

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, we have followed up on the actions taken by officials of the Division of Military and Naval Affairs to implement the recommendations contained in our audit report, *Lead Contamination of State Armories* (Report [2019-S-50](#)), issued September 3, 2020.

Background, Scope, and Objective

Historically, armories were built with an indoor firing range used for training purposes. The firing of weapons inside an indoor firing range resulted in lead dust accumulation throughout. Although indoor firing ranges in New York have not been used in more than 20 years, over time, the accumulation of lead dust has been transported to other areas of the armory on Soldiers' shoes; through the heating, ventilation, and air conditioning system; and as a result of weapons cleaning, maintenance, movement, or storage. Personal exposures to lead can occur through ingestion, inhalation, and dermal contact and can result in growth disorders as well as damage to the nervous system, kidneys, and reproductive system. Lead is considered a cumulative poison, as it is transported by the bloodstream and accumulates in the bones and organs. Exposure to lead is especially dangerous for young and unborn children.

The Division of Military and Naval Affairs (Division) is the State's executive agency responsible for managing New York's military forces, including the New York National Guard. The Department of Defense National Guard Bureau acts as a federal authority over the New York National Guard, and provides them with federal resources, including funding, regulatory guidance, and equipment. In September 2015, the National Guard Bureau's Army National Guard (ARNG) issued guidance to all states regarding a possible lead dust hazard in ARNG armories. The 2015 guidance issued a new acceptable level for surface lead dust of 40 micrograms per square foot ($\mu\text{g}/\text{ft}^2$). It required that all facilities be tested, and if lead surface contamination above the 40 $\mu\text{g}/\text{ft}^2$ threshold is confirmed, public rental of the armory must be immediately suspended and access to family members, the general public, and pregnant women no longer permitted. Once the armory is remediated and lead testing confirms compliance below 40 $\mu\text{g}/\text{ft}^2$, public access may resume. The guidance also required the implementation of safety measures such as posting warning signs and training all armory

employees in lead hazard awareness. ARNG supplemental guidance issued in December 2016 stipulated that the cost of lead remediation efforts would be 100% federally funded.

Our initial audit sought to determine whether the Division has implemented adequate controls to ensure all armories are tested for lead and are remediated where excessive levels are detected. The audit covered the period January 1, 2015 through March 12, 2020. We found that the Division had generally established adequate controls to ensure that the federally funded areas of all armories were tested for lead and that necessary steps were taken to address remediation when high levels were detected. Based on our site visits to a sample of 12 armories undergoing lead remediation, we found the Division was generally abiding by ARNG requirements to protect the health and safety of Soldiers and armory employees in these areas. While the Division's controls provided reasonable assurance that the public is not being unnecessarily exposed to lead at most armories, we found that, in certain instances, more could be done.

The objective of our follow-up was to assess the extent of implementation, as of December 3, 2021, of the five recommendations included in our initial audit report.

Summary Conclusions and Status of Audit Recommendations

The Division has made progress in addressing the issues identified in the initial audit report. Of the initial report's five recommendations, four have been implemented and one has been partially implemented.

Follow-Up Observations

Recommendation 1

Update non-military use agreements to disclose lead issues to armory occupants.

Status – Implemented

Agency Action – As of January 2021, Division officials have added a paragraph to their non-military use agreements stating that the Division represents and warrants that a leased space is free of defects and illegal conditions except those which the Division has notified the lessee of. Division officials advised that, due to the COVID-19 pandemic, all the State-owned armories have been closed to the public since March 2020 and no non-military use agreements have been executed. Therefore, the Division has not had the opportunity to enter into any new agreements that include this disclosure requirement.

Recommendation 2

Post signs warning of potential lead hazards in public areas.

Status – Implemented

Agency Action – Our initial audit noted that four armories with co-tenants – Jamaica, Saratoga, Park Avenue, and Harlem – did not have signs posted warning of potential lead hazards in public areas. Since then, the Division has posted lead hazard warning signs at the Jamaica and Saratoga Armories. According to Division officials, the other two armories – Park Avenue and Harlem – are fully remediated and therefore do not need signs. The Park Avenue Armory has been fully remediated since October 2020 and the Harlem Armory has been fully remediated since March 2021.

Recommendation 3

Disclose lead contamination to co-tenants of the armory when testing results return over the ARNG threshold.

Status – Partially Implemented

Agency Action – As previously indicated, Division officials advised that all armories have been closed since March 2020 due to COVID-19. Consequently, it has not been necessary to disclose lead contamination to co-tenants of the armory when testing results return over the ARNG threshold. However, when armories re-open in the future, such notification to co-tenants will be necessary. Division officials provided us with a transmittal sent by the New York ARNG to the Division in October 2021 that identified three armories with testing results over acceptable levels. The transmittal included a series of steps that the Division was directed to take, including notifying the Superintendent and Officer in Charge and Command of each armory of the test results. Division officials said the outlined steps are included in every transmittal of testing results sent to Division officials when lead testing results are over the threshold for an armory, whether there are co-tenants or not. According to Division officials, the steps serve as a template for the Division to follow to notify co-tenants of unacceptable test results. However, the Division does not have a written policy stating that the steps outlined in the ARNG transmittals are to be carried out by Division staff to ensure testing information is disclosed to armory co-tenants.

Recommendation 4

Obtain clarification from the ARNG regarding compliance requirements for non-military use areas of the armory buildings.

Status – Implemented

Agency Action – Since our initial audit, the Division has made several attempts to obtain clarification from the ARNG regarding compliance requirements for non-military use areas of armory buildings. Division officials indicated that, as of October 2021, the ARNG has begun conversations with the Division to address this issue.

Recommendation 5

Ensure that new staff receive lead hazard awareness training upon hire and that this training is provided to all staff annually.

Status – Implemented

Agency Action – According to Division officials, since our initial audit, all staff except those deployed have received lead hazard awareness training. Division officials explained that training was given in two rounds. In the first round, which ended in June 2021, Division training records showed that of 121 armory staff, 119 staff, including seven new hires, completed the training. The remaining two staff were deployed and therefore unable to take the training. Division officials also stated that, when the deployed staff return, they will be expected to complete the training. In the second round, which was completed in September 2021, Division officials stated that all nine Facilities and Maintenance staff completed the training. Division officials further advised that, in the future, only staff

assigned to armories with an ongoing lead dust concern will be required to take the lead dust awareness training annually.

Major contributors to this report were Karen Bogucki, CGFM; Michael Cantwell; and Kathy Gleason.

We would appreciate your response to this report within 30 days, indicating any actions planned to address the unresolved issues discussed in this report. We thank Division management and staff for the courtesies and cooperation extended to our auditors during this follow-up.

Very truly yours,

Bob Mainello, CPA
Audit Manager

cc: Amy McLaughlin, Director of Internal Audit