



October 12, 2023

Mr. Mark Wilson
Manager of Neighborhood & Commercial Development
City of New Haven, LCI
165 Church Street
New Haven, Connecticut 06512

**RE: Asbestos Abatement Project Monitoring Documentation
MLK – Tyler Street Site
16 Miller Street
New Haven, Connecticut
Eagle Project No. 23-003.13T1**

Dear Mr. Wilson:

Please find the asbestos abatement project monitoring documents associated with the asbestos abatement project completed for the undeveloped parcel at Ella T. Grasso Boulevard, Rev. Dr. Martin Luther King Boulevard (CT-34), Tyler Street and Legion Avenue in New Haven, Connecticut (the "Site"). The attached documents represent Eagle Environmental Inc.'s (Eagle) project monitoring data generated during the excavation and disposal of former demolition debris and urban fill materials containing non-friable Asbestos-Containing Materials (ACM) The following is a list of documents required to be maintained under the State of Connecticut Standard for Asbestos Abatement 19a-332a-4 Recordkeeping section for an asbestos abatement project and the responsible party:

19a-332a-4(b)(1):

The location and description of the project and the estimated amount and type of asbestos involved in each project:

This project included the removal and disposal of below grade asbestos-containing materials to support redevelopment of the Site. The Site consists of multiple vacant parcels of land on Ella T. Grasso Boulevard, Rev. Dr. Martin Luther King Boulevard, Tyler Street and Legion Avenue in New Haven, CT. The Site is generally accessible from Tyler Street. The Site was previously developed with a combination of residential and commercial structures, which had since been demolished. During initial soil remediation efforts, buried debris was observed and was subsequently tested and confirmed to be asbestos containing. Further investigations of the Site were performed to assess the former building locations and future footing/foundation locations for debris. Twenty-one test pits were excavated during the investigation with twelve containing at least one form of non-friable asbestos-containing material. This report documents the test pitting activities, asbestos bulk sample analysis, and removal and disposal of the non-friable asbestos-containing materials at the twenty-one test pit locations. Excavations were completed to end points where no visible debris was observed. A total of 4,300 tons of non-friable asbestos waste was generated during the project.

The ACM identified and removed from the Site generally consisted of the following:

- Asbestos cement board panels (Transite)

- Asbestos Flooring Materials
- Foundation Asbestos Damp Proofing
- Asbestos Pipe Tar
- Asbestos Orangeburg Piping
- Miscellaneous Paper Backing

Asbestos bulk sample laboratory reports and results are included in Appendix B.

ACMs were identified throughout the Site in the approximate footprints of the former residential and commercial structures. Refer to Site Plan 1 and 2 in Appendix D for the excavation locations and ACBM.

The location, type of asbestos removed and the estimated quantity in tonnage for each excavated area is identified on the Waste Shipment Matrix table within Appendix F.

19a-332a-4(b)(2):

The starting and completion dates of the project:

An initial 10 Day Notice was submitted to the State of Connecticut Department Public Health (CT DPH) on June 20, 2023; Due to Site preparation and removal of vegetation at the Site, the excavation was delayed. The excavation and asbestos removal work was initiated on July 5, 2023, and was completed on or about August 11, 2023. Weekly revisions to the notification were required to update quantities of ACM removed from the project Site. A total of six revisions were made.

The revised notifications include the following dates:

- July 5, 2023 – Materials: Flooring, Transite and Damp Proofing (unknown quantity)
- July 10, 2023 – Materials: Flooring, Transite and Damp Proofing (306.08 tons)
- July 17, 2023 – Materials: Flooring, Transite and Damp Proofing (719.14 tons)
- July 25, 2023 – Materials: Flooring, Transite and Damp Proofing (1,538.26 tons)
- July 31, 2023 – Materials: Flooring, Transite and Damp Proofing (2,254.31 tons)
- August 11, 2023 – Materials: Flooring, Transite and Damp Proofing (4,175 tons)

The initial notification and six revisions are included in Appendix E.

19a-332a-4(b)(3):

A summary of the procedures used to comply with Sections 19a-332a-5 to 19a-332a-12:

As stipulated in the approved Alternative Work Practice and in lieu of Subsections 19a-332a-5(b)(c)(d)(e)(h), 7(c) and Section 12 of the Standards for Asbestos Abatement (Standard) regulation the procedures used:

In accordance with the CT DPH approved AWP the asbestos abatement work of this project included the excavation and proper disposal of soil containing urban fill contaminated with ACBM. Please see below for a detailed description.

Project Approach – General Requirements

Soil impacted by asbestos was excavated in twelve (12) areas of the Site to accommodate the proposed redevelopment and construction. Prior to the start of work defined in the AWP, the top six (6) inches to one (1) foot of soil was removed and either stockpiled onsite or removed from the Site as directed by the Licensed Environmental Professional (LEP) for the project. Following

this non-asbestos work, exploratory excavation of soil at depths of 3' to 12' was performed in locations where preexisting structures were present in order to properly delineate soils contaminated with building debris that contains asbestos. In areas of the Site where building debris that contained asbestos was identified, the contractor set up regulated asbestos work areas. The regulated areas were large enough to allow for excavation of soil to the required depths and stockpiling.

In lieu of the requirements of Subsections 19a-332a-5(b)(c)(d)(e)(h), 7(c) and Section 12 of the *Standards for Asbestos Abatement (Standard)* regulation, the designer requested that the stockpiled asbestos-contaminated soil and building debris be loaded into lined and placarded waste containers within a regulated work area required by Subsection 19a-332a-5(a) of the *Standard* or directly live loaded into lined waste dump trailers for offsite disposal. The waste was removed and disposed of off-site at an approved landfill that could accept non-friable asbestos waste. Suspect building materials that were discovered during excavation were sampled and analyzed by Polarized Light Microscopy (PLM) to characterize the soil and debris and determine a disposal classification for the material.

Work Procedures

1. The CT DPH licensed Asbestos Contractor (AAC) was Red Technologies, LLC. and was the licensed contractor of record for the asbestos-contaminated soil/building debris removal and disposal. The AAC was responsible for preparation and submittal of the State asbestos abatement notifications and associated notification fees for the project.
2. The work areas were regulated with asbestos caution tape/orange construction fencing and erect asbestos signs which meet the specifications of 29 CFR 1926.1101(k)(7)(ii)(A) at all approaches to each work area once the abatement areas are established. Signs were posted a sufficient distance from the work area to permit a person to read the sign and take precautionary measures to avoid exposure to asbestos. Signs were posted in 25-foot intervals on the caution tape at a minimum.
3. The AAC established a remote worker decontamination system at the Site in accordance with the provisions of Section 19a-332a-6 and the US Department of Labor Occupational Safety and Health Administration (OSHA) regulations 1926.51(f)(4)(ii). All wastewater associated with the decontamination system was filtered prior to discharge in accordance with the provisions of Subsection 19a-332a-5(i).
4. The operator of the excavator, loader or other heavy equipment that was used inside the regulated area had a minimum of 32-hour Asbestos Worker course. The operator(s) also meet the OSHA respiratory protection and medical surveillance requirements.
5. All asbestos abatement workers and supervisors were trained and licensed in accordance with 20-440-1 through 20-440-9 of the Regulations of the Connecticut State Agencies (RCSA). Training and licensing documentation was maintained on Site at all times during the work.
6. Existing stockpiled soil/debris was continually wetted during loading operations in a manner consistent with the requirements of 40 CFR, Part 61, Subpart M, the National Emission Standards for Hazardous Air Pollutants (NESHAP). All poly sheeting and stockpile soil/debris was disposed of as non-friable asbestos waste.
7. Soil/debris from the trench area was continually wetted during excavation, temporarily stockpiled on poly sheeting, rewetted after stockpiling and covered with poly sheeting, surrounded by hay bales to prevent run-off and demarcated by asbestos caution tape and

OSHA warning signs until being loaded into lined waste containers for disposal as non-friable asbestos waste. All poly sheeting and hay bales was disposed of as non-friable asbestos waste as well.

8. Unexcavated and stockpiled waste was continually wetted during excavation and loading operations in a manner consistent with the requirements of 40 CFR, Part 61, Subpart M, the National Emission Standards for Hazardous Air Pollutants (NESHAP).
9. Wetting was sufficient to control visible emissions during excavation and waste loading activities. The AAC utilized a water tank truck equipped with misting lines at the base of the truck to mist the soils throughout the Site periodically each day to control dust emissions. Each day the AAC ensured that no standing water was generated during wetting operations.
10. Large pieces of concrete or wood timbers that were easily recognized as non-ACM and that could be effectively cleaned by wet cleaning techniques were segregated from the asbestos waste. The on-site Asbestos Project Monitor (APM) visually inspect segregated non-ACM waste to ensure no visible residue was present before it was segregated for on-Site reuse, recycling, or offsite disposal as solid waste.
11. Prior to loading waste containers/dump trailers with asbestos-containing waste, each waste container/trailer was lined with a leak tight liner consisting of a minimum of two (2) layers of 6 mil polyethylene sheeting. Liners were of sufficient size so they could be fully sealed across the top of the load. Asbestos waste was not to be compacted. Each waste trailer was posted with asbestos warning signs during loading operations.
12. The APM inspected each waste containers/trailers during the course of waste loading operations to ensure that the integrity of the lining was maintained. If it was determined that the integrity of the lining could not be maintained, a suitable leak-tight liner was substituted.
13. Each load was sealed labeled with asbestos waste generator labels, Department of Transportation No. 9 labels and OSHA warning labels. The labels were clearly visible to any person opening or removing the transport tarp.
14. All asbestos-containing waste was disposed of as regulated asbestos-containing non-friable asbestos waste. The landfill that accepted the waste was permitted to accept the waste stream for the project.
15. A waste tracking log was maintained by the AAC and the APM to document each load of waste leaving the Site. The waste tracking log included the following information at a minimum:
 - a. Waste Shipment Record Number
 - b. Load number
 - c. Date
 - d. Estimated volume of waste
 - e. Landfill Destination
16. The loading activities were monitored on a full-time basis by the APM. The APM collected representative daily air samples at the boundary of the regulated area to document airborne fiber concentrations both upwind and downwind. Air samples were analyzed by the NIOSH 7400 method. Fiber concentrations were maintained below 0.010 f/cc.

17. All equipment and tracking pads used during the loading operations were decontaminated prior to leaving the regulated area.

Asbestos warning signs were placed at all approaches to each excavated work area. The work area was regulated to authorized personnel only. A log of access into the work area was maintained by the Asbestos Contractor's competent person. The contractor shall provide the Owner with a copy of the access logs.

Asbestos removal was performed utilizing wet methods. Mechanical methods of removal were performed. Asbestos building debris was excavated and placed on poly sheeting within the regulated area and covered with poly sheeting secured in place at the completion of each shift. During waste removal activities, the poly sheeting covering was removed from the stockpiled debris. The debris was rewetted and live loaded into double lined dump trailers. The liners were sealed shut prior properly labeled for disposal prior to transport to the landfill. At the completion of each shift of loading the asbestos debris was recovered with poly sheeting secured in place.

Following asbestos removal activities, a final visual inspection was performed by a State of Connecticut licensed Asbestos Project Monitor. The final visual inspection was performed to evaluate the completeness of the removal of visible asbestos-containing building materials within each excavated pit. Following a successful final visual inspection of the excavated pit down to a pre-determined pit depth (identified on Site development plans), the work areas were deregulated. Additional building debris may be present beyond the specified and excavated depths.

A copy of the approved Alternative Work Practice application and approval letter is provided in Appendix A.

19a-332a-4(b)(4):

The name and address of the authorized asbestos disposal facility and verification from the authorized asbestos disposal facility indicating the amount of asbestos received for disposal:

Approximately four thousand three hundred (4,300) tons of building debris and urban fill material contaminated with non-friable asbestos-containing building materials waste was transported to the Minerva Enterprises Landfill, 900 Minerva Road Waynesburg, OH. The waste was delivered to the landfill under one hundred twenty (120) individual waste shipment records. Copies of each waste shipment record signed by the landfill and associated weight scale tickets are included in Appendix F. A waste shipment matrix table summarizing the type of waste, approximate quantity of each load, excavation location and date with all excavated materials, quantities, locations and excavated dates is also provided in Appendix F.

19a-332a-4(b)(5):

The methodology and results of all air sampling conducted during the abatement process:

During excavation and waste loading operations, background air monitoring was conducted by Eagle at upwind and downwind locations adjacent to the regulated asbestos work area. Samples were collected to evaluate airborne fiber concentrations outside the regulated work area. The air samples were analyzed by Phase Contrast Microscopy (PCM) utilizing the NIOSH 7400 Method. Air samples were analyzed by a trained microscopist listed on the American Industrial Hygiene Association (AIHA) Asbestos Analyst Registry (AAR). Eagle is a CT DPH approved laboratory for PCM air sample analysis.

The concentration of airborne fibers in the air samples were maintained below the USEPA and State of Connecticut DPH re-occupancy air clearance level of 0.010 f/cc throughout the course of the project.

The background air monitoring data is included in Appendix C with the daily project monitoring documents. Background air monitoring locations are identified on Site Plan – 3 Air Sampling Plan in Appendix D

19a-332a-4(b)(6):

A complete list of the names and social security numbers of asbestos abatement workers, asbestos abatement site supervisors and other agents involved in the asbestos abatement activity and working for the asbestos abatement contractor on that project and individuals entering the enclosed work area;

Eagle's project monitor reviewed the abatement worker and supervisor training certificates, CT DPH licenses, medical clearance letters, and respiratory fit test records for each individual who performed asbestos abatement work on the Site. The abatement workers' and supervisors training certificates, licenses, medical clearance letters and respiratory fit-test records have been provided by the Asbestos Abatement Contractor and are included in Appendix G.

19a-332a-4(b)(7):

A log of control of access to the work area:

Eagle has requested copies of the regulated work area access control logs from the asbestos contractor but has not received them to date. Eagle will continue to pursue the work area access control logs from the contractor and will provide them for inclusion in this report once received. Once received the access logs shall be placed in Appendix J.

19a-332a-4(b)(8):

All records for compliance with the requirements of OSHA, Conn OSHA, DEEP, EPA regulations:

At the request of the Asbestos Contractor, Eagle collected and analyzed personal air samples on August 2, 4, 9, 10 and 11, 2023. Eagle collected and analyzed the air samples and provided the data to the Asbestos Contractor's for their asbestos competent person to evaluate exposure levels and recommend appropriate personal protective equipment including respiratory protection.

OSHA personal air monitoring data has been provided and is included in Appendix H.

19a-332a-4(b)(9):

Documentation to demonstrate compliance with the post-abatement re-occupancy criteria established by Section 19a-332a-12:

Re-occupancy air monitoring was not required for this exterior asbestos removal project. Eagle performed a final visual inspection following excavation of the asbestos building debris prior to the excavated area being covered with geotextile fabric and gravel. A visual inspection of ground surfaces was also performed following the loading of all asbestos building debris into transport vehicles. Copies of the final visual inspection forms are provided in Appendix G.

Other Regulatory Requirements:

19a-332a-3(a):

The asbestos abatement contractor, the facility owners or any person who will be conducting demolition activities shall notify the Commissioner before engaging in any asbestos abatement which involves more than ten (10) linear feet or more than twenty-five (25) square feet of asbestos-containing material or before engaging in the demolition of any facility.

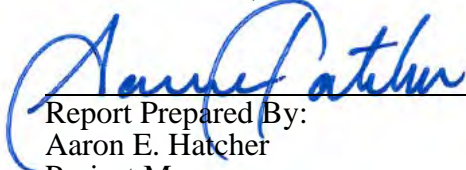
The Asbestos Abatement Contractor's asbestos abatement notifications are provided in Appendix E.

For NESHAP facilities, the US EPA requires a notification for renovation and demolition activities which impacts greater than one hundred sixty (160) square feet, two hundred sixty (260) linear feet or thirty-five (35) cubic feet of Regulated Asbestos-Containing Materials (RACM) or greater, and for demolitions below the threshold for notification, including when no asbestos is present. A NESHAP notification was not required for this project since no RACM above notification thresholds was removed.


The building owner/operator must maintain this report that contains important asbestos abatement documentation for not less than thirty (30) years.

Please do not hesitate to contact us if you have any questions regarding the contents of this report.

Sincerely,
Environmental, Inc.



Report Prepared By:
Aaron E. Hatcher
Project Manager



Report Reviewed By:
Peter Folino
President

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