

# **NEPA ENVIRONMENTAL REVIEW REPORT**

**Community Development Block Grant – Disaster Recovery  
Owner Occupied Rehabilitation and Rebuilding Program**

**Site ID No. 1476  
29 Lincoln Avenue  
Norwalk, Connecticut**

**June 2014**

Ref. No. 104318/7/R01

Prepared for:

Merritt Construction Services, Inc.  
1177 High Ridge Road  
Stamford, CT 06905

Prepared by:



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## **1.0 - INTRODUCTION**

Triton Environmental, Inc. (Triton) has prepared this National Environmental Policy Act (NEPA) evaluation for the property located at 29 Lincoln Avenue in Norwalk, Connecticut (the site) on behalf of Merritt Construction Services, Inc. (Merritt). The location of the site is depicted on Figure 1. The NEPA review is being prepared as a required component of the Community Development Block Grant – Disaster Recovery (CDBG-DR) program for properties impacted by Superstorm Sandy. The CDBG-DR program, run by the U.S. Department of Housing and Urban Development (HUD), provides funding to address repairs to certain impacted Connecticut properties. In order to receive funding from HUD, an environmental review of applicable properties is required.

The project is considered “categorically excluded” from NEPA. However, the project is still subject to additional statutory requirements. As such, Triton has completed the Statutory Checklist for state and federal laws, regulations, and Executive Orders (other than NEPA) in accordance with 24 CFR 58.5 and 58.6. In addition, Triton has completed specific testing at the site, as described in detail in this report.

### **1.1 - Proposed Site Modifications and Work Zone**

The proposed work plan for the 29 Lincoln Avenue property includes replacement of the residential structures roof. As such, the work zone as described by Merritt consists of the entire roof system.

## **2.0 - PRELIMINARY INSPECTION AND RESOURCE REVIEW**

### **2.1 - Preliminary Site Inspection**

As a preliminary step in the NEPA evaluation, Triton completed an initial inspection of the site, focused on the work zone described in Section 1.1. The inspection was completed on March 5 2014, by Mr. Brian Sirowich of Triton, accompanied by Andrew Peters of Merritt.

During the inspection, the following items were noted within the work zone that required further evaluation:

- Suspect asbestos containing materials;
- Potential lead based paint;
- Potential PCB containing sealants/caulk materials;
- Potential radon; and
- Potential mold.

Photographs of the work zone area are included as Appendix B.

### **2.2 - Preliminary Checklist Review**

Following the initial site inspection, a preliminary statutory checklist review was completed in order to determine which items in the checklist did not apply to the site, and which items required additional evaluation and/or on-site surveys. As a component of the preliminary checklist review, Triton reviewed readily available resource maps, as well as online environmental databases. Copies of the maps reviewed are provided in Appendix A.

Based on the site inspection and the review of applicable public resource materials, each of the items identified on the Statutory Checklist have been assigned a code of “Not Applicable to This Project,” with the exception of the items identified below:

### **2.2.1 - Flood Management/Coastal Zone Management Issues (Items 2, 4, 14A and 14E)**

The site is located within the coastal zone boundary. As such, a Coastal Area Management (CAM) Site Plan Review Application is required to be submitted to the Norwalk Zoning Commission (unless otherwise exempted). In addition, given that this is part of a State project, a Flood Management Certificate (FMC) may need to be applied for and approved by the Department of Energy and Environmental Protection, unless otherwise exempted. It is our understanding that the DEEP is developing a General Permit for CDBG-DR projects.

### **2.2.2 - Lead Based Paint (Item 13C)**

Based on the site inspection, potential lead based paint was observed within the work zone.

### **2.2.3 - Asbestos Containing Materials (Item 13D)**

Based on the site inspection, potential asbestos containing materials was observed in the work zone.

### **2.2.4 - Radon (Item 13E)**

Based on the Indoor Radon Potential Map of Connecticut published by the EPA (1997), the site is located in a moderate to high radon potential zone.

### **2.2.5 - Mold (Item 13F)**

Based on the site inspection, mold is present within the work zone.

## **2.3 - Additional Items (Not Included in Statutory Checklist)**

Although not specifically listed on the Statutory Checklist, Triton identified the following additional potential issues associated with the project:

- Based on the site inspection, potential PCB containing building materials were observed in the work zone.

### 3.0 - WORK ZONE SURVEYS AND RESULTS

Based on the preliminary inspection of the work zone, Triton identified several items requiring further testing and evaluation as part of the environmental review.

#### 3.1 - Lead Based Paint Testing

The structure was constructed prior to 1978. As such, preliminary testing for the potential presence of lead in painted surfaces specifically within the work area was evaluated using X-Ray Fluorescence (XRF) testing on April 8, 2014. Painted surfaces on both interior and exterior building material were tested. The survey was completed by a Connecticut certified lead paint inspector. The surveys were completed using a Niton XL-300A XRF instrument.

XRF readings were taken at a total of 11 locations of six distinct building materials on the exterior of the structure. Appendix C contains a spreadsheet summarizing the results. The results of the XRF testing indicate that several of the exterior painted building materials tested contained lead concentrations greater than the action level of 1 mg/cm<sup>2</sup> (0.5% by weight), including the brown wooden siding on the southern side of the structure and yellow trim on the eastern and western sides of the structure. The materials containing lead based paint above the action level are summarized in the table below. The approximate locations of these materials are shown on the Figure 2 diagram.

Material	Location	Side	Color	Approx. Quantity	Concentration (mg/cm <sup>2</sup> )
Trim	Eastern and western sides	A, C	Yellow	24 LF	15.3 and 19.5
Wooden siding	Southern exterior wall	B	Brown	800 SF	1.7 and 4.2

It is anticipated that replacement of the roof will not disturb the lead based paint, and wastes containing lead based paint will not be generated during the renovations. As such, it does not appear that abatement of lead based paint will be needed. However, if renovations disturb these materials, precautions should be taken to protect worker health and any lead containing wastes should be characterized and disposed of properly.

It is currently anticipated that the renovation work at the site will exceed \$25,000.00 in cost. Therefore, in accordance with the HUD Lead Safe Housing Rule, a risk assessment will be performed (to be completed separately).

### 3.2 - Asbestos Sampling

An asbestos survey was completed for the work zone on April 8, 2014 in accordance with Environmental Protection Agency (EPA) and State of Connecticut regulations. A walk-through and inspection of the building was conducted by a Connecticut licensed inspector to identify suspect ACM. Once the location and quantity of each suspect ACM was documented, up to three representative samples of each suspect material was collected.

In accordance with EPA protocols, the samples of each suspect ACM were submitted to a state licensed laboratory and analyzed via the PLM method (EPA 600/R-93/116 Method). To avoid unnecessary sample analysis, the laboratory did not analyze duplicate homogeneous samples once asbestos was detected at concentrations greater than 1% in a related sample.

A total of 16 samples were collected from six homogeneous building materials within the work zone. The results indicated that asbestos greater than 1% was identified in certain building materials, which are summarized in the following table. As shown below, tar present at roof seams and transitions contain approximately 10% chrysotile.

Material	Location	Approx. Quantity	Condition	% Chrysotile
Roof tar	Roof	600 LF	Poor	10%

A roster of the building materials suspected of containing asbestos (and subsequent samples) is attached as Appendix C. The laboratory analytical report is attached as Appendix D.

### 3.3 - Radon Sampling

Radon gas is a product of the decay series that begins with uranium. It is produced directly from radium, which can be commonly found in bedrock that contains black shale and/or granite. Radon gas can migrate through the ground and enter buildings through

porous concrete or fractures and tends to accumulate in poorly ventilated basements. Long-term exposure to radon has been associated with lung cancer.

Triton conducted a radon assessment of the first floor level at the site. Two radon test kits were deployed at the lowest level of the building on April 8, 2014 and allowed to sample radon levels for approximately 48 hours. The EPA has established the guideline of 4 pCi/L as an “elevated” indoor radon level. The laboratory indicated results of 0.7 pCi/L and 0.3 pCi/L for the subject site. Laboratory analytical results are attached in Appendix D.

### 3.4 - PCB Sampling

Caulk/sealant sampling was conducted by Triton on April 8, 2014. Prior to sampling, Triton conducted a visual survey of the work zone for potentially PCB containing caulks and sealants. A sampling plan was then developed in order to collect a set of samples that were representative of the various materials observed.

The following table summarizes the various types of materials that were observed, and the number of samples that were collected from each material type.

Sealant Material	Location	Area	Number of Samples Collected
Roof tar	Roof	600 LF	1

As indicated, one sample was collected from the work zone that is believed to provide a representative evaluation of the potentially PCB-containing material observed. The sample was collected using hand tools (e.g. utility knife). Sampling was completed for purposes of: (1) identifying representative samples, (2) visually inspecting the windows miscellaneous homogeneous materials, and (3) obtaining representative samples for laboratory analyses. The sample was analyzed for PCBs by EPA Method 8082 (using the soxhlet extraction method).

PCBs were not detected in the sample (S-1) collected from roof tar. The laboratory analytical testing data is provided in Appendix D.

### **3.5 - Mold Inspection**

Triton completed a visual mold inspection of the work area on April 8, 2014. Mold was observed on various wooden surfaces through the attic including the wooden plank flooring and the solid wooden sheathing roof materials. Photographs of the apparent mold are provided in Appendix B. Triton was not allowed access to any other interior areas of the dwelling other than the attic during the site inspection. As such, mold may be present in areas of the attic or the remainder of the dwelling that could not be observed during the inspection (i.e. behind walls).

## **4.0 - CONTRACTOR BID ITEMS**

Triton has completed building materials surveys within the proposed work area described by Merritt that have resulted in the identification of asbestos containing roof tar and mold on wooden surfaces throughout the attic. The contractor will be required to address these items in accordance with all appropriate regulatory requirements and industry standards and guidelines as described below.

### **4.1 - Asbestos Abatement**

Approximately 600 linear feet of asbestos containing tar was identified in seams and transitions on the roof of the dwelling. Due to the replacing of the roof, this material will require removal by a licensed asbestos abatement contractor. All abatement activities must be conducted in accordance with local, state, and federal regulations including, but not limited to, project design, containment structures, air monitoring, and clearance sampling by a licensed project monitor. Waste materials must also be properly disposed of at an appropriately permitted disposal facility. The abatement contractor must provide credentials/adequate qualification documentation and a work plan for abatement work with its bid for review by Merritt and Triton.

### **4.2 - Mold Abatement**

Mold was observed on various wooden surfaces throughout the attic and may be present in other interior areas that could not be observed during the inspection (i.e. behind walls or in finished spaces of the dwelling). To protect occupant and worker health, the mold within the work zone must be abated. Any porous materials containing visible mold that are encountered during the renovation should be removed in accordance local, state, and federal regulations including, but not limited to, with the guidelines put forward in the most recent version of the *Institute for Inspection, Cleaning, and Restoration Certificate (IICRC) Standard and Reference Guide for Mold Remediation* as well as the *Connecticut Guidelines for Mold Abatement Contractors*. The abatement contractor must provide credentials/adequate qualification documentation and a work plan for abatement work with its bid for review by Merritt and Triton. Pre-abatement air testing will be completed by

Triton to establish a baseline prior to abatement work. Clearance testing requirements will be determined by Merritt, the homeowner, and the State of Connecticut.

The above items are intended to provide professional contractors with the basis with which to provide a bid for abatement services and are not intended to serve as a formal bid specification or design documents.

## 5.0 - CONCLUSIONS AND RECOMMENDATIONS

Based on the results of NEPA evaluation and specific on-site surveys, it has been determined that this project cannot convert to Exempt per § 58.34(a)(12) at this time because one or more statutes/authorities require consultation or mitigation, as follows:

1. Flood Management/Coastal Zone Management Issues – the site is located within the coastal zone boundary. As such, a Coastal Area Management (CAM) Site Plan Review Application is required to be submitted to the Norwalk Zoning Commission (unless otherwise exempted). In addition, given that this is part of a State project, a Flood Management Certificate (FMC) or associated General Permit will need to be applied for and approved by the Department of Energy and Environmental Protection, unless otherwise exempted.
2. Asbestos Containing Materials (ACM) - Based on the results of the asbestos survey and testing, the tar on the roof was identified as an ACM in the roof. The tar on the roof contains asbestos greater than 1%. Due to the nature of the project, it appears that the asbestos containing tar will have to be removed by a qualified contractor. Additional suspect ACM may be encountered during renovations in spaces that were inaccessible or not apparent during the inspection such as within walls, beneath other layers of flooring, etc. As such, Triton recommends that a competent person be present during the renovation work who is capable of identifying additional suspect materials. Any such suspect materials encountered during the demolition must be sampled, tested, and if necessary, abated.
3. Mold – Mold was observed on various wooden surfaces throughout the attic and may be present in areas that could not be observed during the inspection (i.e. behind walls or alternate finished areas). Additional mold impacts surfaces may be encountered during renovation in spaces that were inaccessible or not apparent during the inspection. To protect occupant and worker health, the mold must be abated by a qualified contractor. Pre-abatement air testing will be completed by Triton to establish a baseline. Triton recommends that a competent person be present during the renovation work who is capable of identifying potential additional suspect materials. General precautions should be taken during the renovation process to avoid the potential spread of mold spores and to mitigate health and safety concerns. Clearance testing will be completed (and compared against the baseline) to evaluate the efficacy of the abatement.

The above items should be completed such that the project can transition to Exempt status per § 58.34(a)(12).

## 6.0 - LIMITATIONS

The tasks completed were performed specifically within the work zone that has been specified to Triton by the Merritt project manager (such zone may change as the project develops and re-inspection by Triton will be required). In addition, the scope of work was limited to those items that are part of the NEPA review process. As such, Triton provides no warranty or opinion regarding conditions outside of the work area, or related to additional environmental conditions outside of the NEPA review process.

In some circumstances, Triton has relied upon available resource maps and/or visual observations to evaluate specific statutory items. In these circumstances, actual surveys have not been conducted. For example, a full wetland delineation and elevation survey with respect to the coastal jurisdiction line has not been completed. Rather, Triton has relied upon available inland wetland and tidal wetland maps (and visual observations) to complete this review.

The completion of the NEPA screen process does not constitute completion of an Environmental Assessment (EA) or a Phase I Environmental Site Assessment.

The ACM, LBP, radon, mold, and PCB inspections were completed for accessible materials within the work zone only (as defined in Section 1.1) and involved the use of selective sampling and non-destructive sampling techniques to access visible suspect materials. A lead risk assessment in accordance with 24 CFR Part 35 has yet to be performed. Although efforts were made to diligently inspect all windows and other building materials, in completing the material survey it should be noted that additional suspect materials or mold may be present behind or beneath building components that were not readily accessible. If suspect, ACM, LBP, and PCB containing materials are encountered during replacement activities, work should be halted until the materials are submitted for laboratory analysis. If mold is identified during replacement activities, it should be abated. As such, Merritt should consider having an environmental professional familiar with the project on site to aid in identifying and sampling potential materials. In most instances, CT DPH does not recommend analytical testing of the air or surfaces to find out how much or what kind of mold is present. As such, Triton's scope of work has focused on a visual and olfactory evaluation. If requested by the homeowner, such testing can be provided both prior to, and following abatement.

In completing the survey, Triton has relied upon information provided by the client and subcontractors (i.e., testing laboratories). Triton provides no warranty regarding the accuracy and completeness of the information provided by subcontractors. A statistical methodology was used during the materials sampling (consistent with the 5% guidance recommended by EPA). Since not all materials were sampled, Triton cannot guarantee that additional materials are not present which contain higher concentrations. Without additional samples of embedded window materials for PCBs, the need for future EPA involvement cannot be confirmed.

All abatement/renovation activities should be conducted in accordance with all applicable local, state, and federal regulations and Occupational Safety and Health Association (OSHA) guidelines.

This report is intended solely to summarize the results of the ACM, PCB, radon, and XRF lead testing, and mold inspection conducted at the site. This report is not intended to serve as a technical specification for abatement and should not be used as such. All abatement activities should be conducted in accordance with applicable local, state, and federal regulations and OSHA guidelines.

This NEPA Report was prepared specifically for Merritt Construction Services, Inc. and the State of Connecticut. No person or other body shall be entitled to rely upon or use information presented in this report without written consent of Merritt Construction Services, Inc., the State of Connecticut, and Triton Environmental, Inc.

## 7.0 - SIGNATURES OF REPORT AUTHORS

This report has been prepared by Triton Environmental, Inc. The names listed below are the principal authors of this report. Requests for information regarding the content of this report should be directed to those individuals.



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*David Vasiliou, LEP*  
*Senior Project Manager*



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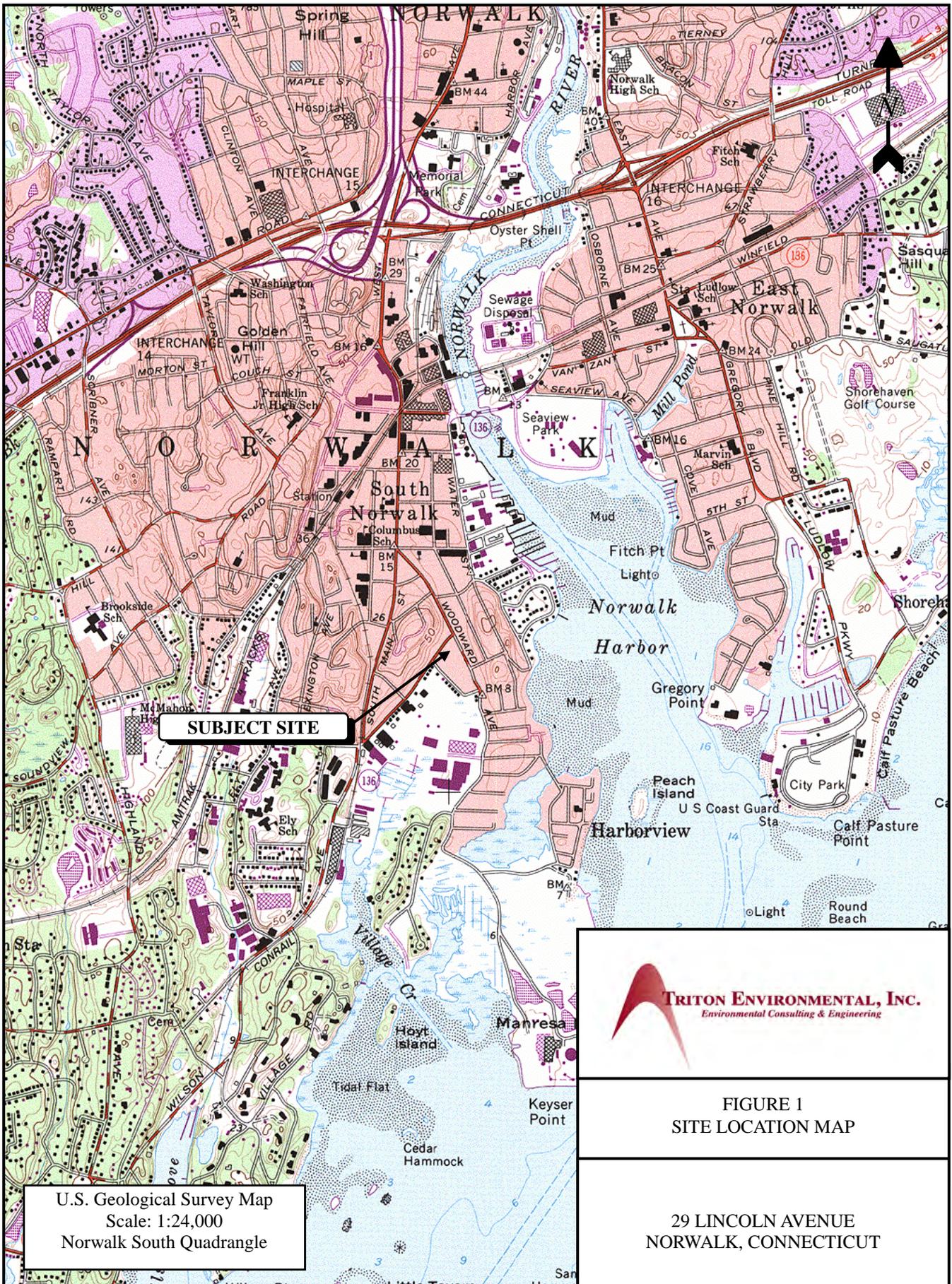
*J. Carver Glezen, LEP*  
*Senior Vice President*



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*Christopher E. Marchesi*  
*President*

## **FIGURES**



**SUBJECT SITE**

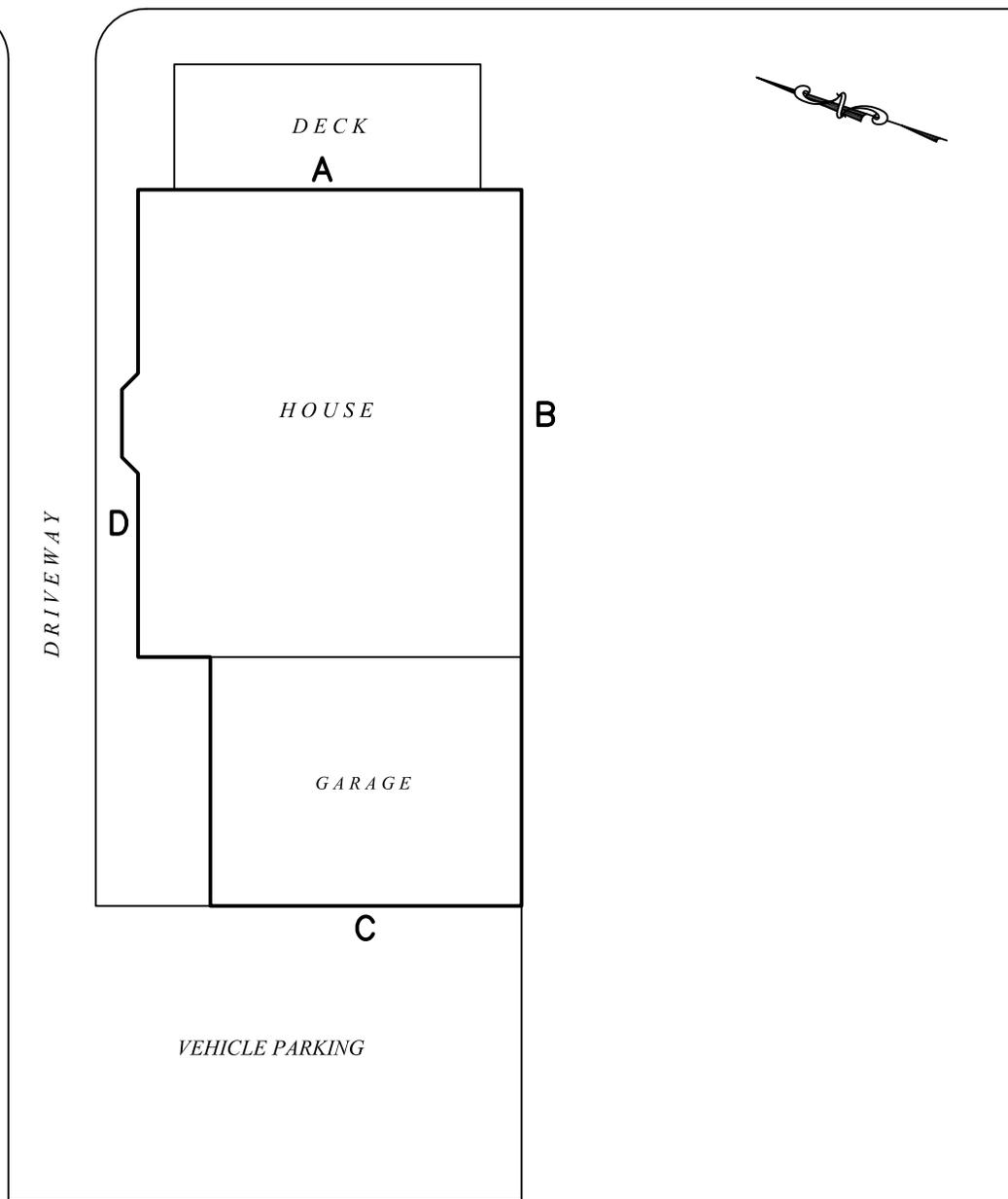
U.S. Geological Survey Map  
 Scale: 1:24,000  
 Norwalk South Quadrangle



**FIGURE 1**  
**SITE LOCATION MAP**

29 LINCOLN AVENUE  
 NORWALK, CONNECTICUT

LINCOLN AVENUE



**NOT TO SCALE – SKETCH ONLY  
FOR ILLUSTRATIVE PURPOSES**

NOTES:

1. THE LOCATION OF ALL STRUCTURES, EQUIPMENT, DELINEATIONS AND OTHER FEATURES PRESENTED ON THIS DRAWING SHOULD BE CONSIDERED APPROXIMATE. THIS DRAWING SHOULD ONLY BE USED FOR GENERAL PRESENTATION PURPOSES AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES. TRITON MAKES NO WARRANTY AS TO THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION CONTAINED IN THIS DRAWING, AND THE USER ASSUMES ALL RISK OF LOSS TO PERSONS AND PROPERTY FROM RELIANCE THEREON.



**TRITON ENVIRONMENTAL, INC.**  
*Environmental Consulting & Engineering*

385 Church Street, Suite 201 • Guilford, Connecticut 06437 • 203.458.7200

FIGURE 2

SITE DIAGRAM

APPLICANT # 1476  
29 LINCOLN AVENUE  
NORWALK, CONNECTICUT

DRAWN BY: RGM

APPROVED BY: BNS

DATE: 5/8/14

SCALE: N.T.S.

FILE No.: 104318-29LINCOLN

**Appendix A**  
**Public Resource Materials**



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 COMMERCIAL STREET, SUITE 300  
CONCORD, NH 3301  
PHONE: (603)223-2541 FAX: (603)223-0104  
URL: [www.fws.gov/newengland](http://www.fws.gov/newengland)

Consultation Tracking Number: 05E1NE00-2014-SLI-0285

May 29, 2014

Project Name: #1476 , 29 Lincoln Ave., Norwalk

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior  
Fish and Wildlife Service

Project name: #1476 , 29 Lincoln Ave., Norwalk

## Official Species List

### Provided by:

New England Ecological Services Field Office  
70 COMMERCIAL STREET, SUITE 300  
CONCORD, NH 3301  
(603) 223-2541  
<http://www.fws.gov/newengland>

**Consultation Tracking Number:** 05E1NE00-2014-SLI-0285

**Project Type:** \*\* Other \*\*

**Project Description:** Repair/replace roof, mold abatement



United States Department of Interior  
Fish and Wildlife Service

Project name: #1476 , 29 Lincoln Ave., Norwalk

### Project Location Map:



**Project Coordinates:** MULTIPOLYGON (((-73.416888 41.0914261, -73.4124688 41.0916048, -73.4124688 41.0881116, -73.4168022 41.0880946, -73.416888 41.0914261)))

**Project Counties:** Fairfield, CT



United States Department of Interior  
Fish and Wildlife Service

Project name: #1476 , 29 Lincoln Ave., Norwalk

## Endangered Species Act Species List

There are a total of 0 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed on the **Has Critical Habitat** lines may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

There are no listed species identified for the vicinity of your project.



United States Department of Interior  
Fish and Wildlife Service

Project name: #1476 , 29 Lincoln Ave., Norwalk

## **Critical habitats that lie within your project area**

There are no critical habitats within your project area.



Department of Economic and  
Community Development

Connecticut  
still revolutionary

1476 JO

May 28, 2014

Ms. Hermia M. Delaire  
Program Manager  
CDBG - Sandy Disaster Recovery Program  
Department of Housing  
505 Hudson Street  
Hartford, CT 06106

Subject: 29 Lincoln Avenue  
Norwalk, CT

Dear Ms. Delaire:

The State Historic Preservation Office has reviewed the information submitted for the above-named property pursuant to the provisions of Section 106 of the National Historic Preservation Act of 1966.

The property located at 29 Lincoln Avenue appears to be eligible for listing on the National Register of Historic Places as a contributing resource to a potential historic district.

Your work plan dated 3/13/14 includes roof replacement. The SHPO has determined that the undertaking as proposed will constitute no adverse effects to historic resources.

The State Historic Preservation Office appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act and Section 106 of the National Historic Preservation Act. For further information please contact Todd Levine, Environmental Reviewer, at (860) 256-2759 or [todd.levine@ct.gov](mailto:todd.levine@ct.gov).

Sincerely,

Mary B. Dunne  
Deputy State Historic Preservation Officer

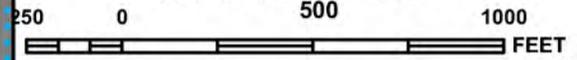
State Historic Preservation Office

One Constitution Plaza | Hartford, CT 06103 | P: 860.256.2800 | [Cultureandtourism.org](http://Cultureandtourism.org)

*An Affirmative Action/Equal Opportunity Employer An Equal Opportunity Lender*



MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0533G

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**FAIRFIELD COUNTY,**  
**CONNECTICUT**  
 (ALL JURISDICTIONS)

**PANEL 533 OF 626**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
NORWALK, CITY OF	090012	0533	G

-NOTE-  
 THIS MAP INCLUDES BOUNDARIES OF THE COASTAL BARRIER RESOURCES SYSTEM ESTABLISHED UNDER THE COASTAL BARRIER RESOURCES ACT OF 1982 AND/OR SUBSEQUENT ENABLING LEGISLATION.

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



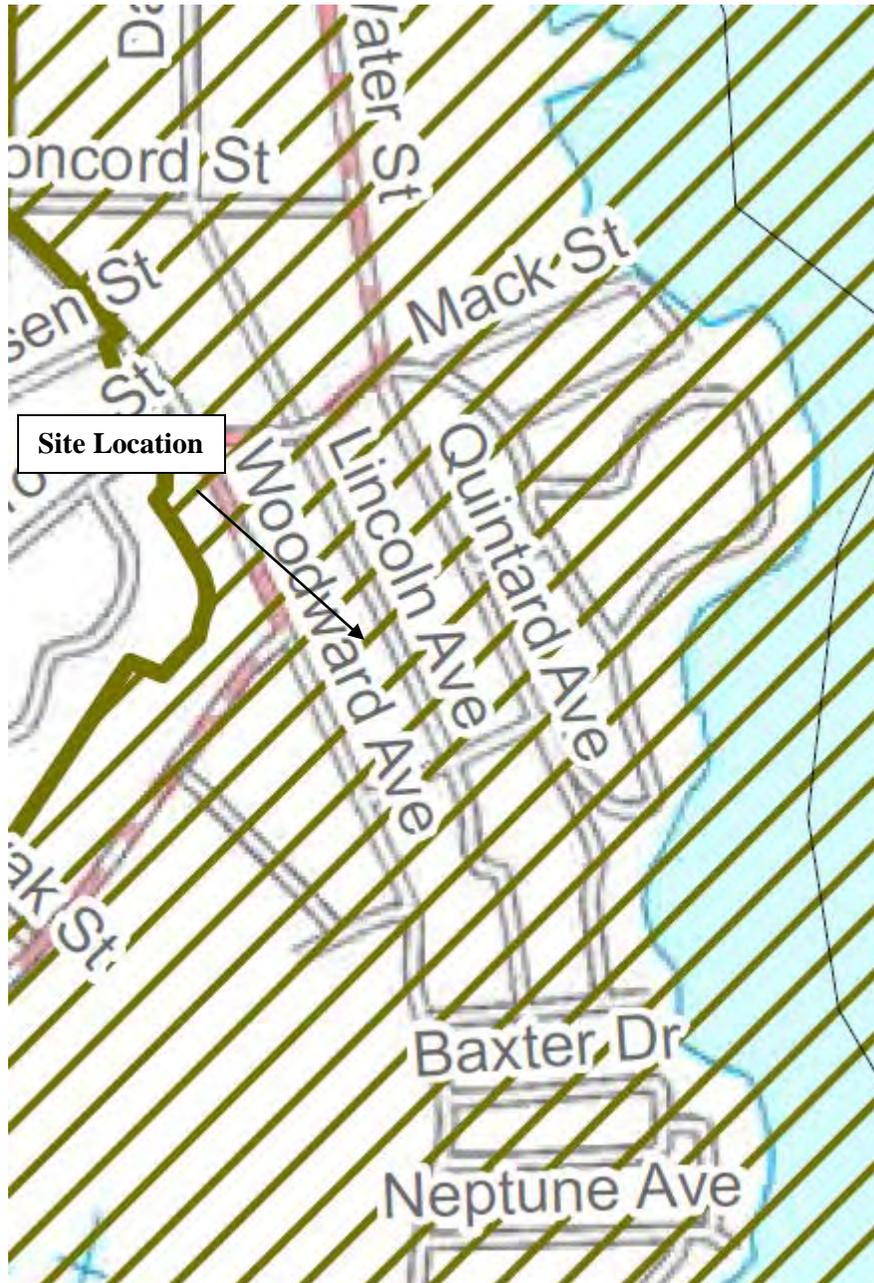
**MAP NUMBER**  
**09001C0533G**  
**MAP REVISED**  
**JULY 8, 2013**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

**Coastal Boundary Map  
(January 2013)**

29 Lincoln Ave  
Norwalk, CT



 Coastal Boundary

**Farmland Soil Map  
(April 2011)**

29 Lincoln Ave  
Norwalk, CT



# Norwalk Inland Wetland Map (February 2010)

## Norwalk Inland Wetland and Watercourse Regulations

29 Lincoln Ave  
Norwalk, CT



MAP EFFECTIVE: February 1, 2010

### Key to Features

-  Property Lines 2008
-  Watercourse (Data from 2007 GIS Planning Dept)
-  Field Delineated Wetlands
-  NRCS Estimated Wetlands
-  1972 Wetland Map
-  Regulated Areas

MAP AMENDED: October 29, 2009  
December 9, 2008

**Inland Wetland Soil Map  
(October 2009)**

**Prepared by CT DEEP**

29 Lincoln Ave  
Norwalk, CT



**Inland Wetland Soil Map – Norwalk  
(October 2009)**

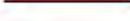
**LEGEND**



**Poorly Drained and Very Poorly Drained soils** - Poorly drained soils occur where the water table is at or just below the ground surface, usually from late fall to early spring. The land where poorly drained soils occur is nearly level or gently sloping. Many of our red maple swamps are on those soils. **Very poorly drained** soils generally occur on level land or in depressions. In these areas, the water table lies at or above the surface during most of the growing season. Most of our marshes and bogs are on these soils.



**Alluvial and Floodplain** soils occur along watercourses occupying nearly all level areas subject to periodic flooding. These soils are formed when material is deposited by flowing water. Such material can be composed of clay, silt, sand or gravel. Alluvial and floodplain soils range from excessively drained to very poorly drained.

-  Open Water
-  River, Brook, Stream
-  Town Boundary
-  State Boundary
-  County Boundary
-  Interstate Highway
-  US Route Highway
-  State Route Highway
-  Highway Ramp
-  Local Road
-  Railroad

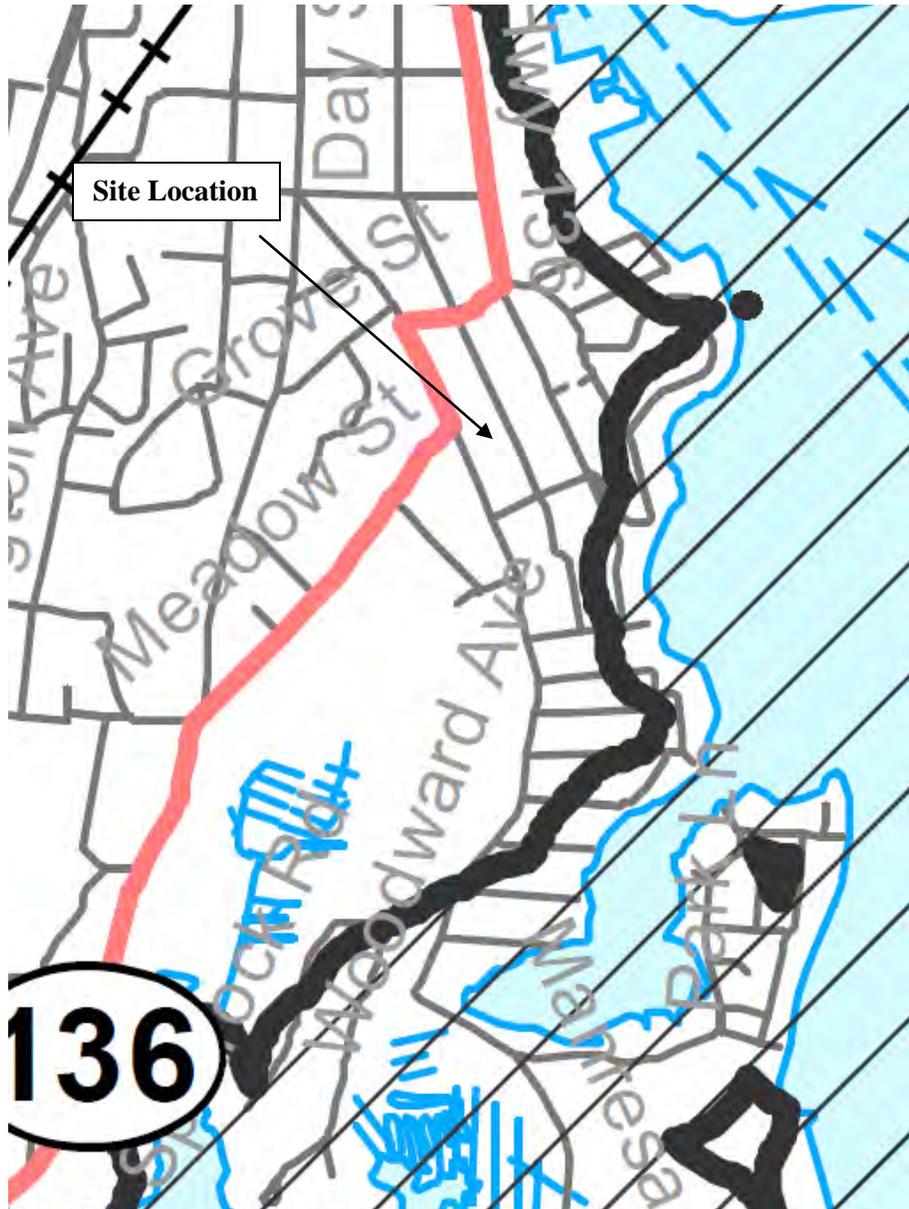
**Aquifer Protection Area Map  
(December, 2013)**

29 Lincoln Ave  
Norwalk, CT



**Natural Diversity Database Map  
(December 2013)**

29 Lincoln Ave  
Norwalk, CT



 State and Federal Listed Species  
& Significant Natural Communities

## **Appendix B**

### **Photographs of Work Area and Mold Inspection Photographs**



**Photograph 1**  
**Front of dwelling**



**Photograph 2**  
**Rear of dwelling**



**Photograph 3**  
**Black mold on roof sheaths in attic**



**Photograph 4**  
**Black mold on roof sheaths in attic**



**Photograph 5**  
**Black mold on attic floor planks.**

## **Appendix C**

### **Rosters of Building Materials Surveyed**

- XRF Raw Data for Painted Surfaces
- Roster of Suspect Asbestos Containing Materials

**XRF Results**  
 29 Lincoln Avenue, Norwalk, CT  
 #1476

Reading No	Time	Type	Duration	Units	Component	Substrate	Side	Condition	Color	Floor	Room	Results	Depth Index	Action Level	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
153	4/8/2014 12:01	PAINT	0.59	mg / cm ^2	TRIM	WOOD	C	PEELING	YELLOW	FIRST	exterior	Positive	6.46	1	15.3	17.4	2.3	5.1	15.3	17.4
154	4/8/2014 12:03	PAINT	0.59	mg / cm ^2	TRIM	WOOD	A	FAIR	YELLOW	FIRST	exterior	Positive	5.76	1	19.5	22.2	2	4.35	19.5	22.2
155	4/8/2014 12:05	PAINT	4.19	mg / cm ^2	siding	WOOD	A	FAIR	BROWN	FIRST	exterior	Negative	2.57	1	0.8	0.2	0.8	0.2	< LOD	0.75
156	4/8/2014 12:05	PAINT	3.58	mg / cm ^2	siding	WOOD	A	FAIR	BROWN	FIRST	exterior	Negative	2.67	1	0.7	0.2	0.7	0.2	1.1	0.5
157	4/8/2014 12:05	PAINT	1.79	mg / cm ^2	siding	WOOD	A	FAIR	BROWN	FIRST	exterior	Negative	2.11	1	0.6	0.3	0.6	0.3	< LOD	1.8
158	4/8/2014 12:06	PAINT	1.78	mg / cm ^2	siding	WOOD	D	FAIR	BROWN	FIRST	exterior	Negative	1.89	1	0.5	0.3	0.5	0.3	< LOD	1.57
159	4/8/2014 12:06	PAINT	1.79	mg / cm ^2	siding	WOOD	D	FAIR	BROWN	FIRST	exterior	Negative	1.99	1	0.5	0.3	0.5	0.3	< LOD	1.5
160	4/8/2014 12:08	PAINT	1.18	mg / cm ^2	siding	WOOD	C	FAIR	BROWN	FIRST	exterior	Negative	2.01	1	< LOD	0.45	< LOD	0.45	< LOD	1.95
161	4/8/2014 12:08	PAINT	1.18	mg / cm ^2	siding	WOOD	B	FAIR	BROWN	FIRST	exterior	Negative	1.72	1	< LOD	0.28	< LOD	0.28	< LOD	1.65
162	4/8/2014 12:10	PAINT	0.6	mg / cm ^2	siding	WOOD	B	FAIR	BROWN	FIRST	exterior	Positive	1.38	1	4.2	2.3	4.2	2.3	< LOD	7.95
163	4/8/2014 12:10	PAINT	1.78	mg / cm ^2	siding	WOOD	B	FAIR	BROWN	FIRST	exterior	Positive	1.21	1	1.7	0.5	1.7	0.5	< LOD	2.4

Notes:

"Side" corresponds to location of material as depicted on Figure 2.

### Roster of Suspect Asbestos Containing Materials – April 2014

Site # 1476 – 29 Lincoln Ave. Norwalk, CT

Sample ID	HA	Material	Quantity	Condition	Location
1 – 3	1	Black Asphalt Roof Shingle	2000 SF	Poor	Rear Deck Overhang
4 - 6	2	Red Asphalt Roof Shingle	2000 SF	Poor	Rear Deck Overhang
7 – 9	2	Red Asphalt Roof Shingle	2000 SF	Poor	Rear Deck Overhang
10 – 12	3	Grey Shingle	2000 SF	Poor	Front Deck Overhang
13 – 15	4	Black Tar Paper	2000 SF	Poor	Front Deck Overhang
16	5	Roof Tar	2000 SF	Poor	Front Deck Overhang
Notes: SF = Square Feet HA = Homogeneous Area					

**Appendix D**  
**Laboratory Analytical Data**

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com>[cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

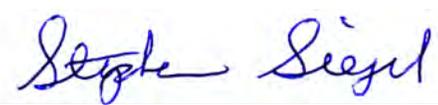
EMSL Order:	041409731
CustomerID:	TRIT52
CustomerPO:	
ProjectID:	

Attn: <b>Brian Sirowich</b> <b>Triton Environmental, Inc.</b> <b>385 Church Street</b> <b>Suite 201</b> <b>Guilford, CT 06437</b>	Phone: (203) 458-7200 Fax: (203) 458-7201 Received: 04/11/14 9:30 AM Analysis Date: 4/17/2014 Collected: 4/8/2014
Project: 1476 / 29 LINCOLN AVE, NORWALK, CT	

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1476-1 041409731-0001	- BLACK ASPHALT ROOF SHINGLE	Black Fibrous Homogeneous	35% 15% 2%	Cellulose Synthetic Fibrous (other)	48% Non-fibrous (other) <b>None Detected</b>
HA: 1					
1476-2 041409731-0002	- BLACK ASPHALT ROOF SHINGLE	Black Fibrous Homogeneous	40% 5% <1%	Cellulose Synthetic Glass	55% Non-fibrous (other) <b>None Detected</b>
HA: 1					
1476-3 041409731-0003	- BLACK ASPHALT ROOF SHINGLE	Black Fibrous Homogeneous	25%	Cellulose	75% Non-fibrous (other) <b>None Detected</b>
HA: 1					
1476-4 041409731-0004	- RED ASPHALT ROOF SHINGLE	Red/Black Fibrous Homogeneous	30%	Cellulose	70% Non-fibrous (other) <b>None Detected</b>
HA: 2					
1476-5 041409731-0005	- RED ASPHALT ROOF SHINGLE	Red/Black Fibrous Homogeneous	35% <1%	Cellulose Fibrous (other)	65% Non-fibrous (other) <b>None Detected</b>
HA: 2					
1476-6 041409731-0006	- RED ASPHALT ROOF SHINGLE	Red/Black Fibrous Homogeneous	30%	Cellulose	70% Non-fibrous (other) <b>None Detected</b>
HA: 2					

Analyst(s)  
 Chris Little (5)  
 Wayne Froehlich (11)

  
 Stephen Siegel, CIH, Laboratory Manager  
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from 04/18/2014 06:54:08

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com>[cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

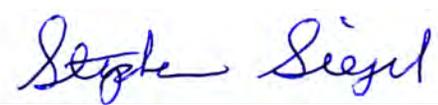
EMSL Order:	041409731
CustomerID:	TRIT52
CustomerPO:	
ProjectID:	

Attn: <b>Brian Sirowich</b> <b>Triton Environmental, Inc.</b> <b>385 Church Street</b> <b>Suite 201</b> <b>Guilford, CT 06437</b>	Phone: (203) 458-7200 Fax: (203) 458-7201 Received: 04/11/14 9:30 AM Analysis Date: 4/17/2014 Collected: 4/8/2014
Project: 1476 / 29 LINCOLN AVE, NORWALK, CT	

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos			Asbestos
			%	Fibrous	% Non-Fibrous	% Type
1476-7 041409731-0007	- RED ASPHALT ROOF SHINGLE	Red/Black Fibrous Homogeneous	30% 5% 5%	Cellulose Glass Synthetic	60% Non-fibrous (other)	None Detected
HA: 2						
1476-8 041409731-0008	- RED ASPHALT ROOF SHINGLE	Red/Black Fibrous Homogeneous	25% 5% 2%	Cellulose Synthetic Glass	68% Non-fibrous (other)	None Detected
HA: 2						
1476-9 041409731-0009	- RED ASPHALT ROOF SHINGLE	Brown/Black Fibrous Homogeneous	15%	Cellulose	85% Non-fibrous (other)	None Detected
HA: 2						
1476-10 041409731-0010	- GRAY ASPHALT SHINGLE	Black Fibrous Homogeneous	40% 5%	Cellulose Synthetic	55% Non-fibrous (other)	None Detected
HA: 3						
1476-11 041409731-0011	- GRAY ASPHALT SHINGLE	Black Fibrous Homogeneous	35%	Cellulose	65% Non-fibrous (other)	None Detected
HA: 3						
1476-12 041409731-0012	- GRAY ASPHALT SHINGLE	Gray/Red/Black Fibrous Homogeneous	15%	Cellulose	85% Non-fibrous (other)	None Detected
HA: 3						

Analyst(s)  
 Chris Little (5)  
 Wayne Froehlich (11)

  
 Stephen Siegel, CIH, Laboratory Manager  
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from 04/18/2014 06:54:08

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077  
 Phone/Fax: (800) 220-3675 / (856) 786-5974  
<http://www.EMSL.com> [cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

EMSL Order: 041409731  
 CustomerID: TRIT52  
 CustomerPO:  
 ProjectID:

Attn: **Brian Sirowich**  
**Triton Environmental, Inc.**  
**385 Church Street**  
**Suite 201**  
**Guilford, CT 06437**

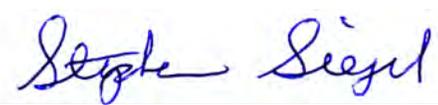
Phone: (203) 458-7200  
 Fax: (203) 458-7201  
 Received: 04/11/14 9:30 AM  
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 Collected: 4/8/2014

Project: 1476 / 29 LINCOLN AVE, NORWALK, CT

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1476-13 041409731-0013	- BLACK TAR PAPER	Black Fibrous Homogeneous	35% Cellulose 2% Glass	63% Non-fibrous (other)	None Detected
HA: 4					
1476-14 041409731-0014	- BLACK TAR PAPER	Black Fibrous Homogeneous	40% Cellulose 2% Glass <1% Synthetic	58% Non-fibrous (other)	None Detected
HA: 4					
1476-15 041409731-0015	- BLACK TAR PAPER	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
HA: 4					
1476-16 041409731-0016	- ROOF TAR	Black Fibrous Homogeneous	15% Cellulose	75% Non-fibrous (other)	10% Chrysotile
HA: 5					

Analyst(s)  
 \_\_\_\_\_  
 Chris Little (5)  
 Wayne Froehlich (11)

  
 Stephen Siegel, CIH, Laboratory Manager  
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367

Initial report from 04/18/2014 06:54:08



EMSL ANALYTICAL, INC.  
LABORATORY-PRODUCTS-TRAINING

# Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

041409731

EMSL Analytical, Inc.  
200 Route 130 North

Cinnaminson, NJ 08077  
PHONE: 1-800-220-3675  
FAX: (856) 786-5974

Company : Triton Environmental, Inc.		EMSL-Bill to: <input type="checkbox"/> Different <input checked="" type="checkbox"/> Same If Bill to is Different note instructions in Comments**	
Street: 385 Church Street Suite 201		Third Party Billing requires written authorization from third party	
City: Guilford	State/Province: CT	Zip/Postal Code: 06437	Country: United States
Report To (Name): Brian Sirowich		Telephone #: 203-458-7200	
Email Address: bsirowich@tritonenvironmental.com		Fax #: 203-458-7201	Purchase Order:
Project Name/Number:		Please Provide Results: <input type="checkbox"/> FAX <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> Mail	
U.S. State Samples Taken: CT		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	

### Turnaround Time (TAT) Options\* - Please Check

3 Hour  6 Hour  24 Hour  48 Hour  72 Hour  96 Hour  1 Week  2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<b>PCM - Air</b> <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual. via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique <b>Other:</b> <input type="checkbox"/>
---	--	---

Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples):  0.8µm  0.45µm

Samplers Name: Brian Sirowich

Samplers Signature: *[Signature]*

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
14761 - 14763	Black Asphalt Roof Shingle	1	5/11/14
14764 - 14766	Red Asphalt Roof Shingle	2	RECEIVED EMSL CINNAMINSON, N.J. APR 11 11:00
14767 - 14769	" " " "	2	
147610 - 147612	Grey Asphalt Shingle	3	
147613 - 147615	Black Tar Paper	4	
147616	Roof Tar	5	

Client Sample # (s): 14761 - 14766 Total # of Samples: 16 maximum

Relinquished (Client): *[Signature]* Date: 4/10/14 Time: 3:00

Received (Lab): *[Signature]* Date: 4-11-14 Time: 9:30A

Comments/Special Instructions:  
1476 29 Lincoln Ave, Norwalk, CT

16

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-0327

<http://www.EMSL.com>[RadonLab@emsl.com](mailto:RadonLab@emsl.com)

EMSL Order: 381401667

CustomerID: TRIT52

CustomerPO:

ProjectID:

Attn: **Dave Vasiliou**  
**Triton Environmental, Inc.**  
**385 Church Street Ste. 201**  
**Guilford, CT 06437**

Phone: (203) 458-7200  
 Fax: (203) 458-7201  
 Received: 04/15/14 4:37 PM  
 Analysis Date: 4/16/2014  
 Collected: 4/8/2014

Test Site: **Underhill**  
**29 Lincoln Ave**  
**Norwalk, CT 06854**

**Test Report: Radon in Air Test Results****Samples for EMSL Kit 97814**

Liquid Scintillation ID	Location	Radon Activity pCi/L	Start	Stop	Temperature F	Humidity %	Sample Type
164840 381401667-0001	First Floor- Dining room chair	0.7	4/8/2014 1:00:00 PM	4/10/2014 2:20:00 PM	68	50	Customer
<b>Sample Notes:</b>							
164808 381401667-0002	First Floor- Dining room chair	0.3	4/8/2014 1:00:00 PM	4/10/2014 2:20:00 PM	68	50	Customer

**Sample Notes:****Summary for EMSL kit 97814****Average Radon Result: 0.5 pCi/L**

The results indicate that both testing devices registered below the United States Environmental Protection Agency (EPA) action level of 4.0 picoCuries per liter of air (pCi/L). The EPA recommends fixing your home if the average of two short-term tests taken in the lowest lived-in level of the home show radon levels that are equal to or greater than 4.0pCi/L. The radon test was performed using a liquid scintillation radon detector/s and counted on a liquid scintillation counter using approved EPA testing protocols for Radon in Air testing.

The EPA recommends retesting your home every two years.

Please contact EMSL Analytical, Inc. or your State Health Department for further information.

All procedures used for generating this report are in complete accordance with the current EPA protocols for the analysis of Radon in Air.

**Report Notes**

Analyst(s)

Laura Freeman (2)

Garrett A. Ray, Laboratory Manager  
 Certified Radon Measurement Specialist NRSB 5SS0093  
 NJ MES12264, FL R2001, NE 116, PA 2572

In no event shall EMSL be liable for indirect, special, consequential, or incidental damages, including, but not limited to, damages for loss of profit or goodwill regardless of the negligence (either sole or concurrent) of EMSL and whether EMSL has been informed of the possibility of such damages, arising out of or in connection with EMSL's services thereunder or the delivery, use, reliance upon or interpretation of test results by client or any third party. We accept no legal responsibility for the purposes for which the client uses the test results. In no event shall EMSL be liable to a client or any third party, whether based upon theories of tort, contract or any other legal or equitable theory, in excess of the amount paid to EMSL by client thereunder. The test results meets all NELAC requirements unless otherwise specified. Accreditations: NRSB ARL6006, NJ DEP 03036, MEB 92525, PA 2573, IN 00455, IA L00032, RI RAS-024, ME 20200C, NE RMB-1083, NY ELAP 10872, NM 885-10L, FL RB2034, OH RL-39, NRPP #106178AL, KS-LB-0005

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ

Initial report from 04/19/2014 10:18:02

Please visit [www.radontestinglab.com](http://www.radontestinglab.com)



EMSL Analytical, Inc.  
 200 Route 130 North  
 Cinnaminson, NJ 08077  
 Tel: 800-220-3675 • Fax: 856-786-0327  
 www.radontestinglab.com

3814016E7

DOM: 3/17/14  
 EXP: 3/17/15 M#4

2014 APR 15 P 4:37

TRIT52  
 5 DAY

**Radon In Air Data Sheet**

Tear Here

**Send Written Report To:**

Name Dave Vasilou  
 Address 385 Church Street  
 City Avilford State CT Zip 06437  
 Phone 203.458.7200 Fax 203.458.7201  
 Email dvasilou@tritonenvironmental.com  
 Technician Name Brian Sirowich  
 Technician Certification # \_\_\_\_\_  
 Technician Signature \_\_\_\_\_

**1ST RED VIAL #** 164840 (164840)

**LOCATION**

- Basement  First Floor  Bedroom  Den
- Living Room  Other Dining Room
- Location in Room Chair

**2ND RED VIAL #** 164808  
 (If Purchased)

**The device has been scientifically tested to provide reliable indoor radon measurements when exposed to temperatures between 60 and 80 degrees F; temperatures outside this range will invalidate the test results.**

Kit # 97814 (Outside of Box)

**Property Tested:**

Name Underhill  
 Address 29 Lincoln ~~St~~ Ave  
 City Norwalk  
 Municipality Norwalk County Fairfield  
 State CT Zip \_\_\_\_\_

Check here if this is a Post Mitigation test.  
 Technician Name Brian Sirowich  
 Technician Certification # \_\_\_\_\_  
 Technician Signature \_\_\_\_\_

**INDOOR CONDITIONS**

Temperature 68 °F Humidity 50 %

**EXPOSURE PERIOD**

**Beginning Date:** 4 / 8 / 2014

Time: 1:00 AM / PM (Circle)

**Ending Date:** 4 / 10 / 2014

Time: 2:20 AM / PM (Circle)

**The test device must remain open for 48 to 96 hours • Return this section with the test device to the laboratory**

80 Lupes Drive  
Stratford, CT 06615



Tel: (203) 377-9984  
Fax: (203) 377-9952  
e-mail: cet1@cetlabs.com

Client: Mr. David Vasiliou  
Triton Environmental  
385 Church St.  
Guilford, CT 06437

# Analytical Report

## CET# 4040217

Report Date: April 14, 2014  
Project: 104318  
Project Number: 104318

Connecticut Laboratory Certificate: PH 0116  
Massachusetts laboratory Certificate.: M-CT903  
Rhode Island Certification: 199



New York Certification: 11982  
Florida Laboratory Certification: E871064

CET #:4040217  
 Project: 104318  
 Project Number: 104318

**SAMPLE SUMMARY**

The sample(s) were received at 20.6°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
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S-1 1476	4040217-01	Solid	4/08/2014 11:00	04/09/2014
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**Client Sample ID S-1 1476**

**Lab ID: 4040217-01**

**PCBs by Soxhlet**  
**Method: EPA 8082A**

**Analyst: CA**  
**Matrix: Solid**

Analyte	Result (mg/kg (As Rec))	RL (mg/kg (As Rec))	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	1.0	5	EPA 3540C	B4D1029	04/10/2014	04/13/2014 16:05	
PCB-1221	ND	1.0	5	EPA 3540C	B4D1029	04/10/2014	04/13/2014 16:05	
PCB-1232	ND	1.0	5	EPA 3540C	B4D1029	04/10/2014	04/13/2014 16:05	
PCB-1242	ND	1.0	5	EPA 3540C	B4D1029	04/10/2014	04/13/2014 16:05	
PCB-1248	ND	1.0	5	EPA 3540C	B4D1029	04/10/2014	04/13/2014 16:05	
PCB-1254	ND	1.0	5	EPA 3540C	B4D1029	04/10/2014	04/13/2014 16:05	
PCB-1260	ND	1.0	5	EPA 3540C	B4D1029	04/10/2014	04/13/2014 16:05	
PCB-1268	ND	1.0	5	EPA 3540C	B4D1029	04/10/2014	04/13/2014 16:05	
PCB-1262	ND	1.0	5	EPA 3540C	B4D1029	04/10/2014	04/13/2014 16:05	

<i>Surrogate: TCMX</i>	<i>102 %</i>	<i>50 - 150</i>			B4D1029	04/10/2014	<i>04/13/2014 16:05</i>	
<i>Surrogate: DCB</i>	<i>91.1 %</i>	<i>50 - 150</i>			B4D1029	04/10/2014	<i>04/13/2014 16:05</i>	

CET #:4040217  
 Project: 104318  
 Project Number: 104318

**QUALITY CONTROL SECTION**

**Batch B4D1029 - EPA 8082A**

Analyte	Result (mg/kg (As Rec))	RL (mg/kg (As Rec))	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
<b>Blank (B4D1029-BLK1)</b>					Prepared: 4/10/2014 Analyzed: 4/13/2014				
PCB-1016	ND	0.20							
PCB-1221	ND	0.20							
PCB-1232	ND	0.20							
PCB-1242	ND	0.20							
PCB-1248	ND	0.20							
PCB-1254	ND	0.20							
PCB-1260	ND	0.20							
PCB-1268	ND	0.20							
PCB-1262	ND	0.20							
<i>Surrogate: TCMX</i>					72.6	50 - 150			
<i>Surrogate: DCB</i>					88.4	50 - 150			
<b>LCS (B4D1029-BS1)</b>					Prepared: 4/10/2014 Analyzed: 4/13/2014				
PCB-1016	0.854	0.20	1.000		85.4	40 - 140			
PCB-1260	0.908	0.20	1.000		90.8	40 - 140			
<i>Surrogate: TCMX</i>					80.4	50 - 150			
<i>Surrogate: DCB</i>					91.5	50 - 150			
<b>Calibration Check (B4D1029-CCV1)</b>					Prepared: 4/10/2014 Analyzed: 4/13/2014				
PCB-1016	1.15	0.20	1.000		115	80 - 120			
PCB-1260	1.29	0.20	1.000		129	80 - 120			<b>H</b>
<i>Surrogate: TCMX</i>					115	50 - 150			
<i>Surrogate: DCB</i>					134	50 - 150			



80 Lupes Drive  
Stratford, CT 06615

Tel: (203) 377-9984  
Fax: (203) 377-9952  
email: cet1@cetlabs.com

## Quality Control Definitions and Abbreviations

Internal Standard (IS)	An Analyte added to each sample or sample extract. An internal standard is used to monitor retention time, calculate relative response, and quantify analytes of interest.
Surrogate Recovery	The % recovery for non-tarer organic compounds that are spiked into all samples. Used to determine method performance.
Continuing Calibration Batch	An analytical standard analyzed with each set of samples to verify initial calibration of the system. Samples that are analyzed together with the same method, sequence and lot of reagents within the same time period.
ND	Not detected
RL	Reporting Limit
Dilution	Multiplier added to detection levels (MDL) and/or sample results due to interferences and/or high concentration of target compounds.
Duplicate Result	Result from the duplicate analysis of a sample. Amount of analyte found in a sample.
Spike Level	Amount of analyte added to a sample
Matrix Spike Result	Amount of analyte found including amount that was spiked.
Matrix Spike Dup	Amount of analyte foun in duplicate spikes including amount that was spike.
Matrix Spike % Recovery	% Recovery of spiked amount in sample.
Matrix Spike Dup % Recovery	% Recovery of spiked duplicate amount in sample.
RPD	Relative percent difference between Matrix Spike and Matrix Spike Duplicate.
Blank	Method Blank that has been taken through all steps of the analysis.
LCS % Recovery	Laboratory Control Sample percent recovery. The amount of analyte recovered from a fortified sample.
Recovery Limits	A range within which specified measurements results must fall to be compliant.
CC	Calibration Verification

### Flags:

- H- Recovery is above the control limits
- L- Recovery is below the control limits
- B- Compound detected in the Blank
- P- RPD of dual column results exceeds 40%
- #- Sample result too high for accurate spike recovery.



Connecticut Laboratory Certification PH0116  
Massachussets Laboratory Certification M-CT903  
Rhode Island Certification 199

New York Certification 11982  
Florida Laboratory Certification E871064

CET #:4040217

Project: 104318

Project Number: 104318

Questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,



David Ditta  
Laboratory Director

Report Comments:

ND is None Detected at the specified detection limit

All analyses were performed in house unless a Reference Laboratory is listed.

Samples will be disposed of 30 days after the report date.

Sample Result Flags:

E- The result is estimated, above the calibration range.

H- The surrogate recovery is above the control limits.

L- The surrogate recovery is below the control limits.

B- The compound was detected in the laboratory blank.

P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.

D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.

+ - The Surrogate was diluted out.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.



**COMPLETE ENVIRONMENTAL TESTING, INC.**

**CUSTODY RECORD**

CET # \_\_\_\_\_

Volatile Soils Only:

Date and Time in Freezer \_\_\_\_\_

Client: \_\_\_\_\_

CET: \_\_\_\_\_

80 Lupes Drive Stratford, CT 06615 Tel: (203) 377-9984 Fax: (203) 377-9952 e-mail: cet1@cetlabs.com Bottle Request e-mail: bottleorders@cetlabs.com		Matrix A=Air S=Soil W=Water DW=Drinking W. C=Cassette Solid Wipe Other (Specify)	Turnaround Time ** (check one) Same Day * Next Day * 2-3 Days * Std (5-7 Days)	Organics 8260 CT List 8260 Aromatics 8260 Halogens CT ETPH 8270 CT List 8270 PNAS PCBs Pesticides Herbicides								Metals (check all that apply) 13 Priority Poll 8 RCRA TOTAL TCLP SPLP Field Filtered Lab To Filter				Additional Analysis								TOTAL # OF CONT. NOTE #			
Sample ID	Date/Time																										
S-1 1476	4/8/14 11:00	S.L.D																									
PRESERVATIVE (Cl-HCl, N-HNO <sub>3</sub> , S-H <sub>2</sub> SO <sub>4</sub> , Na-NaOH, C=Cool, O=Other)																											
CONTAINER TYPE (P=Plastic, G=Glass, V=Vial, O=Other)																											
Soil VOCs Only (M=MeOH B= Sodium Bisulfate W=Water F= Empty Vial E=Encore)																											
RELINQUISHED BY:		DATE/TIME	RECEIVED BY:		NOTES:																						
[Signature]		4/9/14 2:15	[Signature]																								
RELINQUISHED BY:		DATE/TIME	RECEIVED BY:																								
RELINQUISHED BY:		DATE/TIME	RECEIVED BY:																								
<b>Client / Reporting Information</b>				<b>Project Information</b>																							
Company Name Toxin Environment				Project Contact: David Vaslow						PO #:																	
Address 385 Church St				Project #: 104318						Project #: 104318																	
City G. Lfd				Location: CT						Collector(s): CK/BS																	
State CT				QA/QC <input checked="" type="checkbox"/> Std <input type="checkbox"/> Site Specific (MS/MSD) * <input type="checkbox"/> RCP Pkg * <input type="checkbox"/> DQAW *																							
Zip 06437				Data Report <input checked="" type="checkbox"/> Email <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> Excel <input type="checkbox"/> Other																							
Report To: David Vaslow				E-mail: dvaslow@toxinenvironment.com						RSR Reporting Limits (check one) <input checked="" type="checkbox"/> GA <input type="checkbox"/> GB <input type="checkbox"/> SWP <input type="checkbox"/> Other (specify)																	
Phone # 203 458 7200				Fax # 203 458 7201						Lab Use:						Evidence of Cooling: 20.60 or N						SHEET 1 OF 1					

\* Additional charge may apply. \*\* TAT begins when the samples are received at the Lab and all issues are resolved. TAT for samples received after 3 p.m. will start on the next business day. REV. 12/11