BISHOP RESIDENCE

Limited Hazardous Materials Building Inspection Report

Storm Sandy Residential Rehabilitation Project
250 Cosey Beach Avenue
East Haven, Connecticut

Lothrop Associates, LLP

White Plains, New York

May 2015

Fuss & O'Neill EnviroScience, LLC
56 Quarry Road
Trumbull, CT 06611

Project No. 20140370.D5E

Table of Contents

Limited Hazardous Materials Building Inspection Report
250 Cosey Beach Avenue, East Haven, Connecticut
Lothrop Associates, LLP

1 Introduction 1

2 Asbestos Inspection 1
- 2.1 Methodology 2
- 2.2 Results 3
- 2.3 Discussion 4
- 2.4 Conclusions & Recommendations 4

3 Lead-Based Paint Testing 4
- 3.1 XRF Sampling Methodology 4
- 3.2 Lead in Dust Sampling Methodology 5
- 3.3 Lead in Drinking Water Sampling Methodology 5
- 3.4 XRF Results 5
- 3.5 Lead in Dust Results 6
- 3.6 Lead in Drinking Water Testing Results 7
- 3.7 Conclusions and Recommendations 8

4 Assessment of PCB-Containing Fluorescent Ballasts 9
- 4.1 Methodology 9
- 4.2 Conclusions and Recommendations 9

5 Assessment of Mercury-Containing Devices 9
- 5.1 Methodology 10
- 5.2 Conclusions and Recommendations 10

6 Mold Visual Assessment 10
- 6.1 Observations 10
- 6.1 Recommendations 10

7 Airborne Radon Gas Information, Sampling and Procedure 11
- 7.1 Airborne Radon Gas Facts and Health Effects 11
- 7.2 Airborne Radon Gas Sampling Methodology 11
- 7.3 Airborne Radon Gas Quality Assurance Procedure 12
- 7.4 Airborne Radon Gas Analytical Results 12
- 7.5 Conclusions and Recommendations 13

Table of Contents

Limited Hazardous Materials Building Inspection Report
250 Cosey Beach Avenue, East Haven, Connecticut
Lothrop Associates, LLP

Appendices

APPENDIX A	FUSS & O'NEILL ENVIROSCIENCE STATE INSPECTOR LICENSES, CERTIFICATIONS AND ACCREDITATIONS
APPENDIX B	ASBESTOS LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS
APPENDIX C	LEAD PAINT TESTING PROCEDURES AND EQUIPMENT
APPENDIX D	LEAD TESTING FIELD DATA SHEETS
APPENDIX E	LEAD IN DUST LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY FORMS
APPENDIX F	LEAD IN DRINKING WATER LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY FORM
APPENDIX G	MOLD LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY FORM
APPENDIX H	AIRBORNE RADON GAS SAMPLING LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY FORM
APPENDIX I	SITE PHOTOGRAPHS

1 Introduction

On February 16, 2015, February 19, 2015, and February 20, 2015, Fuss & O'Neill EnviroScience, LLC (EnviroScience) Environmental Technicians, Mr. James Blum, Ms. Sandra Guzman, and Mr. Robert Eaton performed a limited hazardous materials building inspection of the residential structure located at 250 Cosey Beach Avenue in East Haven, Connecticut (the "Site"). Mr. Blum and Ms. Guzman are both State of Connecticut-licensed Asbestos Consultant - Inspectors and Certified Lead Inspectors. Mr. Blum is also a State of Connecticut-Certified Lead Risk Assessor. The residential structure was occupied at the time and date of the inspection and is scheduled for raising. Refer to *Appendix A* for the EnviroScience inspector state licenses, certifications, and accreditations. The scope of work was performed for Lothrop Associates, LLP (the "Client").

This inspection was performed in response to the planned raising of the Site building due to damage caused by Superstorm Sandy, as identified in the *Initial Property Inspection Report* dated November 7, 2014, provided by the Client. The limited inspection consisted of the following:

- A inspection for asbestos-containing materials (ACM) associated with the scheduled raising of the existing residential building to flood elevation;
- Testing and risk assessment of painted surfaces coated with suspect lead-based paint (LBP);
- An evaluation of fluorescent light fixtures for polychlorinated biphenyls (PCB)-containing light ballasts;
- An inventory of light tubes/lamps and devices for mercury;
- A mold assessment; and
- Airborne radon gas sampling.

2 Asbestos Inspection

A property owner must ensure that performance of a thorough inspection for ACM, prior to possible disturbance of suspect ACM during raising of the building, is conducted. This is a requirement of the United States (US) Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulation located at Title 40 CFR, Part 61, Subpart M.

This includes Friable, Non-Friable Category I, and Non-Friable Category II ACM.

- A Friable Material is defined as material that contains greater than one percent (>1%) asbestos, that when dry **can** be crumbled, pulverized, or reduced to powder by hand pressure.
- A Category I Non-Friable Material refers to material that contains greater than one percent (>1%) asbestos (e.g. packings, gaskets, resilient floor coverings, asphalt roofing products, etc.) that when dry **cannot** be crumbled, pulverized, or reduced to powder by hand pressure.
- A Category II Non-Friable Material refers to any non-friable material (excluding Category I materials) that contains greater than one percent (>1%) asbestos that when dry **cannot** be crumbled, pulverized, or reduced to powder by hand pressure.

During this inspection, suspect ACM were separated into three EPA categories. These categories are: thermal system insulation (TSI), surfacing ACM, and miscellaneous ACM. TSI includes all materials used

to prevent heat loss or gain or water condensation on mechanical systems. Examples of TSI are pipe insulation, boiler insulation, duct insulation, and mudded pipe fitting insulations. Surfacing ACM includes all ACM that is applied by spray or trowel, or otherwise applied to an existing surface. Surfacing ACM is commonly used for fireproofing, decorative, and acoustical applications. Miscellaneous materials include all ACM not listed in thermal or surfacing, such as linoleum, vinyl asbestos flooring, and ceiling tiles. Samples are recommended to be collected in a manner sufficient to determine asbestos content and include homogenous building materials. The EPA NESHAP regulation does not specifically identify a minimum number of samples to be collected and analyzed, but recommends the use of sampling protocols included in EPA Title 40 CFR, Part 763, Subpart E - Asbestos Containing Materials in Schools regulation.

2.1 Methodology

Samples of suspect ACM were collected in accordance with EPA recommendations and Asbestos Hazard Emergency Response Act (AHERA) protocols. The protocols included the following:

1. Surfacing Materials (SURF) (e.g., plaster, spray-applied fireproofing, etc.) were collected in a randomly distributed manner representing each homogenous area based on the overall quantity represented by the sampling as follows:
   a. Three samples collected from each homogenous area that is less than or equal to (≤) 1,000 square feet.
   b. Five samples collected from each homogenous area that is greater than (>) 1,000 square feet, but less than or equal to 5,000 square feet.
   c. Seven samples collected from each homogenous area that is greater than (>) 5,000 square feet.

2. Thermal System Insulation (TSI) (e.g., pipe insulation, tank insulation, etc.) was collected in a randomly distributed manner representing each homogenous area. Three bulk samples were collected as representative of each homogeneous material type, and sent to laboratory for asbestos analysis. Also, a minimum of one sample of any patching material (less than 6 linear of square feet) applied to TSI was collected.

3. Miscellaneous Materials (MISC) (e.g. floor tile, gaskets, construction mastics, etc.) had a minimum of two samples collected as representative of each homogenous material type. Sampling was conducted in a manner sufficient to determine asbestos content of the homogenous material as determined by the Asbestos Inspector. If materials identified were of (significant) minimal quantity, only a single sample was collected.

The Asbestos Consultants – Inspectors collected samples and prepared proper chain-of-custody forms for transmission of samples to a Connecticut-licensed analytical laboratory for analysis by Polarized Light Microscopy (PLM). The sampling locations, material type, and sample identification are identified by bulk sample analysis in *Table 1* of the "Results" section. Asbestos laboratory analytical reports and chain-of-custody forms are included in *Appendix B*.

2.2 Results

Utilizing the EPA sampling and analytical protocols, the following materials were identified as **ACM**:

Table 1
Asbestos-Containing Materials

Location	Material Type	Asbestos Content	Estimated Quantity	Sample No.
2nd Floor Chimney-Bedroom 1	White Top Coat on Chimney Plaster	4% Chrysotile	30 SF	0219-JB-05A
2nd Floor Chimney-Bedroom 1	Beige Bottom Coast Plaster on Chimney	2% Chrysotile	30 SF	0219-JB-06A

Note: SF = Square Feet

Utilizing the EPA sampling and analytical protocols, the following materials were identified as n**on-ACM**:

Table 2
Non-Asbestos-Containing Materials

Location	Material Type	Sample No.
Interior Kitchen & Bathroom 1	Gray Sheetrock & White Taping Compound	0219-JB-01A-B, 02A-B, 03
2nd Floor Chimney – Bedroom 1	White Textured Paint on Chimney	0219-JB-04A-C*
Exterior	Gray Skim Coat Plaster on Concrete Head Wall	0219-JB-07A-C
	Gray Concrete Head Wall	0219-JB-08A-B
	Gray Cement Block Wall & Grout	0219-JB-09A-B, 10A-B
	Red Chimney Brick & Grout	0219-JB-11A-B, 12A-B
	Black Paper Behind Wood Siding	0219-JB-13A-B
	Gray Concrete Porch Floor & Grout	0219-JB-14A-B, 15A-B
	Gray Concrete Stairs & Grout	0219-JB-16A-B, 17A-B
	Gray Concrete Foundation	0219-JB-18A-B

Note – * Material is considered contaminated ACM and should be removed and disposed as ACM.

2.3 Discussion

The EPA defines any material that contains greater than one percent (> 1%) asbestos, utilizing PLM as ACM. Materials that are identified as "none detected" are specified as not containing asbestos.

2.4 Conclusions & Recommendations

ACM was identified at the Site building. ACM identified in *Table 1* of Section 2.2 must be removed by a State of Connecticut-licensed Asbestos Abatement Contractor should materials be disturbed during renovation activities and raising of building structure. This is a CTDPH Standards for Asbestos Abatement and EPA NESHAP requirement.

Any suspect material encountered during renovation activities that is not identified in this report as being non-ACM, should be assumed to be ACM unless sample collection and analysis indicate otherwise. Note that since this asbestos inspection was limited, we recommend conducting a supplemental inspection of hidden and inaccessible areas (behind walls/beneath fixed floors, exterior foundation, etc.) prior to building raising activities.

3 Lead-Based Paint Testing

EnviroScience conducted a comprehensive testing for surfaces coated with LBP within the Site structure. On February 16, 2015, EnviroScience representatives, Mr. Blum performed the testing, and on February 19, 2015, testing was completed by Ms. Guzman. The purpose of the testing was for compliance with EPA's Renovation, Repair, and Painting Rule (RRP; Title 40 CFR, Parts 745.80 through 92) and the US Department of Housing and Urban Development (HUD) Lead-Safe Housing Rule (Title 24 CFR, Part 35, Subparts B-R).

3.1 XRF Sampling Methodology

A direct reading X-ray fluorescence (XRF) analyzer was used to perform the testing. The testing was conducted in accordance with the protocol outlined in the attached document: "Testing Procedures and Equipment" (refer to *Appendix C)*.

For the purpose of this testing, various interior and exterior building components representing the initial painting history of the building, and any building-wide repainting by the owners/managers of these building components were tested. Individual repainting efforts are not discoverable in such a limited testing program.

The two-story residential building foundation was constructed with masonry stone. Window and door systems are composed of wood and metal. Interior walls and ceilings are constructed with sheetrock. The Site structure was occupied at the time of the inspection. No child under the age of six resided in the residence at the time of the inspection, however a pregnant woman did reside within the residence at the time of this inspection.

3.2 Lead in Dust Sampling Methodology

As part of the lead inspection dust wipe samples were collected in accordance with the protocols outlined in *Appendix C*. Dust wipe samples were collected from representative floors, window sills, and window wells at the Site structure. Samples were submitted for analysis by Atomic Absorption Spectrometry (AAS) at EMSL Analytical, Inc. in Cinnaminson, New Jersey. As required by HUD and CTDPH, quality control field blank samples were included in the analysis.

The following wipe standards for lead in dust have been established by CTDPH:

Floors	40 micrograms per square foot (µg/ft²)
Window sills	250 µg/ft²
Window wells	400 µg/ft²

3.3 Lead in Drinking Water Sampling Methodology

Representative drinking water samples (first draw and 2-minute flush) were collected from a faucet to evaluate whether a lead in drinking water hazard exists at the Site structure. Drinking water samples were submitted for analysis by EPA Method 200.9 to Connecticut Testing Laboratories, Inc. in Meriden, Connecticut.

The following standard for lead in drinking water has been established by the EPA:

Drinking Water	0.015 milligrams per liter (mg/L)

3.4 XRF Results

The coated building component testing indicated consistent painting trends throughout the building interior and exterior. The following painted building components were determined to contain toxic levels of lead (equal to or greater than 1.0 milligram of lead per square centimeter [mg/cm²] of paint):

Table 3
Lead-Painted Building Components

Location	Building Component	Reading (mg/cm²)	Defective?
2nd Floor Closet/Laundry Room	Window Sill	3.5	No
Landing/Hall Stairwell	Stringer	1.9	No
	Riser	3.6	No
1st Floor Living Room	Door Casing	2.0	No

Location	Building Component	Reading (mg/cm²)	Defective?
1st Floor Kitchen	Door	1.3	**Yes**
Exterior B Side	Corner Boards – Yellow Paint	3.4	No
	2nd Siding - Bottom Layer	1.7	**Yes**
	Upper Trim – Yellow Paint	8.9	**Yes**
	Trim – Yellow Paint	>9.9	**Yes**
	Window Jamb	5.4	No
Exterior D Side	Ceiling Joist – Yellow Paint	3.5	**Yes**

Note - Bold indicates defective lead paint

The lead testing field data sheets and diagrams are provided as *Appendix D* of this report.

3.5 Lead in Dust Results

Representative dust wipe samples were collected inside the Site structure to evaluate whether a lead dust hazard existed. The sample numbers, locations, and results are as follows:

Table 4
Lead Dust Wipe Sample Results

Sample No.	Wipe Sample Location	Component	Results
0216JB-01	Bedroom #1	Window Well	<40 µg/ft²
0216JB-02	Bedroom #1	Window Sill	<40 µg/ft²
0216JB-03	Bedroom #1	Floor	<10 µg/ft²
0216JB-04	Bedroom #2	Window Well	45 µg/ft²
0216JB-05	Bedroom #2	Window Sill	<40 µg/ft²
0216JB-06	Bedroom #2	Floor	<10 µg/ft²
0216JB-07	Bedroom #3	Window Well	<40 µg/ft²
0216JB-08	Bedroom #3	Window Sill	<40 µg/ft²
0216JB-09	Bedroom #3	Floor	<10 µg/ft²
0216JB-10	Bathroom #1	Window Well	100 µg/ft²
0216JB-11	Bathroom #1	Window Sill	<40 µg/ft²
0216JB-12	Bathroom #1	Floor	<10 µg/ft²

Sample No.	Wipe Sample Location	Component	Results
0216JB-13	Play Room	Window Well	<40 µg/ft²
0216JB-14	Play Room	Window Sill	<40 µg/ft²
0216JB-15	Play Room	Floor	<10 µg/ft²
0216JB-16	2nd Floor Landing	Floor	<10 µg/ft²
0216JB-17	**Living Room**	**Window Well**	**3,400 µg/ft²**
0216JB-18	Living Room	Window Sill	<40 µg/ft²
0216JB-19	Living Room	Floor	<10 µg/ft²
0216JB-20	Kitchen	Window Well	120 µg/ft²
0216JB-21	Kitchen	Floor	<10 µg/ft²
0216JB-22	Entry Way	Window Well	<40 µg/ft²
0216JB-23	Entry Way	Window Sill	<40 µg/ft²
0216JB-24	Entry Way	Floor	<10 µg/ft²
0216JB-25	Bathroom #2	Window Well	170 µg/ft²
0216JB-26	Bathroom #2	Window Sill	240 µg/ft²
0216JB-27	Bathroom #2	Floor	<10 µg/ft²
0216JB-28	Field Blank	N/A	<10 µg/wipe
0216JB-29	Field Blank	N/A	<10 µg/wipe

Bold – indicates results above CTPDH and HUD standards

The lead in dust laboratory analytical report and chain-of-custody forms are provided in *Appendix E*.

3.6 Lead in Drinking Water Testing Results

On February 20, 2015, lead in drinking water sampling was performed at 250 Cosey Beach Avenue. The following concentrations of lead in drinking water were identified:

Table 5
Lead in Drinking Water Testing Results

Sample No.	Type of Sample	Results (mg/L)
20150220JB-01	1st Draw	ND <0.005
20150220JB-02	2-Minute Flush	ND <0.005

Note - ND = None Detected

The lead in drinking water laboratory analytical report and chain-of-custody form are provided as *Appendix F* in this report.

3.7 Conclusions and Recommendations

LBP was identified during this inspection. The defective LBP must be abated by a CTDPH-licensed Lead Abatement Contractor. A CTDPH-licensed Lead Abatement Contractor is required because a child under the age of six most likely resides in the residence, since a woman in the residence was pregnant at the time of the inspection.

If LBP-coated building components will be disturbed during renovations, a Toxicity Characteristic Leaching Procedure (TCLP) sample that is representative of the anticipated waste stream should be collected and analyzed to determine waste disposal options.

Lead in dust hazards were identified during this inspection. Lead in dust hazards on the window well identified as containing elevated concentrations of lead in dust must be abated by a CTDPH licensed Lead Abatement Contractor. A CTDPH-licensed Lead Abatement Contractor is required because a child under the age of six most likely resides in the residence since a woman in the residence was pregnant at the time of the inspection.

Water testing indicates total lead in water at concentrations below 0.005 mg/L. A lead in drinking water hazard does not exist on the date and time of the inspection at the residence.

No bare soil areas were accessible along the exterior building drip line due to snow and ice pack; therefore lead in soil sampling was not performed.

If a specific component or surface is not identified as having been tested as part of this limited inspection, it should be presumed to contain lead paint until tested. Contractor's should be aware that the threshold limit of 1.0 mg/cm^2 for purposes of EPA RRP requirements is not recognized by OSHA and worker exposures are still subject to the Lead in Construction regulation (Title 29 CFR, Part 1926.62).

This inspection was performed as a comprehensive inspection of all representative surfaces within the residence that are scheduled to be disturbed and can be utilized to determine applicability requirements for the RRP rule on surfaces tested.

4 Assessment of PCB-Containing Fluorescent Ballasts

Fluorescent light ballasts manufactured prior to 1979 may contain capacitors that contain PCBs. Light ballasts installed as late as 1985 may contain PCB capacitors. Fluorescent light ballasts that are not labeled as "No-PCBs" must be assumed to contain PCBs unless proven otherwise by quantitative analytical testing. Capacitors in fluorescent light ballasts labeled as non-PCB-containing may contain diethylhexl phthalate (DEHP). DEHP was the primary substitute to replace PCBs for small capacitors in fluorescent lighting ballasts in use until 1991. DEHP is a toxic substance, a suspected carcinogen and is listed under the EPA Resource Conservation and Recovery Act (RCRA) and the Superfund law as a hazardous waste. Therefore, Superfund liability exists for land filling both PCB- and DEHP-containing light ballasts. These listed materials are considered hazardous waste under RCRA, and require special handling and disposal requirements.

4.1 Methodology

On February 16, 2015, EnviroScience representative Mr. Blum performed a visual inspection of representative fluorescent light fixtures to identify possible PCB-containing ballasts. The inspection involved visually inspecting labels on representative light ballasts to identify dates of manufacture and labels indicating "No PCB's". Ballasts manufactured after 1991 were not listed as a PCB- or DEHP-containing ballast, and not quantified for disposal. Ballasts without a label indicating "No PCB's" are presumed to be PCB waste, and must be segregated for proper removal, packaging, transport and disposal as PCB waste. Ballasts with date labels indicating manufacture prior to 1991 that indicate "No PCB's" are presumed to contain DEHP and must be segregated for proper removal, packaging, transport, and disposal as non-PCB hazardous waste. The disposal requirements are slightly varied, and costs are slightly less for DEHP than for PCB-containing light ballasts.

4.2 Conclusions and Recommendations

No light ballasts were observed within the visible and accessible areas of the Site building. No further action regarding PCB-containing fluorescent light ballasts is required at this time.

5 Assessment of Mercury-Containing Devices

Fluorescent lamps/tubes are presumed to contain mercury vapor, which is a hazardous substance to both human health and the environment. Thermostatic controls and electrical switch gear may contain a vial or bulb of mercury associated with the control. Mercury-containing equipment is regulated for proper disposal by the EPA RCRA hazardous waste regulations. Mercury lamps according to the EPA are

considered a universal waste requiring all fluorescent lamps/tubes to be recycled, reclaimed, or disposed as hazardous waste.

5.1 Methodology

On February 16, 2015, EnviroScience representative Mr. Blum performed a visual in-place inventory of mercury amps/tubes, thermostats, and mercury switches.

5.2 Conclusions and Recommendations

No fluorescent light bulbs/tubes, thermostats, switches, or gauges were observed within accessible and visible areas of the Site structure. No further action regarding mercury-containing fluorescent light lamps/tubes or devices is required at this time.

6 Mold Visual Assessment

On February 16, 2015, and February 19, 2015, EnviroScience representatives Mr. Blum and Ms. Guzman respectively performed a visual assessment for the presence of suspect mold and water intrusion.

A bulk sample of visible suspect mold growth was collected for direct microscope analysis. Direct analysis identifies all types of mold spores, but does not differentiate between viable and non-viable mold spores. Non-viable mold spores can be of interest with respect to health, as well as viable spores. EMSL Analytical, Inc. of Cinnaminson, New Jersey performed the analysis.

6.1 Observations

Suspect mold growth was identified on the second floor bathroom ceiling. Mold was confirmed by laboratory identification of high levels of *Cladosporium* in the bulk sample collected.

Refer to *Appendix G* for mold laboratory analytical report and chain-of-custody form.

6.1 Recommendations

Potential exposure to mold during building renovation is suspected. Appropriate worker protection, use of engineering controls, and surface mold treatment on building materials to remain should be considered.

Building materials to remain in areas of visible suspect mold growth should be cleaned and have a mold inhibitor directly applied to the affected areas, if possible. Prior to disturbance, visible suspect mold growth remediation and water-damaged building materials removal should be performed within a negative pressure enclosure, using properly trained and protected workers. Removal should comply with EPA and the Institute of Inspection, Cleaning and Restoration Certification (IICRC) guidance.

7 Airborne Radon Gas Information, Sampling and Procedure

7.1 Airborne Radon Gas Facts and Health Effects

Radon is a naturally-occurring radioactive gas produced by the natural breakdown (decay) of uranium which is found in soil and rock throughout the US. Radon gas travels through soil and enters buildings through cracks and other penetrations in building foundations. Eventually the gas itself decays into radioactive particles (decay products) that can become trapped in the lungs during human respiration. As these particles in turn decay they release small bursts of radiation which can damage lung tissue and lead to lung cancer over the course of a person's lifespan.

EPA studies have determined that radon gas concentrations in outdoor air average approximately 0.4 picoCuries per liter of air (pCi/L). However, radon and its decay products can accumulate to a much higher concentration inside a building. The EPA has adopted a recommended action level of 4.0 pCi/L; equal to or above which the EPA recommends that building owners take action to reduce the level of airborne radon with the building.

Radon is a colorless, odorless and tasteless gas, and thus, the only way to know whether or not an elevated level of radon gas is present in a building is to test the air for radon gas. Each frequently occupied room that is in contact with the lowest living level of the building should be measured, as even adjacent rooms can have significantly different levels of radon.

Again, radon is a known human carcinogen. Prolonged exposure to elevated radon concentrations causes an increased risk of lung cancer. Like other environmental pollutants, there is some uncertainty about the magnitude of radon health risks. However, scientists are more certain about radon risks than risks from most other cancer-causing environmental pollutants as estimates of radon risk are based on studies of cancer in humans (underground miners). Additional studies on more typical, non-occupationally exposed, populations are underway.

EPA estimates that radon may cause about 14,000 lung cancer deaths in the US each year, with a range of 7,000 to 30,000. The US Surgeon General has warned that radon gas is the second-leading cause of lung cancer deaths after smoking, and is the leading cause among non-smokers.

7.2 Airborne Radon Gas Sampling Methodology

On February 16, 2015, EnviroScience representative Mr. Blum deployed passive radon gas detection canisters in limited areas within the Site structure. The canisters were retrieved by EnviroScience representative Mr. Eaton on February 19, 2015, at least 48-hours, but not later than 96-hours later. The canisters were supplied by Radon Testing Corporation of America (RTCA).

It is recommended that such canisters be placed at least 20-inches from the floor and 12-inches away from exterior walls. Also, it is recommended that the canisters not be placed near drafts resulting from Heating, Ventilating, and Air Conditioning (HVAC) intakes and returns, doors, and at least 36-inches from windows. Also, canisters should not be exposed to direct sunlight, be covered up, or otherwise disturbed during the testing period. A closed building condition is also utilized for 12-hours prior to testing being conducted.

Airborne radon gas sampling laboratory analytical report and chain-of-custody form are included in *Appendix H*.

7.3 Airborne Radon Gas Quality Assurance Procedure

EPA strongly recommends that quality assurance measurements are included in radon measurement studies. Quality assurance measurements include side-by-side canisters (duplicates), and unexposed control canisters (blanks).

Duplicates are pairs of canisters deployed in the same location, side-by-side, for the same measurement period. Duplicates are placed in at least ten percent of all sampling locations. These duplicate canisters are stored, deployed, removed, and shipped to the laboratory for analysis in the same manner as the other canisters. If either or both of the analyses in a duplicate pairing is above the EPA standard of 4.0 pCi/L the relative percent difference (RPD) between the two tests must be determined. If the allowable difference is exceeded, the test is determined to be invalid and a new duplicate test must be run. If both canister results are below the EPA standard then the RPD is not calculated since, despite any disparity, both results are below the EPA standard.

Blanks are utilized to determine whether the manufacturing, shipping, storage, and processing of the canisters has affected the accuracy of airborne radon gas sampling procedures. Blanks are unopened, unexposed canisters that are deployed with and shipped with the exposed canisters, so the processing laboratory treats them without bias. The number of blanks is at least five percent of the total number of canisters deployed, up to a maximum of 25 canisters.

7.4 Airborne Radon Gas Analytical Results

Four canisters, including one duplicate and one blank, were placed in target locations within the structure during sampling that was performed February 16, 2015 to February 19, 2015. The radon gas concentrations in the samples collected during the assessment were determined to contain 0.1 pCi/L to 0.3 pCi/L. The EPA threshold for radon gas is 4.0 pCi/L.

In *Table 6* below, the locations and results of quality control duplicate tests are listed for the sampling conducted from February 16, 2015 to February 19, 2015:

Table 6
Duplicate Samples Results – February 16 – February 19, 2015

Location	Canister Numbers	Radon Concentration (pCi/Liter)			Relative Percent Difference (RPD, %)
		Sample	Sample Duplicate	Sample Average	
Kitchen	2366989 & 2366953	0.3	0.3	0.3	Percent Difference Not Needed (No Concentrations Above 4.0 pCi/Liter)

Note Duplicate testing results were satisfactory.

In *Table 7* below, the locations and results of quality control blank tests are listed for sampling conducted from February 16, 2015 to February 19, 2015:

Table 7
Blank Samples Results – February 16 – February 19, 2015

Location	Canister Numbers	Radon Concentration (pCi/Liter)
Living Room	2360378	0.1

Note Blank testing results were satisfactory

In *Table 8* below, the locations, canister numbers, and radon concentrations are listed for the airborne radon assessment conducted from February 16, 2015 to February 19, 2015:

Table 8
Radon Sampling Results – February 16 – February 19, 2015

Location	Canister Numbers	Radon Concentration (pCi/Liter)
Living Room	2366956	0.1
Kitchen	2366989	0.3

Note Sample testing results were satisfactory.

7.5 Conclusions and Recommendations

During the course of the initial airborne radon gas sampling, four sampling canisters, including one duplicate and one blank, were placed in targeted locations within the Site structure. The analytical results

of the samples were below EPA recommended action level of 4.0 pCi/L. No further action regarding radon gas is required at this time.

Refer to *Appendix I* for site photographs.

Report prepared by Environmental Technician Robert Eaton.

Reviewed by:

Kevin J. McCarthy
Project Manager

Timothy M. Downey
Senior Project Manager

Appendix A

Fuss & O'Neill EnviroScience State Inspector Licenses, Certifications and Accreditations

1001311 01 AV 0.378 **AUTO T6 2 1564 06040-599246 -C01-P01314-I

JAMES B BLUM
FUSS & O'NEILL ENVIROSCIENCE LLC
146 HARTFORD RD
MANCHESTER CT 06040-5992

Dear JAMES B BLUM,

Attached you will find your validated certificate for the coming year. Should you have any questions about your certificate renewal, please do not hesitate to write or call:

Department of Public Health
P.O. Box 340308
M.S.#12MQA
Hartford, CT 06134-0308

(860) 509-7603
oplc.dph@ct.gov
www.ct.gov/dph/license

Sincerely,

JEWEL MULLEN, MD, MPH, MPA, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

1001311-0001317-0000001 of 0000001-C01-aid00101-1564-01314

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
JAMES B BLUM

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-119676	000841	11/30/15

PROFESSION
ASBESTOS CONSULTANT-INSPECTOR

SIGNATURE COMMISSIONER

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A
ASBESTOS CONSULTANT-INSPECTOR

JAMES B BLUM

CERTIFICATE NO.
000841

CURRENT THROUGH
11/30/15

VALIDATION NO.
03-119676

SIGNATURE COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
JAMES B BLUM

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-119676	000841	11/30/15

PROFESSION
ASBESTOS CONSULTANT-INSPECTOR

SIGNATURE COMMISSIONER

Fuss & O'Neill EnviroScience, LLC

146 Hartford Road, Manchester, CT 06040 – (860) 646-2469

This is to certify that

James Blum

xxx-xx-1625

has successfully completed the

4 Hr. Asbestos Inspector Refresher

Asbestos Accreditation under TSCA Title II

40 CFR Part 763

John Rowinski, Principal Instructor

Robert L. May, Jr., Training Manager

September 3, 2014

Date of Course

AI-R-09/14-2

Certificate Number

September 3, 2014

Examination Date

September 3, 2015

Expiration Date

JAMES B BLUM
FUSS & O'NEILL ENVIROSCIENCE LLC
146 HARTFORD RD
MANCHESTER, CT 06040-5992

Dear Licensed/Certified Professional,
Attached you will find your validated license/certification for the coming year. Should you have any questions about your license/certificate renewal, please do not hesitate to write or call:

Department of Public Health **(860) 509-7603**
P.O. Box 340308
M.S.#12MQA **http://www.dph.state.ct.us**
Hartford, CT 06134-0308

Sincerely,

JEWEL MULLEN, MD, MPH, MPA, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

INSTRUCTIONS:

1. Detach and sign each of the cards on this form.
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED BY THIS DEPARTMENT AS A
Lead Inspector Risk Assessor

JAMES B BLUM

CERTIFICATION NO. 2256
CURRENT THROUGH 11/30/2015
VALIDATION NO. **DUPLICATE**

SIGNATURE — **COMMISSIONER**

EMPLOYER'S COPY
STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
NAME: JAMES B BLUM
VALIDATION NO: **DUPLICATE** | CERTIFICATION NO.: 2256 | CURRENT THROUGH: 11/30/2015
PROFESSION: Lead Inspector Risk Assessor
SIGNATURE — **COMMISSIONER**

WALLET CARD
STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
NAME: JAMES B BLUM
VALIDATION NO: **DUPLICATE** | CERTIFICATION NO.: 2256 | CURRENT THROUGH: 11/30/2015
PROFESSION: Lead Inspector Risk Assessor
SIGNATURE — **COMMISSIONER**

Certificate of Training

This program was presented at
Fuss & O'Neill Enviro Science in.
Manchester, CT with the prior
approval of the CTDPH.

Awarded to

JAMES BLUM

146 HARTFORD ROAD, MANCHESTER, CT 06040

Has successfully completed a 7 hr, 1 day

Lead Inspector Risk Assessor Refresher

February 11 & 17, 2015

This training course was approved and given in accordance with the Department of Health Standards established pursuant to Section 20-477 of the Connecticut General Statutes

Presented by

Mystic Air Quality Consultants, Inc.

1204 North Road, Groton, CT 06340 (800) 247-7746

Certificate Number: 95CTLDRARF **Exam Grade: 96** **Expiration Date: 02/17/2016**

Exam Date: 02/17/2015

23744

Christopher J. Eident, CIH, CSP, RS

George Williamson, Training Director

Richard Haffey, Training Director

Dear SANDRA L GUZMAN,

Attached you will find your validated certificate for the coming year. Should you have any questions about your certificate renewal, please do not hesitate to write or call:

Department of Public Health
P.O. Box 340308
M.S.#12MQA
Hartford, CT 06134-0308

(860) 509-7603
oplc.dph@ct.gov
www.ct.gov/dph/license

Sincerely,

JEWEL MULLEN, MD, MPH, MPA, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

1011198-0011224-0000001 of 0000001-C01-a1d00101-1264-11211

EMPLOYER'S COPY
STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
NAME
SANDRA L GUZMAN
VALIDATION NO. 03-928852
CERTIFICATE NO. 000823
CURRENT THROUGH 08/31/15
PROFESSION
ASBESTOS CONSULTANT-INSPECTOR
SIGNATURE
COMMISSIONER

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT
THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A
ASBESTOS CONSULTANT-INSPECTOR

SANDRA L GUZMAN

CERTIFICATE NO.
000823
CURRENT THROUGH
08/31/15
VALIDATION NO.
03-928852

SIGNATURE
COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD
STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
NAME
SANDRA L GUZMAN
VALIDATION NO. 03-928852
CERTIFICATE NO. 000823
CURRENT THROUGH 08/31/15
PROFESSION
ASBESTOS CONSULTANT-INSPECTOR
SIGNATURE
COMMISSIONER

Certificate of Training

Awarded to

SANDRA GUZMAN

For successful completion of a 4 Hour, 1/2 Day

Asbestos Building Inspector

Annual Refresher Training

June 23, 2014

This training was approved and given in accordance with the Regulations for Connecticut State Agencies RCSA 20 - 440 - 1-9 and RCSA 20 - 441 and meets the requirements of the EPA Revised MAP under TSCA Title II of 4/4/94.

Presented by

Mystic Air Quality Consultants, Inc.

1204 North Road, Groton, CT 06340 (800) 247-7746

Certificate Number: ABIRF23239 **Exam Grade: 100** **Expiration Date: 06/23/2015**

Exam Date: 06/23/2014

Christopher J. Eident, CIH, CSP, RS

George Williamson, Training Director

Richard Haffey, Training Director

1011197-0011223-0000001 of 0000001-C01-a1d00101-1264-11210

Dear SANDRA L GUZMAN,

Attached you will find your validated certificate for the coming year. Should you have any questions about your certificate renewal, please do not hesitate to write or call:

Department of Public Health
P.O. Box 340308
M.S.#12MQA
Hartford, CT 06134-0308

(860) 509-7603
oplc.dph@ct.gov
www.ct.gov/dph/license

Sincerely,

JEWEL MULLEN, MD, MPH, MPA, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

EMPLOYER'S COPY
STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
NAME
SANDRA L GUZMAN

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-928851	002210	08/31/15

PROFESSION
LEAD INSPECTOR

SIGNATURE COMMISSIONER

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A
LEAD INSPECTOR

SANDRA L GUZMAN

CERTIFICATE NO.
002210
CURRENT THROUGH
08/31/15
VALIDATION NO.
03-928851

SIGNATURE COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD
STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
NAME
SANDRA L GUZMAN

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-928851	002210	08/31/15

PROFESSION
LEAD INSPECTOR

SIGNATURE COMMISSIONER

CERT# L-500 - 155

CHEMSCOPE TRAINING DIVISION

LEAD INSPECTOR REFRESHER

8HOUR TRAINING CERTIFICATE

Sandra L. Guzman

146 Hartford Road , Manchester CT

Has attended an 8 hour course on the subject discipline in English on

9/11/2014 and has passed a written examination.

The above individual has successfully completed the above training course approved in accordance with the Department of Public Health Standards established pursuant to Section 20-477 of the Connecticut General Statutes.

Course syllabus includes all required topics of State of Connecticut DPH and EPA.

Examination Date: 9/11/2014

Expiration Date: 9/11/2015

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (U.S.C. 1001 and 15 U.S.C. 2615), I certify that this training complies with all applicable requirements of Title IV of TSCA, 40 CFR part 745 and any other applicable Federal, State, or local requirements.

Ronald D. Arena
Training Manager

Chem Scope, Inc.
15 Moulthrop Street
North Haven CT 06473
(203) 865-5605

© GOES 340

Litho in U.S.A.

Appendix B

Asbestos Laboratory Analytical Reports and Chain-of-Custody Forms

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnasblab@EMSL.com

EMSL Order:	041504880
CustomerID:	ENVI54
CustomerPO:	20140370.D5E
ProjectID:	

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone:	(860) 646-2469
Fax:	(888) 838-1160
Received:	02/20/15 9:50 AM
Analysis Date:	2/21/2015
Collected:	2/19/2015

Project: **Lothrop-Storm Sandy-250 Cosey Beach Ave / 20140370.D5E / East Haven, CT**

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

			Non-Asbestos				Asbestos
Sample	Description	Appearance	%	Fibrous	%	Non-Fibrous	% Type
0219-JB-01A *041504880-0001*	Interior- Kitchen - Gray Sheetrock	Brown/White Fibrous Homogeneous	15% 10%	Cellulose Glass	75%	Non-fibrous (other)	**None Detected**
0219-JB-01B *041504880-0002*	Interior- Bathroom 1 - Gray Sheetrock	Brown/White Fibrous Heterogeneous	30% 2%	Cellulose Glass	68%	Non-fibrous (other)	**None Detected**
0219-JB-02A *041504880-0003*	Interior- Kitchen - White Taping Compound	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
0219-JB-02B *041504880-0004*	Interior- Bathroom 1 - White Taping Compound	Brown/White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
0219-JB-03 *041504880-0005*	Interior- Kitchen - White Sheetrock/ Taping Compound Composite	Various Fibrous Heterogeneous	30% 2%	Cellulose Glass	68%	Non-fibrous (other)	**None Detected**
0219-JB-04A *041504880-0006*	2nd Floor Chimney- Bedroom 1 - White Textured Paint on Chimney	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
0219-JB-04B *041504880-0007*	2nd Floor Chimney- Bedroom 1 - White Textured Paint on Chimney	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**

Analyst(s)
Dave Poitras (16)
Olivia Feriozzi (19)

Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
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 02/21/2015 13:45:08

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnasblab@EMSL.com

EMSL Order:	041504880
CustomerID:	ENVI54
CustomerPO:	20140370.D5E
ProjectID:	

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone:	(860) 646-2469
Fax:	(888) 838-1160
Received:	02/20/15 9:50 AM
Analysis Date:	2/21/2015
Collected:	2/19/2015

Project: **Lothrop-Storm Sandy-250 Cosey Beach Ave / 20140370.D5E / East Haven, CT**

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
0219-JB-04C *041504880-0008*	2nd Floor Chimney-Bedroom 1 - White Textured Paint on Chimney	Various Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-05A *041504880-0009*	2nd Floor Chimney-Bedroom 1 - White Top Coat on Chimney Plaster	White Non-Fibrous Homogeneous		96% Non-fibrous (other)	**4% Chrysotile**
0219-JB-05B *041504880-0010*	2nd Floor Chimney-Bedroom 1 - White Top Coat on Chimney Plaster				**Stop Positive (Not Analyzed)**
0219-JB-05C *041504880-0011*	2nd Floor Chimney-Bedroom 1 - White Top Coat on Chimney Plaster				**Stop Positive (Not Analyzed)**
0219-JB-06A *041504880-0012*	2nd Floor Chimney-Bedroom 1 - Beige Bottom Coat Plaster on Chimney	Beige Non-Fibrous Homogeneous	5% Hair	93% Non-fibrous (other)	**2% Chrysotile**

Analyst(s)

Dave Poitras (16)
Olivia Feriozzi (19)

Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

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 02/21/2015 13:45:08

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnasblab@EMSL.com

EMSL Order:	041504880
CustomerID:	ENVI54
CustomerPO:	20140370.D5E
ProjectID:	

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone:	(860) 646-2469
Fax:	(888) 838-1160
Received:	02/20/15 9:50 AM
Analysis Date:	2/21/2015
Collected:	2/19/2015

Project: **Lothrop-Storm Sandy-250 Cosey Beach Ave / 20140370.D5E / East Haven, CT**

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
0219-JB-06B *041504880-0013*	2nd Floor Chimney-Bedroom 1 - Beige Bottom Coat Plaster on Chimney				**Stop Positive (Not Analyzed)**
0219-JB-06C *041504880-0014*	2nd Floor Chimney-Bedroom 1 - Beige Bottom Coat Plaster on Chimney				**Stop Positive (Not Analyzed)**
0219-JB-07A *041504880-0015*	Exterior - Gray Skim Coat Plaster on Concrete Head Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-07B *041504880-0016*	Exterior - Gray Skim Coat on Concrete Head Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-07C *041504880-0017*	Exterior - Gray Skim Coat on Concrete Head Wall	Various Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-08A *041504880-0018*	Exterior - Gray Concrete Head Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-08B *041504880-0019*	Exterior - Gray Concrete Head Wall	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
Dave Poitras (16)
Olivia Feriozzi (19)

Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03035, PA ID# 68-00367

Initial report from 02/21/2015 13:45:08

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnasblab@EMSL.com

EMSL Order:	041504880
CustomerID:	ENVI54
CustomerPO:	20140370.D5E
ProjectID:	

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone:	(860) 646-2469
Fax:	(888) 838-1160
Received:	02/20/15 9:50 AM
Analysis Date:	2/21/2015
Collected:	2/19/2015

Project: **Lothrop-Storm Sandy-250 Cosey Beach Ave / 20140370.D5E / East Haven, CT**

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
0219-JB-09A *041504880-0020*	Exterior - Gray Cement Block Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-09B *041504880-0021*	Exterior - Gray Cement Block Wall	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-10A *041504880-0022*	Exterior - Gray Concrete Block Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-10B *041504880-0023*	Exterior - Gray Concrete Block Grout	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-11A *041504880-0024*	Exterior - Red Chimney Brick	Red Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-11B *041504880-0025*	Exterior - Red Chimney Brick	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-12A *041504880-0026*	Exterior - Gray Brick Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-12B *041504880-0027*	Exterior - Gray Brick Grout	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
Dave Poitras (16)
Olivia Feriozzi (19)

Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
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 02/21/2015 13:45:08

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnasblab@EMSL.com

EMSL Order:	041504880
CustomerID:	ENVI54
CustomerPO:	20140370.D5E
ProjectID:	

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone:	(860) 646-2469
Fax:	(888) 838-1160
Received:	02/20/15 9:50 AM
Analysis Date:	2/21/2015
Collected:	2/19/2015

Project: **Lothrop-Storm Sandy-250 Cosey Beach Ave / 20140370.D5E / East Haven, CT**

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

			Non-Asbestos				Asbestos
Sample	Description	Appearance	%	Fibrous	%	Non-Fibrous	% Type
0219-JB-13A *041504880-0028*	Exterior - Black Paper Behind Wood Siding	Black Non-Fibrous Homogeneous	10%	Glass	90%	Non-fibrous (other)	**None Detected**
0219-JB-13B *041504880-0029*	Exterior - Black Paper Behind Wood Siding	Black Fibrous Homogeneous	20%	Glass	80%	Non-fibrous (other)	**None Detected**
0219-JB-14A *041504880-0030*	Exterior - Gray Concrete Porch Floor	Gray Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
0219-JB-14B *041504880-0031*	Exterior - Gray Concrete Porch Floor	Brown/Gray Non-Fibrous Heterogeneous			100%	Non-fibrous (other)	**None Detected**
0219-JB-15A *041504880-0032*	Exterior - Gray Concrete Floor Grout	Gray Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
0219-JB-15B *041504880-0033*	Exterior - Gray Concrete Floor Grout	Brown Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
0219-JB-16A *041504880-0034*	Exterior - Gray Concrete Stairs	Gray Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
0219-JB-16B *041504880-0035*	Exterior - Gray Concrete Stairs	Gray/Tan Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**

Analyst(s)

Dave Poitras (16)
Olivia Feriozzi (19)

Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03035, PA ID# 68-00367

Initial report from 02/21/2015 13:45:08

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnasblab@EMSL.com

EMSL Order:	041504880
CustomerID:	ENVI54
CustomerPO:	20140370.D5E
ProjectID:	

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone:	(860) 646-2469
Fax:	(888) 838-1160
Received:	02/20/15 9:50 AM
Analysis Date:	2/21/2015
Collected:	2/19/2015

Project: **Lothrop-Storm Sandy-250 Cosey Beach Ave / 20140370.D5E / East Haven, CT**

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
0219-JB-17A *041504880-0036*	Exterior - Gray Concrete Stairs Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-17B *041504880-0037*	Exterior - Gray Concrete Stairs Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-18A *041504880-0038*	Exterior - Gray Concrete Foundation	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
0219-JB-18A *041504880-0039*	Exterior - Gray Concrete Foundation	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

Dave Poitras (16)
Olivia Feriozzi (19)

Benjamin Ellis, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03035, PA ID# 68-00367

Initial report from 02/21/2015 13:45:08

THIS IS THE LAST PAGE OF THE REPORT.

OrderID: 041504880

041504880

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

56 Quarry Road, Trumbull, CT 066611

Phone (203) 374-3748 Fax (203) 374-4391

ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORM

Sheet 1 of 3

Project Name: Lothrop – Storm Sandy – 250 Cosey Beach Ave Project No 20140370.D5E Date: 2/19/2015

Site Address: 250 Cosey Beach Ave., East Haven, CT Project Manager. Kevin McCarthy

Sample ID	Sample Location	Type of Material
0219-JB-01A	Interior – Kitchen	Gray Sheetrock
0219-JB-01B	Interior – Bathroom 1	Gray Sheetrock
0219-JB-02A	Interior – Kitchen	White Taping Compound
0219-JB-02B	Interior – Bathroom 1	White Taping Compound
0219-JB-03	Interior – Kitchen	White Sheetrock/Taping Compound Composite
0219-JB-04A	2nd Floor Chimney – Bedroom 1	White Textured Paint on Chimney
0219-JB-04B	2nd Floor Chimney – Bedroom 1	White Textured Paint on Chimney
0219-JB-04C	2nd Floor Chimney – Bedroom 1	White Textured Paint on Chimney
0219-JB-05A	2nd Floor Chimney – Bedroom 1	White Top Coat on Chimney Plaster
0219-JB-05B	2nd Floor Chimney – Bedroom 1	White Top Coat on Chimney Plaster
0219-JB-05C	2nd Floor Chimney – Bedroom 1	White Top Coat on Chimney Plaster
0219-JB-06A	2nd Floor Chimney – Bedroom 1	Beige Bottom Coat Plaster on Chimney
0219-JB-06B	2nd Floor Chimney – Bedroom 1	Beige Bottom Coat Plaster on Chimney
0219-JB-06C	2nd Floor Chimney – Bedroom 1	Beige Bottom Coat Plaster on Chimney
0219-JB-07A	Exterior	Gray Skim Coat Plaster on Concrete Head Wall

Analysis Method: ☒ PLM ☐ TEM ☐ Other _____ Turnaround Time 48 hours

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____ Please call EnviroScience if analyses will not be completed for requested TAT at (203) 374 - 3748

RECEIVED EMSL CINNAMINSON, NJ 15 FEB 20 AM 10: 53

Email Results to: kmcarthy@fando.com **Do Not Mail Hard Copy Report** **Total # of Samples:** 39
FAX Results to: 888-838-1160.

Special Instructions Stop analysis on first positive sample in each homogeneous set of samples unless otherwise noted. Do not layer samples unless indicated. Do Not Point Count.

Samples collected by: James Blum SBlum **Date:** 2/19/2015 **Time:** _____

Samples Sent by: James Blum SBlum **Date:** 2/19/2015 **Time:** _____

Samples Received by: DMB-CX **Date:** 2-20-15 **Time:** 950A

Shipped To: ☒ EMSL State NJ ☐ Other _____

Method of Shipment: ☒ FedEx ☐ Lab Drop Off ☐ Other _____

39 ea

F:\P2014\0370\D5E\Lab Data\250_Cosey_Beach_ Asb Bulk CoC_2015-02-19.docx

OrderID: 041504880

041504880

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

56 Quarry Road, Trumbull, CT 066611 Phone (203) 374-3748 Fax (203) 374-4391

ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORM

Sheet 2 of 3

Project Name: Lothrop – Storm Sandy – 250 Cosey Beach Ave Project No. 20140370.D5E Date: 2/19/2015

Site Address: 250 Cosey Beach Ave., East Haven, CT Project Manager: Kevin McCarthy

Sample ID	Sample Location	Type of Material
0219-JB-07B	Exterior	Gray Skim Coat on Concrete Head Wall
0219-JB-07C	Exterior	Gray Skim Coat on Concrete Head Wall
0219-JB-08A	Exterior	Gray Concrete Head Wall
0219-JB-08B	Exterior	Gray Concrete Head Wall
0219-JB-09A	Exterior	Gray Cement Block Wall
0219-JB-09B	Exterior	Gray Cement Block Wall
0219-JB-10A	Exterior	Gray Concrete Block Grout
0219-JB-10B	Exterior	Gray Concrete Block Grout
0219-JB-11A	Exterior	Red Chimney Brick
0219-JB-11B	Exterior	Red Chimney Brick
0219-JB-12A	Exterior	Gray Brick Grout
0219-JB-12B	Exterior	Gray Brick Grout
0219-JB-13A	Exterior	Black Paper Behind Wood Siding
0219-JB-13B	Exterior	Black Paper Behind Wood Siding

Analysis Method: ☒ PLM ☐ TEM ☐ Other _____ Turnaround Time: 48 Hours

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____ Please call EnviroScience if analyses will not be completed for requested TAT at (203) 374 - 3748.

Email Results to: kmcarthy@fando.com **Do Not Mail Hard Copy Report** **Total # of Samples:** 39
FAX Results to: 888-838-1160.

Special Instructions: Stop analysis on first positive sample in each homogeneous set of samples unless otherwise noted. Do not layer samples unless indicated. Do Not Point Count.

RECEIVED EMSL CINNAMINSON, NJ 15 FEB 20 AM 10: 52

Samples collected by: James Blum JBlum **Date:** 2/19/2015 **Time:** _____

Samples Sent by: James Blum JBlum **Date:** 2/19/2015 **Time:** _____

Samples Received by: _____ **Date:** _____ **Time:** _____

Shipped To: ☒ EMSL State NJ ☐ Other _____

Method of Shipment: ☒ FedEx ☐ Lab Drop Off ☐ Other _____

OrderID: 041504880

041504880

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

56 Quarry Road, Trumbull, CT 066611

Phone (203) 374-3748 Fax (203) 374-4391

ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORM

Sheet 3 of 3

Project Name: Lothrop – Storm Sandy – 250 Cosey Beach Ave Project No. 20140370.D5E Date: 2/19/2015

Site Address: 250 Cosey Beach Ave., East Haven, CT Project Manager: Kevin McCarthy

Sample ID	Sample Location	Type of Material
0219-JB-14A	Exterior	Gray Concrete Porch Floor
0219-JB-14B	Exterior	Gray Concrete Porch Floor
0219-JB-15A	Exterior	Gray Concrete Floor Grout
0219-JB-15B	Exterior	Gray Concrete Floor Grout
0219-JB-16A	Exterior	Gray Concrete Stairs
0219-JB-16B	Exterior	Gray Concrete Stairs
0219-JB-17A	Exterior	Gray Concrete Stairs Grout
0219-JB-17B	Exterior	Gray Concrete Stairs Grout
0219-JB-18A	Exterior	Gray Concrete Foundation
0219-JB-18B	Exterior	Gray Concrete Foundation

RECEIVED EMSL CINNAMINSON, NJ 15 FEB 20 AM 10:52

Analysis Method: ☒ PLM ☐ TEM ☐ Other _____ Turnaround Time: 48 Hours

Based on the turnaround time indicated above, analyses are due to EnviroScience on or before this date: _____ Please call EnviroScience if analyses will not be completed for requested TAT at (203) 374 - 3748.

Email Results to: kmcarthy@fando.com **Do Not Mail Hard Copy Report** **Total # of Samples:** 39
FAX Results to: 888-838-1160.

Special Instructions: Stop analysis on first positive sample in each homogeneous set of samples unless otherwise noted. Do not layer samples unless indicated. Do Not Point Count

Samples collected by: James Blum **Date:** 2/19/2015 **Time:** _____

Samples Sent by: James Blum **Date:** 2/19/2015 **Time:** _____

Samples Received by: _____ **Date:** _____ **Time:** _____

Shipped To: ☒ EMSL State NJ ☐ Other _____

Method of Shipment: ☒ FedEx ☐ Lab Drop Off ☐ Other _____

F:\P2014\0370\D5E\Lab Data\250_Cosey_Beach_ Asb Bulk CoC_2015-02-19 docx

Appendix C

Lead Paint Testing Procedures and Equipment

STANDARD OPERATING PROCEDURES
HUD AND STATE OF CONNECTICUT LEAD-BASED PAINT INSPECTIONS

TESTING PROCEDURES AND EQUIPMENT

The United States Department of Housing and Urban Development (HUD) "Guidelines for the Evaluation and Control of Lead Hazards in Housing, September 1997" were consulted for this lead evaluation. HUD has been the agency at the federal level with responsibility for the establishment of national lead-based paint standards for testing and abatement. The HUD document will be referenced as the Guidelines in this report. The State of Connecticut Department of Public Health's current lead regulations, Lead Poisoning Prevention and Control (19a-111-1 through 19a-111-11) were also consulted.

This lead evaluation was comprehensive. A comprehensive inspection means that representative painted surfaces were systematically evaluated on a room-by-room basis in accordance with the Guidelines and the State of Connecticut regulations.

Lead-based paint surfaces and components were identified by utilizing on-site x-ray fluorescence (XRF) instruments. Fuss & O'Neill EnviroScience, LLC (EnviroScience) owns and utilizes Radiation Monitoring Device LPA-1s (RMD) instruments exclusively for lead-based paint (LBP) testing. Each instrument is operated in accordance with state and federal and manufacturer standards. With the exception of wall surfaces, state and federal protocols provide one reading on a representative component per room (i.e., baseboard, chair rail, etc.) as sufficient to establish the lead paint classification. Due to the large spatial areas involved with walls, and the variability in lead content in paint over large areas, the federal and state governments require a reading on each wall surface per room. Therefore, representative testing is not permitted for walls.

The federal government has developed Performance Characteristic Sheets (PCS) for the type of instrument cited above. Each instrument must be calibrated in accordance with these PCSs on a 1.0-milligram lead standard. Each of EnviroScience's instruments has these standards assigned to it. The standards were either purchased directly from the government, or from the instrument manufacturers.

With the RMD in the standard reading mode on metal, a Substrate Equivalent Lead (SEL) concentration must be determined. To determine the SEL, the paint is removed from the substrate to obtain a base substrate reading. After removing the paint, the surface is wiped with a 5% trisodium phosphate solution (TSP). All paint residues are collected and properly disposed. Once the paint and surrounding area are cleaned, the XRF is utilized to determine the SEL for each surface. The SEL values are subtracted from the XRF values to determine the Corrected Lead Concentration (CLC). The CLC is the lead content of the paint on the building component tested.

The RMD instrument has federal government-determined positive and negative ranges for the definition of LBP. XRF results are classified using either the threshold, or the inconclusive range. For the threshold, results are classified as positive if they are greater than or equal to the threshold and negative if they are less than the threshold. There is no inconclusive classification when using

the threshold values associated with an RMD instrument. The ranges for the RMD instrument and their various operating modes are as follows:

Radiation Monitoring Device LPA Analyzer 1

30-Second Standard Mode Reading Description	Substrate	Threshold (mg/cm²)
Results corrected for substrate bias on metal substrate only.	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	0.9
	Plaster	1.0
	Wood	1.0

Quick Mode Reading Description	Substrate	Threshold (mg/cm²)	Inconclusive Range (mg/cm²)
Readings not corrected for substrate bias on any substrate.	Brick	1.0	None
	Concrete	1.0	None
	Drywall	1.0	None
	Metal	1.0	None
	Plaster	1.0	None
	Wood	1.0	None

Prior to the start of any testing, draw a sketch of the building, to define side designations and to help identify exactly where readings were obtained. Drawings depicting the room-numbering scheme are located on the cover page(s) for the building(s) inspected. Each side of the building was labeled A, B, C, or D. The wall "A" side of the unit is generally the side of primary entrance into a dwelling, and this room is always Room 1. Areas in the units include rooms, hallways, and closets. Areas are numbered in a clockwise fashion as building construction allows. This allows the inspector to indicate which substrate surface was tested. The surface condition is described by a check mark in the appropriate column, under the heading "condition of surface" on the testing form.

When more than one surface type was present on a side, the component tested was indicated with a number. If two windows were present on a building side, they were numbered left to right. Closet shelves and shelf supports were numbered top to bottom.

It is understood that the room layouts presented in the report are in conformance with the conditions that exist at the time the testing is performed. EnviroScience avoids labeling a room solely by its current functional use (i.e., living room, bedroom, etc.) since this use can change over time. Similarly, room layouts can change dramatically as dwellings are renovated and additions are built, incorporating existing rooms, or existing interior walls are moved or eliminated altogether.

Lead Dust Wipe Sampling Protocol

Data Collection

A. A description of the sample location is recorded.

B. Surface type (floor, windowsill, window well) is noted.

C. Surface area measurements are recorded.

Wipe Sampling Method

A. The area to be wiped is identified and measured.

B. A disposable glove is put on and the "ghost wipe" package is opened.

C. Without touching any other surface, the wipe is opened and placed flat down on the surface. Using firm, consistent pressure, a wipe is taken in a single "S" motion.

D. Next the wipe is folded in half with the contaminated side facing inward and another wipe is taken again at 90 degrees to the first "S" wipe. Do not use a scrubbing motion, but be sure to collect all visible dust in the measured area.

E. The wipe is folded again with the contaminated side inward. Without touching any other surface, the wipe is placed into a plastic centrifuge tube. The tube is sealed and labeled. The sample number indicates the date and sampler's identity.

F. The samples are submitted to our laboratory on our standard sample log. Date and time of transfer is recorded to ensure proper chain of custody. The analytical procedure utilized is a modified EPA SW-846-3050. Blanks are submitted in accordance with EnviroScience's QA/QC program.

Appendix D

Lead Testing Field Data Sheets

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

LEAD INSPECTION COVER SHEET

Inspector's Information

Inspector's Name: Sandra Guzman
License Number: 2210
XRF Model: LPA1
Serial Number: 3241P
Date of Inspection: 2/19/2015
Project Number: 20140370.05E

Property Information

Building Address: 250 Losey Beach Avenue (Street)
East Haven (City) CT (State)
Age of Property:
Describe Structure: Two-story wood frame house with concrete foundation. Sheet rock walls, wood floor, with metal and wood windows. Wood shingle siding

Are there lead hazards present? ☑ Yes ☐ No
Were lead dust wipes taken? ☑ Yes ☐ No
Were soil samples collected? ☐ Yes ☑ No
Were drinking water samples collected? ☑ Yes ☐ No

Single Family Dwelling ☑

Is there an EBL child present? ☐ Yes ☑ No ☐ Unknown
Is there a child under six years of age in the dwelling? ☐ Yes ☑ No ☐ Unknown

Multiple Family Dwelling ☐

Number of units in building:
Number of units tested:
Is there an EBL child present in the building? ☐ Yes ☐ No ☐ Unknown
If EBL child, which unit(s)?
Is there a child under six years of age in the building? ☐ Yes ☐ No ☐ Unknown
If child under six, which unit(s)?

XRF Calibration Check

Calibration Paint Film Used: ☐ NIST 1.02 mg/cm² ☑ Manufacturer's Standard 1.0 mg/cm²

Calibration Check Limits Used: ☑ RMD (0.7 to 1.3 mg/cm² inclusive)
☐ Scitec MAP4 (0.6 to 1.2 mg/cm² inclusive)

	Hour	First Reading	Second Reading	Third Reading	Average
First Check	9:35	0.7	0.8	0.7	0.73
Second Check	10:50	0.8	0.7	0.8	0.76
Third Check					
Fourth Check					

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

Project Name: 250 Cosey Beach Avenue, East Haven CT. Lothrop- Storm Sandy **Project Number:** 20140370.D5E

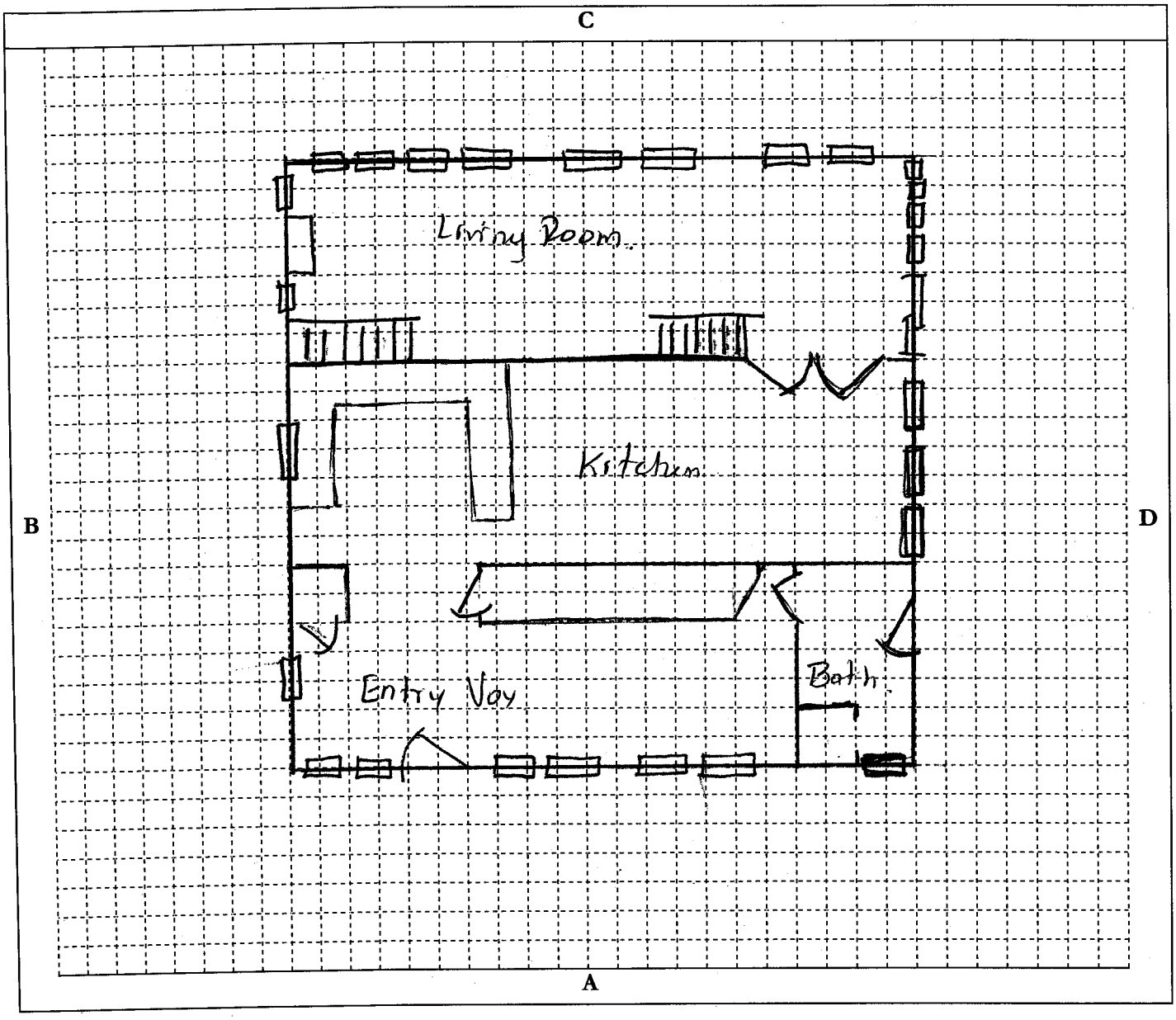
Project Manager: K McCarthy

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #/Bldg #:**

Floor: **Room:** **Page** of

Number of Doors: **No. of Windows:**

Diagram of: 1st Floor



(#) Room Number Door Window Page _____ of _____

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

Project Name: 250 Cosey Beach Avenue, East Haven CT. Lothrop- Storm Sandy **Project Number:** 20140370.D5E

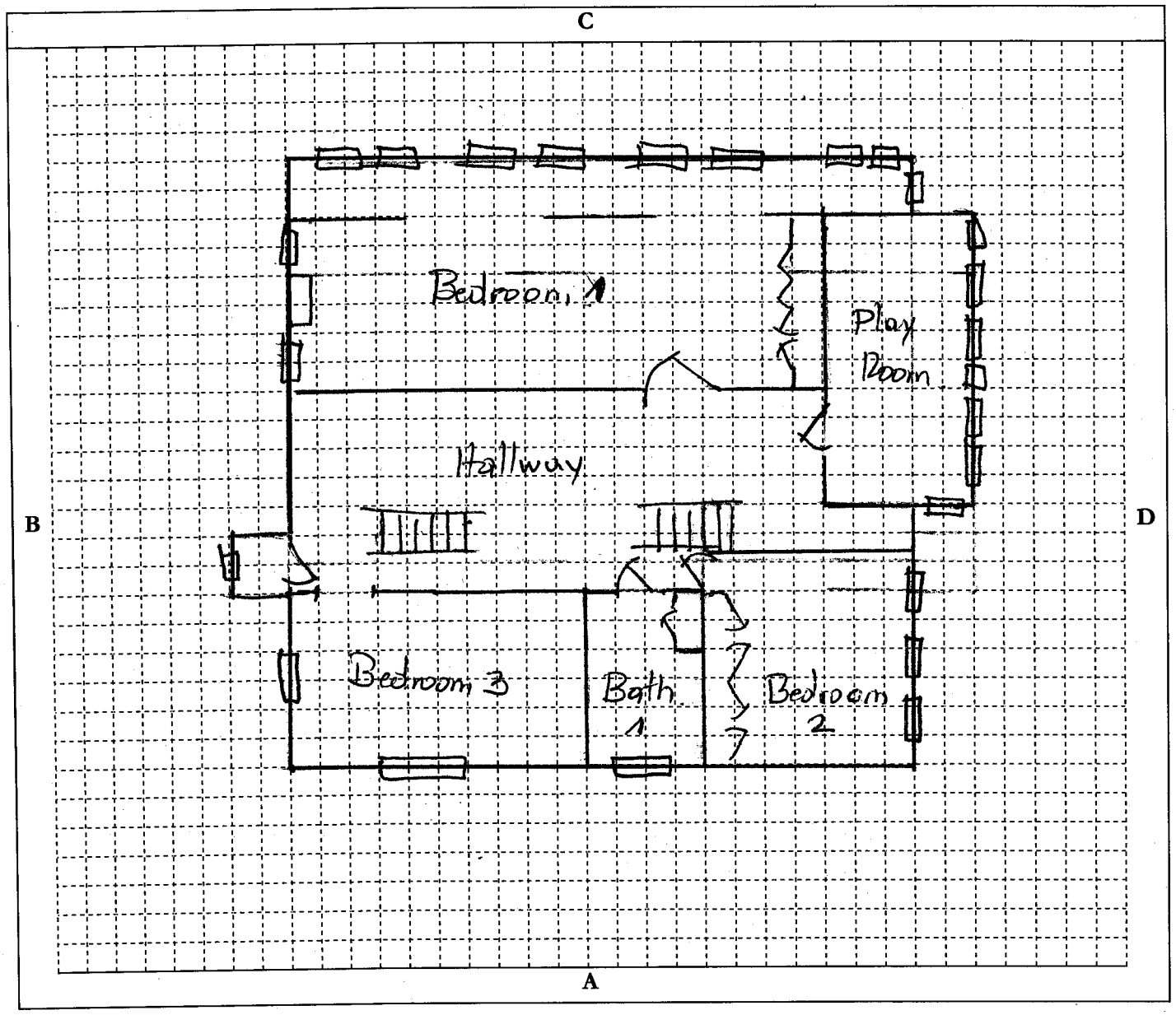
Project Manager: K McCarthy

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #/Bldg #:**

Floor: **Room:** **Page** of

Number of Doors: **No. of Windows:**

Diagram of: 2nd Floor



(#) Room Number Door Window Page _____ of _____

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**

Floor: 2nd **Room:** Bedroom #1 **Page** 1 **of**

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor	N/C	—	W						
	Baseboards	0.2	N	W	White					
A	Wall	-0.3	N	S	Tan					
B	Wall	-0.0	N	S	Tan					
C	Wall	-0.4	N	S	Tan					
D	Wall	<0.3	N	S	Tan					
	~~Chair rail~~									
	Ceiling	-0.1	N	S	White					
	~~Crown Molding~~									
	Door	-0.2	N	W	White					
	Casing	-0.2	N	W	White					
	Jamb	-0.5	N	W	White					
	Door									
	Casing									
	Jamb									
	Window Trim	<0.3	N	W	Tan					
	~~Sill~~									
	Sash	N/C	—	M						Closet Door -0.5 W White
	Well	-0.5	N	M						
	~~Cabinet Base~~									D-wall -0.1 -
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	Radiator									
	Wall Molding									
	Chimney flue	0.1	N	P	White					

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes:

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040 (860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**

Floor: 2nd Floor **Room:** Play room **Page** 2 **of**

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor	N/C	–	W	–					
	Baseboards	-0.1	N	W	white					
A	Wall	-0.1	N	S	Tan					
B	Wall	-0.0	N	S						
C	Wall	-0.2	N	S						
D	Wall	-0.0	N	S	–					
	~~Chair rail~~									
	Ceiling	-0.1	N	S	white					
	~~Crown Molding~~									
	~~Door~~									
	Casing	0.0	N	W	white					kickboard - -0.1 V - Gray
	Jamb	-0.1	N	W	white					
	~~Door~~									
	Casing									
	Jamb									
	Window Trim	-0.0	N	W	white					
	Sill	-0.2	N	W	white					
	Sash	N/C		M	white					
	Well	N/C		M	white					
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	Radiator									
	Wall Molding									

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes:

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**

Floor: 2nd 1 **Room:** Bedroom 2 **Page** 3 **of**

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor	N/C	–	W	–					
	Baseboards	-0.2		W	White					
A	Wall	-0.3	N	S	Pink					
B	Wall	-0.5	N	S	Blue					
C	Wall	-0.1	N	S	Blue					
D	Wall	-0.5	N	S	Blue					
	~~Chair rail~~									
	Ceiling	-0.1	N	S	Yellow					
	~~Crown Molding~~									
	Door	-0.5	N	W	White					
	Casing	-0.1	N	W	White					
	Jamb	-0.3	N	W	White					
	Door									
	Casing									
	Jamb									
	Window ~~Trim~~									
	Sill	-0.4	N	S	Blue					
	Sash	N/C								
	Well	N/C								
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	~~Radiator~~ Closet Door	-0.2	N	W	White					
	Wall Molding									

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes:

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**

Floor: 2nd **Room:** Bath **Page** 4 **of**

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor									
	Baseboards	-0.0	N	W	White					
A	Wall	-0.3	N	S	Brown					
B	Wall	-0.4	N	S						
C	Wall	-0.1	N	S						
D	Wall	-0.0	N	S						
	~~Chair rail~~									
	Ceiling									
	Crown ~~Molding~~									
	Door	-0.3	N	W	White					
	Casing	-0.1	N	W	White					
	Jamb	-0.2	N	W	White					
	Door									
	Casing									
	Jamb									
	Window ~~Trim~~									
	Sill	-0.2	N	S	Brown					
	Sash	N/C	—	M						
	Well	N/C	—	M						
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	~~Radiator~~ Closet W									closet 2.11 -0.5 D-5.10
	Wall Molding									

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes:

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**

Floor: 2 **Room:** Bedroom 3 **Page** 5 **of**

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor	N/C	—	—						
	Baseboards									
A	Wall	0.1	N	S	light Brn					
B	Wall	0.1	N	S						
C	Wall	-0.M	N	S						
D	Wall	-0.3	N	S						
	~~Chair rail~~									
	Ceiling									
	~~Crown Molding~~									
	~~Door~~									
	~~Casing~~									
	Jamb									
	Door									
	Casing									
	Jamb									
	Window Trim	—								
	Sill	-0.2	N	S	light Brn					
	Sash	N/C								
	Well	N/C								
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	Radiator									
	Wall Molding									

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes:

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**

Floor: 2nd **Room:** Laundry / Hall **Page** 6 **of**

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor	N/C	–	W	–					
	Baseboards	-0.5	N	W	white					
A	Wall	-0.7	N	S	Red					
B	Wall	-0.6	N	S						
C	Wall	0.2	N	S						
D	Wall	-0.3	N	S	–					
	~~Chair rail~~									
	Ceiling	-0.3	N	S	white					
	~~Crown Molding~~									
	Door	-0.4	N	W	white					
	Casing	0.1	N	W	white					
	Jamb	-0.4	N	W	white					
	Door									
	Casing									
	Jamb									
	~~Window Trim~~									
	~~Sill~~									
	~~Sash~~									
	Well									
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	Radiator									
	Wall Molding									
	Stringe	1.9	✓	W	white	N	–	–	–	
	Riser	3.6	✓	W	white	N	–	–	✓	

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes:

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**_____

Floor: 2nd **Room:** ~~Hallway Closet~~ Closet @ Landing **Page** ____ **of** ____

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor									
	Baseboards									
A	Wall									
B	Wall	0.4								
C	Wall									
D	Wall									
	Chair rail									
	Ceiling									
	Crown Molding									
	Door									
	Casing									
	Jamb									
	Door									
	Casing									
	Jamb									
	Window Trim									
	Sill	3.5	✓	W	Grey	N				
	Sash									
	Well									
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	Radiator									
	Wall Molding									

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes: _____

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040 (860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**_____

Floor: 1st **Room:** living room **Page** ____ **of** ____

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor	N/C	—	W	—					
	Baseboards	0.1	N	W	white					
A	Wall	-0.0	N	S	Red					
B	Wall	0.1	N	S						
C	Wall	-0.1	N	S						
D	Wall	0.1		S	—					
	~~Chair rail~~									
	Ceiling	0.1	N	S	white					
	~~Crown Molding~~									
	Door	0.7	N	W	white					
	Casing	2.0	N	W	white	N				
	Jamb	0.7	N	W	white					
	Door									
	Casing									
	Jamb									
	Window Trim	-0.1	N	W	white					
	Sill									
	Sash	N/C		M	white					
	Well	N/C		M	white					
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	Radiator									
	Wall Molding									
	Stair Support	0.3	N	W	Green					
	Beam									
	Chimney Flue	0.2	N	P	white					

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes: _____

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:** _____

Floor: 1st **Room:** kitchen **Page** ____ **of** ____

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor	N/C	–	W	—					
	Baseboards	-0.3	N	W	white					
A	Wall	-0.3	N	S	Green					
B	Wall	-0.2	N	S						
C	Wall	-0.0	N	S						
D	Wall	-0.6	N	S	—					
	Chair ~~rail~~									
	Ceiling	-0.2	N	S	white					
	Crown Molding									
	Door	1.3	✓	W	white	Yes	✓	✓	✓	
	Casing	-0.3	N	W	white					
	Jamb	-0.2	N	W	white					
	Door									
	Casing									
	Jamb									
	Window Trim	-0.1	N	W	white					
	Sill									
	Sash	N/C	–	M						
	Well	N/C	–	M						
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	Radiator									
	Wall Molding									

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes: _____

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**_____

Floor: 1st **Room:** Entry **Page** ____ **of** ____

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor	N/C	—	Stone	—					
	Baseboards	-0.1	N	W	white					
A	Wall	-0.4	N	S	Blue					
B	Wall	-0.2	N	S	Blue					
C	Wall	-0.1	N	S	Blue					
D	Wall	-0.6	N	S	Blue					
	Chair ~~rail~~									
	Ceiling	-0.3	N	S	white					
	Crown Molding									
	Door									
	Casing									
	Jamb									
	Door	-0.5	N	W	white					
	Casing	-0.2	N	W	white					
	Jamb	-0.2	N	W	white					
	Window Trim	-0.0	N	W	white					
	Sill	0.1	N	W	white					
	Sash	N/C	—	M						
	Well	~~N/C~~								
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf	-0.1		W	white					
	Shelf Supports	N/C	—	M	—					
	~~Radiator~~ Floor	-0.2	N	W	Grey					
	~~Wall Molding~~									
	Closet Door	-0.1	N	W	white					

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes: _____

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – INTERIOR ROOM

Address: 250 Cosey Beach Avenue, East Haven CT **Apt. #:**_____

Floor: 1st **Room:** Bathroom 2 **Page** ____ **of** ____

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy **(If Positive - Check All That Apply)**

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Floor	N/C		Stone						
	Baseboards	0.0	N	W	White					
A	Wall	-0.4	N	S	Tan					
B	Wall	-0.7	N	S						
C	Wall	-0.1	N	S						
D	Wall	0.0	N	S						
	Chair rail									
	Ceiling	-0.3	N	S	White					
	Crown ~~Molding~~									
	Door	N/C	-	W						
	Casing	-0.1	N	W	White					
	Jamb	-0.1	N	W	White					
	Door									
	Casing									
	Jamb									
	Window Trim	-0.1	N	W	White					
	Sill	-0.1	N	W	White					
	Sash	N/C		M						
	Well									
	Cabinet Base									
	Door Exterior									
	Door Interior									
	Walls									
	Shelves									
	Shelf Supports									
	Closet Shelf									
	Shelf Supports									
	Radiator									
	Wall Molding									

* Substrate Type: Metal = M, Wood = W, Plaster = P, Sheetrock = S, Concrete = C, Brick = B
N/A = Not Accessible; N/C = Not Coated; COV = Covered; VR = Vinyl Replacement

Notes: _____

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – EXTERIOR OF SIDE A

Address: 250 Cosey Beach Avenue, East Haven CT **Page** ____ **of** ____

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Project Manager: K. McCarthy

(If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Color	Defective	Chewable	Friction	Impact	Comments
	Foundation	N/C	–	C	—					
	~~Skirt Board~~									
	Corner Boards	-0.1	N	W	Gray					
	Siding	0.1	N	W	Gray					
	Upper Trim	-0.0	N	M	White					
	Door	-0.3	N	W	White					
	Casing	-0.0	N	W	White					
	Jamb	-0.0	N	W	White					
	Threshold	-0.6	N	M	Black					
	~~Kick Board~~									
	~~Storm Door~~									
	~~Window Sill~~									
	Trim	-0.2	N	M	White					
	Sash	-0.1	N	M	White					
	~~Blind Stops~~									
	Storm Window									
	~~Basement Sash~~									
	~~Frame~~									
	~~Bulkhead~~									
	Downspouts									
	~~Porch Floor~~									
	~~Ceiling Joist~~									
	~~Lower Trim~~									
	Lower Railing									
	~~Balusters~~									
	~~Railing Cap~~									
	~~Ceiling~~									
	~~Lattice~~									
	Lattice Frame									
	~~Support Columns~~									
	~~Column Base~~									
	~~Brackets~~									
	~~Hand Rails~~									
	~~Treads~~									
	~~Risers~~									
	~~Stringers~~									

FUSS & O'NEILL
EnviroScience, LLC
www.fando.com
146 Hartford Road, Manchester, CT 06040
(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – EXTERIOR OF SIDE B

Address: 250 Cosey Beach Avenue, East Haven CT
Page _____ **of** _____
Project Name: Lothrop – Storm Sandy
Project Number: 20140370.5E
Project Manager: K McCarthy

(If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
	Foundation	—							
	Skirt Board								
	Corner Boards	3.4							Yellow - Painted.
	Siding / 2d Siding	07 / 1.7	✓	W / W	D				Light Gray / Dark Gray
	Upper Trim	8.9.	✓	W.					Yellow
	Door								
	Casing								
	Jamb								
	Threshold								
	Kick Board								
	Storm Door								
	Window Sill	—		—					—
	Trim	9.9.	✓	W	D.				Yellow
	Sash	—		Vinyl.					White
	Blind Stops								
	Storm Window	—		Vinyl.					White
	Basement Sash								
	Frame								
	Bulkhead								
	Downspouts								
	Porch Floor								
	Ceiling Joist								
	Lower Trim								
	Lower Railing								
	Balusters								
	Railing Cap								
	Ceiling								
	Lattice								
	Lattice Frame								
	Support Columns								
	Column Base								
	Brackets								
	Hand Rails								
	Treads								
	Risers								
	Stringers								
	Window Jamb	5.4		W					Yellow
	Gate	-0.1		W					White.
	Balcony Ceiling				D.				Yellow.

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – EXTERIOR OF SIDE C

Address: 250 Cosey Beach Avenue, East Haven CT

Page _____ **of** _____

Project Name: Lothrop – Storm Sandy

Project Number: 20140370.5E

Project Manager: K McCarthy

(If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
	Foundation								
	Skirt Board								
	Corner Boards	-0.5		W					White.
	Siding	-0.0		W					Light Gray.
	Upper Trim								
	Door								
	Casing								
	Jamb								
	Threshold								
	Kick Board								
	Storm Door								
	Window Sill	-0.1		W					White
	Trim	-0.6		W					White.
	Sash								
	Blind Stops								
	Storm Window								
	Basement Sash								
	Frame								
	Bulkhead								
	Downspouts								
	Porch Floor								
	Ceiling Joist								
	Lower Trim								
	Lower Railing								
	Balusters								
	Railing Cap								
	Ceiling								
	Lattice								
	Lattice Frame								
	Support Columns								
	Column Base								
	Brackets								
	Hand Rails								
	Treads								
	Risers								
	Stringers								

FUSS & O'NEILL
EnviroScience, LLC
www.fando.com
146 Hartford Road, Manchester, CT 06040
(860) 646-2469 Fax (860) 649-6883

XRF FIELD DATA SHEET – EXTERIOR OF SIDE D.

Address: 250 Cosey Beach Avenue, East Haven CT **Page** _____ **of** _____

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.5E

Project Manager: K McCarthy

(If Positive - Check All That Apply)

Side	Surface	XRF Readings	POS	Substrate	Defective	Chewable	Friction	Impact	Comments
	Foundation								
	Skirt Board								
	Corner Boards	-03/02		W/W					White/White.
	Siding	-0.1		W.					Light Gray
	Upper Trim								
	Door	-03/-00		W/W.					White/White.
	Casing	-0.3/-03		W W.					White/White
	Jamb	-0.0		W					White
	Threshold								
	Kick Board								
	Storm Door								
	Window Sill								white.
	Trim	0.01 -00		W					
	Sash	— —		Vinyl					White
	Blind Stops								
	Storm Window								
	Basement Sash								
	Frame								
	Bulkhead								
	Downspouts								
	Porch Floor								
	Ceiling Joist	3.5	✓	Vinyl	D				white. covering yellow painted joist
	Lower Trim								
	Lower Railing								
	Balusters								
	Railing Cap								
	Ceiling								
	Lattice								
	Lattice Frame								
	Support Columns								
	Column Base								
	Brackets								
	Hand Rails								
	Treads								
	Risers								
	Stringers								
	Soffit	-0.3		Vinyl.					White.
	Gate	-0.1.		W					White

Appendix E

Lead in Dust Laboratory Analytical Report and Chain-of-Custody Forms

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 786-5974
http://www.EMSL.com cinnaminsonleadlab@emsl.com

EMSL Order:	201501877
CustomerID:	ENVI54
CustomerPO:	20140370.D5E
ProjectID:	

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone:	(860) 646-2469
Fax:	(888) 838-1160
Received:	02/20/15 9:55 AM
Collected:	2/16/2015

Project: **20140370.D5E / Lothrop-Storm Sandy / 250 Cosey Beach Avenue,East Haven,CT**

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Area Sampled*	*Lead Concentration*
0216JB-01	*201501877-0001*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Bedroom #1 Window Well				
0216JB-02	*201501877-0002*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Bedroom #1 Window Sill				
0216JB-03	*201501877-0003*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: Bedroom #1 Floor				
0216JB-04	*201501877-0004*	2/16/2015	2/20/2015	36 in²	45 µg/ft²
	Site: Bedroom #2 Window Well				
0216JB-05	*201501877-0005*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Bedroom #2 Window Sill				
0216JB-06	*201501877-0006*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: Bedroom #2 Floor				
0216JB-07	*201501877-0007*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Bedroom #3 Window Well				
0216JB-08	*201501877-0008*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Bedroom #3 Window Sill				
0216JB-09	*201501877-0009*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: Bedroom #3 Floor				
0216JB-10	*201501877-0010*	2/16/2015	2/20/2015	36 in²	100 µg/ft²
	Site: Bathroom #1 Window Well				
0216JB-11	*201501877-0011*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Bathroom #1 Window Sill				
0216JB-12	*201501877-0012*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: Bathroom #1 Floor				
0216JB-13	*201501877-0013*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Play Room Window Well				
0216JB-14	*201501877-0014*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Play Room Window Sill				
0216JB-15	*201501877-0015*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: Play Room Floor				

Julie Smith - Laboratory Director
NJ-NELAP Accredited:03036
or other approved signatory

*Analysis following Lead in Dust by EMSL SOP/ Determination of Environmental Lead by FLAA. Reporting limit is 10 ug/wipe. ug/wipe = ug/ft2 x area sampled in ft2. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities (such as volume sampled) or analytical method limitations. Samples received in good condition unless otherwise noted. The lab is not responsible for data reported in µg/ft² which is dependant on the area provided by non-lab personnel. The test results contained within this report meet the requirements of NELAC unless otherwise noted. "<" (less than) results signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA-LAP, unless specifically indicated otherwise

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 02/23/2015 13:09:42

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 786-5974
http://www.EMSL.com cinnaminsonleadlab@emsl.com

EMSL Order:	201501877
CustomerID:	ENVI54
CustomerPO:	20140370.D5E
ProjectID:	

Attn: **Kevin McCarthy**
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone:	(860) 646-2469
Fax:	(888) 838-1160
Received:	02/20/15 9:55 AM
Collected:	2/16/2015

Project: **20140370.D5E / Lothrop-Storm Sandy / 250 Cosey Beach Avenue,East Haven,CT**

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Area Sampled*	*Lead Concentration*
0216JB-16	*201501877-0016*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: 2nd Floor Landing Floor				
0216JB-17	*201501877-0017*	2/16/2015	2/20/2015	36 in²	3400 µg/ft²
	Site: Living Room Window Well				
0216JB-18	*201501877-0018*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Living Room Window Sill				
0216JB-19	*201501877-0019*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: Living Room Floor				
0216JB-20	*201501877-0020*	2/16/2015	2/20/2015	36 in²	120 µg/ft²
	Site: Kitchen Window Well				
0216JB-21	*201501877-0021*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: Kitchen Floor				
0216JB-22	*201501877-0022*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Entryway Window Well				
0216JB-23	*201501877-0023*	2/16/2015	2/20/2015	36 in²	<40 µg/ft²
	Site: Entryway Window Sill				
0216JB-24	*201501877-0024*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: Entryway Floor				
0216JB-25	*201501877-0025*	2/16/2015	2/20/2015	36 in²	170 µg/ft²
	Site: Bathroom #2 Window Well				
0216JB-26	*201501877-0026*	2/16/2015	2/20/2015	36 in²	240 µg/ft²
	Site: Bathroom #2 Window Sill				
0216JB-27	*201501877-0027*	2/16/2015	2/20/2015	144 in²	<10 µg/ft²
	Site: Bathroom #2 Floor				
0216JB-28	*201501877-0028*	2/16/2015	2/20/2015	n/a	<10 µg/wipe
	Site: Field Blank				
0216JB-29	*201501877-0029*	2/16/2015	2/20/2015	n/a	<10 µg/wipe
	Site: Field Blank				

Julie Smith - Laboratory Director
NJ-NELAP Accredited:03036
or other approved signatory

*Analysis following Lead in Dust by EMSL SOP/ Determination of Environmental Lead by FLAA. Reporting limit is 10 ug/wipe. ug/wipe = ug/ft2 x area sampled in ft2. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities (such as volume sampled) or analytical method limitations. Samples received in good condition unless otherwise noted. The lab is not responsible for data reported in µg/ft² which is dependant on the area provided by non-lab personnel. The test results contained within this report meet the requirements of NELAC unless otherwise noted. "<" (less than) results signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA-LAP, unless specifically indicated otherwise

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 02/23/2015 13:09:42

OrderID: 201501877

201501877

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54

FUSS & O'NEILL
EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

SAMPLE LOG FOR LEAD WIPES

Sheet No. 1 **of** 3

Project Name: Lothrop – Storm Sandy

Project Number: 20140370.D5E

Building: 250 Cosey Beach Avenue, East Haven CT

Project Manager: K. McCarthy

Sample ID Number	Sample Location/Building	Surface		Result (ug/ft)	Lab Number
		Component	Sq. In		
0216JB-01	Bedroom #1	Window Well	36		
0216JB-02	Bedroom #1	Window Sill	36		
0216JB-03	Bedroom #1	Floor	144		
0216JB-04	Bedroom #2	Window Well	36		
0216JB-05	Bedroom #2	Window Sill	36		
0216JB-06	Bedroom #2	Floor	144		
0216JB-07	Bedroom #3	Window Well	36		
0216JB-08	Bedroom #3	Window Sill	36		
0216JB-09	Bedroom #3	Floor	144		
0216JB-10	Bathroom #1	Window Well	36		
0216JB-11	Bathroom #1	Window Sill	36		
0216JB-12	Bathroom #1	Floor	144		

Analysis Method: EPA-SW-846-3050(MOD.)

Turnaround Time 48 Hours

Wipe Media ☒ ASTM ☐ Non ASTM

Based on the turnaround time indicated above, analyses are due to Fuss & O'Neill EnviroScience on or before this date:_____.
Please call the Fuss & O'Neill EnviroScience laboratory at 860-646-2469 if analyses will be late.

Fax Results To: Fuss & O'Neill EnviroScience Laboratory at 888-838-1160

Special Instructions:

Samples Collected By: J Blan Date: 2-16-15 Time. Morning

Samples Rec'd/Sent By: Date: Time.

Samples Received By: Date: 2/20/15 Time 9:55am EMSL-Fx

Shipped To: ☒ EMSL (State) NJ ☐ Other

Method of Shipment: ☒ Fed Ex. ☐ UPS Overnight ☐ UPS Ground ☐ Other

F:\P2014\0370\D5E\Lab Data\Lead Wipes_COC_2015-0216.docx

OrderID: 201501877

201501877

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54

FUSS & O'NEILL EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040

(860) 646-2469 Fax (860) 649-6883

SAMPLE LOG FOR LEAD WIPES

Sheet No. 2 of 3

Project Name: Lothrop – Storm Sandy

Project Number: 20140370 D5E

Building: 250 Cosey Beach Avenue, East Haven CT

Project Manager: K. McCarthy

Sample ID Number	Sample Location/Building	Surface		Result (ug/ft)	Lab Number
		Component	Sq. In		
0216JB-13	Play Room	Window Well	36		
0216JB-14	Play Room	Window Sill	36		
0216JB-15	Play Room	Floor	144		
0216JB-16	2nd Floor Landing	Floor	144		
0216JB-17	Living Room	Window Well	36		
0216JB-18	Living Room	Window Sill	36		
0216JB-19	Living Room	Floor	144		
0216JB-20	Kitchen	Window Well	36		
0216JB-21	Kitchen	Floor	144		
0216JB-22	Entry Way	Window Well	36		
0216JB-23	Entry Way	Window Sill	36		
0216JB-24	Entry Way	Floor	144		

Analysis Method: EPA-SW-846-3050(MOD.)

Turnaround Time 48 Hours

Wipe Media ☒ ASTM ☐ Non ASTM

Based on the turnaround time indicated above, analyses are due to Fuss & O'Neill EnviroScience on or before this date:_____.
Please call the Fuss & O'Neill EnviroScience laboratory at 860-646-2469 if analyses will be late.

Fax Results To: Fuss & O'Neill EnviroScience Laboratory at 888-838-1160

Special Instructions:

Samples Collected By: S Blum Date: 2-16-15 Time: Morning

Samples Rec'd/Sent By: Date: / Time: /

Samples Received By: Date: 2/20/15 Time: 9:55am EMSL-Ex

Shipped To: ☒ EMSL (State) NJ ☐ Other

Method of Shipment: ☒ Fed Ex. ☐ UPS Overnight ☐ UPS Ground ☐ Other

F:\P2014\0370\D5E\Lab Data\Lead Wipes_COC_2015-0216.docx

OrderID: 201501877

201501877

Fuss & O'Neill EnviroScience EMSL Customer No. ENVI54

FUSS & O'NEILL EnviroScience, LLC

www.fando.com

146 Hartford Road, Manchester, CT 06040 (860) 646-2469 Fax (860) 649-6883

SAMPLE LOG FOR LEAD WIPES

Sheet No. 3 of 3

Project Name: Lothrop – Storm Sandy **Project Number:** 20140370.D5E

Building: 250 Cosey Beach Avenue, East Haven CT **Project Manager:** K. McCarthy

Sample ID Number	Sample Location/Building	Surface Component	Surface Sq. In	Result (ug/ft)	Lab Number
0216JB-25	Bathroom #2	Window Well	36		
0216JB-26	Bathroom #2	Window Sill	36		
0216JB-27	Bathroom #2	Floor	144		
0216JB-28	Field Blank	/	/		
0216JB-29	Field Blank	/	/		

Analysis Method: EPA-SW-846-3050(MOD.) Turnaround Time 48 Hours

Wipe Media ☒ ASTM ☐ Non ASTM

Based on the turnaround time indicated above, analyses are due to Fuss & O'Neill EnviroScience on or before this date:_____.
Please call the Fuss & O'Neill EnviroScience laboratory at 860-646-2469 if analyses will be late.

Fax Results To: Fuss & O'Neill EnviroScience Laboratory at 888-838-1160

Special Instructions:

Samples Collected By: SBlum Date: 2-16-15 Time: Morning

Samples Rec'd/Sent By. / Date: / Time.

Samples Received By: [signature] Date: 2/20/15 Time: 9:55am EMSL-Fx

Shipped To: ☒ EMSL (State) NJ ☐ Other

Method of Shipment: ☒ Fed Ex. ☐ UPS Overnight ☐ UPS Ground ☐ Other

F:\P2014\0370\D5E\Lab Data\Lead Wipes_COC_2015-0216.docx

Appendix F

Lead in Water Laboratory Analytical Report and Chain-Of-Custody Form

Date Samples Received: 02/20/15

Client Name : **Fuss & O'Neill EnviroScience**	CTL Lab No. : 0215226
Report Date : 02/23/15	PO/ Job No. : 20140370.D5E

RESULTS OF ANALYSIS

EPA Method 200.9

Date Analyzed: 02/23/15

Matrix Type :		**W**	**W**		
CTL Sample No.:		**1903**	**1904**		
Field ID :		**20150220**	**20150220**		
		JB-01	**JB-02**		
Parameters	**RL**				
Total Lead-mg/L	0.005	ND	ND		

RL= Reporting Limit **ND**= Not Detected

Matrix Type: W= Water/Aqueous **S**= Soil/Solid **O**= Oil/Hydrocarbon

Connecticut Testing Laboratories, Inc.
165 Gracey Avenue / Meriden, CT 06451
(203) 634-3731 (Fax) 630-1336
Certification CT-PH0547/ MA-CT035

0215226

FUSS & O'NEILL
(860) 646-2469 • www.FandO.com

☐ 146 Hartford Road, Manchester, CT 06040
☑ 56 Quarry Road, Trumbull, CT 06611
☐ 1419 Richland Street, Columbia, SC 29201
☐ 78 Interstate Drive, West Springfield, MA 01089
☐ 317 Iron Horse Way, Suite 204, Providence, RI 02908
☐ 80 Washington Street, Suite 301, Poughkeepsie, NY
☐ Other _____

CHAIN-OF-CUSTODY RECORD 33448

Turnaround Time Requirement
☑ 24-Hour* ☐ 72-Hour* ☐ Other _____ (days)
☐ 48-Hour* ☐ Standard (____ days) *Surcharge Applies

Project Name	Project Location	Project Number	Laboratory
Lothrop Storm Sandy	250 Cosey Beach Ave, East Haven	20140370.D5E	Connecticut Testing Lab

Report To: Kevin McCarthy / Karran Redfield
Invoice To: Sarah Owens
P.O. No.: 20140370.D5E
Sampler's Signature: J. Blum Date: 2-20-15

Source Codes:
MW=Monitoring Well PW=Potable Water T=Treatment Facility S=Soil B=Sediment
SW=Surface Water ST=Stormwater W=Waste A=Air C=Concrete
X=Other _____

Analysis Request: Lead in Water

Containers: Soil VOA Vial, ☐ methanol; Soil VOA Vial, ☐ water; Glass Soil Container (___) oz; ☐ $Na(SO_4)_2$; Other:; Other:; Water VOA Vial, ☐ As is; Glass Amber (___) ml, ☐ As is; Plastic - As is, ☐ 250 ml; Plastic - H_2SO_4, ☐ 250 ml; Plastic - HNO_3, 250 ml; Plastic - NaOH, 250 ml; ☐ H_2SO_4; ☑ 1000 ml; ☐ 500 ml; ☐ Filtered; ☐ 0.45µ; ☐ 10µ

Item No.	Transfer Check 1	2	3	4	Sample Number 20150220JB	Source Code	Date Sampled	Time Sampled	Lead in Water	Plastic - As is, ☐ 250 ml	Comments
1	✓				1 -01	DW	2-20-15	800	✓ 1903	1	1st Draw
2	✓				1 -02	1	1	802	✓ 04	1	2nd Draw
											temp=5.0°C

Transfer Number	Relinquished By	Accepted By	Date	Time
1	J. Blum	F+O Fridge	2-20-15	850
2	F+O Fridge	R.H.	2-20-15	1200
3	R.H.	[illegible]	2/20/15	12:00
4	[illegible]	M. McMahon	2/20/15	12:40

Charge Exceptions: ☐ CT Tax Exempt ☐ QA/QC ☐ Other _____
____ Duplicates ____ Blanks (Item Nos:)

Reporting and Detection Limit Requirements: ☐ RCP Deliverables ☐ MCP CAM Cert.

Additional Comments: 3°

Appendix G

Mold Laboratory Analytical Report and Chain-Of-Custody Form

EMSL Analytical, Inc.
200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

Order ID:	371502486
Customer ID:	ENVI54
Customer PO:	20140370.D5E
Project ID:	

Attn: J. Blum
Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Phone:	(860) 646-2469
Fax:	(888) 838-1160
Collected:	02/19/2015
Received:	02/20/2015
Analyzed:	02/21/2015

Proj: 20140370.D5E / 250 Cosey Beach Avenue East Haven CT

Test Report: Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, and Other Particulates from Bulk Samples (EMSL Method: M041)

Lab Sample Number:	371502486-0001				
Client Sample ID:	02195SG-01				
Sample Location:	Second Floor Bathroom Ceiling				
Spore Types	Category				
Agrocybe/Coprinus	-				
Alternaria	-				
Ascospores	-				
Aspergillus/Penicillium	-				
Basidiospores	-				
Bipolaris++	-				
Chaetomium	-				
Cladosporium	*High*				
Curvularia	-				
Epicoccum	-				
Fusarium	-				
Ganoderma	-				
Myxomycetes++	-				
Paecilomyces	-				
Rust	-				
Scopulariopsis	-				
Stachybotrys	-				
Torula	-				
Ulocladium	-				
Unidentifiable Spores	-				
Zygomycetes	-				
Fibrous Particulate	-				
Hyphal Fragment	-				
Insect Fragment	-				
Pollen	-				

Category: Count/per area analyzed
Rare: 1 to 10 Low: 11 to 100 Medium: 101 to 1000 High: >1000

Bipolaris++ = Bipolaris/Dreschlera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut
* = Sample contains fruiting structures and/or hyphae associated with the spores.

No discernable field blank was submitted with this group of samples.

Farbod Nekouei, M.S., Laboratory Director
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation of the data contained in this report is the responsibility of the client. "-" denotes not detected. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Accredited #100194

Initial report from: 02/23/2015 08:23:39

For Information on the fungi listed in this report please visit the Resources section at www.emsl.com

OrderID: 371502486

371502486

Chain of Custody

Environmental Microbiology Lab Services

EMSL Analytical, Inc.
107 Haddon Avenue
Westmont, NJ 08108

Phone: (856) 858-4800
Fax: (856) 858-4960 (856) 427-1608
http://www.emsl.com

Please print all information legibly.

[redacted] Fuss & O'Neill EnviroScience, LLC	[redacted] Fuss & O'Neill EnviroScience, LLC
146 Hartford Road	146 Hartford Road
Manchester, CT	Manchester, CT
06040	06040
United States	United States
James Blum 860-921-6222	
860-646-2469	860-646-2469
413-647-0018	860-649-6883
JBlum @fando.com	KMcCarthy@fando.com
20140370. D5E	

Project Name/Number: Cosey Beach Avenue, East Haven CT Date Collected 02/19/2015 Date Sent 02/20/2015

For EMSL use only
EMSL Order No. _____
Sample(s) received in good condition? [Y] [N]
Discernable field blank submitted? [Y] [N]

Sample ID	Sample Location	Sample Type	Volume (liters), Area (sq. cm), or Weight (grams)	Analysis Code*	Turn-around Time*	Comments
021915SG- 01	Second Floor Bathroom Ceiling	Type Compound	4 grams	M041	48 Hours	

*See attached schedule

Relinquished by: Sandra Guzman SGuzman Date: 02/19/2015 Time: 13:00

Received by: ORM Date: 2-20-15 Time: 7:50

EMSL-MI-COCv4.0

Page: ___ of ___

F:\P2014\0370\D5E\Lab Data\250 Cosey Beach Mold Bulk CoC 20150219.docx

Appendix H

Airborne Radon Gas Sampling Laboratory Analytical Report and Chain-Of-Custody Form

RTCA RADON TESTING CORPORATION OF AMERICA

PC1502200129

Site Radon Inspection Report

Date : 02/20/2015

Ms. Karron Redfield
Fuss & O'Neill Enviroscience, LLC
146 Hartford Road
Manchester, CT 06040-

Client: Lothrop-Storm Sandy-PC20140370.D5E
Test Location: 250 Cosey Beach Ave
East Haven, CT 06512-

Individual Canister Results

Canister ID# :	2360378	Test Start :	02/16/2015 @ 09:17
Canister Type :	Charcoal Canister 3 inch	Test Stop :	02/19/2015 @ 08:31
Location :	Living Rm-B	Received:	02/20/2015 @ 16:00
Radon Level :	0.1 pCi/L	Analyzed:	02/20/2015 @ 16:22
Error for Measurement is: ±	0.2 pCi/L		

Canister ID# :	2366953	Test Start :	02/16/2015 @ 09:15
Canister Type :	Charcoal Canister 3 inch	Test Stop :	02/19/2015 @ 08:29
Location :	Kitchen-D	Received:	02/20/2015 @ 16:00
Radon Level :	0.3 pCi/L	Analyzed:	02/20/2015 @ 16:22
Error for Measurement is: ±	0.2 pCi/L		

Canister ID# :	2366956	Test Start :	02/16/2015 @ 09:17
Canister Type :	Charcoal Canister 3 inch	Test Stop :	02/19/2015 @ 08:31
Location :	Living Rm	Received:	02/20/2015 @ 16:00
Radon Level :	0.1 pCi/L	Analyzed:	02/20/2015 @ 16:22
Error for Measurement is: ±	0.4 pCi/L		

Canister ID# :	2366989	Test Start :	02/16/2015 @ 09:15
Canister Type :	Charcoal Canister 3 inch	Test Stop :	02/19/2015 @ 08:29
Location :	Kitchen	Received:	02/20/2015 @ 16:00
Radon Level :	0.3 pCi/L	Analyzed:	02/20/2015 @ 16:22
Error for Measurement is: ±	0.2 pCi/L		

National Radon Safety Board NRSB Certified Radon Professionals

Andreas C. George
Radon Measurement Specialist
NJ MES 11089

Dante Galan
Laboratory Director

NRSB ARL0001
NYS ELAP ID: 10806
PADEP ID: 0346
NJDEP ID: NY933
NJ MEB 90036
FL DOH RB1609
IL RNL2000201

(914)345-3380
FAX (914)345-8546

2 Hayes Street, Elmsford, NY 10523
www.rtca.com

PC1502200129

RTCA RADON TESTING CORPORATION OF AMERICA

Site Radon Inspection Report

Date : 02/20/2015

Ms. Karron Redfield
Fuss & O'Neill Enviroscience, LLC
146 Hartford Road
Manchester, CT 06040-

Client: Lothrop-Storm Sandy-PC20140370.D5E
Test Location: 250 Cosey Beach Ave
East Haven, CT 06512-
Individual Canister Results

The reported results indicate that radon levels in the building tested are below the United States Environmental Protection Agency (EPA) action level of 4.0 picoCuries per liter of air (pCi/L). The EPA recommends retesting if your living patterns change and you begin occupying a lower level of the building, such as a basement or if major remodeling is done.

General radon information may be obtained by consulting the EPA booklet: A Citizen's Guide to Radon (www.epa.gov/radon/pubs/citguide.html). To request a copy or for further information, please contact your state health department. The EPA maintains a radon information website, including copies of its publications, at www.epa.gov/iaq/radon.

For New Jersey clients: Please see the attached guidance document entitled Radon Testing and Mitigation: The Basics for further information.

For New York clients: If the radon level of one or more testing devices is equal to or exceeds 20 pCi/L please contact the New York State Department of Health, Bureau of Environmental Radiation Protection, for technical advice and assistance at 518-402-7556 or toll free 1-800-458-1158.

PLEDGE OF ASSURED QUALITY

All procedures used for generating this report are in complete accordance with the current EPA protocols for the analysis of radon in air (EPA 402-R-92-004). The analytical results relate only to the samples tested, in the condition received by the lab, and that calculations were based upon the information supplied by client. RTCA and its personnel do not assume responsibility or liability, collectively and individually, for analysis results when detectors have been improperly handled or placed by the consumer, nor does RTCA and its personnel accept responsibility for any financial or health consequences of subsequent action or lack of action, taken by the customer or it's consultants based on RTCA-provided results.

National Radon Safety Board NRSB Certified Radon Professionals

Andreas C. George
Radon Measurement Specialist
NJ MES 11089

Dante Galan
Laboratory Director

NRSB ARL0001
NYS ELAP ID: 10806
PADEP ID: 0346
NJDEP ID: NY933
NJ MEB 90036
FL DOH RB1609
IL RNL2000201

(914)345-3380
FAX (914)345-8546

2 Hayes Street, Elmsford, NY 10523
www.rtca.com

FUSS & O'NEILL
EnviroScience, LLC

Radon Testing Summary Sheet

Contact/Phone #: James Blum/203-374-3748 x3541

Project #: 20140370.D5E

Project: Lothrop – Storm Sandy

Address: 250 Cosey Beach Ave

East Haven, CT

Placed by: J Blum

Retrieved by: R Eaton

Start Date: 2-16-15

Stop Date: 2-19-15

Weather at Placement: 1°F, Sunny

Email results to Jblum@fando.com. Please Make Sure to Include Chain-of-Custody

Instructions: Tear off center bar coded label from canister and affix to sheet in spaces provided. Please make sure top bar coded label is left on detector. Identify test location for each detector in space provided for that detector (room #, location in room, etc.). Use additional sheets as necessary. Please mark clearly if any detector is missing or damaged at retrieval.

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM
2366989
REMOVE THIS PORTION AND KEEP FOR YOUR RECORDS
2366989
Client
RADON TESTING CORP. OF AMERICA

Start Time: 9:15
Stop Time: 8:29
Identifier:
Kitchen

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM
2366953
REMOVE THIS PORTION AND KEEP FOR YOUR RECORDS
2366953
Client
RADON TESTING CORP. OF AMERICA

tart Time: 9:15
top Time: 8:29
lentifier:
kitchen D

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM
2366956
REMOVE THIS PORTION AND KEEP FOR YOUR RECORDS
2366956
Client
RADON TESTING CORP. OF AMERICA

Start Time: 9:17
Stop Time: 8:31
Identifier:
living room

REMOVE THIS PORTION AND AFFIX TO TEST INFORMATION FORM
2360378
REMOVE THIS PORTION AND KEEP FOR YOUR RECORDS
2360378
Client
RADON TESTING CORP. OF AMERICA

tart Time:
Stop Time: N/A
Identifier:
living room - B

Start Time:
Stop Time:
Identifier:

Start Time:
Stop Time:
Identifier:

Start Time:
Stop Time:
Identifier:

Start Time:
Stop Time:
Identifier:

Start Time:
Stop Time:
Identifier:

Start Time:
Stop Time:
Identifier:

56 Quarry Road, Trumbull, CT 06611
t (203) 374-3748
f (203) 374-4391
www.FandO.com

Appendix I

Site Photographs

Mold on 2nd Floor Bathroom Ceiling

Defective LBP on Kitchen Door

Defective LBP on Kitchen Door

Defective LBP on Exterior Ceiling Joist

LPB on Bottom Layer of Wood Shingle Siding