Lead Clearance Inspection
37-39 Green Street
Middletown, Connecticut

Nehemiah Housing Corporation, Inc.
Middletown, Connecticut

December 7, 2010

Fuss & O'Neill EnviroScience, LLC
146 Hartford Road
Manchester, CT 06040

Project No. 20072210.A2E
December 7, 2010

Mr. Michael Taylor, Executive Director
Nehemiah Housing Corporation, Inc.
668 Main Street
Middletown, CT 06457

RE: Lead Clearance Inspection
37-39 Green Street
Middletown, Connecticut
Fuss & O’Neill EnviroScience Project No. 20072210.A2E

Dear Mr. Taylor:

Enclosed is the report for the lead-based paint clearance sampling for the two-family home located at 37-39 Green Street in Middletown, Connecticut. Included are the sample logs and results.

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

Sincerely,

David T. Kohl
Project Manager

DTK/kr
# Table of Contents

Lead Clearance Inspection  
Nehemiah Housing Corporation, Inc.

1 Introduction ........................................................................................................... 1

2 Testing Procedures and Equipment ................................................................. 1
   2.1 Data Collection................................................................................................. 1
   2.2 Wipe Sampling Method .................................................................................. 1
   2.3 Soil Sampling Method ................................................................................. 2

3 Results ................................................................................................................... 3

Appendices

APPENDIX A - SAMPLE LOGS & LABORATORY RESULTS
APPENDIX B - SITE DIAGRAMS

End of Report
1 Introduction

On November 16, 2010, Fuss and O'Neill EnviroScience LLC's (EnviroScience) Connecticut certified lead inspector Kathleen Morgan conducted an interior visual inspection of the twofamily home, collected wipe samples of the interior, conducted an exterior visual inspection, and collected soil samples of the exterior of the residence located at 37-39 Green Street in Middletown, Connecticut. The wipe samples were collected from horizontal surfaces in each interior lead remediation work area in first floor unit, designated 37 Green Street and the second floor unit, designated 39 Green Street. There were no interior common areas. Wipe samples were analyzed to determine if lead dust levels on surfaces were less than re-occupancy levels allowed after a lead remediation project, as provided by the U.S. Department of Housing and Urban Development (HUD). Soil samples were collected from bare soil areas to determine if lead in soil levels exceeded HUD criteria. The residence is currently vacant.

2 Testing Procedures and Equipment

Dust wipe samples were collected from locations delineated on our sample log.

2.1 Data Collection

A. A description of the sample location is recorded. (Floor samples should not be taken in the middle of the room.)

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

C. Surface area measurements are recorded fro wipe samples.

2.2 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.

2.3 Soil Sampling Method

Linear Transect Method:
For use around roadways, buildings, and other structures such as painted fencing, concrete walls, etc. Each side of the building is labeled with a letter. The ‘A’ side of the building is the street side. The remaining sides are labeled B, C, and D, clockwise around the building. Fencing and concrete walls are similarly labeled if there is a street side. Otherwise, along with roadways, these structures can be labeled using the directional points North, South, East and West.

1. Linear transects are established parallel to the building, wall, fence or roadway at 2-foot intervals. Note: the 2-foot (or drip line) interval is essential for buildings since this is the area where the highest lead in soil levels are likely to be found.

2. Three (3) to ten (10) distinct locations roughly equidistant from one another along the transect line are selected as sample points. As a general rule, we would like to see five sampling points for each 100 feet of transect line, but sample points should be at least 2 feet apart, so in smaller areas (less than 10 feet), fewer samples may be collected.

3. Samples of the top one-half inch (0.5") of soil should be taken using a metal spoon or stainless-steel scoop. Collect soil until a circular hole of approximately 2 inches in diameter (0.5" deep) has been created. Samples from each of the sampling points should be composited into a 24-ounce plastic bag of at least 3 mil in weight. The bags should be either zip-locked or foldable with puncture proof tabs.

4. After each composite sample is collected, the sampling spoon or scoop should be thoroughly cleaned with a disposable wipe to prevent cross contamination of other composite samples to be collected in other areas on the site.

5. The soil samples are dried, weighed out and digested in nitric acid according to EPA Method 3050. Analysis is performed by direct aspiration flame atomic absorption spectrophotometry according to EPA Method 7420. Results are expressed in milligrams per kilogram (mg/kg), or parts-per-million (ppm).

Grid Method:
In other areas, such as play areas and other open spaces, an X shaped axis should be developed with directional reference points of North, South, East and West. At least five, but not more than ten sampling points should be designated along each axis. The sampling points should be equidistant from one another and should be at least one foot distant from each other.

The sampling and compositing procedures outlined in the linear transect method should be followed for each axis.

For all soil sampling, a property sketch should be drawn. It is recommended that you use the space provided on the back of the lead in soil sample log.
3 Results

The clearance criteria for lead dust wipe samples for HUD are:

- <40 micrograms of lead per square foot (ug/ft²) for floors
- <250 ug/ft² for window sills
- <400 ug/ft² for window wells

The attached results of the dust wipe analyses, for 37 Green Street, Middletown, Connecticut, indicate that dust levels of lead were below their respective standards and interior clearance was achieved.

The attached results of the dust wipe analyses, for 39 Green Street, Middletown, Connecticut, indicate that dust levels of lead were below their respective standards and interior clearance was achieved.

Under HUD and State of CTDPH clearance protocols, composite soil samples from bare areas should be collected to ascertain if hazardous levels of lead in soil, which could have been generated by the remediation activities, exist on the property. Soil samples were collected from the drip line, approximately 2 feet from the foundation, and the midyard, in accordance with the above soil sampling protocol. The sample results were compared to the HUD/EPA standard for bare soil in residential sites in non-play areas which is 1200 mg/kg. Sample results were also compared to the CTDPH's standard for bare residential soil of 400 mg/kg which is identical to EPA's standard for children's play areas. It is CTDPH's position that any area of bare soil is a potential play area on a residential property. HUD has taken the position that whichever standard is the strictest should be the one followed during the clearance process. The sample, at the drip line (54 mg/kg) and midyard (<40 mg/kg) were below HUD and CTDPH standards. Exterior clearance was achieved. Please refer to Appendix A for laboratory analytical results.

Report prepared by Kathleen Morgan.

Reviewed by:

David T. Kohl  
Project Manager

Robert L. May, Jr.  
Vice President
Appendix A

Laboratory Results and Chain of Custody
### Test Report: Lead In Dust by Flame AAS (SW 846 3050B*7000B)

<table>
<thead>
<tr>
<th>Client Sample Description</th>
<th>Lab ID</th>
<th>Collected</th>
<th>Analyzed</th>
<th>Area Sampled</th>
<th>Lead Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1116KM 01</td>
<td>0001</td>
<td>11/16/2010</td>
<td>11/18/2010</td>
<td>144 in²</td>
<td>&lt;10 µg/ft²</td>
</tr>
<tr>
<td>Site: LIVING ROOM ENTRY WAY WINDOW / FLOOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1116KM 02</td>
<td>0002</td>
<td>11/16/2010</td>
<td>11/18/2010</td>
<td>105 in²</td>
<td>&lt;14 µg/ft²</td>
</tr>
<tr>
<td>Site: LIVING ROOM ENTRY WAY WINDOW / SILL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1116KM 03</td>
<td>0003</td>
<td>11/16/2010</td>
<td>11/18/2010</td>
<td>144 in²</td>
<td>12 µg/ft²</td>
</tr>
<tr>
<td>Site: KITCHEN / FLOOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1116KM 04</td>
<td>0004</td>
<td>11/16/2010</td>
<td>11/18/2010</td>
<td>105 in²</td>
<td>&lt;14 µg/ft²</td>
</tr>
<tr>
<td>Site: KITCHEN / SILL</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1116KM 05</td>
<td>0005</td>
<td>11/16/2010</td>
<td>11/18/2010</td>
<td>144 in²</td>
<td>&lt;10 µg/ft²</td>
</tr>
<tr>
<td>Site: BEDROOM / FLOOR</td>
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<td>1116KM 06</td>
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<td>11/18/2010</td>
<td>117.25 in²</td>
<td>13 µg/ft²</td>
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<tr>
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</tr>
<tr>
<td>1116KM 07</td>
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<td>11/18/2010</td>
<td>11/18/2010</td>
<td>144 in²</td>
<td>&lt;10 µg/ft²</td>
</tr>
<tr>
<td>Site: BEDROOM / FLOOR</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1116KM 08</td>
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<td>11/18/2010</td>
<td>11/18/2010</td>
<td>119 in²</td>
<td>&lt;12 µg/ft²</td>
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<tr>
<td>Site: BEDROOM / SILL</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1116KM 09</td>
<td>0009</td>
<td>11/18/2010</td>
<td>11/19/2010</td>
<td>n/a</td>
<td>&lt;10 µg/ft²</td>
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<tr>
<td>Site: FIELD BLANK</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Initial report from 11/18/2010 21:23:54

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* Reporting Limit is 10 µg/ft². The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. 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.

* slight modifications to methods applied. Samples received in good condition unless otherwise noted. Quality Control data associated with this sample set is within acceptable limits, unless otherwise noted.

* Samples analyzed by EMSL Analytical Inc. 307 West 30th Street, New York, NY 10001. EMSL Lab ID: 10058
# Test Report: Lead in Dust by Flame AAS (SW 846 3050B^4/7000B)

<table>
<thead>
<tr>
<th>Client Sample Description</th>
<th>Lab ID</th>
<th>Collected</th>
<th>Analyzed</th>
<th>Area Sampled</th>
<th>Lead Concentration</th>
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</thead>
<tbody>
<tr>
<td>1116KM 12</td>
<td>0001</td>
<td>11/16/2010</td>
<td>11/18/2010</td>
<td>144 in²</td>
<td>&lt;10 µg/l²</td>
</tr>
<tr>
<td>Site: LIVINGROOM/FLOOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1116KM 13</td>
<td>0002</td>
<td>11/16/2010</td>
<td>11/18/2010</td>
<td>105 in²</td>
<td>&lt;14 µg/l²</td>
</tr>
<tr>
<td>Site: LIVINGROOM/SILL</td>
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<td>1116KM 14</td>
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<td>11/18/2010</td>
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<td>&lt;10 µg/l²</td>
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<td>Site: KITCHEN/FLOOR</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1116KM 15</td>
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<td>11/18/2010</td>
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<td>&lt;14 µg/l²</td>
</tr>
<tr>
<td>Site: KITCHEN/SILL</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1116KM 16</td>
<td>0005</td>
<td>11/16/2010</td>
<td>11/18/2010</td>
<td>144 in²</td>
<td>&lt;10 µg/l²</td>
</tr>
<tr>
<td>Site: BEDROOM/FLOOR</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1116KM 17</td>
<td>0006</td>
<td>11/16/2010</td>
<td>11/18/2010</td>
<td>105 in²</td>
<td>&lt;14 µg/l²</td>
</tr>
<tr>
<td>Site: BEDROOM/STILL</td>
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<tr>
<td>1116KM 18</td>
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<td>11/16/2010</td>
<td>11/18/2010</td>
<td>144 in²</td>
<td>&lt;10 µg/l²</td>
</tr>
<tr>
<td>Site: BEDROOM/FLOOR</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1116KM 19</td>
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<td>11/16/2010</td>
<td>11/18/2010</td>
<td>119 in²</td>
<td>&lt;12 µg/l²</td>
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<tr>
<td>Site: BEDROOM/SILL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Miron Apfeldorfer, Laboratory Manager
or other approved signature

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* Reporting limit is 10 µg/l². The CO data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. 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.

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Samples analyzed by EMSL Analytical, Inc., 307 West 30th Street, New York, NY 10001.

Page 1 of 1
# SAMPLE LOG FOR LEAD WIPES

**Project Name:** Nehemiah Housing  
**Building:** 37 Green St, Middletown, CT  
**Project Number:** 2007.2210.A13  
**Project Manager:** D. Kohl

<table>
<thead>
<tr>
<th>Sample ID Number</th>
<th>Sample Location/Building</th>
<th>Surface Component</th>
<th>Sq. Ft</th>
<th>Result (ug/ft²)</th>
<th>Lab Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>111126m01</td>
<td>Living Room Entry</td>
<td>Floor</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111126m02</td>
<td>Window</td>
<td>Sill</td>
<td>3.5' x 1.2'</td>
<td>3.50</td>
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</tr>
<tr>
<td>111126m03</td>
<td>Kitchen</td>
<td>Floor</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111126m04</td>
<td>Sill</td>
<td>3.5' x 1.2'</td>
<td>3.51</td>
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<td>111126m05</td>
<td>Bedroom 4</td>
<td>Floor</td>
<td>1</td>
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<tr>
<td>111126m06</td>
<td>Sill</td>
<td>3.5' x 1.2'</td>
<td>3.51</td>
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<td>111126m07</td>
<td>Bedroom 6</td>
<td>Floor</td>
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<td>111126m08</td>
<td>Sill</td>
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<td>111126m09</td>
<td>Blank</td>
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</tr>
</tbody>
</table>

**Analysis Method:** EPA 200.8A 3050A(NOD)  
**Wipe Media:** ASTM □ Non ASTM  
**Turnaround Time:** 72 HRS

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 860-953-2700 if analyses will be late.

**Fax Results To:** Fuss & O'Neill EnviroScience Laboratory at 413-647-1018

**Special Instructions:**

**Samples Collected By:**  
**Date:** 11/16/12  
**Time:** PM

**Samples Rec'd/Sent By:**  
**Date:** 11/17/12  
**Time:** PM

**Samples Received By:**  
**Date:** 11/17/12  
**Time:** PM

**Shipped To:** USPS (State) □ Other

**Method of Shipment:** □ Fed Ex  
□ UPS Overnight  
□ UPS Ground  
□ Other 2010 NOV 17 10:41
# SAMPLE LOG FOR LEAD WIPES

**Project Name:** Nehemiah Housing  
**Building:** 39 Green St, Middletown, CT

<table>
<thead>
<tr>
<th>Sample ID Number</th>
<th>Sample Location/Building</th>
<th>Surface</th>
<th>Component</th>
<th>Sq. Ft</th>
<th>Result (mg/ft²)</th>
<th>Lab Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1116 11M 12</td>
<td>Living Room (L)</td>
<td>Floor</td>
<td>Si I(0)</td>
<td>3.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>Floor</td>
<td>Si II (1)</td>
<td>3.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Kitchen (K)</td>
<td>Floor</td>
<td>Si II (1)</td>
<td>3.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Floor</td>
<td>Si I(0)</td>
<td>3.55</td>
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<tr>
<td>16</td>
<td>Bathroom (B)</td>
<td>Floor</td>
<td>Si I(0)</td>
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<td>17</td>
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<td>Floor</td>
<td>Si I(0)</td>
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<td></td>
</tr>
<tr>
<td>18</td>
<td>Bedroom (E)</td>
<td>Floor</td>
<td>Si I(0)</td>
<td>3.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Floor</td>
<td>Si I(0)</td>
<td>3.55</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Analysis Method:** EPA SW-846 3059 (MOD)  
**Memo Round Time:** 72

Based on the memo round 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 860-933-2100 if analyses will be late.

**Fax Results To:** Fuss & O'Neill EnviroScience Laboratory at 113-647-0018  
**Date:** 2010-11-17 10:41

**Special Instructions:**

**Samples Collected By:** [Signature]  
**Date:** 11/10  
**Time:** 10:41

**Samples Rec'd/Sent By:** [Signature]  
**Date:** 11/10  
**Time:** 10:41

**Shipped To:**  
1. [Office/Department]  
2. [Person/State]  
3. [Other]

**Method of Shipment:** FedEx

---

**Project Number:** 200728010A1E  
**Project Manager:** D. Kohl
Test Report: Lead in Soils by Flame AAS (SW 846 3050B*7000B)

<table>
<thead>
<tr>
<th>Client Sample Description</th>
<th>Lab-ID</th>
<th>Collected</th>
<th>Analyzed</th>
<th>Lead Concentration</th>
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<tbody>
<tr>
<td>1118KM 10</td>
<td>0001</td>
<td>11/17/2010</td>
<td>11/18/2010</td>
<td>54 mg/Kg</td>
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<td>Site: ORPLINE ON BLOG</td>
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<tr>
<td>1118KM 11</td>
<td>0002</td>
<td>11/17/2010</td>
<td>11/18/2010</td>
<td>&lt;40 mg/Kg</td>
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<tr>
<td>Site: MID YARD - BACK</td>
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<td></td>
</tr>
</tbody>
</table>

Initial report from 11/18/2010 21:51:50

Miron Apfeldorfer, Laboratory Manager
or other approved signature

Reporting limit is 5 mg/kg. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report applies 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.

* At least one replicate sample was included in each analysis. Unless otherwise specified, all sample analyses were performed using the method described in SW 846 3050B.
**SAMPLE LOG FOR LEAD SOIL**

**Project Name:** Nehemiah Housing  
**Building:** 37-39 Green St, Middletown, CT

<table>
<thead>
<tr>
<th>Sample ID Number</th>
<th>Sample Location/Building</th>
<th>Soil Condition</th>
<th>Result (%)</th>
<th>Lab Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1116KIM10</td>
<td>Dirt line on flower bed</td>
<td>Composite</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid yard - back</td>
<td>Composite</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Analysis Method:** EPA-SW-846-3050-7420  
**Turnaround Time:** 72 HOURS

Based on the turnaround time indicated above, analyses are due to Fuss & O'Neill EnviroScience on or before this date: ____________

Fax Results To: Fuss & O'Neill EnviroScience Laboratory at 413-647-6018

**Special Instructions:**

**Samples Collected By:** KIM Date: 11/16/10 Time: PM

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

**Samples Received By:** ____________ Date: ____________ Time: ____________

**Shipped To:** XXXX EMSL (State) ____________  
**Method of Shipment:** XXX Fed Ex  
□ UPS Overnight  
□ UPS Ground  
□ Other

(SEE REVERSE FOR DIAGRAM)
Appendix B

Site Diagrams
Project Name: Achehiah Housing
Address: 37 Green St, Middletown, CT
Floor: 1st Room: 
Number of Doors: 6
Diagram of: 6x Floor Apt #37

Project Number: A1E
Project Manager: D. Feld
Apt. #/Bldg #: 37
Page 1 of 1