

ASBESTOS & LEAD-BASED PAINT SURVEY

**VACANT DAY CARE CENTER
3611 DREW STREET
HOUSTON, HARRIS COUNTY, TEXAS**

Prepared For:

**CITY OF HOUSTON
DESIGN AND CONSTRUCTION
900 BAGBY, 2ND FLOOR
HOUSTON, TEXAS 77002**

Prepared By:

**ENVIRONMENTAL CONSULTING SERVICES, INC.
HOUSTON, TEXAS**

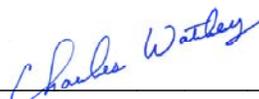
LINA A. JAZI
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MAY 2011



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ENVIRONMENTAL CONSULTING SERVICES, INC.

May 18, 2011

Mr. Gabriel Mussio
City of Houston
900 Bagby, 2nd Floor
Houston, Texas 77002

RE: Asbestos & Lead-Based Paint Survey
Vacant Day Care Center
3611 Drew Street
Houston, Harris County, Texas
ECS Project No.: 11.04.29.033

Dear Mr. Mussio:

Environmental Consulting Services, Inc. (ECS) is pleased to present the results of the Asbestos and Lead-Based Paint Survey conducted at the above referenced property. This report includes the results of our findings from visual reconnaissance and analytical testing. An assessment of the information was made to arrive at the conclusions stated and the recommendations presented.

We appreciate the opportunity to be of service to you and look forward to working on future assignments. Should you have any question concerning this report or if we can assist you in any other matter, please feel free to contact us.

Sincerely,
Environmental Consulting Services, Inc.

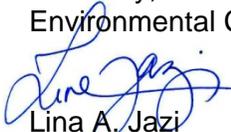

Lina A. Jazi
President

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1. EXECUTIVE SUMMARY

On May 5, 2011, Environmental Consulting Services, Inc. (ECS) conducted an Asbestos and Lead-Based Paint Survey at the vacant day care center located at 3611 Drew Street, in Houston, Harris County, Texas. The scope of services was to inspect the property for the presence of asbestos-containing materials and lead-based-paint materials. The survey was performed by Mr. Charles Watley (TDSHS Asbestos License # 105187 and Lead Certificate # NLR021610-9029) and Mr. Christopher Cox (TDSHS Asbestos license # 600005). It is ECS understanding that the City of Houston intends to sell this property.

1.1. Findings

Asbestos-Containing Materials (ACMs)

Based on the analytical test results of the suspect ACMs sampled and analyzed, the following materials indicated the presence of asbestos in amounts greater than 1%:

- Approximately 4,130 square feet of **12" grey and white floor tile (top non asbestos layer) and bottom layer of 12" brown floor tile and associated black mastic** located throughout,
- Approximately 400 square feet of **12" brown floor tile and associated black mastic** located in the entry restroom,

Under the City of Houston's hazard categorization standard, the floor tiles and associated black mastic are rated **C-3: ASBESTOS PRESENT, NO ACTION NECESSARY UNLESS RENOVATION, REMODELING OR DEMOLITION IS UNDERTAKEN.**

Samples of wall texture and joint compound were found to contain less than 1% Chrysotile asbestos. Under the City of Houston's hazard categorization standard, the wall texture and joint compound are rated **B-1: CONTAINS 1% ASBESTOS, OR LESS, NOT REGULATED BY DSHS.**

Samples of 2'x2' ceiling panels white with fissures and pinholes; sheetrock wallboard, sheetrock ceiling and joint compound, and grey HVAC duct sealant were found not to contain asbestos and are rated **A: NO ASBESTOS FOUND.**

Lead-Based Paints (LBPs)

Based on the suspect LBP samples collected and analyzed, none of the samples indicated the presence of lead in amounts greater than 0.5% by weight, $\geq 5,000$ ppm, or 1 mg/cm²:

Samples of white and purple multi-layer wall paint, white interior door paint, white interior window frame paint, and white exterior wall paint were found to contain lead in amounts less than 0.5% lead by weight. According to the City's lead hazard categorization

list, these materials are categorized as **C-2, LEAD PRESENT, NO ACTION NECESSARY WHEN LEAD LEVELS ARE FOUND BELOW APPLICABLE FEDERAL AND STATE REGULATION ACTION LEVELS. OSHA REGULATIONS MAY APPLY TO WORKERS DURING DEMOLITION OR RENOVATIONS (<5,000 PPM, 0.5% BY WEIGHT OR 1 MG/CM²).**

1.2. Recommendations

Asbestos-Containing Materials (ACMs):

Based on our assessment of ACM at the subject site, we recommend the following:

- Any of the identified asbestos-containing materials are to be disturbed; these materials shall be removed by a licensed asbestos contractor prior to renovations or demolition.
- If renovations or demolition are postponed for a period of time, an Operations and Maintenance (O&M) Program should be established for all ACMs. This program should include interim control measures for high hazardous materials, and will act as a passive abatement alternative for low to moderate hazardous materials. An O&M program may include appropriate measures for disturbance reduction, as well as enclosure and encapsulation to increase the effectiveness of the program.

Please note that the removal of any ACM is regulated under Environmental Protection Agency (EPA), National Emission Standards for Hazardous Air Pollutants (NESHAP); Texas Department of State Health Services (TDSHS), Texas Asbestos Health Protection Rules (TAHPR); and Occupational Safety and Health Administration (OSHA) regulations and must be performed with the proper engineering and regulatory controls by a licensed asbestos abatement contractor and consultant. Air monitoring also provides critical documentation for the building owner and should be performed by a qualified licensed consultant. Additionally, after removal a visual observation of the work and final air clearance testing must be performed.

You should also be aware that the EPA has not prohibited the manufacture of non-friable asbestos-containing materials, such as vinyl floorings, mastics, and roofing materials, joint compound as well as materials arriving from other countries.

In addition, House Bill 1927 and the TDSHS TAHPR, prohibits the installation of asbestos-containing materials in public and commercial building, unless there is not an alternative material or part. Material Safety Data Sheets (MSDS) must be obtained for building materials or replacement parts. As a result, any future replacement materials should be checked for the presence of asbestos, or a certification from a licensed engineer or architect stating that the MSDS have been reviewed and in their professional opinion all parts of the building affected by the planned renovation or demolition do not contain asbestos.

Lead-Based Painted Materials (LBPs):

Although lead was found to be below the applicable federal and state regulation action levels, the followings still apply:

The removal and disposal of lead-based painted materials is regulated under Environmental Protection Agency (EPA), Texas Department of State Health Services (TDSHS), Texas Environmental Lead Reduction Rules (TELRR); and Occupational Safety and Health Administration (OSHA) regulations and must be performed with the proper engineering and regulatory controls by a qualified contractor and consultant. Additionally, after removal a visual observation of the work and final wipe clearance testing must be performed.

The OSHA lead standard (29 CFR 1926.62) applies to all construction work where an employee may be occupationally exposed to lead." OSHA defines lead as "all inorganic lead compounds, and organic lead soaps". OSHA does not define a lead-containing material as having a certain percentage of lead. Each employer is required to develop an exposure assessment to "initially determine if any employee may be exposed to lead at or above the action level" (AL) of 30 milligrams per cubic centimeter of air, calculated as an 8-hour time-weighted average (TWA). The personal exposure limit (PEL) based on an 8-hour TWA is 50 milligrams per cubic centimeter of air. Biological monitoring is in the form of blood lead levels and zinc protoporphyrin (ZPP) level sampling and analysis is required for employees exposed to lead.

Furthermore, any debris generated from renovations, demolition or repainting process should be placed into disposal bags or a secure location until Toxicity Characteristic Leaching Procedure (TCLP) analysis for classifying the waste stream can be determined.

1.3. Conclusions

The Asbestos and Lead-Based Paint Survey results indicate the presence of asbestos-containing materials at the vacant day care center located at 3611 Drew Street, in Houston, Texas. Should you decide to remove the asbestos-containing materials, we recommend that all abatement actions be performed by a qualified abatement contractor. Current asbestos abatement regulations are generally recognized as minimum standards and do not address such issues as insurance, bonding, and clearance standards. Because of the potential liability associated with asbestos and lead-based painted materials, we recommend that all abatement actions be performed according to applicable regulations and using job-specific abatement specifications. Air monitoring also provides critical documentation for the building owner. We recommend that air monitoring be performed by a qualified and licensed consultant.

2. ASBESTOS SURVEY

Environmental Consulting Services, Inc. (ECS) has completed an Asbestos Survey of the interior of the vacant day care center located at 3611 Drew Street, in Houston, Harris County, Texas. The purpose of this survey was to identify suspect Asbestos-Containing Materials (ACMs), and report locations, conditions and quantity estimates of confirmed ACMs. Bulk samples were transported to and analyzed by a laboratory licensed by TDSHS.

2.1. Scope of Services

This inspection was performed to determine the presence, location, and condition of Asbestos-Containing Materials (ACM) at the referenced property. The site inspection was performed on May 5, 2011 by Mr. Charles Watley (TDSHS License # 105187 and Lead Certificate # NLR021610-9029) and Mr. Christopher Cox (TDSHS License # 600005). The survey consisted of the following:

- Conduct a building survey for ACMs,
- Collect samples of suspect ACMs, and submit them for laboratory analyses,
- Prepare a report discussing our findings with recommendations and/or alternatives for dealing with asbestos hazards, and
- Estimate quantities and submit an opinion of cost for abatement of confirmed ACMs.

2.2. Sampling Techniques and Analytical Procedures

This section details the sampling and laboratory methods used in the asbestos inspection to quantify and assess the condition of the confirmed ACM.

2.2.1. Sampling Techniques

This section addresses the criteria necessary for identifying, evaluating and assessing suspect Asbestos-Containing Materials (ACMs).

a. Homogeneous Areas

Prior to collecting bulk samples of suspect ACM, distinct homogeneous sampling areas and specific sampling sites were defined based on building construction dates. A homogeneous sample area can be defined as a material that is similar in appearance, color, and generally having the same episode of installation as surrounding "like" material. Attempts were made in all cases to obtain representative samples of like materials as this is the most cost-effective method for determination of ACM. It should be assumed by the building owner, contractor, and the abatement contractors that the composition of like materials in a single homogeneous area is the same. Homogeneous areas sampled as part of this inspection include materials which

have been identified by ECS as ACM and have been classified as friable (material containing more than one-percent asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure) or non-friable (material containing more than one-percent asbestos that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure). Friable materials are more likely to become airborne, thereby increasing the potential for health hazards.

b. Hazard Assessment

According to AHERA (October 30, 1986), verified friable or assumed ACM uncovered in an inspection or reinspection of a facility shall be accessed in view of past, present, or future likelihood of disturbance and may include the following:

1. Location of material present.
2. Condition of material: type of damage, severity of damage, and the extent or spread of damage.
3. Accessibility of the materials.
4. Potential for disturbance of the material.
5. Known or suspected causes of damage (i.e., air erosion, vandalism, service or repair, vibration, and water).
6. Preventive measures which might eliminate the likelihood of undamaged ACM from becoming significantly damaged.
7. Actions to be taken to protect human health.

The above hazard assessment factors will be discussed according to classifications of verified ACM. The ACM is usually examined and prioritized according to hazard categories based on condition, location, potential for damage and potential for fiber release. The asbestos hazard categories as defined by the City of Houston are divided into the following categories:

Hazard Category	Response Action
A: No asbestos found	N/A
B-1: Asbestos Present	Contains 1% asbestos, or less, not regulated by DSHS
B-2: Asbestos Present	Adequately enclosed
B-3: Asbestos Present	Adequately encapsulated
C-1: Asbestos Present	Serious health hazard, as defined by EPA, abatement should be a top priority
C-2: Asbestos Present	Health hazard, as defined by EPA, abatement should be planned
C-3: Asbestos Present	No action necessary unless renovation, remodeling, or demolition is planned

c. Field Methods

All accessible areas of the subject site were inspected for the presence of suspect ACMs. A total of 18 bulk samples of suspect ACMs were collected. Appropriate chain-of-custody procedures were initiated at the site for all samples.

The following suspect ACMs were identified during our survey of the structure:

- 12" grey and white floor tile and yellow mastic over 12" brown floor tile and black mastic throughout,
- 12" brown floor tile and black mastic in the entry restroom,
- 2'x2' ceiling panels white with fissures and pinholes throughout,
- Sheetrock wallboard, smooth texture and joint compound throughout,
- Sheetrock ceiling and joint compound throughout, and
- Grey HVAC duct sealant above ceiling throughout.

2.2.2. Analytical Procedures

A total of eighteen (18) bulk samples were collected from the accessible areas of the subject site. The samples were analyzed by Environmental Analytical Services, LLC (EAS) in Houston, Texas, utilizing the Environmental Protection Agency's Polarized Light Microscopy (PLM) *Method for the Detection of Asbestos in Bulk Insulation Samples*, (EPA 600/R-93/116), and the McCrone Research Institute's *The Asbestos Particle Atlas* as method references. Samples of friable asbestos of visual estimation result of less 5% asbestos were re-analyzed using the USEPA point counting method (EPA-600/M4-82-020; 600/R-93/116). This technique, recommended by the Environmental Protection Agency (EPA), selectively removes specific binder components by ashing or acidizing particular components of the sample. Point counting allows a more accurate determination of asbestos percentage. The laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), participates in the NVLAP and AIHA Bulk Asbestos Sample Quality Assurance Programs, and is licensed to analyze bulk asbestos samples collected in the State of Texas (TDSHS #30-0373).

2.2.3. Asbestos-Containing Material (ACM) Verification and Assessment

The laboratory results of the suspect asbestos bulk samples analysis are shown in *Table 1, Asbestos Bulk Samples Summary*. The laboratory reports are included as *Appendix B*. Based on the results presented in *Table 1*, the following materials indicated the presence of asbestos in amounts greater than 1%:

- **12" grey and white floor tile and yellow mastic over 12" brown floor tile and black mastic** throughout was found to contain 2% Chrysotile asbestos in the bottom layer of tile and 5% Chrysotile asbestos in the bottom layer of mastic.
- **12" brown floor tile and black mastic** in the entry restroom was found to contain 5% Chrysotile asbestos in the mastic.

Samples of wall texture and joint compound were found to contain less than 1% Chrysotile asbestos.

Samples of 2'x2' ceiling panels white with fissures and pinholes; sheetrock wallboard, sheetrock ceiling and joint compound, and grey HVAC duct sealant were found not to contain asbestos.

**TABLE 1
ASBESTOS BULK SAMPLES SUMMARY**

Sample No.	Description / Location	Asbestos Content	Friability / Condition	Hazard Risk Assessment
01, 02, 03	12" grey and white floor tile and yellow mastic over 12" brown floor tile and black mastic Throughout	Tile: None Detected Mastic: None Detected Tile: 2% Chrysotile Mastic: 5% Chrysotile	Non-Friable/ Good	C-3
04, 05, 06	12" brown floor tile and black mastic Entry restroom	Tile: None Detected Mastic: 5% Chrysotile	Non-Friable/ Good	C-3
07, 08, 09	2'x2' ceiling panels white with fissures and pinholes Throughout	None Detected	Friable/ Good	A
10, 11, 12	Sheetrock wallboard, smooth texture and joint compound Throughout	Sheetrock: None Detected Texture: ⁽¹⁾ 0.75% Chrysotile Compound: ⁽¹⁾ 0.50% Chrysotile	Non-Friable/ Good	B-1
13, 14, 15	Sheetrock ceiling and joint compound Throughout	None Detected	Non-Friable/ Good	A
16, 17, 18	Grey HVAC duct sealant Above ceiling throughout	None Detected	Non-Friable/ Good	A

Notes:

- Samples analyzed by laboratory, recognized under the National Voluntary Laboratory Accreditation Program (NVLAP) for satisfactory compliance with criteria for Asbestos Fiber Analysis and licensed by the Texas Department of State Health Services (TDSHS).
- Samples were analyzed using Polarized Light Microscopy according the U.S. EPA Interim Method for the determination of Asbestos.

⁽¹⁾ Results of friable asbestos of < 0.5% Chrysotile were analyzed using USEPA point counting method

2.2.4. Hazard Assessment Results

Based on the Asbestos Survey performed, the presence of asbestos was documented in several materials. A hazard assessment for these materials is listed in *Table 1* above and summarized below:

Non-Friable:

The following non-friable materials were in good condition at the time of our survey, and present a low hazard potential. These materials have a **Hazard Categorization of C-3: ASBESTOS PRESENT, NO ACTION NECESSARY UNLESS RENOVATION, REMODELING OR DEMOLITION IS UNDERTAKEN.**

- **12" grey and white floor tile and yellow mastic over 12" brown floor tile and black mastic** throughout was found to contain 2% Chrysotile asbestos in the bottom layer of tile and 5% Chrysotile asbestos in the bottom layer of mastic.
- **12" brown floor tile and black mastic** in the entry restroom was found to contain 5% Chrysotile asbestos in the mastic.

Asbestos – 1% or Less

Samples of wall texture and joint compound were found to contain less than 1% Chrysotile asbestos. Under the City of Houston's hazard categorization standard, the wall texture and joint compound are rated **B-1: CONTAINS 1% ASBESTOS, OR LESS, NOT REGULATED BY DSHS.**

Non-Asbestos:

Samples of 2'x2' ceiling panels white with fissures and pinholes; sheetrock wallboard, sheetrock ceiling and joint compound, and grey HVAC duct sealant were found not to contain asbestos and are rated **A: NO ASBESTOS FOUND.**

The hazard assessments given above for various materials are general, based on the average conditions observed during the survey. However, because of various limiting factors in performing a survey, these assessments do not attempt to inventory and rate every hazardous circumstance throughout the survey area.

Additionally, the hazard associated with any material may become more severe over time. Buildings are dynamic, constantly changing facilities. Each change has the potential to contribute to an increased health hazard. Some of the factors which can contribute to an increased hazard include:

- physical damage
- accident
- carelessness
- vandalism
- water leakage
- deterioration over time
- routine maintenance
- emergency repairs
- renovations
- fire

Any of these factors alone or in combination, can cause the potential hazard associated with ACMs to increase.

2.3. Asbestos Quantity and Estimate of Removal Costs

An estimate of the abatement costs for the confirmed ACMs identified at the subject site is summarized in *Table 2, Asbestos Quantity and Estimate of Removal Costs*. The cost estimate was developed based on observations made during our survey and our review of available documentation. The estimate does not include replacement materials.

The estimates presented in *Table 2* are general in nature and represent the relative magnitude and difficulty in performing asbestos abatement work. The estimate compares reasonably well with our experience on other similar projects. You should be aware that, unlike general construction, wide bid ranges (greater than 100%) are not uncommon for asbestos abatement projects. Other factors which will have an impact on the cost include insurance and bonding requirements, the time of the year (typically, costs rise in the summer when schools are out), and scheduling restraints.

TABLE 2 ASBESTOS QUANTITY & ESTIMATES OF REMOVAL COSTS			
REMOVAL ESTIMATE			
Material / Location	Quantity Estimate	Low	High
12" grey and white floor tile and yellow mastic over 12" brown floor tile and black mastic Throughout	4,130 sq. ft. @ \$3-4/sq. ft.	\$ 12,390	\$ 16,520
12" brown floor tile and black mastic Entry restroom	400 sq. ft. @ \$1.50-2.00 /sq. ft.	600	800
Estimates of Asbestos Removal Costs		\$ 12,990	\$ 17,320
Consulting Estimate			
Service	Quantity Estimate	Low	High
Design Phase (Phase II)			
Licensed Asbestos Consultant	2 to 5 hrs. @ \$90/hr	\$ 180	\$ 450
Licensed Project Manager	5 to 7 hrs. @ \$70/hr	350	490
Bidding and Award (Phase III)			
Licensed Asbestos Consultant	2 to 4 hrs. @ \$90/hr	\$ 180	\$ 360
Licensed Project Manager	8 to 10 hrs. @ \$70/hr	560	700
Abatement Phase (Phase IV)			
Licensed Project Manager	60 to 80 hrs. @ \$70/hr	\$4,200	\$5,600
PCM Air Samples	10 to 20 samples @ 11/ea	110	220
Post Abatement Phase (Phase V)			
Licensed Asbestos Consultant	2 to 4 hrs. @ \$90/hr	\$ 180	\$ 360
Licensed Project Manager	5 to 7 hrs. @ \$70/hr	350	490
Estimates for Consulting		\$ 6,110	\$ 8,670
Estimated Project Total		\$ 19,100	\$ 25,990
Notes:			

TABLE 2
ASBESTOS QUANTITY & ESTIMATES OF REMOVAL COSTS

- Conservative removal costs are presented as unit cost estimates and together should generally represent a total estimated removal cost.
- Abatement opinion includes materials, labor, insurance, overhead, disposal, profit, and other items necessary to complete this project.
- These estimates do not include replacement costs.
- The estimates are general in nature and represent the relative magnitude and difficulty in performing the asbestos abatement work.

2.4. Recommendations

Please note that removal or disturbance of any ACM is regulated under OSHA; EPA; and TDSHS, and must be performed with the proper engineering and regulatory controls by a licensed contractor with a licensed asbestos consultant required to prepare project specific work procedures and perform on-site project monitoring (asbestos) and final clearance testing within a commercial building. This provides critical documentation for the building owner. Remediation of exterior materials also has specific federal regulation requirements.

It is ECS understanding that the City of Houston intends to renovate areas of the property. Based on the Asbestos Survey performed, ECS makes the following recommendations:

- Any of the identified asbestos-containing materials are to be disturbed; these materials shall be removed by a licensed asbestos contractor prior to renovations or demolition.
- If renovations or demolition are postponed for a period of time, an Operations and Maintenance (O&M) Program should be established for all ACMs. This program should include interim control measures for high hazardous materials, and will act as a passive abatement alternative for low to moderate hazardous materials. An O&M program may include appropriate measures for disturbance reduction, as well as enclosure and encapsulation to increase the effectiveness of the program.

Please note that the removal of any ACM is regulated under Environmental Protection Agency (EPA), National Emission Standards for Hazardous Air Pollutants (NESHAP); Texas Department of State Health Services (TDSHS), Texas Asbestos Health Protection Rules (TAHPR); and Occupational Safety and Health Administration (OSHA) regulations and must be performed with the proper engineering and regulatory controls by a licensed asbestos abatement contractor and consultant. Air monitoring also provides critical documentation for the building owner and should be performed by a qualified licensed consultant. Additionally, after removal a visual observation of the work and final air clearance testing must be performed.

You should also be aware that the EPA has not prohibited the manufacture of non-friable asbestos-containing materials, such as vinyl floorings, mastics, and roofing materials, joint compound as well as materials arriving from other countries.

In addition, House Bill 1927 and the TDSHS TAHPR, prohibits the installation of asbestos-containing materials in public and commercial building, unless there is not an alternative material or part. Material Safety Data Sheets (MSDS) must be obtained for building materials or replacement parts. As a result, any future replacement materials should be checked for the presence of asbestos, or a certification from a licensed engineer or architect stating that the MSDS have been reviewed and in their professional opinion all parts of the building affected by the planned renovation or demolition do not contain asbestos.

3. LEAD-BASED PAINT INSPECTION

Environmental Consulting Services, Inc. (ECS) performed a Lead-Based Paint Inspection at a vacant day care center located at 3611 Drew Street, in Houston, Texas. The site inspection was performed on May 5, 2011 by Mr. Charles Watley (Lead Certificate # NLR021610-9029). The purpose of this assessment was to determine if Lead-Based Paint (LBP) was present at the site.

3.1. Scope of Services

ECS was contracted by the City of Houston to perform the following scope of services:

- Collect samples of suspect LBPs, and submit samples for laboratory analyses,
- Prepare a report discussing our findings with recommendations and/or alternatives for dealing with lead-based paint hazards, and
- Estimate quantities and submit an opinion of cost for abatement of confirmed LBPs.

3.2. Sampling Techniques and Analytical Procedures

3.2.1. Paint Samples Collection

The following suspect LBPs were identified during our survey of the structure:

- White and purple multi-layer wall paint,
- White interior door paint,
- White interior window frame paint, and
- White exterior wall paint.

A total of four (4) samples of suspect Lead-Based-Paint (LBP) materials were collected and analyzed.

3.2.2. Analytical Procedures

Paint Chip samples were transported to EMSL Analytical, Inc. for analysis using the US Environmental Protection Agency (EPA) method SW846 7420/3050B Flame Atomic Absorption. EMSL Analytical, Inc. is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), participates in the NVLAP Sample Quality Assurance Programs.

3.2.3. Lead-Based Paint Hazard Assessment

Lead is an airborne and consumable hazard. A hazard assessment refers to the process by which this material's potential to release dust or flakes into the air is evaluated. Damage may

be a part of a material's aging process or when acted upon by other factors such as friction from another material, air movement, vibration, impact, or localized deterioration. Assessing a material's potential for release, and hence its associated hazard risk, is accomplished by evaluating these and other factors. Below is the City of Houston's hazard categorization of lead.

Hazard Category	Response Action
C-1: Lead Present	Health Hazard, as defined by applicable federal, state and city regulations. Abatement should be a top priority. (> 5,000 ppm or 0.5% by weight)
C-2: Lead Present	No action necessary when the material is adequately enclosed, must be addressed prior to demolition or renovation. OSHA regulations apply to workers or the public. (> 600 ppm or 0.06% but < 5,000 ppm or 0.5% by weight)
A: Allowable Lead Level	< 600 ppm or 0.06% by weight
A-1: Lead Abated	Once identified; lead containing materials (LCM) have been abated

3.2.4. Analytical Test Results

The analytical test results of the suspect lead-based paint samples are shown in *Table 3, Paint Chip Samples Summary*. The laboratory reports are included in *Appendix B*. Based on the analytical results, **none** of the samples indicated the presence of lead in amounts greater than 0.5% by weight, $\geq 5,000$ ppm, or 1 mg/cm^2

TABLE 3 PAINT CHIP SAMPLES SUMMARY				
Sample No.	Description / Location	Laboratory Results % by weight	Condition	Hazard Risk Assessment
01	White and purple wall paint Throughout	<010%	Good	C-2
02	White interior door paint Throughout	<010%	Good	C-2
03	White interior window frame paint Throughout	<010%	Good	C-2
04	White exterior wall paint Throughout	<010%	Good	C-2
Notes:				
<ul style="list-style-type: none"> • Samples analyzed by laboratory, recognized under the National Voluntary Laboratory Accreditation Program (NVLAP) for satisfactory compliance with criteria for using the US Environmental Protection Agency (EPA) and licensed by the Texas Department of State Health Services (TDSHS). 				

TABLE 3 PAINT CHIP SAMPLES SUMMARY				
Sample No.	Description / Location	Laboratory Results % by weight	Condition	Hazard Risk Assessment
<ul style="list-style-type: none"> • Samples were analyzed using the US Environmental Protection Agency (EPA) method SW846 7420/3050B Flame Atomic Absorption. 				

3.2.5. Material Assessments

Based on the suspect LBP samples collected and analyzed, none of the samples indicated the presence of lead in amounts greater than 0.5% by weight, $\geq 5,000$ ppm, or 1 mg/cm²:

- Samples of white and purple multi-layer wall paint, white interior door paint, white interior window frame paint, and white exterior wall paint were found to contain lead in amounts less than 0.5% lead by weight. According to the City's lead hazard categorization list, these materials are categorized as **C-2, LEAD PRESENT, NO ACTION NECESSARY WHEN LEAD LEVELS ARE FOUND BELOW APPLICABLE FEDERAL AND STATE REGULATION ACTION LEVELS. OSHA REGULATIONS MAY APPLY TO WORKERS DURING DEMOLITION OR RENOVATIONS (<5,000 PPM, 0.5% BY WEIGHT OR 1 MG/CM²).**

3.2.6. Hazard Assessment Summary

The hazard assessments given above for various materials are general, based on the average conditions observed during the survey. However, because of various limiting factors in performing a survey, these assessments do not attempt to inventory and rate every hazardous circumstance throughout the survey area.

Additionally, the hazard associated with any material may become more severe over time. Buildings are dynamic, constantly changing facilities. Each change has the potential to contribute to an increased health hazard. Some of the factors which can contribute to an increased hazard include:

- peeling
- chalking
- friction surfaces
- chipping
- cracking

Any of these factors alone or in combination, can cause the potential hazard associated with lead-based paint to increase.

3.3. Recommendations

Although lead was found to be below the applicable federal and state regulation action levels, the followings still apply:

The removal and disposal of lead-based painted materials is regulated under Environmental Protection Agency (EPA), Texas Department of State Health Services (TDSHS), Texas Environmental Lead Reduction Rules (TELRR); and Occupational Safety and Health Administration (OSHA) regulations and must be performed with the proper engineering and regulatory controls by a qualified contractor and consultant. Additionally, after removal a visual observation of the work and final wipe clearance testing must be performed.

The OSHA lead standard (29 CFR 1926.62) applies to all construction work where an employee may be occupationally exposed to lead." OSHA defines lead as "all inorganic lead compounds, and organic lead soaps". OSHA does not define a lead-containing material as having a certain percentage of lead. Each employer is required to develop an exposure assessment to "initially determine if any employee may be exposed to lead at or above the action level" (AL) of 30 milligrams per cubic centimeter of air, calculated as an 8-hour time-weighted average (TWA). The personal exposure limit (PEL) based on an 8-hour TWA is 50 milligrams per cubic centimeter of air. Biological monitoring is in the form of blood lead levels and zinc protoporphyrin (ZPP) level sampling and analysis is required for employees exposed to lead.

Furthermore, any debris generated from renovations, demolition or repainting process should be placed into disposal bags or a secure location until Toxicity Characteristic Leaching Procedure (TCLP) analysis for classifying the waste stream can be determined.

4. QUALIFICATIONS AND LIMITATIONS

This survey was authorized by and prepared for The City of Houston for use in evaluating suspect ACMs and LBPs at the vacant day care center located at 3611 Drew Street, in Houston, Harris County, Texas. This report was produced for the exclusive use of the City of Houston and its authorized representatives. Further dissemination of this report without prior written authorization from ECS and the City of Houston is strictly prohibited.

This work product was performed consistent with standards of care and diligence normally practiced by recognized environmental consulting firms in performing services of a similar nature in this region.

The conclusions and recommendations in this report are professional opinions based solely upon visual observations of the site, at the time of our investigation, and the results of laboratory analysis. These opinions describe only the conditions present at the time of our investigation, reasonably foreseeable, and in areas that were observed; they cannot necessarily apply to site conditions of which ECS is not aware and has not had the opportunity to evaluate. ECS and its representatives do not warrant against future changes in operations or conditions, nor do warrant conditions present of a type or at a location not addressed in this study. Quantities are preliminary quantities based on observations made during our survey and should not be used to prepare a removal cost bid.

ECS cannot act as insurers, and no expressed or implied representation or warrant is included or intended in our report except that our work was performed, within the limits prescribed by our client, with the customary thoroughness and competence of our profession. Un-sampled asbestos-containing construction materials may be located in exterior materials, within walls, ceiling cavities, below flooring or grade, and other non-accessible areas. Precaution should be used in relation to these un-sampled materials until proper sampling and analysis have determined their asbestos content. The condition of the ACMs may change gradually or suddenly, depending upon use, maintenance or accident.

This report does not constitute an appraisal of value or legal opinion, and ECS makes no representations or warranties of the fitness of the property for any specific use or value. ECS assumes no responsibility for the Client's, or a third party's, misinterpretation or improper use of this report.

ECS shall not be liable for any special, consequential, or exemplary damages resulting in whole or in part, from the Client's use of this report. Liability on the part of ECS to any impacted third party is limited to the monetary value paid for this report.

APPENDIX A
SITE PHOTOGRAPHS



Photo No.1: General view of 3611 Drew Street



Photo No. 2: 12" gray and white floor tile and yellow mastic



Photo No. 3: 12" brown floor tile and black mastic

APPENDIX B
ANALYTICAL RESULTS

ASBESTOS-CONTAINING MATERIALS



**Environmental
Analytical
Services, LLC**

13201 Northwest Freeway Suite 520
Houston, Texas 77040
Phone: 713-343-4017 / Fax 713-934-9942
E-Mail: easlabs@aol.com

**Point Count Method by Polarized Light Microscopy Analysis
(EPA-600/M4-82-020; 600/R-93/116)**

Environmental Solutions Inc,
13201 Northwest Freeway St.503
Houston, Texas 77040

Phone: 713-934-9944
Fax: 713-934-9942

Project:
3611 Drew St.

ESI # ECS11.05
Job: ESI11.84
Attn: Jerry Heard

Date Analyzed: May 12, 2011

Date Received: May 11, 2011

Microscope: Olympus-CH-40
Analysis Time Requested: 24-Hours

Sample#	Layer	Sample Description	Homo- Geneous (Y/N)	Asbestos Detected? Yes/No	Asbestos Mineral Percent	Non-Asbestos Fibers	Non-Fibrous Material
10	A	Purple Texture	YES	YES	0.75% Chrysotile		
	C	White Joint Compound	YES	YES	0.50% Chrysotile		

NVLAP # 200784-0
TDH # 300373 Control # 95392
Page 1 of 1

Notes:

Some samples (floor tiles, surfacing, etc.) may contain fibers too small to be detectable by PLM. TEM/Chatfield analysis of bulk material is recommended in this case. All asbestos percentages are based on calibrated visual estimates traceable to NIST standards for regulated asbestos types. Analysts' percentages fall within a range of acceptable percentages, depending on the actual concentration of asbestos. This test report relates only to the items tested. Neither NVLAP nor EPA accreditation implies endorsement by any US Government agency. This report may not be reproduced except in full without written permission from Environmental Analytical Services.

These results are submitted pursuant to EAS current terms and condition of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, EAS will store the samples for a period of ninety (90) days before discarding. Percent ranges reported are estimates and not absolute percent range values.

Analyzed by:


Arthur Hernandez

Approved Signatory:


Arthur Hernandez



ESI 11.84

13201 Northwest Freeway, Suite 503
Houston, Texas 77040
Phone: 713-934-9944 Fax: 713-934-9942

Bulk Sample Chain-Of-Custody

ESI Project No. ECS11.05		Project I.D. 3611 Drew St.		Date Collected 05/05/2011		Date Requested 05/10/11 3 day		Page 1 of 1	
Sample No.	Material Sampled	Sample Location	Material Location(s) and any Damage	Friable (F)/ Non-Friable (NF)		Condition		Estimated Quantity	
01	12" F/T- Mix of grey & white tiles & ym over		Throughout	F	NF	Good / Fair / Poor		4130	
02	12" Brown tile with black mastic			F	NF	Good / Fair / Poor			
03	12" F/T-Brown and assoc. black mastic		Entry RR	F	NF	Good / Fair / Poor		400	
04	2x2 CRT- white with fissures & pin holes		Throughout	F	NF	Good / Fair / Poor		4,500	
05	Sheetrock wall board, Joint Compound & smooth texture		Throughout	F	NF	Good / Fair / Poor		13,000	
06	Sheetrock ceiling board & Joint Compound		Areas throughout	F	NF	Good / Fair / Poor		2000	
07	Grey duct sealant		Above ceiling throughout	F	NF	Good / Fair / Poor		320'k	

NOTES:

* LAB - Analyze to FIRST POSITIVE
Email results to JHeard@esi-texas.com

SAMPLES COLLECTED BY:

Name: [Signature] Date: 05/05/2011
RELINQUISHED TO: [Signature] Date: 5/5/11 5 PM
Name: [Signature]



**Environmental
Analytical
Services, LLC**

13201 Northwest Freeway Suite 503
Houston, Texas 77040
Phone: 713-343-4017 / Fax: 713-934-9942
E-Mail: easlabs@aol.com

**Polarized Light Microscopy Analysis
(EPA-600/M4-82-020; 600/R-93/116)**

Environmental Solutions Inc,
13201 Northwest Freeway Suite # 503
Houston, Texas 77040

Project:
3611 Drew St.

Date Analyzed: May 10, 2011

Phone: 713-934-9944
Fax: 713-934-9942

ESI Project # ECS11.05

Job: ESI11.79
Attn: Jerry Heard

Date Received: May 5, 2011

Microscope: Olympus-CH-40
Analysis Time Requested: 3-Days

Sample#	Layer	Sample Description	Homo- Geneous (Y/N)	Asbestos Detected? Yes/No	Asbestos Mineral Percent	Non-Asbestos Fibers	Non-Fibrous Material
01	A	Gray Floor Tile	YES	NO	None Detected		100% Other
	B	Yellow Mastic	YES	NO	None Detected	2% Cellulose	98% Other
	C	Brown Floor Tile	YES	YES	2% Chrysotile		98% Other
	D	Black Mastic	YES	YES	5% Chrysotile		95% Other
02&03					Not Analyzed Positive Stop		
04	A	Tan Floor Tile	YES	NO	None Detected		100% Other
	B	Yellow/Black Mastic	YES	YES	3% Chrysotile	2% Cellulose	95% Other
05&06					Not Analyzed Positive Stop		
07	A	White/Tan Ceiling Tile	YES	NO	None Detected	40% Cellulose 40% Fiberglass	20% Other

NVLAP # 200784-0
DSHS # 300373 Control # 95392
Page 1 of 3

Notes:

Some samples (floor tiles, surfacing, etc.) may contain fibers too small to be detectable by PLM. TEM Chatfield analysis of bulk material is recommended in this case. All asbestos percentages are based on calibrated visual estimates traceable to NIST standards for regulated asbestos types. Analysts' percentages fall within a range of acceptable percentages, depending on the actual concentration of asbestos. This test reports relates only to the items tested. Neither NVLAP nor EPA accreditation implies endorsement by any US Government agency. This report may not be reproduced except in full without written permission from Environmental Analytical Services.

These results are submitted pursuant to EAS current terms and condition of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, EAS will store the samples for a period of ninety (90) days before discarding. Percent ranges reported are estimates and not absolute percent range values.

Analyzed by:

Arthur Hernandez

Approved Signatory:

Lisa Crain



Environmental Analytical Services, LLC

13201 Northwest Freeway Suite 503
Houston, Texas 77040
Phone: 713-343-4017 / Fax: 713-934-9942
E-Mail: easlabs@aol.com

Polarized Light Microscopy Analysis
(EPA-600/M4-82-020; 600/R-93/116)

Environmental Solutions Inc,
13201 Northwest Freeway Suite # 503
Houston, Texas 77040

Project:
3611 Drew St.

Date Analyzed: May 10, 2011

Phone: 713-934-9944
Fax: 713-934-9942

ESI Project # ECS11.05
Job: ESI11.79
Attn: Jerry Heard

Date Received: May 5, 2011

Microscope: Olympus-CH-40
Analysis Time Requested: 3-Days

Sample#	Layer	Sample Description	Homo- Geneous (Y/N)	Asbestos Detected? Yes/No	Asbestos Mineral Percent	Non-Asbestos Fibers	Non-Fibrous Material
08	A	White/Tan Ceiling Tile	YES	NO	None Detected	40% Cellulose 40% Fiberglass	20% Other
09	A	White/Tan Ceiling Tile	YES	NO	None Detected	40% Cellulose 40% Fiberglass	20% Other
10	A	Purple Texture	YES	YES	2% Chrysotile		98% Other
	B	Tan Tape	YES	NO	None Detected	100% Cellulose	
	C	White Joint Compound	YES	YES	2% Chrysotile		98% Other
	D	White/Brown Sheetrock	YES	NO	None Detected	30% Cellulose	70% Other
11&12					Not Analyzed Positive Stop		
13	A	White Joint Compound	YES	NO	None Detected	2% Cellulose	98% Other
	B	White/Brown Sheetrock	YES	NO	None Detected	30% Cellulose	70% Other

NVLAP # 200784-0
DSHS # 300373 Control # 95392
Page 2 of 3

Notes

Some samples (floor tiles, surfacing, etc.) may contain fibers too small to be detectable by PLM. TEM Chatfield analysis of bulk material is recommended in this case. All asbestos percentages are based on calibrated visual estimates traceable to NIST standards for regulated asbestos types. Analysts' percentages fall within a range of acceptable percentages, depending on the actual concentration of asbestos. This test reports relates only to the items tested. Neither NVLAP nor EPA accreditation implies endorsement by any US Government agency. This report may not be reproduced except in full without written permission from Environmental Analytical Services.

These results are submitted pursuant to EAS current terms and condition of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, EAS will store the samples for a period of ninety (90) days before discarding. Percent ranges reported are estimates and not absolute percent range values.

Analyzed by:

Arthur Hernandez

Approved Signatory:

Lisa Crain



**Environmental
Analytical
Services, LLC**

**13201 Northwest Freeway Suite 503
Houston, Texas 77040
Phone: 713-343-4017 / Fax: 713-934-9942
E-Mail: easlabs@aol.com**

**Polarized Light Microscopy Analysis
(EPA-600/M4-82-020; 600/R-93/116)**

**Environmental Solutions Inc,
13201 Northwest Freeway Suite # 503
Houston, Texas 77040**

**Project:
3611 Drew St.**

Date Analyzed: May 10, 2011

**Phone: 713-934-9944
Fax: 713-934-9942**

ESI Project # ECS11.05

Date Received: May 5, 2011

**Job: ESI11.79
Attn: Jerry Heard**

**Microscope: Olympus-CH-40
Analysis Time Requested: 3-Days**

Sample#	Layer	Sample Description	Homo- Geneous (Y/N)	Asbestos Detected? Yes/No	Asbestos Mineral Percent	Non-Asbestos Fibers	Non-Fibrous Material
14	A	White Joint Compound	YES	NO	None Detected	2% Cellulose	98% Other
	B	White/Brown Sheetrock	YES	NO	None Detected	30% Cellulose	70% Other
15	A	White Joint Compound	YES	NO	None Detected	2% Cellulose	98% Other
	B	White/Brown Sheetrock	YES	NO	None Detected	30% Cellulose	70% Other
16	A	Gray Sealant	YES	NO	None Detected	2% Cellulose	98% Other
17	A	Gray Sealant	YES	NO	None Detected	2% Cellulose	98% Other
18	A	Gray Sealant	YES	NO	None Detected	2% Cellulose	98% Other

NVLAP # 200784-0
DSHS # 300373 Control # 95392
Page 3 of 3

Notes

Some samples (floor tiles, surfacing, etc.) may contain fibers too small to be detectable by PLM. TEM Chatfield analysis of bulk material is recommended in this case. All asbestos percentages are based on calibrated visual estimates traceable to NIST standards for regulated asbestos types. Analysts' percentages fall within a range of acceptable percentages, depending on the actual concentration of asbestos. This test reports relates only to the items tested. Neither NVLAP nor EPA accreditation implies endorsement by any US Government agency. This report may not be reproduced except in full without written permission from Environmental Analytical Services.

These results are submitted pursuant to EAS current terms and condition of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, EAS will store the samples for a period of ninety (90) days before discarding. Percent ranges reported are estimates and not absolute percent range values.

Analyzed by:

Arthur Hernandez

Approved Signatory:

Lisa Crain

LEAD-BASED PAINT



Environmental Solutions, Inc.

ESI 11.79

13201 Northwest Freeway, Suite 503
Houston, Texas 77040
Phone: 713-934-9944 Fax: 713-934-9942

Bulk Sample Chain-Of-Custody

ESI Project No.		Project I.D.		Date Collected		Date Requested		Page		of	
ECS11.05		3611 Dew St.		05/05/2011		05/10/11 3day		1		1	
Sample No.	Material Sampled	Sample Location	Material Location(s) and any Damage	Friable (F)/ Non-Friable (NF) Condition		Estimated Quantity					
01	12" F/T- Mix of grey & white tiles & Ym over		Throughout	F / NF		4130					
02	12" Brown tile with black mastic			Good / Fair / Poor Sig. Damaged							
03	12" F/T- Brown and assoc. black mastic		Entry RR	F / NF		400					
04				Good / Fair / Poor Sig. Damaged							
05				F / NF							
06				Good / Fair / Poor Sig. Damaged							
07	2 x 2 C/T- white with fissures & pin holes		Throughout	F / NF		4,500					
08				Good / Fair / Poor Sig. Damaged							
09				F / NF							
10	Sheetrock wall board, Joint Compound & siml smooth texture		Throughout	F / NF		13,000					
11				Good / Fair / Poor Sig. Damaged							
12				F / NF							
13	Sheetrock ceiling board & Joint Compound		Areas throughout	F / NF		2000					
14				Good / Fair / Poor Sig. Damaged							
15				F / NF							
16	Grey duct sealant		Above ceiling throughout	F / NF		320 1/2					
17				Good / Fair / Poor Sig. Damaged							
18				F / NF							

NOTES:

* LAB - Analyze to FIRST POSITIVE
Email results to JHeard@esi-texas.com

SAMPLES COLLECTED BY: *[Signature]* Date: 05/05/2011
RELINQUISHED TO: *[Signature]* Date: 5/5/11 5pm



EMSL Analytical, Inc.
 2001 East 52nd St., Indianapolis, IN 46205

Phone: (317) 803-2997 Fax: (317) 803-3047 Email: indianapolislabs@emsl.com

Attn: **J. Heard**
Environmental Solutions, Inc.
13201 N.W. Frwy
Suite 503
Houston, TX 77040

Customer ID: ENSO44
 Customer PO:
 Received: 05/09/11 9:30 AM
 EMSL Order: 161107122

Fax: (713) 934-9942 Phone: (713) 934-9944
 Project: 3611 DREW/ECS11.05

EMSL Proj:

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

<i>Lab ID:</i>	<i>Analyzed</i>	<i>RDL</i>	<i>Lead Concentration</i>	<i>Notes</i>
0001	5/9/2011	0.010 % wt	<0.010 % wt	
Client Sample Pb-01				Collected:
0002	5/9/2011	0.010 % wt	<0.010 % wt	
Client Sample Pb-02				Collected:
0003	5/9/2011	0.010 % wt	<0.010 % wt	
Client Sample Pb-03				Collected:
0004	5/9/2011	0.010 % wt	<0.010 % wt	
Client Sample Pb-04				Collected:

Initial report from 05/11/2011 08:55:58

Doug Wiegand, Laboratory Manager
 or other approved signatory

Reporting limit is 0.01 % wt. 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. Indianapolis, IN AIHA-LAP, LLC--ELLAP 157245, OH E10040



161107122

2501 Central Parkway, Suite C-13, Houston, TX 77092 (713) 686-3635 http://www.emsl.com

EMSL ANALYTICAL, Inc. CHAIN OF CUSTODY

EMSL Rep: Environmental Solutions, Inc. EMSL-Bill to: Same
Your Name: Environmental Solutions, Inc.
Company:
Street: 13201 Northwest Freeway
Box #:
City/State: Houston, TX Zip 77040

Phone Results to: Name:
Telephone #:
Project Name/Number: Soil Drew / ECS11.05
Fax Results to: Name: Jhear da ESI-Texas.com
Fax #: 713-934-9942
Purchase Order #:

TURNAROUND TIME
3 Hours 6 Hours 12 Hours 24 Hours 48 Hours 72 Hours 4 Days 5 Days 6-10 Days

SAMPLE MATRIX
Air Bulk Soil Wipe Micro-Vac Drinking Water Wastewater Chips Other

ASBESTOS ANALYSIS
PCM - Air
TEM AIR
PLM - Bulk
TEM BULK

LEAD ANALYSIS
Flame Atomic Absorption
Graphite Furnace Atomic Absorption
ICP - Inductively Coupled Plasma

MICROBIAL ANALYSIS
Air Samples
Water Samples
Wipe and Bulk Samples

Table with 4 columns: SAMPLE NUMBER, SAMPLE DESCRIPTION/LOCATION, VOLUME Air (L), Area (Inches sq.)
Rows: Pb-01 (white & purple multi-layer paint), Pb-02 (white interior door paint), Pb-03 (white interior window frame paint), Pb-04 (Exterior wall paint (white))

Client Sample # (S) Pb01 - Pb-04 TOTAL SAMPLE #
Relinquished: [Signature] Date: 5/6/11 Time: 2:11 pm
Received: [Signature] Date: 5-9-11 Time: 9:30 am

Relinquished by Bobbie K 5/6/11

161107122



EMSL Analytical, Inc. Relinquish Form

Initial Lab:	EMSL- Houston (15)	Phone Number:	713-686-3635
		Fax Number:	713-686-3645
Relinquished to:	EMSL- Indianapolis	Phone Number:	317-803-2997
		Fax Number:	317-803-3047
Does new Lab hold equivalent or additional accreditation*			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

EMSL Customer ID #:	ENSO44		
Client Name:	Environmental Solutions		
Client Project:	3611 Drew/ECS11.05 & 1522 Fulton.ECS11.06		
Date Received:	5/6/11		
Date Relinquished:	5/6/11		
Date Due:	48hrs		
Special Instructions:			
Relinquished by (Signature):	Date:	Received by (Signature)	Date:
<i>Subhikta</i>	5/6/11	<i>[Signature]</i>	5-9-11
Relinquished by (Signature):	Date:	Received by (Signature)	Date:

Client Notification- Please sign this form and fax to the original laboratory. By signing below you agree to allow the above named laboratory to relinquish the samples to a new laboratory with equivalent or additional certification.

Name (please Print)	Signature	Agent of:	Date:
If this is a reoccurring project or sample type that will require samples to be relinquished on a regular basis please sign below and the laboratory will keep this form on file.			
Name (please Print)	Signature	Agent of:	Date:

- All accreditation information and certificates can be found at www.emsl.com.

APPENDIX C
LICENSES AND CERTIFICATIONS



TEXAS DEPARTMENT OF STATE HEALTH SERVICES

ENVIRONMENTAL CONSULTING SERVICES INC

is certified to perform as a

Asbestos Consultant Agency

in the State of Texas within the purview of Texas Occupations Code, chapter 1954, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.

A handwritten signature in cursive script, appearing to read "David Lakey MD".

DAVID LAKEY, M.D.
COMMISSIONER OF HEALTH

License Number: 100179

Control Number: 96308

Expiration Date: 5/26/2012

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE



TEXAS DEPARTMENT OF STATE HEALTH SERVICES

Be it known that

ENVIRONMENTAL CONSULTING SERVICES INC (ECS)

is certified to perform as a

Lead Firm

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1955 and Title 25, Texas Administrative Code, Chapter 295 relating to Texas Environmental Lead Reduction, as long as this license is not suspended or revoked.

A handwritten signature in cursive script, appearing to read "David Laakey MD".

David L. Laakey, M.D.
Commissioner of Health

License Number: 2110079

Control Number 6188

Expiration Date: 2/6/2012
(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE



TEXAS DEPARTMENT OF STATE HEALTH SERVICES

ENVIRONMENTAL ANALYTICAL SERVICES LLC

is certified to perform as a

**Asbestos Laboratory
PCM, PLM**

in the State of Texas within the purview of Texas Occupations Code, chapter 1954, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.

A handwritten signature in cursive script, appearing to read "David Lahey MD".

DAVID LAHEY, M.D.
COMMISSIONER OF HEALTH

License Number: 300373

Control Number: 95713

Expiration Date: 3/12/2013

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE



AIHA
Laboratory Accreditation
Programs, LLC

AIHA Laboratory Accreditation Programs, LLC

www.aiha.org/lap

EMSL Analytical, Inc.

2001 East 52nd Street, Indianapolis, IN 46205

Laboratory ID: 157245

Along with all premises from which key activities are performed, as listed above, has LIMITED the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard. Current Requirements for the Competence of Testing and Calibration Laboratories is the following:

LABORATORY ACCREDITATION PROGRAMS

- INDUSTRIAL HYGIENE
Accreditation Expires: 03/01/2013
- ENVIRONMENTAL LEAD
Accreditation Expires: 03/01/2013
- ENVIRONMENTAL MICROBIOLOGY
Accreditation Expires: 03/01/2013
- FOOD
Accreditation Expires:

Specific Field(s) of Testing (ISO/IEC/ISO/IEC) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful re-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aiha.org/lap) for the most current Scope.

Christine Trivett

Christine Trivett

Chairperson, Accredited Accreditation Board

Revision: 18-01/15/2011

Cheryl O. Morris

Cheryl O. Morris

Director, AIHA Laboratory Accreditation Programs, LLC

Date Issued: 03/01/2011

CERTIFICATE

THIS CERTIFIES THAT

CHARLES T. WATLEY

ID/DL# TX 07648823

Has Successfully Completed the NATEC
DSHS Accredited Course for Lead Inspector Refresher
and has passed the Required Exam in that Discipline.

This course is Approved Under §295.204 of the
Texas Environmental Lead Reduction Rules

February 16, 2010
Course Date

NLR021610-9029
Certification #

Laurel R. Steiner
Authorized Signature

February 16, 2010
Exam Date

David A. Roberts
Instructors Signature

9802 Lawndale Avenue, Houston, Texas 77017, (713) 472-4022, www.natectx.com email: natectx@comcast.net





**Texas Department of
State Health Services**

Asbestos Inspector

CHRISTOPHER M COX

License No. 600005

Control No. 96483

Expiration Date: 6/28/2012

