EE&G ENVIRONMENTAL SERVICES, LLC

REVISED LIMITED
LEAD-BASED PAINT INSPECTION REPORT

FOR

SOUTHERNMOST
WASTE TO ENERGY PLANT COMPLEX
5701 COLLEGE ROAD
KEY WEST, FLORIDA 33040

Prepared for

CH_2M HILL
6410 5TH STREET, SUITE 2A
KEY WEST, FLORIDA 33040

ATTENTION: MR. ANDREW SMYTH

Prepared by

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SECTION 1.0

INTRODUCTION

1.1 INTRODUCTION

At the request of the CH_2M HILL (hereafter referred to as the Client), EE&G Environmental Services, LLC (EE&G) conducted a limited Lead-Based Paint (LBP) inspection of the Southernmost Waste to Energy Plant Complex located at 5701 College Road, Key West, Florida. The inspection was performed by Environmental Protection Agency (EPA) Lead-Based Paint Risk Assessor, Ronald G. MacDonald of EE&G on February 23rd and 24th, 2011. EE&G's scope of work for this project consisted of evaluating the subject facility utilizing an X-Ray Fluorescence (XRF) instrument to assess for lead concentrations in selected painted building components.

1.2 OWNER INFORMATION

CITY OF KEY WEST
POST OFFICE BOX 1409
KEY WEST, FLORIDA 33041-1409

1.3 EDUCATIONAL MATERIALS

A copy of *Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools* has been provided in Appendix A of this report. Federal law requires that individuals receive certain information before renovating more than two square feet of painted surfaces in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child-care facilities, including preschools and kindergarten classrooms, and the families of children under the age of six that attend those facilities: renovators must provide a copy of this pamphlet to child-care facilities and general renovation information to families whose children attend those facilities.

Federal law requires contractors that disturb lead-based paint in homes, child care facilities and schools built before 1978 to be certified and follow specific work practices to prevent lead contamination. Contractors must provide certification prior to renovations.

SECTION 2.0

COMPLEX DESCRIPTION

At the time of this inspection the Southernmost Waste to Energy Plant Complex consisted of approximately 8 structures; Resource Recovery Building, Solid Waste Tipping Area, Storage Shed, Raised Cooling Tower structure, Fire Equipment Shed, Electrical building, Scale House, and Ash Transfer Building. The incinerator was not observed on the property at the time of this inspection. According to the county records the complex was built approximately in 1972. Painting history was not available at the time of the inspection.

The Resource Recovery Building, Solid Waste Tipping Area, and Ash Transfer Building were observed to be constructed primarily of concrete and steel. The Solid Waste Tipping Area also housed 2 cranes and a control room which could not be safely accessed.

Raised Cooling Tower structure was observed to be steel structure. The electrical building was a concrete structure supported on concrete slab.

The Storage Shed, Fire Equipment Shed, and Scale House were observed to be of modular construction. The storage shed had an unpainted metal exterior and was not accessed during this inspection. Two other modular buildings were located in the southern part of the Resource Recovery Building, and a third was observed in the east side of the Solid Waste Tipping Area.

See Appendix C for a copy of site diagram provide by the client.

SECTION 3.0

METHODS AND LIMITATIONS

3.1 XRF METHODS

The limited inspection was performed based on a modified version of the protocol established in the "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" by the Department of Housing and Urban Development (HUD) in June 1995. A portable spectrum analyzing XRF instrument manufactured by Niton Corporation was utilized to perform a limited LBP inspection of interior and exterior painted building components of the structures located at the subject property. The XRF serial number was 21205, and last date of calibration was August 10, 2010.

The XRF instrument performs a self-calibration test on startup. The calibration was then verified using a known standard from the United States Department of Commerce National Institute of Standards and Technology (NIST). QA/QC measurements were taken with the Level III (1.04 mg/cm^2) NIST standard at the beginning and end of the inspection. XRF test results express lead concentrations in milligram per square centimeter (mg/cm^2). The results were stored in the XRF for later retrieval in a spreadsheet format.

XRF testing combinations were determined on site by an EPA Certified Lead-Based paint Risk Assessor and the following factors; location (e.g. Building, Floor, Unit, Room), component (e.g. Wall, Ceiling, Door, Door Frame, Baseboard, etc.), substrate (e.g. Drywall, Concrete, Wood, Metal, etc.), and painting history (if available). An XRF reading was obtained from selected testing combinations.

3.2 LIMITATIONS

The limited inspection was conducted to assess selected painted building components for the presence of lead. Because of limitations in access this inspection can not be utilized as a Lead-Based Paint Inspection as defined in the HUD Guidelines, that is beyond the intent and scope of this limited inspection. The inspected areas are assumed to be representative of the coatings used throughout the facility. This limited inspection report has been prepared by EE&G in a manner consistent with industry standards exercised by members of the profession practicing under similar conditions. No other warranty, expressed or implied is made. Under no circumstances is this limited inspection report to be utilized as a bid proposal or a project specification document, as this is not its intent. The intent of this inspection report is to assist the client in assessing for lead in selected painted building components.

EPA and HUD define lead-based paint (LBP) as; paint or other coatings that contain lead at or greater than the level of 1.0 mg/cm^2 or 0.5% by weight; however, the US Department of Labor's Occupational Safety and Health Administration (OSHA) lead regulation, 29 CFR 1926.62, does not recognize a concentration of lead in paint that may be safe for workers therefore, measurable amounts of lead are considered to be a potential source of exposure. This assessment can be utilized to identify building components that contain lead. However, as

OSHA does not recognize the absence of lead through XRF, this assessment can not be utilized for establishing that coatings are lead-free for purposes of OSHA compliance.

EE&G's interpretations and recommendations are based upon the results of the XRF testing, environmental regulations, and quality control and assurance standards. The results, conclusions, and recommendations contained in this report pertain to conditions observed at the time of the inspection. Other conditions elsewhere at the subject facility may differ from those in the inspected locations and, such conditions are unknown, may change over time, and have not been considered.

This report was prepared solely for the use of EE&G's client, and is not intended for use by third party beneficiaries. The client shall indemnify and hold EE&G harmless against any liability for any loss arising out of or relating to reliance by any third party on any work performed there under, or the contents of this report. EE&G will not be held responsible for the interpretation or use by others of data developed pursuant to the compilation of this report, or for use of segregated portions of this report.

SECTION 4.0

INSPECTION FINDINGS

4.1 XRF TESTING RESULTS

HUD defines LBP as; paints or coatings with lead concentrations equal to or greater than 1.0 mg/cm^2 when measured by XRF. The following components were identified as LBP during this inspection:

DESCRIPTION:	**Metal safety railings**
CONDITION:	**Damaged – some localized peeling in spots**
LOCATIONS:	**Resource Recovery Building – south end, storage area above cages.** **Solid Waste Tipping Area – catwalks and northeast exterior.**
DESCRIPTION:	**Metal stair hand railings**
CONDITION:	**Damaged – some localized peeling in spots**
LOCATIONS:	**Resource Recovery Building – south end, south of wood modular.**
DESCRIPTION:	**Concrete floor stripe**
CONDITION:	**Damaged – some localized chipping in spots**
LOCATIONS:	**Resource Recovery Building – south end, east of wood modular.**
DESCRIPTION:	**Concrete floor curbing stripe**
CONDITION:	**Damaged – some localized chipping in spots**
LOCATIONS:	**Resource Recovery Building – north end, around equipment slabs.**
DESCRIPTION:	**Metal water tank**
CONDITION:	**Intact**
LOCATIONS:	**Resource Recovery Building – north end, along west wall.**
DESCRIPTION:	**Metal stair hand railings, stair treads, and risers**
CONDITION:	**Intact**
LOCATIONS:	**Resource Recovery Building – north end, stairway to control room** **Solid Waste Tipping Area – catwalks and west side incinerator pad.**
DESCRIPTION:	**Metal safety railings**
CONDITION:	**Intact**
LOCATIONS:	**Resource Recovery Building – north end, catwalk at control room.**
DESCRIPTION:	**Metal ladder and safety cage**
CONDITION:	**Intact**
LOCATIONS:	**Resource Recovery Building – north end, catwalk at control room.** **Solid Waste Tipping Area – catwalks.**

DESCRIPTION: **Metal stair hand railings**
CONDITION: **Intact**
LOCATIONS: **Resource Recovery Building – north end, interior stairwell**

DESCRIPTION: **Metal bollard**
CONDITION: **Intact**
LOCATIONS: **Resource Recovery Building – exterior, north.**

DESCRIPTION: **Concrete parking stop**
CONDITION: **Intact**
LOCATIONS: **Resource Recovery Building – exterior, south and north.**

DESCRIPTION: **Metal rebar screen frame**
CONDITION: **Damaged - Chipping**
LOCATIONS: **Solid Waste Tipping Area – exterior, north.**

DESCRIPTION: **Metal ladder**
CONDITION: **Intact**
LOCATIONS: **Raised Cooling Tower – underside platform.**

DESCRIPTION: **Metal bollard and railing**
CONDITION: **Intact**
LOCATIONS: **Raised Cooling Tower – exterior, east.**
Scale House – exterior, south.
Ash Transfer Building – exterior, south, southwest, and west.

DESCRIPTION: **Metal drain cover**
CONDITION: **Intact**
LOCATIONS: **Raised Cooling Tower –exterior, north.**

DESCRIPTION: **Metal posts**
CONDITION: **Intact**
LOCATIONS: **Raised Cooling Tower – exterior, north.**

DESCRIPTION: **Metal guard rail**
CONDITION: **Intact**
LOCATIONS: **Scale House – exterior, southeast.**

DESCRIPTION: **Metal floor stripe**
CONDITION: **Damaged – some localized chipping in spots**
LOCATIONS: **Scale House – exterior, east – edge of scale.**

DESCRIPTION: **Crane and associated catwalks and railings**
CONDITION: **Not accessed (Assumed LBP)**
LOCATIONS: **Solid Waste Tipping Area – catwalks and west side incinerator pad.**

Testing combinations and XRF results are presented in Appendix B, LBP Photographs in Appendix C.

SECTION 5.0

RECOMMENDATIONS

5.1 RECOMMENDATIONS FOR LBP

IF the structure is to remain occupied any LBP areas that have become damaged should be completely abated or stabilized to prevent further delamination (i.e. surface preparation for repainting operations). Any abatement procedure in which LBP is disturbed should be conducted by trained personnel and in accordance with all federal, state and local regulations, including OSHA's lead regulation 29 CFR 1926.62. Also, prior to disposal, the entire waste stream from LBP abatement (paint, rags, protective suits, debris, etc.) must be characterized by a Toxic Characteristic Leachate Procedure (TCLP) test. The EPA requires TCLP testing to determine if the waste is considered hazardous.

To comply with OSHA lead regulation 29 CFR 1926.62, the testing results should be made available to any personnel that will conduct painting operations of these structures. This regulation considers paint that contains any amount of lead to be lead-based paint and mandates protective measures any time a painting or renovation project involves the disturbance of LBP components in such a way as to cause airborne emissions of lead particulate (sanding, scraping, grinding, etc.). These protective measures include: personnel protection (respirators, protective suits, etc.), engineering controls and personnel air monitoring until results of the personnel monitoring indicate airborne lead concentrations below the Permissible Exposure Limit (PEL) of fifty (50) micrograms per cubic meter as an eight-hour time weighted average (TWA). In lieu of the above protective measures, painting personnel may provide objective historical data from previous similar projects to demonstrate that the PEL for lead will not be exceeded.

If the structure is to be demolished, prior to demolition, a “wastestream characterization” should be performed on the structure. This “wastestream” must be characterized by a Toxic Characteristic Leachate Procedure (TCLP) test. The EPA requires TCLP testing to determine if the waste is considered either hazardous (and must be disposed of in a special disposal site) or is nonhazardous, and may be disposed of in a standard landfill. For some materials such as steel and mostly metal components, recycling at a certified recycling facility is another alternative to including these components as a representative fraction of the waste stream characterization. Finally, baseline representative soil samples should be collected from each address/lot on the properties to establish a background “Lead-in Soil” concentration for future post-demolition comparison.

To comply with OSHA lead regulation 29 CFR 1926.62, the laboratory analysis results should be made available to any personnel that will conduct demolition and razing operations of this structure. This regulation considers paint that contains any amount of lead to be lead-based paint and mandates protective measures any time a demolition project involves the disturbance of LBP components in such a way as to cause airborne emissions of lead particulate (torching, disc sanding, etc.). These protective measures include: personnel protection (respirators, protective suits, etc.), engineering controls and personnel air monitoring until results of the personnel monitoring indicate airborne lead concentrations below the Permissible Exposure

Limit (PEL) of fifty (50) micrograms per cubic meter as an eight-hour time weighted average (TWA). In lieu of the above protective measures, demolition personnel may provide objective historical data from previous similar projects to demonstrate that the PEL for lead will not be exceeded.

At completion of demolition/razing/disposal of the structure down to grade, final representative soil samples should be collected from each address/lot to determine a final background "Lead-in-Soil" concentration that should be below EPA/HUD or Florida DEP guidelines for Affordable Housing. If levels exceed EPA/HUD and/or Florida DEP guidelines, some soil remediation may be required to eliminate contaminated soil. Additional round(s) of confirmatory testing will then be required to clear this area.

5.2 RECOMMENDATIONS FOR OTHER PAINTS AND COATINGS

OSHA does not recognize the absence of lead through XRF; therefore, these materials must be considered to be lead-containing and a potential source of exposure unless determined to be nonlead-containing through laboratory analysis (i.e. Flame AAS, Method SW 846, 7420).

Any activity that would release lead dust or fumes must be performed by workers in accordance with the OSHA standard for removal of lead containing paint. If these materials can remain intact during renovation or demolition, then no other special handling is required.

5.3 OSHA COMPLIANCE

To comply with OSHA lead regulation 29 CFR 1926.62, this report should be made available to personnel that will conduct painting (or demolition?) operations at this facility. This regulation considers coatings that contain measurable amounts of lead to be lead-based paint and mandates protective measures when a painting or demolition project involves the disturbance of painted components in such a way as to cause airborne emissions of lead particulate (sanding, scraping, grinding, etc.). These protective measures include: hazard communication training, personnel protection (respirators, protective suits, etc.), engineering controls and personnel air monitoring until results of the personnel monitoring indicate airborne lead concentrations below the Action Level (AL) of 30 micrograms per cubic meter as an eight-hour time weighted average (TWA). In lieu of the above protective measures, painting and or demolition personnel may provide objective historical data from previous similar projects to demonstrate that the AL for lead will not be exceeded.

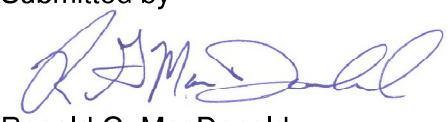
5.4 DISCLOSURE OF LBP HAZARDS

The Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as Title X, Section 1018 requires the disclosure to the purchaser or lessee of any known information on lead-based paint or lead-based paint hazards and provide to the purchaser or lessee any lead hazard evaluation reports available prior to the sale or lease of most housing built prior to 1978.

SECTION 6.0

SIGNATURE PAGE

Submitted by



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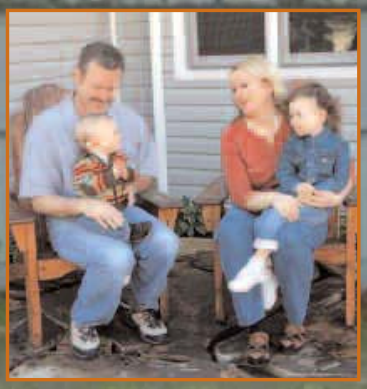
APPENDIX A

RENOVATE RIGHT
EPA PAMPHLET

Renovate Right

Important Lead Hazard Information for Families, Child Care Providers and Schools



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT U.S.

It's the Law!

Federal law requires that individuals receive certain information before renovating more than two square feet of painted surfaces in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under the age of six that attend those facilities: renovators must provide a copy of this pamphlet to child-care facilities and general renovation information to families whose children attend those facilities.

Also, beginning April 2010, federal law will require contractors that disturb lead-based paint in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Therefore beginning in April 2010, ask to see your contractor's certification.

Renovating, Repairing, or Painting?

- Is your home, your building, or the child care facility or school your children attend, being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school your children under age 6 attend, built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the childcare facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb lead-based paint can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

Who Should Read This Pamphlet?

This pamphlet is for you if you:

- Reside in a home built before 1978,
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health,
- How to choose a contractor, if you are a property owner,
- What tenants, and parents/guardians of a child in a child care facility or school should consider,
- How to prepare for the renovation or repair job,
- What to look for during the job and after the job is done,
- Where to get more information about lead.

This pamphlet is not for:

- **Abatement projects.** Abatement is a set of activities aimed specifically at eliminating lead or lead hazards. EPA has regulations for certification and training of abatement professionals. If your goal is to eliminate lead or lead hazards, contact the National Lead Information Center at **1-800-424-LEAD (5323)** for more information.
- **"Do-it-yourself" projects.** If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at **1-800-424-LEAD (5323)** and ask for more information on how to work safely in a home with lead-based paint.
- **Contractor education.** Contractors who want information about working safely with lead should contact the National Lead Information Center at **1-800-424-LEAD (5323)** for information about courses and resources on lead-safe work practices.

Lead and Your Health

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetus.

Lead gets into the body when it is swallowed or inhaled.

- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint. People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb lead-based paint.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family everyday.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.

Where Does the Lead Come From?

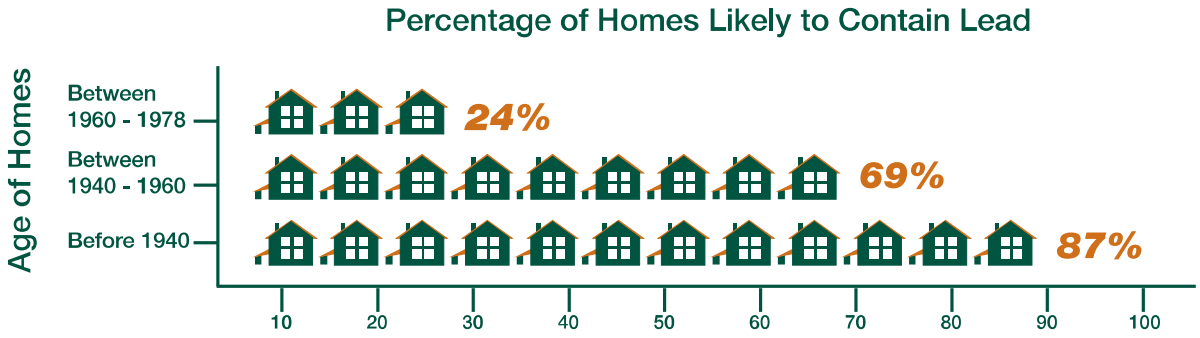
Dust is the main problem. The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and windowsills into the body.

Home renovation creates dust. Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust. The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

Other sources of lead. Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at **1-800-424-LEAD (5323)** for more information on these sources.

Checking Your Home for Lead-Based Paint



Older homes, child care facilities, and schools are more likely to contain lead-based paint. Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You or your contractor may also test for lead using a lead test kit. Test kits must be EPA-approved and are available at hardware stores. They include detailed instructions for their use.

You can hire a certified professional to check for lead-based paint. These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

For Property Owners

You have the ultimate responsibility for the safety of your family, tenants, or children in your care. This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Beginning April 2010, federal law will require that contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities, and schools built before 1978 to be certified and follow specific work practices to prevent lead contamination.

Until contractors are required to be certified, make sure your contractor can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask if the contractor is aware of the lead renovation rules. For example, contractors are required to provide you with a copy of this pamphlet before beginning work. A sample pre-renovation disclosure form is provided at the back of this pamphlet. Contractors may use this form to make documentation of compliance easier.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- Even before contractors are required to be certified you should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices should be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

Once these practices are required, if you think a worker is failing to do what they are supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with the contract requirements,
- Call your local health or building department, or
- Call EPA's hotline **1-800-424-LEAD (5323).**

For Tenants, and Families of Children Under Age Six in Child Care Facilities and Schools

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Beginning April 2010, federal law will require that contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities and schools built before 1978 that a child under age six visits regularly to be certified and follow specific work practices to prevent lead contamination.

The law will require anyone hired to renovate, repair, or do painting preparation work on a property built before 1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

Once these practices are required, if you think a worker is failing to do what they are supposed to do or is doing something that is unsafe, you should:

- Contact your landlord,
- Call your local health or building department, or
- Call EPA's hotline **1-800-424-LEAD (5323).**

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the more stringent requirements of HUD's Lead-safe Housing Rule and the ones described in this pamphlet.

Preparing for a Renovation

The work areas should not be accessible to occupants while the work occurs. The rooms or areas where work is being done may be blocked off or sealed with plastic sheeting to contain any dust that is generated. The contained area will not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. You will not have access to some areas and should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they, too, can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside, in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is done. Items that can't be moved, such as cabinets, should be wrapped in heavy duty plastic.
- To turn off forced-air heating and air conditioning systems while work is done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or parts of the work are being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.

During the Work

Beginning April 2010, federal law will require contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb lead-based paint to be certified and follow specific work practices to prevent lead contamination.

Even before contractors are required to be certified and follow specific work practices, the contractor should follow these three simple procedures, described below:

1. **Contain the work area.** The area should be contained so that dust and debris do not escape from that area. Warning signs should be put up and heavy-duty plastic and tape should be used as appropriate to:
   - Cover the floors and any furniture that cannot be moved.
   - Seal off doors and heating and cooling system vents.

   These will help prevent dust or debris from getting outside the work area.

2. **Minimize dust.** There is no way to eliminate dust, but some methods make less dust than others. For example, using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them are techniques that generate less dust than alternatives. Some methods generate large amounts of lead-contaminated dust and should not be used. They are:
   - Open flame burning or torching.
   - Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
   - Using a heat gun at temperatures greater than 1100°F.

3. **Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area should be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
   - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
   - Wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area should be re-cleaned.

For Property Owners: After the Work is Done

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Even before contractors are required to be certified and follow specific work practices, you should:

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor should use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at **www.epa.gov/lead** or contact the National Lead Information Center at **1-800-424-LEAD (5323)** or visit their website at **www.epa.gov/lead/nlic.htm.**

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You can specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at **1-800-424-LEAD (5323)** for lists of qualified professionals and EPA-recognized lead labs.

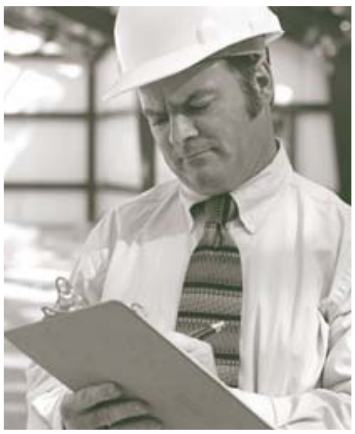
If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.

For Additional Information

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or childcare facility.

- The **National Lead Information Center** at **1-800-424-LEAD (5323)** or **www.epa.gov/lead/nlic.htm** can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.



  - State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations and potential sources of financial aid for reducing lead hazards. If your State or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
  - Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
  - State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

- The **National Lead Information Center** can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at **www.epa.gov/lead/pubs/brochure.htm.**
  - Lead Paint Safety, a Field Guide for Painting, Home Maintenance, and Renovation Work
  - Reducing Lead Hazards When Remodeling Your Home
  - Protect Your Family from Lead in Your Home
  - Lead in Your Home: A Parent's Reference Guide

For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

EPA Contacts

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations. EPA requires training and certification for conducting abatement, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **www.epa.gov/lead.**

Region 1
(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont)
Regional Lead Contact
U.S. EPA Region 1
Suite 1100
One Congress Street
Boston, MA 02114-2023
(888) 372-7341

Region 2
(New Jersey, New York, Puerto Rico, Virgin Islands)
Regional Lead Contact
U.S. EPA Region 2
2890 Woodbridge Avenue
Building 209, Mail Stop 225
Edison, NJ 08837-3679
(732) 321-6769

Region 3
(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia)
Regional Lead Contact
U.S. EPA Region 3
1650 Arch Street
Philadelphia, PA 19103-2029
(215) 814-5000

Region 4
(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)
Regional Lead Contact
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303-8960
(404) 562-9900

Region 5
(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)
Regional Lead Contact
U.S. EPA Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3507
(312) 886-6003

Region 6
(Arkansas, Louisiana, New Mexico, Oklahoma, Texas)
Regional Lead Contact
U.S. EPA Region 6
1445 Ross Avenue,
12th Floor
Dallas, TX 75202-2733
(214) 665-6444

Region 7
(Iowa, Kansas, Missouri, Nebraska)
Regional Lead Contact
U.S. EPA Region 7
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7003

Region 8
(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)
Regional Lead Contact
U.S. EPA Region 8
999 18th Street, Suite 300
Denver, CO 80202-2466
(303) 312-6312

Region 9
(Arizona, California, Hawaii, Nevada)
Regional Lead Contact
U.S. Region 9
75 Hawthorne Street
San Francisco, CA 94105
(415) 947-8021

Region 10
(Alaska, Idaho, Oregon, Washington)
Regional Lead Contact
U.S. EPA Region 10
1200 Sixth Avenue
Seattle, WA 98101-1128
(206) 553-1200

Other Federal Agencies

CPSC

The Consumer Product Safety Commission (CPSC) protects the public from the unreasonable risk of injury or death from 15,000 types of consumer products under the agency's jurisdiction. CPSC warns the public and private sectors to reduce exposure to lead and increase consumer awareness. Contact CPSC for further information regarding regulations and consumer product safety.

CPSC
4330 East West Highway
Bethesda, MD 20814
Hotline 1-(800) 638-2772
www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch
4770 Buford Highway, MS F-40
Atlanta, GA 30341
(770) 488-3300
www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development
Office of Healthy Homes
and Lead Hazard Control
451 Seventh Street, SW, Room 8236
Washington, DC 20410-3000
HUD's Lead Regulations Hotline
(202) 402-7698
www.hud.gov/offices/lead/

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

Current Sample Pre-Renovation Form

Effective until April 2010.

Confirmation of Receipt of Lead Pamphlet

❑ I have received a copy of the pamphlet, *Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools* informing me of the potential risk of the lead hazard exposure from renovation activity to be performed in my dwelling unit. I received this pamphlet before the work began.

Printed name of recipient

Date

Signature of recipient

Self-Certification Option (for tenant-occupied dwellings only) —
If the lead pamphlet was delivered but a tenant signature was not obtainable, you may check the appropriate box below.

❑ **Refusal to sign** — I certify that I have made a good faith effort to deliver the pamphlet, *Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools*, to the rental dwelling unit listed below at the date and time indicated and that the occupant refused to sign the confirmation of receipt. I further certify that I have left a copy of the pamphlet at the unit with the occupant.

❑ **Unavailable for signature** — I certify that I have made a good faith effort to deliver the pamphlet, *Renovate Right: Important Lead Hazard Information for Families, Child Care providers and Schools*, to the rental dwelling unit listed below and that the occupant was unavailable to sign the confirmation of receipt. I further certify that I have left a copy of the pamphlet at the unit by sliding it under the door.

Printed name of person certifying

Attempted delivery date and time lead pamphlet delivery

Signature of person certifying lead pamphlet delivery

Unit Address

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead pamphlet to the owner and/or tenant. Pamphlet must be mailed at least 7 days before renovation (Document with a certificate of mailing from the post office).

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

Future Sample Pre-Renovation Form

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation

Pamphlet Receipt

❑ I have received a copy of the lead hazard information pamphlet informing me of the potential risk of the lead hazard exposure from renovation activity to be performed in my dwelling unit. I received this pamphlet before the work began.

Owner-occupant Opt-out Acknowledgment

❑ (A) I confirm that I own and live in this property, that no child under the age of 6 resides here, that no pregnant woman resides here, and that this property is not a child-occupied facility.

Note: A child resides in the primary residence of his or her custodial parents, legal guardians, foster parents, or informal caretaker if the child lives and sleeps most of the time at the caretaker's residence.

Note: A child-occupied facility is a pre-1978 building visited regularly by the same child, under 6 years of age, on at least two different days within any week, for at least 3 hours each day, provided that the visits total at least 60 hours annually.

If Box A is checked, check either Box B or Box C, but not both.

❑ (B) I request that the renovation firm use the lead-safe work practices required by EPA's Renovation, Repair, and Painting Rule; or

❑ (C) I understand that the firm performing the renovation will not be required to use the lead-safe work practices required by EPA's Renovation, Repair, and Painting Rule.

_____

Printed Name of Owner-occupant

_____ _____

Signature of Owner-occupant | Signature Date

Renovator's Self Certification Option (for tenant-occupied dwellings only)

***Instructions to Renovator*:** If the lead hazard information pamphlet was delivered but a tenant signature was not obtainable, you may check the appropriate box below.

❑ **Declined** – I certify that I have made a good faith effort to deliver the lead hazard information pamphlet to the rental dwelling unit listed below at the date and time indicated and that the occupant declined to sign the confirmation of receipt. I further certify that I have left a copy of the pamphlet at the unit with the occupant.

❑ **Unavailable for signature** – I certify that I have made a good faith effort to deliver the lead hazard information pamphlet to the rental dwelling unit listed below and that the occupant was unavailable to sign the confirmation of receipt. I further certify that I have left a copy of the pamphlet at the unit by sliding it under the door or by (fill in how pamphlet was left). _____

_____ _____

Printed Name of Person Certifying Delivery | Attempted Delivery Date

_____

Signature of Person Certifying Lead Pamphlet Delivery

_____

_____

Unit Address

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

Note: This form is not effective until April 2010.

1-800-424-LEAD (5323)
www.epa.gov/lead

EPA-740-F-08-002
March 2008

APPENDIX B

XRF TESTING DATA

	Component Description			Substrate	Location Description			PbC	Results
RESOURCE RECOVERY BUILDING									
1	SHUTTER_CAL			367.42	4.51	2.32		2.09	
2	NIST	1.04						1.1	Positive
3	DOOR	ROLL UP	FRAME	METAL	GROUND	SOUTH END		0.11	Negative
4	DOOR	ROLL UP	FRAME	METAL	GROUND	SOUTH END		0	Negative
5	WALL	LOWER		CONCRETE	GROUND	SOUTH END		0	Negative
6	CAGE	FENCING		METAL	GROUND	SOUTH END		0	Negative
7	CAGE	FENCING		METAL	GROUND	SOUTH END		0	Negative
8	I-BEAM	COLUMN		METAL	GROUND	SOUTH END	CAGES	0.9	Negative
9	I-BEAM	BEAM		METAL	GROUND	SOUTH END	CAGES	0.2	Negative
10	MAIN	SUPPORT	COLUMN	METAL	SECOND	SOUTH END	CAGES	0.19	Negative
11	WALL	SUPPORT		METAL	SECOND	SOUTH END	CAGES	0	Negative
12	**SAFETY**	**RAILING**		**METAL**	**SECOND**	**SOUTH END**	**CAGES**	**1.8**	**Positive**
13	COLUMN	ROUND		METAL	GROUND	SOUTH END	CAGES	0	Negative
14	I-BEAM	BEAM		METAL	GROUND	SOUTH END	CAGES	0	Negative
15	I-BEAM	BEAM		METAL	GROUND	SOUTH END	CAGES	0	Null
16	I-BEAM	BEAM		METAL	GROUND	SOUTH END	CAGES	0	Negative
17	DOOR			METAL	GROUND	SOUTH END	CAGES	0.03	Negative
18	DOOR	JAMB		METAL	GROUND	SOUTH END	CAGES	0.02	Negative
19	DOOR	FRAME		METAL	GROUND	SOUTH END	CAGES	0.03	Negative
20	WALL			CONCRETE	GROUND	SOUTH END	CAGES	0	Negative
21	WALL			CONCRETE	GROUND	SOUTH END	CAGES	0	Negative
22	CAGE	FENCING		METAL	GROUND	SOUTH END	CAGES	0	Negative
23	LADDER			METAL	GROUND	SOUTH END	CAGES	0	Negative
24	MAIN	SUPPORT	COLUMN	METAL	SECOND	SOUTH END	OFFICES	0.11	Negative
25	WALL	SUPPORT		METAL	SECOND	SOUTH END	OFFICES	0	Negative
26	WALL	UPPER		METAL	SECOND	SOUTH END	OFFICES	0.01	Negative
27	WALL	UPPER		METAL	SECOND	SOUTH END	OFFICES	0.02	Negative
28	FAN	FRAME		METAL	SECOND	SOUTH END	OFFICES	0	Negative

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
29	PIPE RACK	SUPPORT	COLUMN	METAL	SECOND	SOUTH END	OFFICES	0.01	Negative
30	PIPE RACK	SUPPORT	I-BEAM	METAL	SECOND	SOUTH END	OFFICES	0	Negative
31	PIPE RACK	SUPPORT	ANGLE	METAL	SECOND	SOUTH END	OFFICES	0	Null
32	PIPE RACK	SUPPORT	ANGLE	METAL	SECOND	SOUTH END	OFFICES	0	Negative
33	PIPE RACK	SUPPORT	PLATE	METAL	SECOND	SOUTH END	OFFICES	0	Negative
34	SAFETY	RAILING		METAL	SECOND	SOUTH END	OFFICES	0.02	Negative
35	FLOOR			CONCRETE	GROUND	SOUTH END		0	Negative
36	WALL	LOWER		CONCRETE	GROUND	SOUTH END	CAGES	0.02	Negative
37	I-BEAM	COLUMN		METAL	GROUND	SOUTH END	CAGES	0.01	Negative
38	MAIN	SUPPORT	COLUMN	METAL	GROUND	SOUTH END	CAGES	0.12	Negative
39	I-BEAM	BEAM		METAL	GROUND	SOUTH END	CAGES	0.05	Null
40	I-BEAM	BEAM		METAL	GROUND	SOUTH END	CAGES	0.02	Negative
41	CAGE	FENCING		METAL	GROUND	SOUTH END	CAGES	0	Negative
42	**STAIR**	**HAND**	**RAIL**	**METAL**	**GROUND**	**SOUTH END**	**CAGES**	**2.3**	**Positive**
43	STAIR	STRINGER		METAL	GROUND	SOUTH END	CAGES	0.5	Negative
44	SHUTTER_CAL			371.81	4.51	2.31		1.99	
45	NIST	1.04						0.9	Null
46	NIST	1.04						0.9	Negative
47	STAIR	STRINGER		METAL	GROUND	SOUTH END	CAGES	0.3	Negative
48	STAIR	HAND	RAIL	METAL	SECOND	SOUTH END	CAGES	0.5	Negative
49	**SAFETY**	**RAILING**		**METAL**	**SECOND**	**SOUTH END**	**CAGES**	**3.4**	**Positive**
50	MAIN	SUPPORT	COLUMN	METAL	SECOND	SOUTH END	CAGES	0.19	Negative
51	WALL	UPPER		METAL	SECOND	SOUTH END	CAGES	0.03	Negative
52	WALL	SUPPORT		METAL	SECOND	SOUTH END	CAGES	0.07	Negative
53	CROSS	BRACE		METAL	SECOND	SOUTH END	CAGES	0.03	Negative
54	ANGLE	FRAMING		METAL	SECOND	SOUTH END	CAGES	0.02	Negative
55	ROUUND	SUPPORT		METAL	SECOND	SOUTH END	CAGES	0.06	Negative
56	FLOOR			WOOD	SECOND	SOUTH END	CAGES	0	Negative
57	**FLOOR**	**STRIPE**		**CONCRETE**	**GROUND**	**SOUTH END**		**3.1**	**Positive**

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
58	WALL			WOOD	GROUND	SOUTH END	MODULARS	0	Negative
59	DOOR			WOOD	GROUND	SOUTH END	MODULARS	0	Negative
60	DOOR	JAMB		WOOD	GROUND	SOUTH END	MODULARS	0	Negative
61	DOOR	FRAME		WOOD	GROUND	SOUTH END	MODULARS	0	Negative
62	DOOR			METAL	GROUND	SOUTH END	MODULARS	0	Negative
63	WALL			METAL	GROUND	SOUTH END	MODULARS	0	Negative
64	MODULAR	FRAME		METAL	GROUND	SOUTH END	MODULARS	0	Null
65	MODULAR	FRAME		METAL	GROUND	SOUTH END	MODULARS	0	Negative
66	WINDOW	FRAME		METAL	GROUND	SOUTH END	MODULARS	0	Negative
67	WINDOW	FRAME		WOOD	GROUND	SOUTH END	OFFICES	0.02	Negative
68	DOOR			WOOD	GROUND	SOUTH END	OFFICES	0	Negative
69	DOOR	FRAME		WOOD	GROUND	SOUTH END	OFFICES	0.01	Negative
70	WALL			CONCRETE	GROUND	SOUTH END	OFFICES	0	Negative
71	WALL			CONCRETE	GROUND	SOUTH END	BREAK ROOM	0	Negative
72	WINDOW	FRAME		WOOD	GROUND	SOUTH END	BREAK ROOM	0.01	Negative
73	WINDOW	FRAME		WOOD	GROUND	SOUTH END	BREAK ROOM	0.01	Negative
74	DOOR			WOOD	GROUND	SOUTH END	BREAK ROOM	0	Negative
75	DOOR	JAMB		WOOD	GROUND	SOUTH END	BREAK ROOM	0.01	Negative
76	DOOR	FRAME		WOOD	GROUND	SOUTH END	BREAK ROOM	0.02	Negative
77	DOOR			WOOD	GROUND	SOUTH END	OFFICES	0	Negative
78	DOOR	JAMB		WOOD	GROUND	SOUTH END	OFFICES	0.02	Negative
79	DOOR	FRAME		WOOD	GROUND	SOUTH END	OFFICES	0.02	Negative
80	WINDOW	FRAME		WOOD	GROUND	SOUTH END	OFFICES	0.06	Negative
81	WINDOW	FRAME		WOOD	GROUND	SOUTH END	OFFICES	0.02	Negative
82	WALL			CONCRETE	GROUND	SOUTH END	OFFICES	0	Negative
83	I-BEAM	COLUMN		METAL	GROUND	SOUTH END	OFFICES	0	Negative
84	DOOR			METAL	GROUND	SOUTH END		0.01	Negative
85	DOOR	JAMB		METAL	GROUND	SOUTH END		0	Negative
86	DOOR	FRAME		METAL	GROUND	SOUTH END		0	Negative

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
87	DOOR			METAL	GROUND	NORTH END		0.01	Negative
88	DOOR	JAMB		METAL	GROUND	NORTH END		0	Negative
89	DOOR	FRAME		METAL	GROUND	NORTH END		0.01	Negative
90	WALL			CONCRETE	GROUND	NORTH END		0	Negative
91	WALL			CONCRETE	GROUND	NORTH END		0.01	Negative
92	WALL			CONCRETE	GROUND	NORTH END		0	Negative
93	DOOR	ROLL UP	FRAME	METAL	GROUND	NORTH END		0.16	Negative
94	DOOR	ROLL UP	FRAME	METAL	GROUND	NORTH END		0	Negative
95	DOOR			METAL	GROUND	NORTH END		0	Negative
96	DOOR	JAMB		METAL	GROUND	NORTH END		0	Negative
97	DOOR	FRAME		METAL	GROUND	NORTH END		0	Negative
98	I-BEAM	COLUMN		METAL	GROUND	NORTH END		0.13	Negative
99	MAIN	SUPPORT	COLUMN	METAL	GROUND	NORTH END		0.09	Negative
100	FLOOR	CURBING		CONCRETE	GROUND	NORTH END		0	Negative
101	PIPE RACK	SUPPORT	COLUMN	CONCRETE	GROUND	NORTH END		0	Negative
102	PIPE RACK	SUPPORT	COLUMN	CONCRETE	GROUND	NORTH END		0	Negative
103	PIPE RACK	SUPPORT	COLUMN	CONCRETE	GROUND	NORTH END		0	Negative
104	PIPE			CONCRETE	GROUND	NORTH END		0.01	Negative
105	EQUIPMENT	GENERATOR		METAL	GROUND	NORTH END		0.03	Negative
106	EQUIPMENT	GENERATOR		METAL	GROUND	NORTH END		0.01	Negative
107	EQUIPMENT	GENERATOR		METAL	GROUND	NORTH END		0.02	Negative
108	EQUIPMENT	GENERATOR	CONTROL	METAL	GROUND	NORTH END		0	Negative
109	EQUIPMENT	GENERATOR	CONTROL	METAL	GROUND	NORTH END		0	Negative
110	EQUIPMENT	SMALL	TRANSFORMER	METAL	GROUND	NORTH END		0	Negative
111	EQUIPMENT	SMALL	TRANSFORMER	METAL	GROUND	NORTH END		0	Negative
112	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
113	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
114	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
115	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
116	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
117	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
118	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
119	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
120	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
121	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
122	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
123	EQUIPMENT	SWITCH	PANELS	METAL	GROUND	NORTH END		0	Negative
124	FLOOR	CURBING		CONCRETE	GROUND	NORTH END		0.01	Negative
125	**FLOOR**	**CURBING**		**CONCRETE**	**GROUND**	**NORTH END**		**5.3**	**Positive**
126	EQUIPMENT	MOTOR		METAL	GROUND	NORTH END		0	Negative
127	EQUIPMENT	MOTOR		METAL	GROUND	NORTH END		0	Negative
128	EQUIPMENT	MOTOR		METAL	GROUND	NORTH END		0	Negative
129	EQUIPMENT	MOTOR		METAL	GROUND	NORTH END		0	Negative
130	EQUIPMENT	MOTOR		METAL	GROUND	NORTH END		0	Negative
131	EQUIPMENT	MOTOR		METAL	GROUND	NORTH END		0	Negative
132	EQUIPMENT	LAGRE	TRANSFORMER	METAL	GROUND	NORTH END		0	Negative
133	EQUIPMENT	LAGRE	TRANSFORMER	METAL	GROUND	NORTH END		0	Negative
134	EQUIPMENT	LAGRE	GENERATOR	METAL	GROUND	NORTH END		0	Negative
135	EQUIPMENT	LAGRE	GENERATOR	METAL	GROUND	NORTH END		0.02	Negative
136	EQUIPMENT	LAGRE	GENERATOR	METAL	GROUND	NORTH END		0.04	Negative
137	EQUIPMENT	LAGRE	GENERATOR	METAL	GROUND	NORTH END		0	Negative
138	**FLOOR**	**CURBING**		**CONCRETE**	**GROUND**	**NORTH END**		**4**	**Positive**
139	**FLOOR**	**CURBING**		**CONCRETE**	**GROUND**	**NORTH END**		**6.9**	**Positive**
140	EQUIPMENT	TANK		METAL	GROUND	NORTH END		0.03	Negative
141	EQUIPMENT	TANK		METAL	GROUND	NORTH END		1	Null
142	**EQUIPMENT**	**TANK**		**METAL**	**GROUND**	**NORTH END**		**1.4**	**Positive**
143	PIPE			METAL	GROUND	NORTH END		0	Negative
144	STAIR	STRINGER		METAL	GROUND	NORTH END		0.01	Negative

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
145	STAIR	STRINGER		METAL	GROUND	NORTH END		0.06	Negative
146	**STAIR**	**HAND**	**RAIL**	**METAL**	**GROUND**	**NORTH END**		**6.7**	**Positive**
147	**STAIR**	**HAND**	**RAIL**	**METAL**	**GROUND**	**NORTH END**		**7.3**	**Positive**
148	**STAIR**	**RISER**		**METAL**	**GROUND**	**NORTH END**		**3.3**	**Positive**
149	**STAIR**	**TREAD**		**METAL**	**GROUND**	**NORTH END**		**7.3**	**Positive**
150	**SAFETY**	**RAILING**		**METAL**	**SECOND**	**NORTH END**		**6.2**	**Positive**
151	**LADDER**			**METAL**	**SECOND**	**NORTH END**		**3.3**	**Positive**
152	**LADDER**	**CAGE**		**METAL**	**SECOND**	**NORTH END**		**4**	**Positive**
153	DOOR			METAL	SECOND	NORTH END		0.05	Negative
154	DOOR	FRAME		METAL	SECOND	NORTH END		0.02	Negative
155	WALL			CONCRETE	SECOND	NORTH END		0	Negative
156	WALL			METAL	SECOND	NORTH END		0.01	Negative
157	WALL			CONCRETE	GROUND	NORTH END	OFFICES	0	Negative
158	WALL			CONCRETE	GROUND	NORTH END	OFFICES	0	Null
159	WALL			CONCRETE	GROUND	NORTH END	OFFICES	0.01	Negative
160	DOOR			METAL	GROUND	NORTH END	OFFICES	0.08	Negative
161	DOOR	JAMB		METAL	GROUND	NORTH END	OFFICES	0.01	Negative
162	DOOR	FRAME		METAL	GROUND	NORTH END	OFFICES	0.02	Negative
163	DOOR			METAL	GROUND	NORTH END	STAIR WELL	0.03	Negative
164	DOOR	JAMB		METAL	GROUND	NORTH END	STAIR WELL	0.01	Negative
165	DOOR	FRAME		METAL	GROUND	NORTH END	STAIR WELL	0.02	Negative
166	MAIN	SUPPORT	COLUMN	METAL	GROUND	NORTH END	STAIR WELL	0.06	Negative
167	CAGE	FENCING		METAL	GROUND	NORTH END	STAIR WELL	0.01	Negative
168	WALL			CONCRETE	GROUND	NORTH END	STAIR WELL	0.01	Negative
169	STAIR	TREAD		CONCRETE	GROUND	NORTH END	STAIR WELL	0.09	Negative
170	STAIR	RISER		CONCRETE	GROUND	NORTH END	STAIR WELL	0.07	Negative
171	**STAIR**	**HAND**	**RAIL**	**METAL**	**GROUND**	**NORTH END**	**STAIR WELL**	**10.1**	**Positive**
172	DOOR			METAL	SECOND	NORTH END	STAIR WELL	0.01	Negative
173	DOOR	JAMB		METAL	SECOND	NORTH END	STAIR WELL	0	Negative

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
174	DOOR	FRAME		WOOD	SECOND	NORTH END	STAIR WELL	0.1	Negative
175	DOOR			METAL	SECOND	NORTH END	STAIR WELL	0.01	Negative
176	DOOR	FRAME		METAL	SECOND	NORTH END	STAIR WELL	0.01	Negative
177	WALL			CONCRETE	SECOND	NORTH END	STAIR WELL	0	Negative
178	WALL			CONCRETE	SECOND	NORTH END	CONTROL ROOM	0.5	Negative
179	WALL			CONCRETE	SECOND	NORTH END	CONTROL ROOM	-0.08	Negative
180	DOOR			METAL	SECOND	NORTH END	CONTROL ROOM	0	Negative
181	DOOR	JAMB		METAL	SECOND	NORTH END	CONTROL ROOM	0.03	Negative
182	DOOR	FRAME		METAL	SECOND	NORTH END	CONTROL ROOM	0.07	Null
183	DOOR	FRAME		METAL	SECOND	NORTH END	CONTROL ROOM	0	Negative
184	WINDOW	FRAME		METAL	SECOND	NORTH END	CONTROL ROOM	0.01	Null
185	WINDOW	FRAME		METAL	SECOND	NORTH END	CONTROL ROOM	0.02	Negative
186	WINDOW	FRAME		WOOD	SECOND	NORTH END	CONTROL ROOM	0.01	Negative
187	WINDOW	FRAME		WOOD	SECOND	NORTH END	CONTROL ROOM	0	Negative
188	DOOR			WOOD	SECOND	NORTH END	CONTROL ROOM	0	Negative
189	DOOR	JAMB		WOOD	SECOND	NORTH END	CONTROL ROOM	0.02	Negative
190	DOOR	FRAME		WOOD	SECOND	NORTH END	CONTROL ROOM	0	Negative
191	TOP	CABINET		WOOD	SECOND	NORTH END	CONTROL ROOM	0	Negative
192	BASE	CABINET		WOOD	SECOND	NORTH END	CONTROL ROOM	0	Negative
193	EQUIPMENT	CONTROL	PANELS	WOOD	SECOND	NORTH END	CONTROL ROOM	0	Negative
194	EQUIPMENT	CONTROL	PANELS	WOOD	SECOND	NORTH END	CONTROL ROOM	0	Negative
267	DOOR			METAL	GROUND	NORTH END	OUTSIDE	0	Negative
268	DOOR	FRAME		METAL	GROUND	NORTH END	OUTSIDE	0	Negative
269	DOOR	ROLL UP	FRAME	METAL	GROUND	NORTH END	OUTSIDE	0.01	Negative
270	**BOLLARD**			**METAL**	**GROUND**	**NORTH END**	**OUTSIDE**	**9.1**	**Positive**
271	WALL			METAL	GROUND	NORTH END	OUTSIDE	0	Negative
272	WALL			CONCRETE	GROUND	NORTH END	OUTSIDE	0.01	Negative
273	**PARKING**	**STOP**		**CONCRETE**	**GROUND**	**NORTH END**	**OUTSIDE**	**2**	**Positive**
274	BOLLARD			METAL	GROUND	NORTH END	OUTSIDE	0.01	Negative

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
275	BOLLARD			METAL	GROUND	NORTH END	OUTSIDE	0	Negative
276	TANK			METAL	GROUND	NORTH END	OUTSIDE	0	Negative
277	TANK			METAL	GROUND	NORTH END	OUTSIDE	0	Negative
335	SHUTTER_CAL			373.17	4.51	2.31		1.84	
336	NIST	1.04						0.9	Null
337	NIST	1.04						0.9	Negative
338	CEILING			DRYWALL	GROUND	SOUTH END	MODULARS	0	Negative
339	CEILING			WOOD	GROUND	SOUTH END	MODULARS	0	Negative
340	DOOR			METAL	GROUND	SOUTH END	MODULARS	0.09	Null
341	DOOR			METAL	GROUND	SOUTH END	MODULARS	0	Negative
342	MAIN	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.08	Negative
343	MAIN	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.21	Negative
344	MAIN	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.27	Negative
345	MAIN	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.07	Negative
346	ROOFING	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.03	Negative
347	ROOFING	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.01	Negative
348	ROOFING	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.01	Null
349	ROOFING	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.01	Negative
350	ROOFING	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.01	Null
351	ROOFING	SUPPORT	BEAM	METAL	THIRD	NORTH END		0.01	Negative
SOLID WASTE TIPPING AREA									
195	**SAFETY**	**RAILING**		**METAL**	**SECOND**	**OUTSIDE**	**CAT WALK**	**8**	**Positive**
196	I-BEAM	COLUMN		METAL	THIRD	OUTSIDE	CAT WALK	0	Negative
197	I-BEAM	COLUMN		METAL	THIRD	OUTSIDE	CAT WALK	0	Negative
198	DOOR			METAL	THIRD	OUTSIDE	CAT WALK	0.01	Negative
199	DOOR	JAMB		METAL	THIRD	OUTSIDE	CAT WALK	0	Negative
200	DOOR	FRAME		METAL	THIRD	OUTSIDE	CAT WALK	0.01	Negative
201	WALL			METAL	THIRD	OUTSIDE	CAT WALK	0	Negative
202	WALL			METAL	THIRD	EAST SIDE		-0.16	Negative

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
203	WALL	SUPPORT		METAL	THIRD	EAST SIDE		0.01	Negative
204	WALL	SUPPORT		METAL	THIRD	EAST SIDE		0.01	Negative
205	CROSS	BRACE		METAL	THIRD	EAST SIDE		0	Negative
206	WALL			METAL	THIRD	EAST SIDE	MODULAR	0	Negative
207	DOOR			METAL	THIRD	EAST SIDE	MODULAR	0	Null
208	DOOR			METAL	THIRD	EAST SIDE	MODULAR	0	Negative
209	DOOR	JAMB		METAL	THIRD	EAST SIDE	MODULAR	0	Negative
210	DOOR	FRAME		METAL	THIRD	EAST SIDE	MODULAR	0	Negative
211	BOLLARD			METAL	THIRD	EAST SIDE		0	Negative
212	BOLLARD			METAL	THIRD	EAST SIDE		0	Negative
213	SCOOPE			METAL	THIRD	EAST SIDE		0	Negative
214	PIPE			METAL	THIRD	EAST SIDE		0	Negative
215	SAFETY	RAILING		METAL	THIRD	EAST SIDE		0	Negative
216	**SAFETY**	**RAILING**		**METAL**	**THIRD**	**EAST SIDE**		**2**	**Positive**
217	SAFETY	RAILING		METAL	THIRD	EAST SIDE		0	Negative
218	**LADDER**			**METAL**	**THIRD**	**EAST SIDE**		**2.8**	**Positive**
219	**LADDER**	**CAGE**		**METAL**	**THIRD**	**EAST SIDE**		**1.5**	**Positive**
220	DROP	BIN		METAL	THIRD	EAST SIDE		0.01	Negative
221	**STAIR**	**HAND**	**RAIL**	**METAL**	**THIRD**	**EAST SIDE**		**3.9**	**Positive**
222	**LADDER**			**METAL**	**THIRD**	**EAST SIDE**		**2.6**	**Positive**
223	**LADDER**	**CAGE**		**METAL**	**THIRD**	**EAST SIDE**		**1.2**	**Positive**
224	DOOR			METAL	FOURTH	EAST SIDE		0.01	Negative
225	DOOR	FRAME		METAL	FOURTH	EAST SIDE		0	Negative
226	WALL			METAL	FOURTH	EAST SIDE		0	Negative
227	WALL	SUPPORT		METAL	FOURTH	EAST SIDE		0.01	Negative
228	I-BEAM	BEAM		METAL	FOURTH	EAST SIDE		0.01	Negative
229	I-BEAM	COLUMN		METAL	FOURTH	EAST SIDE		0	Negative
230	CROSS	BRACE		METAL	FOURTH	EAST SIDE		0.01	Negative
231	WALL			CONCRETE	FOURTH	EAST SIDE		0.01	Negative

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KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
232	BOLLARD			METAL	GROUND	OUTSIDE	SOUTH SIDE	0	Negative
233	**STAIR**			**METAL**	**GROUND**	**OUTSIDE**	**SOUTHWEST SIDE**	**6.1**	**Positive**
234	COLUMN			METAL	GROUND	OUTSIDE	WEST SIDE	0	Null
235	COLUMN			METAL	GROUND	OUTSIDE	WEST SIDE	0	Negative
236	PIPE			METAL	GROUND	OUTSIDE	WEST SIDE	0.01	Negative
237	WALL			CONCRETE	GROUND	OUTSIDE	WEST SIDE	0	Negative
238	WALL			METAL	GROUND	OUTSIDE	WEST SIDE	0	Negative
239	BOLLARD			METAL	GROUND	OUTSIDE	NORHTWEST SIDE	0	Negative
240	I-BEAM	COLUMN		METAL	GROUND	OUTSIDE	NORHTWEST SIDE	0	Negative
241	SAFETY	RAILING		METAL	GROUND	OUTSIDE	NORTHEAST SIDE	0	Negative
242	SAFETY	RAILING		METAL	GROUND	OUTSIDE	NORTHEAST SIDE	0	Negative
243	SAFETY	RAILING		METAL	GROUND	OUTSIDE	NORTHEAST SIDE	0	Negative
244	**SAFETY**	**RAILING**		**METAL**	**GROUND**	**OUTSIDE**	**NORTHEAST SIDE**	**6.3**	**Positive**
332	REBAR	SCREEN	FRAME	METAL	GROUND	OUTSIDE	NORTH SIDE	0.08	Negative
333	**REBAR**	**SCREEN**	**FRAME**	**METAL**	**GROUND**	**OUTSIDE**	**NORTH SIDE**	**3.3**	**Positive**
334	NIST	1.04		METAL	GROUND	OUTSIDE		0.8	Negative
RAISED COOLING TOWER STRUCTURE									
245	**SAFETY**	**RAILING**		**METAL**	**GROUND**	**UNDER**	**AT LADDER**	**1.4**	**Positive**
246	I-BEAM	COLUMN		METAL	GROUND	UNDER		0.06	Negative
247	CROSS	BRACE		METAL	GROUND	UNDER		0.06	Negative
248	I-BEAM	BEAM		METAL	GROUND	UNDER		0.01	Negative
249	I-BEAM	BEAM		METAL	GROUND	UNDER		0.01	Negative
250	PIPE			METAL	GROUND	UNDER		0.13	Negative
251	PIPE			METAL	GROUND	UNDER		0.01	Negative
252	PIPE			METAL	GROUND	UNDER		0.06	Negative
253	**BOLLARD**			**METAL**	**GROUND**	**SOUTHEAST**		**5.2**	**Positive**
254	**BOLLARD**	**RAILING**		**METAL**	**GROUND**	**SOUTHEAST**		**8.7**	**Positive**
255	DOOR			METAL	GROUND	FIRE EQ SHED	OUTSIDE	0	Negative
256	DOOR			METAL	GROUND	FIRE EQ SHED	OUTSIDE	0.03	Null

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

	Component Description			Substrate	Location Description			PbC	Results
257	DOOR	JAMB		METAL	GROUND	FIRE EQ SHED	OUTSIDE	0	Negative
258	DOOR	FRAME		METAL	GROUND	FIRE EQ SHED	OUTSIDE	0	Negative
259	WALL			METAL	GROUND	FIRE EQ SHED	OUTSIDE	0	Negative
260	SHED	FRAME		METAL	GROUND	FIRE EQ SHED	OUTSIDE	0	Negative
261	EQUIPMENT	PIPE		METAL	GROUND	FIRE EQ SHED	INSIDE	0	Negative
262	EQUIPMENT	PIPE		METAL	GROUND	FIRE EQ SHED	INSIDE	0	Negative
263	EQUIPMENT	PUMP		METAL	GROUND	FIRE EQ SHED	INSIDE	0	Negative
264	EQUIPMENT	TANK		METAL	GROUND	FIRE EQ SHED	INSIDE	0	Negative
265	LARGE	TRANSFORMER		METAL	GROUND	EAST SIDE		0	Negative
266	LARGE	TRANSFORMER		METAL	GROUND	EAST SIDE		0	Negative
278	DRAIN	COVER		METAL	GROUND	NORTH SIDE		0.27	Negative
279	**DRAIN**	**COVER**		**METAL**	**GROUND**	**NORTH SIDE**		**9.2**	**Positive**
280	MANHOLE	COVER		METAL	GROUND	NORTH SIDE		0.09	Negative
281	MANHOLE	COVER		METAL	GROUND	NORTH SIDE		0.15	Negative
282	MANHOLE	COVER		METAL	GROUND	NORTH SIDE		0.26	Negative
283	**POST**			**METAL**	**GROUND**	**NORTH SIDE**		**8.8**	**Positive**
352	DOOR			METAL	GROUND	ELEC. BLDG	OUTSIDE	0	Negative
353	DOOR	JAMB		METAL	GROUND	ELEC. BLDG	OUTSIDE	0	Null
354	DOOR	JAMB		METAL	GROUND	ELEC. BLDG	OUTSIDE	0.01	Negative
355	DOOR	FRAME		METAL	GROUND	ELEC. BLDG	OUTSIDE	0	Negative
356	WALL			CONCRETE	GROUND	ELEC. BLDG	OUTSIDE	0	Negative
357	WALL			WOOD	GROUND	ELEC. BLDG	INSIDE	0	Negative
358	CEILING			WOOD	GROUND	ELEC. BLDG	INSIDE	0	Negative
359	WALL			CONCRETE	GROUND	ELEC. BLDG	INSIDE	0	Negative
360	TRIM			WOOD	GROUND	ELEC. BLDG	OUTSIDE	0	Negative
SCALE HOUSE BUILDING									
284	GUARD	RAILING		METAL	GROUND	OUTSIDE	SOUTHEAST SIDE	0.5	Negative
285	**GUARD**	**RAILING**		**METAL**	**GROUND**	**OUTSIDE**	**SOUTHEAST SIDE**	**1.2**	**Positive**
286	**POST**			**METAL**	**GROUND**	**OUTSIDE**	**SOUTHEAST SIDE**	**8.1**	**Positive**

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
287	FLAG	POLE		METAL	GROUND	OUTSIDE	SOUTH SIDE	0	Negative
288	**BOLLARD**			**METAL**	**GROUND**	**OUTSIDE**	**EAST SIDE**	**13.2**	**Positive**
289	**FLOOR**	**STRIPE**		**METAL**	**GROUND**	**OUTSIDE**	**EAST SIDE**	**1.6**	**Positive**
290	FLOOR			CONCRETE	GROUND	OUTSIDE	EAST SIDE	0.08	Negative
291	WALL			METAL	GROUND	OUTSIDE		0.01	Negative
292	DOOR			METAL	GROUND	OUTSIDE		0	Negative
293	WALL			METAL	GROUND	OUTSIDE		0.01	Negative
361	DOOR			METAL	GROUND	INSIDE		0	Negative
362	DOOR	JAMB		WOOD	GROUND	INSIDE		0	Negative
363	DOOR	FRAME		WOOD	GROUND	INSIDE		0	Negative
364	WALL			WOOD	GROUND	INSIDE		0	Negative
365	CEILING			DRYWALL	GROUND	INSIDE		0	Negative
366	CEILING			WOOD	GROUND	INSIDE		0	Negative
367	WALL			METAL	GROUND	INSIDE		0	Negative
ASH TRANSFER BUILDING									
294	WALL			CONCRETE	GROUND	OUTSIDE		0	Negative
295	**BOLLARD**			**METAL**	**GROUND**	**OUTSIDE**	**SOUTHWEST SIDE**	**3.3**	**Positive**
296	**BOLLARD**	**RAILING**		**METAL**	**GROUND**	**OUTSIDE**	**SOUTHWEST SIDE**	**1.8**	**Positive**
297	**BOLLARD**			**METAL**	**GROUND**	**OUTSIDE**	**SOUTH SIDE**	**1.8**	**Positive**
298	WALL			CONCRETE	GROUND	OUTSIDE		0	Negative
299	DOOR	ROLL UP	FRAME	METAL	GROUND	OUTSIDE		0	Negative
300	COLUMN			METAL	GROUND	OUTSIDE		0	Negative
301	COLUMN	BASE		CONCRETE	GROUND	OUTSIDE		0	Negative
302	COLUMN	BASE		CONCRETE	GROUND	OUTSIDE		0	Negative
303	COLUMN	BASE		CONCRETE	GROUND	OUTSIDE		0.03	Negative
304	TANK	DIESEL		CONCRETE	GROUND	OUTSIDE	EAST SIDE	0	Negative
305	TANK	GAS		CONCRETE	GROUND	OUTSIDE	EAST SIDE	0	Negative
306	SAFETY	RAILING		CONCRETE	GROUND	OUTSIDE	DIESEL TANK	0	Negative
307	SAFETY	RAILING		CONCRETE	GROUND	OUTSIDE	GAS TANK	0	Negative

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	Component Description			Substrate	Location Description			PbC	Results
308	WALL			CONCRETE	GROUND	OUTSIDE	EAST SIDE	0.01	Negative
309	WALL			METAL	GROUND	OUTSIDE	EAST SIDE	0	Negative
310	DOOR			METAL	GROUND	OUTSIDE		0	Negative
311	DOOR	FRAME		METAL	GROUND	OUTSIDE		0	Negative
312	MAIN	SUPPORT	COLUMN	METAL	GROUND	OUTSIDE		0.01	Negative
313	MAIN	SUPPORT	COLUMN	METAL	GROUND	OUTSIDE		0	Negative
314	MAIN	SUPPORT	COLUMN	METAL	GROUND	INSIDE		0	Negative
315	MAIN	SUPPORT	COLUMN	METAL	GROUND	INSIDE		0.03	Negative
316	WALL			METAL	GROUND	INSIDE		0.02	Negative
317	WALL	SUPPORT		METAL	GROUND	INSIDE		0.14	Negative
318	TRIM			METAL	GROUND	INSIDE	OFFICES	0	Negative
319	WALL			CONCRETE	GROUND	INSIDE	OFFICES	0.02	Negative
320	WINDOW			METAL	GROUND	INSIDE	OFFICES	0.03	Negative
321	WINDOW			METAL	GROUND	INSIDE	OFFICES	0.06	Negative
322	I-BEAM	COLUMN		METAL	GROUND	INSIDE		0	Negative
323	I-BEAM	COLUMN		METAL	GROUND	INSIDE		0	Negative
324	I-BEAM	COLUMN		METAL	GROUND	INSIDE	OFFICES	0	Negative
325	WALL			CONCRETE	GROUND	INSIDE	OFFICES	0.03	Null
326	WALL			CONCRETE	GROUND	INSIDE	OFFICES	0	Negative
327	CEILING			WOOD	GROUND	INSIDE	OFFICES	0	Negative
328	DOOR	ROLL UP	FRAME	WOOD	GROUND	OUTSIDE		0.1	Negative
329	**BOLLARD**			**METAL**	**GROUND**	**OUTSIDE**	**WEST SIDE**	**4.7**	**Positive**
330	AC	SUPPORT		METAL	GROUND	OUTSIDE	SOUTH SIDE	0	Negative
331	ELECTRICAL	CABINET		METAL	GROUND	OUTSIDE	SOUTH SIDE	0	Negative
368	WALL			METAL	GROUND	INSIDE	SHOP	0	Negative
369	WALL	SUPPORT		METAL	GROUND	INSIDE	SHOP	0	Negative
370	I-BEAM	COLUMN		METAL	GROUND	INSIDE	SHOP	0	Negative
371	DOOR			METAL	GROUND	INSIDE	SHOP	0.01	Negative
372	DOOR	JAMB		METAL	GROUND	INSIDE	SHOP	0	Negative

PbC = Lead concentration expressed in mg/cm^2. All null results have been resampled and confirmed by XRF.

KWSMWTELBPSURVREPREV

	Component Description			Substrate	Location Description			PbC	Results
373	DOOR	FRAME		METAL	GROUND	INSIDE	SHOP	0	Negative
374	DOOR	ROLL UP	FRAME	METAL	GROUND	INSIDE	SHOP	0.07	Null
375	DOOR	ROLL UP	FRAME	METAL	GROUND	INSIDE	SHOP	0.16	Negative
376	DOOR			METAL	GROUND	INSIDE	SHOP	0	Negative
377	DOOR	JAMB		METAL	GROUND	INSIDE	SHOP	0	Negative
378	DOOR	FRAME		METAL	GROUND	INSIDE	SHOP	0	Negative
379	DOOR			METAL	GROUND	INSIDE	OFFICES	0	Negative
380	DOOR	JAMB		METAL	GROUND	INSIDE	OFFICES	0	Negative
381	DOOR	FRAME		METAL	GROUND	INSIDE	OFFICES	0	Negative
382	DOOR			METAL	GROUND	INSIDE	OFFICES	0	Negative
383	DOOR	JAMB		METAL	GROUND	INSIDE	OFFICES	0	Negative
384	DOOR	FRAME		METAL	GROUND	INSIDE	OFFICES	0	Negative
385	WALL			CONCRETE	GROUND	INSIDE	OFFICES	0	Negative
386	WALL			CONCRETE	GROUND	INSIDE	OFFICES	0	Negative
387	WINDOW			METAL	GROUND	INSIDE	OFFICES	0.06	Negative
388	WALL			CONCRETE	GROUND	INSIDE	OFFICES	0	Negative
389	WALL			CONCRETE	GROUND	INSIDE	OFFICES	0	Negative
390	WINDOW			METAL	GROUND	INSIDE	OFFICES	0.11	Negative
391	DOOR			METAL	GROUND	INSIDE	OFFICES	0	Negative
392	DOOR	JAMB		METAL	GROUND	INSIDE	OFFICES	0	Negative
393	DOOR	FRAME		METAL	GROUND	INSIDE	OFFICES	0	Negative
394	CEILING			WOOD	GROUND	INSIDE	OFFICES	0	Null
395	CEILING			WOOD	GROUND	INSIDE	OFFICES	0	Negative
396	CEILING			WOOD	GROUND	INSIDE	OFFICES	0	Negative
397	CEILING			WOOD	GROUND	INSIDE	OFFICES	0	Negative
398	NIST	1.04				OFFICE		0.9	Negative

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KWSMWTELBPSURVREPREV

APPENDIX C

FIGURES

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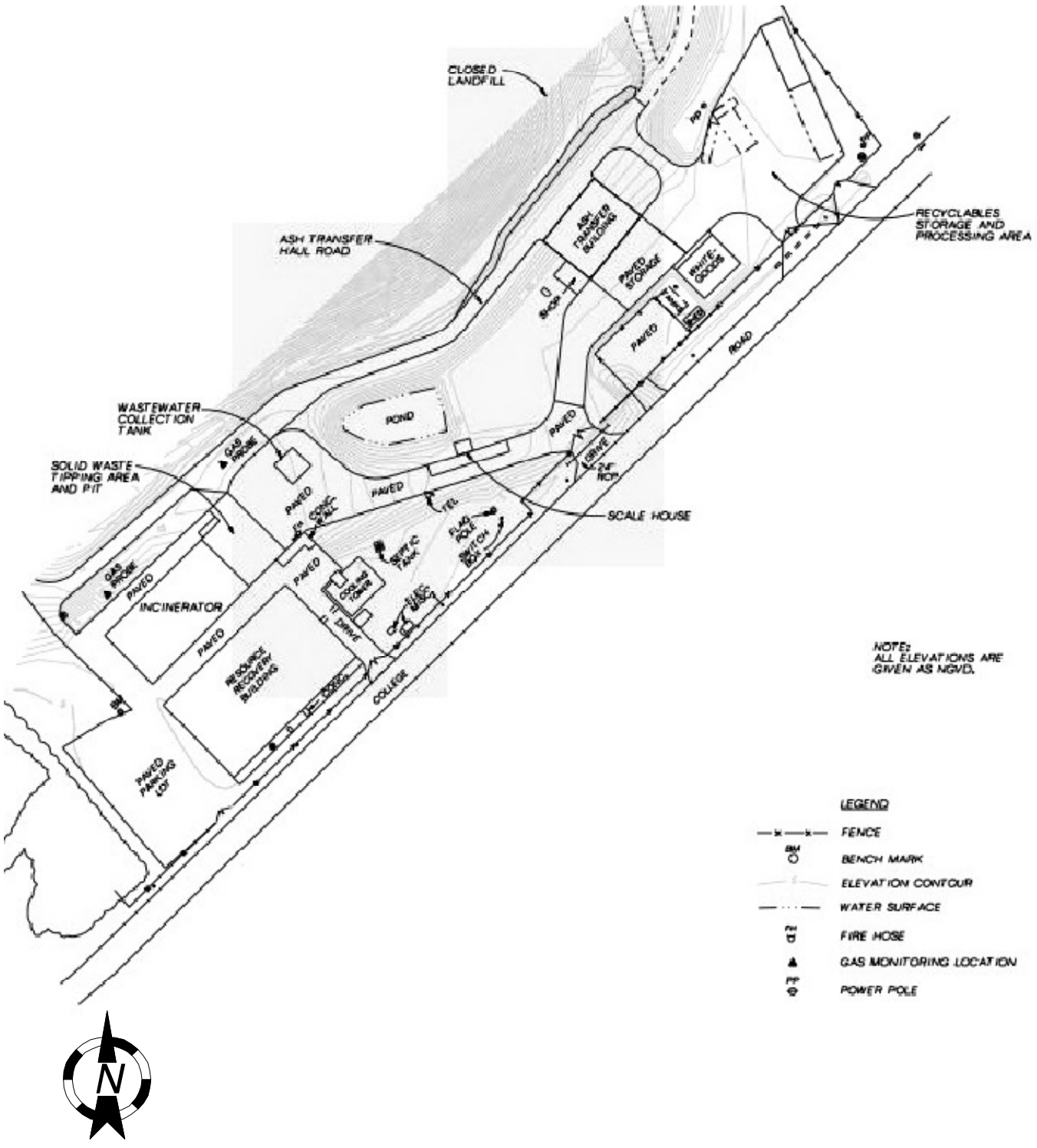
Tampa, Florida 33607
Phone (813) 278-1005 Fax (813) 278-8545



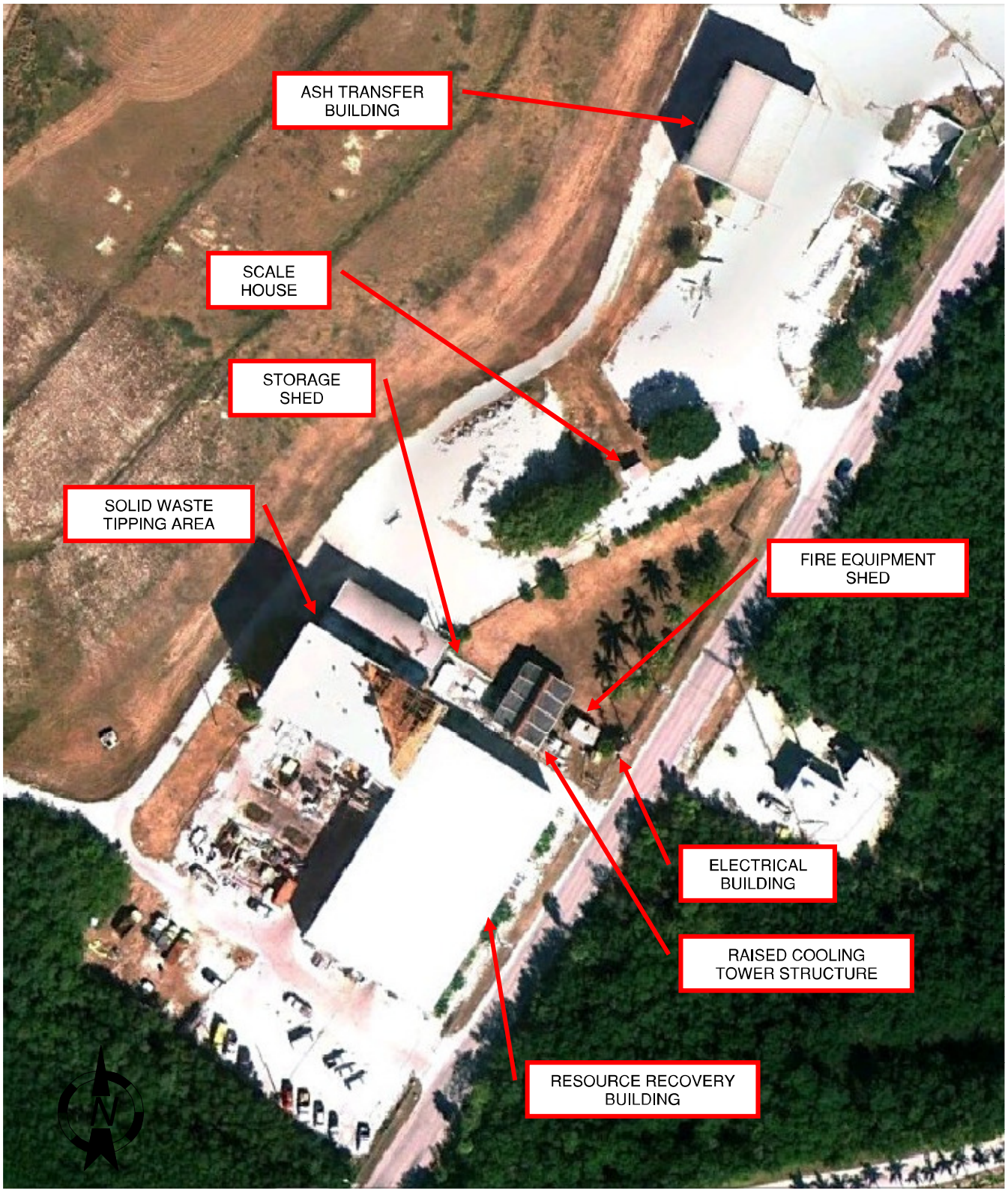
SOUTHERNMOST WASTE TO ENERGY COMPLEX
5701 College Road, Key West, Florida
Project #: 2010-2498

COMPLEX LAYOUT
Source: CM2H HILL

FIGURE C1

EE&G Environmental Services, LLC

5005 West Laurel Street, Suite 110
Tampa, Florida 33607
Phone (813) 278-1005 Fax (813) 278-8545



SOUTHERNMOST WASTE TO ENERGY COMPLEX
5701 College Road, Key West, Florida
Project #: 2010-2498

COMPLEX LAYOUT
Source: Google Earth

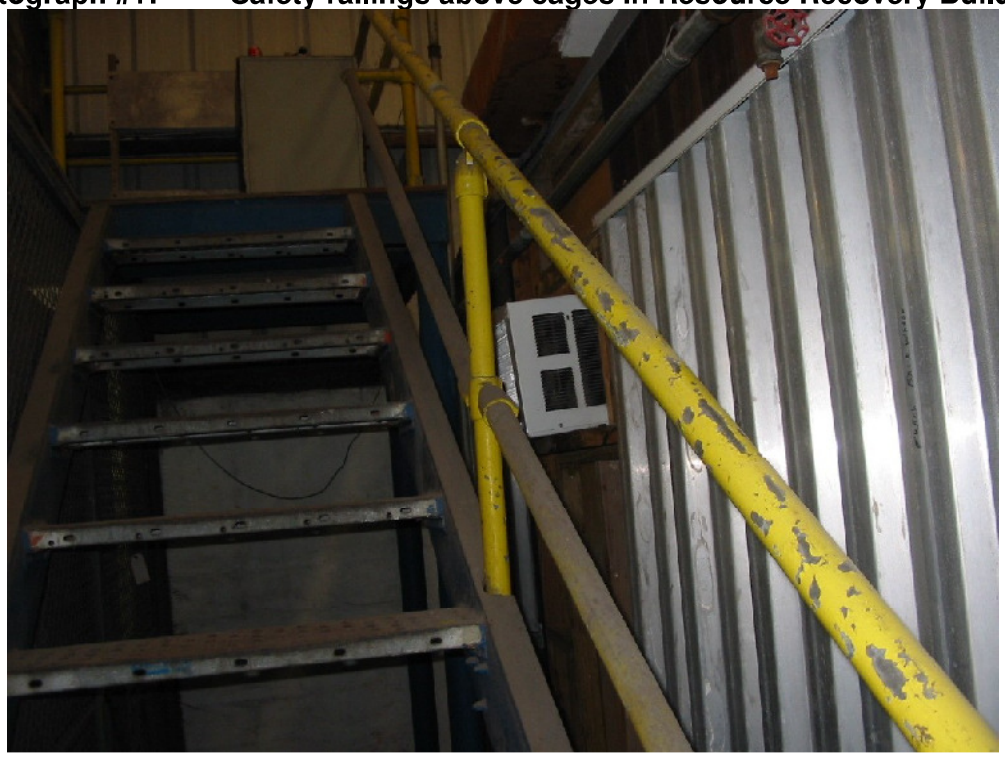
FIGURE C2

APPENDIX D

PHOTOGRAPHS

Photographs are representative of LBP components identified in section 4.0

Photograph #1: Safety railings above cages in Resource Recovery Building.



Photograph #2: Metal stair hand railings in Resource Recovery Building.

Photographs are representative of LBP components identified in section 4.0

Photograph #3: Concrete floor stripe in Resource Recovery Building

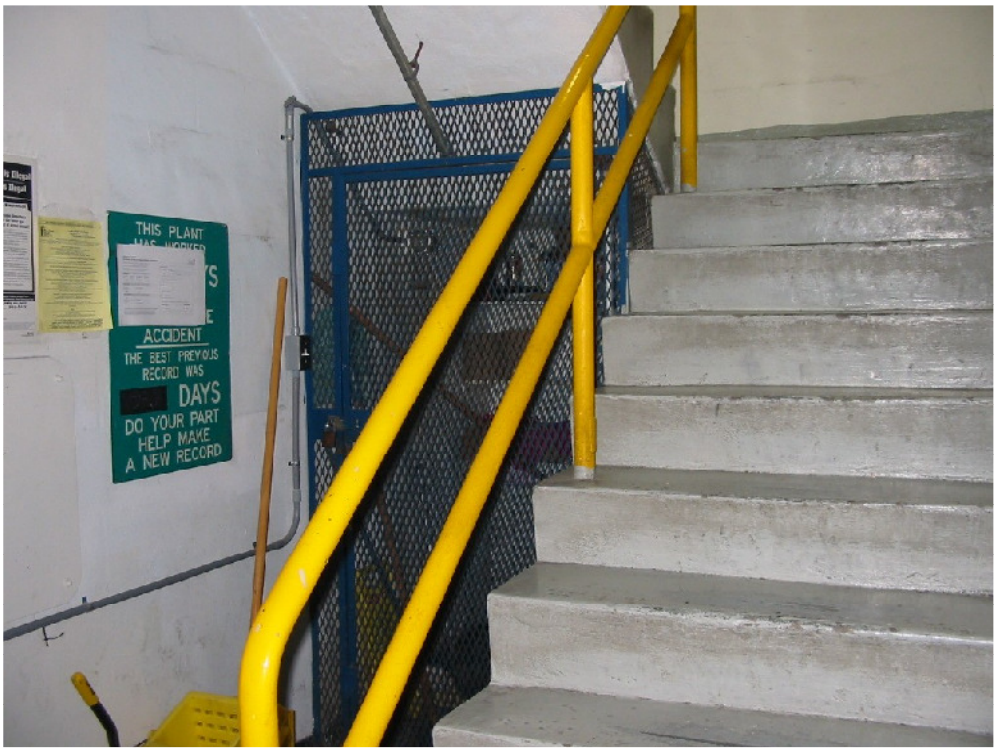
Photograph #4: Concrete floor curbing in Resource Recovery Building

Photographs are representative of LBP components identified in section 4.0

Photograph #5: Water tank in Resource Recovery Building.

Photograph #6: Stairs, safety railings, and ladders in Resource Recovery Building.

Photographs are representative of LBP components identified in section 4.0



Photograph #7: Stairwell hand rail in Resource Recovery Building.

Photograph #8: Stairs in Solid Waste Tipping Area.

Photographs are representative of LBP components identified in section 4.0

Photograph #9: Ladders and safety railings in Solid Waste Tipping Area.

Photograph #10: Cranes and safety railings in Solid Waste Tipping Area.

Photographs are representative of LBP components identified in section 4.0

Photograph #11: Stairs southwest of Solid Waste Tipping Area.

Photograph #12: Railing northeast of Solid Waste Tipping Area.

Photographs are representative of LBP components identified in section 4.0

Photograph #13: Safety railings and ladder under Raised Cooling Tower Structure.

Photograph #14: Bollards with rail east of Raised Cooling Tower Structure.

Photographs are representative of LBP components identified in section 4.0

Photograph #15: Drain cap north of Raised Cooling Tower Structure

Photograph #16: Posts north of Raised Cooling Tower Structure

Photographs are representative of LBP components identified in section 4.0

Photograph #17: Guard rail southeast of the Scale House.

Photograph #18: Stripe around scale at Scale House.

Photographs are representative of LBP components identified in section 4.0

Photograph #19: Bollards south of Ash Transfer Building.

Photograph #20: Rebar filter screen north of Solid Waste Tipping Area.

Photographs are representative of LBP components identified in section 4.0

APPENDIX E

CERTIFICATES

United States Environmental Protection Agency

This is to certify that

Ronald Gene MacDonald

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as a:

Risk Assessor

In the Jurisdiction of:

Florida

This certification is valid from the date of issuance and expires October 31, 2012

FL-R-912-3

Certification #

OCT 2 1 2008

Issued On

Jeaneanne M. Gettle, Chief

Pesticides and Toxic Substances Branch

United States Environmental Protection Agency

This is to certify that

EE&G Environmental Services, LLC

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226

In the Jurisdiction of:

Florida

This certification is valid from the date of issuance and expires September 8, 2013

FL-10142-3

Certification #

SEP 2 2 2010

Issued On

Jeaneanne M. Gettle, Chief

Pesticides and Toxic Substances Branch

Florida Department of
Environmental Protection
Division of Air Resource Management

DEP Form 62-257.900(1)
Effective 10-12-08

NOTICE OF DEMOLITION OR ASBESTOS RENOVATION

TYPE OF NOTICE (CHECK ONE ONLY): ☐ **ORIGINAL** ☐ **REVISED** ☐ **CANCELLATION** ☐ **COURTESY**
TYPE OF PROJECT (CHECK ONE ONLY): ☐ **DEMOLITION** ☐ **RENOVATION**
IF DEMOLITION, IS IT AN ORDERED DEMOLITION? ☐YES ☐ NO
IF RENOVATION:
IS IT AN EMERGENCY RENOVATION OPERATION? ☐YES ☐ NO
IS IT A PLANNED RENOVATION OPERATION? ☐YES ☐ NO

I. Facility Name _____
Address _____
City _____ State _____ Zip _____ County _____
Site _____ Consultant Inspecting Site _____
Building Size _____ (Square Feet) # of Floors _____ Building Age in Years _____
Prior Use: ☐ School/College/University ☐ Residence ☐ Small Business ☐ Other _____
Present Use: ☐ School/College/University ☐ Residence ☐ Small Business ☐ Other _____

II. Facility Owner _____ Phone (_____) _____
Address _____
City _____ State _____ Zip _____

III. Contractor's Name _____ Phone (_____) _____
Address _____
City _____ State _____ Zip _____
Is the contractor exempt from licensure under section 469.002(4), F.S.? ☐ YES ☐ NO

IV. Scheduled Dates: (Notice must be postmarked 10 working days before the project start date)
Asbestos Removal (mm/dd/yy) Start:_____ Finish:_____ Demo/Renovation (mm/dd/yy) Start: _____ Finish: _____

V. Description of planned demolition or renovation work to be performed and methods to be employed, including demolition or renovation techniques to be used and description of affected facility components. _____

Procedures to be Used (Check All That Apply):

☐	Strip and Removal	☐	Glove Bag	☐	Bulldozer	☐	Wrecking Ball
☐	Wet Method	☐	Dry Method	☐	Explode	☐	Burn Down
OTHER:							

VI. Procedures for Unexpected RACM: _____

VII. Asbestos Waste Transporter: Name _____ Phone (_____) _____
Address _____
City _____ State _____ Zip _____

VIII. Waste Disposal Site: Name _____ Class _____
Address _____
City _____ State _____ Zip _____

IX. RACM or ACM: Procedure, including analytical methods, employed to detect the presence of RACM and Category I and II nonfriable ACM.
_____

Amount of RACM or ACM*
_____ square feet surfacing material
_____ linear feet pipe
_____ cubic feet of RACM off facility components
_____ square feet cementitious material
_____ square feet resilient flooring
_____ square feet asphalt roofing

X. Fee Invoice Will Be Sent to Address in Block Below: (Print or Type)

*Identify and describe surfacing material and other materials as applicable:
_____
_____

I certify that the above information is correct and that an individual trained in the provisions of this regulation (40 CFR Part 61, Subpart M) will be on-site during the demolition or renovation and evidence that the required training has been accomplished by this person will be available for inspection during normal business hours.

_____ _____
(Print Name of Owner/Operator) (Date)

_____ _____
(Signature of Owner/Operator) (Date)

DEP USE ONLY Postmark/Date Received ID#

Instructions

The state asbestos removal program requirements of s. 376.60, F.S., and the renovation or demolition notice requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, Subpart M, as embodied in Rule 62-257, F.A.C., are included on this form.

Check to indicate whether this notice is an original, a revision, a cancellation, or a courtesy notice (i.e., not required by law). If the notice is a revision, please indicate which entries have been changed or added.

Check to indicate whether the project is a demolition or a renovation.

If you checked demolition, was it **ordered** by the State or a local government agency? If so, in addition to the information required on the form, the owner/operator must provide the name of the agency ordering the demolition, the title of the person acting on behalf of the agency, the authority for the agency to order the demolition, the date of the order, and the date ordered to begin. A copy of the order must also be attached to the notification.

If you checked renovation, is it an **emergency renovation operation**? If so, in addition to the information required on the form, the owner/operator must provide the date and hour the emergency occurred, the description of the sudden, unexpected event, and an explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden. If you checked renovation and it is a **planned renovation operation**, please note that the notice is effective for a period not to exceed a calendar year of January 1 through December 31.

I. Complete the facility information. This section describes the facility where the renovation or demolition is scheduled. This address will be used by the Department inspector to locate the project site. Provide the name of the consultant or firm that conducted the asbestos site survey/inspection. For "prior use" check the appropriate box to indicate whether the prior use of the facility is that of a school, college, or university; residence, as "residential dwelling" is defined in Rule 62-257.200, F.A.C.; small business, as defined in s. 288.703(1), F.S.; or other. If "other" is checked, identify the use. Please follow the same instructions for "present use."

II. Complete the facility owner information.

III. Complete the contractor information.

IV. List separately the scheduled start and finish dates (month/day/year) for both the asbestos removal portion of the project and the renovation or demolition portion of the project.

V. Describe and check the methods and procedures to be used for a planned demolition or renovation. Include a description of the affected facility components. (Note: The NESHAP for asbestos, which is adopted and incorporated by reference in Rule 62-204.800, F.A.C., requires obtaining Department approval prior to using a dry removal method in accordance with 40 CFR section 61.145(3)(c)(i).)

VI. Describe the procedures to be used in the event unexpected RACM is found or previously nonfriable asbestos material becomes crumbled, pulverized, or reduced to powder after start of the project.

VII. Complete the asbestos waste transporter information.

VIII. Complete the waste disposal site information.

IX. List the amount of RACM or ACM of each type of asbestos to be removed. (Note: A volume measurement of RACM off facility components is **only** permissible if the length or area could not be measured previously.) Identify and describe the listed surfacing material and other listed materials as applicable.

X. Provide the address where the Department is to send the invoice for any fee due. Do not send a fee with the notification. The fee will be calculated by the Department pursuant to Rule 62-257.400, F.A.C.

Sign the form and mail the original to the district or local air program having jurisdiction in the county where the project is scheduled **(DO NOT FAX)**. The correct address can be obtained by contacting the State Asbestos Coordinator at: Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, FL 32399-2400.