From: **James Martinello** James.Martinello@dep.state.fl.us
Subject: **Town of Surfside- Beach Fill Material Placement**
Date: **July 1, 2014 at 3:21 PM**
To: **alex front** alex@arsenvironmental.com
Cc: **Gene Chalecki** Gene.Chalecki@dep.state.fl.us, **Christian Lambright** Christian.Lambright@dep.state.fl.us

Good afternoon Alex-

Based upon our telephone conversation today, you have indicated that a separate chemical analysis was conducted on behalf of a resident or residents of the Town of Surfside and a report was created outlining your findings. You have also indicated that your analysis found levels of leachable lead and differed from the independent testing analysis conducted on behalf of the Town of Surfside in early May 2014.

The Department is interested in reviewing the findings found in your report. Please submit to me at your earliest convenience. This request should not be construed to indicate that the Department will make any determination or take any specific action based upon your report alone, however, we will review as a part of the overall investigation of this matter.

Thank you for contacting me and if you have any questions, please let me know.

Jim Martinello
Environmental Administrator
Beaches Field Services and Compliance/Enforcement Section
Division of Water Resource Management
850/245-7599

August 16, 2010

ARS-Report-2010-0707 **Lead**

Client:

Absolute Demolition
Frances Melgard
17994 SW 97 Avenue, Suite 101
Palmetto Bay, Fl. 33157

Job Site:

Surf Club
(1st Fl Corridor, Ballroom, Locker Room & Offices)
9011 Collins Avenue
Miami Beach, Florida

LEAD BASED PAINT INSPECTION

Pursuant to your request, ARS ENVIRONMENTAL, INC., has performed a Lead Based Paint Inspection on 08-11-2010 at the above referenced location.

The purpose of our inspection was to determine the presence and location of Lead Based Paint on painted surfaces throughout the building and send collected paint chips to a NLLAP accredited testing laboratory.

All inspection procedures and sample collections were conducted in accordance with U.S. Environmental Protection Agency (EPA) guidelines and in accordance with Chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1997 Revision).

Lead Based Paint Sampling

Sample Number	Sample Location	Sample Color	Sample Condition	General Comments
1	Interior/Exterior Paint on Concrete Walls	Yellow	Fair	4
2	Paint in Locker Rooms, Hallway & Ballroom Archways	Yellow	Fair	5
3	Interior wall on concrete next to womens locker rooms	Blue	Fair	5
4	Interior Bi-fold & wood doors @ locker room & offices	White	Intact	1, 4
5	Interior Wood Door Framing @ locker room & offices	White	Intact	1, 4
6	Black paint on baseboard in locker room	Black	Intact	1, 4

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Phone. (954) 227-2402 • Fax 866-748-1264
URL: www.arsenvironmental.com • Email. sales@arsenvironmental.com

Sample Number	Sample Location	Sample Color	Sample Condition	General Comments
7	Interior Paint on locker room shower walls	Peach	Fair	5
Aluminum Window Casings, Marble Flooring & Walls				

(See Attached Laboratory Results)

Recommendations

Samples 2, 3 & 7 are positive for Lead below the regulatory limits. Samples 1, 4, 5, & 6 are positive for Lead above the regulatory limits. Current Federal Regulatory Standards only apply to properties regulated by H.U.D. (Housing and Urban Development and this property does not fall into this category.

While there are no Federal Regulatory Standards, the **OSHA Lead in Construction Standard** (29 CFR 1926.62) shall apply to any construction work including renovation and demolition that may disturb the above referenced surfaces.

In addition to the above considerations, the presence of lead in demolition debris has the potential to impose limitations on where and how the debris may be disposed. The Resource Conservation and Recovery Act (RCRA), Subtitles C and D, require that the waste must be analyzed to determine the amount of leachable lead present. The type of test to be performed on the waste is the Toxicity Characteristic Leaching Procedure (TCLP) for lead, and the results of this test will determine whether the material must be handled and disposed of as hazardous waste. For structures containing large amounts of lead-containing paint, a significant potential for failing the TCLP exists.

Material Condition

Total area of Deteriorated Paint on Each Component

Type of building component[1]	Intact	Fair[2]	Poor[3]
Exterior components with large surface areas	Entire surface is intact	Less than or equal to 10 ft^2	More than 10 ft^2
Interior components with large surface areas (walls, ceilings, floors, doors)	Entire surface is intact	Less than or equal to 2 ft^2	More than 2 ft^2
Interior and exterior components with small surface areas (window sills, baseboards, soffits, trim)	Entire surface is intact	Less than or equal to 10% of the total surface area of the component	More than 10% of the total surface area of the component

[1] **"Building component"** in this table refers to each individual component or side of building, not the combined surface area of all similar components in a room (e.g., a wall with one ft^2 of deteriorated paint is in "fair" condition, even if the other 3 walls in a room have no deteriorated paint).

[2] Surfaces in **"fair"** condition should be repaired and/or monitored, but are not considered to be "lead-based paint hazards" as defined in Title X.

[3] Surfaces in **"poor"** condition are considered to be "lead-based paint hazards" as defined in Title X and should be addressed through abatement or interim controls.

General Comments

1) ☑ The condition of this building component is intact.

2) ☐ If this component is to be removed or disturbed prior to a total comprehensive abatement project, the lead based paint should be abated (removed or encapsulated) from the component prior to the component being removed or disturbed.

3) ☐ If there is a substantial change in the condition of this component then the lead based paint should be abated from the surface of the component or the component should be removed and replaced.

4) ☐ Laboratory analysis by atomic absorption spectrometry confirmed that this building component is positive and exceeds the regulatory limits on lead, 1.0 mg/cm2 or **5,000 ppm** _ HUD definition of lead based paint requiring abatement.

5) ☑ Laboratory analysis by atomic absorption spectrometry confirmed that this building component is positive and does not exceeds the regulatory limits on lead, 1.0 mg/cm2, **5,000 ppm** or 0.50% by weight _ HUD definition of lead based paint requiring abatement.

6) ☐ Laboratory analysis by atomic absorption spectrometry confirmed that this building component is negative.

Conclusion

The results, finds, conclusions and recommendations expressed in this report are based only on conditions which were observed during inspections by this report. ARS ENVIRONMENTAL, INC., makes no representation or assumptions as to past conditions or future occurrences. It was not within the scope of this investigation to remove surface materials to investigate portions of the structure or materials which lay beneath the surface. Our selection of sample locations and frequency is based upon our observations and the assumption that like materials in the same area are homogeneous.

When implementing the response actions, parties responsible for final selection should remember that actions shall be sufficient to protect HUMAN HEALTH AND THE ENVIRONMENT, but may also be the least burdensome method. Nothing in these recommendations should be construed as PROHIBITING or discouraging removal.

It has been a pleasure working with you and look forward to doing so in the near future.

Inspected & Reviewed By

Alexander Front, ARS Environmental, Inc.
Lead Risk Assessor FL-R-3783-2

BACKGROUND INFORMATION ON LEAD BASED PAINT

GENERAL INFORMATION

Lead has been known to humankind since ancient times. It was used historically as a major component of many alloys such as bronze and solder, as well as in the manufacturing of pigments and paints. In its natural state, lead is a bluish gray metal found in small amounts in the earth's crust. It has a molecular weight of 207.20, is solid at normal temperatures, and has no characteristic taste or smell. Lead readily tarnishes in the atmosphere but is one of the most stable fabricated metals because of its corrosive resistance to air, water, and soil (ATSDR, 1992). Concurrent with the use of lead through history was the occurrence of "plumbism", or lead poisoning.

LEAD POISONING

First described by Hippocrates around 370 B.C., lead poisoning, is the oldest recognized occupational disease. Lead is a toxin affecting multiple organ systems in children and adults, from acute and chronic exposures. Acute toxic symptoms include ataxia, repeated vomiting, headache, stupor, hallucinations, tremors, convulsions, and coma. These symptoms are manifested by the encephalopathic syndrome seen in lead poisoning. Chronic exposure can cause weight loss, central nervous system effects, anemia. and damage to the kidneys. Chronic lead poisoning adversely affects the central and peripheral nervous systems, causing restlessness, irritability, and memory loss, Permanent brain damage has been noted among children. Kidney damage arising from short term ingestion of lead is reversible. While chronic exposure may lead to general degradation of the kidney. Inhalation of lead dusts can cause gastritis and changes in the liver. Lead is significantly bioaccumulated in the bones and teeth where it is stored and then subsequently released. Lead also Inhibits enzymatic activity impacting the biosynthesis of heme (Patnaik, 1992).

While adults are subject to the same potential toxic effects of lead as children. A number of metabolic criteria serve to define young children and the fetus as subjects of increased risk for lead exposure and toxicity. Young children ingest and absorb a larger amount of lead per unit body measure than do adults. Children also retain a larger fraction of absorbed lead than do adults. Furthermore, children are not as efficient at sequestering circulating lead in their bones. And a higher fraction of total body lead burden is available to exert toxic effects in various target organs. In children. Basal metabolism and rates of respiration are higher than in adults, and these act to enhance lead uptake and toxicity risk. For the fetus, there is no effective metabolic or anatomical barrier to lead uptake.

Consequently, there is no protection at crucial time periods when important organ systems such as the central nervous system are forming (ATSDR, 1988).

LEAD BASED PAINT USAGE

As previously stated, the occurrence of adult lead poisoning within the occupational environment has been well documented through history. (Even Benjamin Franklin wrote a letter on occupational lead poisoning in 1786.) While the occurrence of lead poisoning within the workplace led to legislation which protected adult workers, it was lead poisoning within children that has led to the enactment of current legislation regarding lead based paint (LBP). As early as 1904, a physician in Australia concluded that lead paint was responsible for lead poisoning in child patients. He postulated that ingestion occurred secondary to hand-to_mouth exposure following contact with freshly painted or sticky surfaces or surfaces that were well worn and powdery.

By the mid_1930s, requests for limitations on the use of LBP became more frequent in the United States. Manufacturers of cribs and toys for small children had already begun eliminating lead based paint from these items. The lead industry itself showed its awareness that LBP was a danger to young children as early as 1930 through the submittal of questionnaires regarding LBP usage among manufacturers of children's toys and furniture. This posture of initial concern by the lead industry changed to an aggressive defense in the 1940s. Despite the accumulation of a large body of knowledge of the causes and effects of lead poisoning in children over the first third of the century.

Lead continued to be used in exterior and interior paints, pigments, and drying compounds well into the 1940s and beyond. LBP could still be found on the market in 1970. The year that Federal legislation prohibiting its use was passed, without industry opposition (AJPH, I989). Despite the discontinued use of LBP, historical use resulted in hazards associated with lead paint chips, lead dust, and lead contaminated soils.

LEAD BASED PAINT HAZARDS

Paint chips containing lead are a hazard, primarily from peeling paint. Lead dust is also a special concern in part because the smaller particles are more easily absorbed by the body. Certain methods of paint removal, such as sanding, scraping, and burning will create excessive amounts of dust if not controlled. LBP dust can also come from the normal abrasion of painted surfaces such as the opening and closing of windows. Because young children typically play on the floor and engage in a great deal of hand_to_mouth activity, they are at particularly high risk. Lead dust is also a problem with exterior paints. For many years exterior paint films were designed to "chalk" or lose some of the surface paint due to rain and ultraviolet light, in order to keep the surface looking fresh. The lead pigment which washed off in this process accumulates in the soil. Lead contaminated soil poses a hazard to children who may play in or near it, and dirt tracked into a home can lead to increased lead dust levels in the home.

REGULATION OR LEAD USE IN PAINT

Federal regulatory efforts began with the enactment of the "Lead Based Paint Poisoning Prevention Act" (LBPPA) (42 U.S.C. 4822 (d)(2)(a) in 1971. In 1973, the Consumer Product Safety Commission (CPSC) established a minimum lead content in paint of 0.3% by weight in a dry film of paint newly applied. In 1978, CPSC lowered the allowable lead level in paint to 0.06%.

In 1973, amendments as to the LBPPA designated the U.S. of Housing and Urban Development (HUD) the lead agency in the Federal effort to eliminate hazard. In 1970s, HEW) carried out an extensive research program with the National Bureau of Standards (now the National Institute of Standards and Technology). This work was followed in the early l980s by the issuance of regulations addressing the hazards of LBP in HUD associated housing. The Housing and Community Development Act of 1987 changed the definition of the LBP hazard to include exterior as well as interior intact and non_ intact painted surfaces. It also called for research and a domonsuation program, and mandated the inspection and abatement of all pre 1978 public housing family dwelling units. The Stewart B. McKinney Homeless Assistance Amendments Act of 1988 added additional requirements to the current HUD program. In response to the 1989 HUD_Independent Agencies Appropriations Act, comprehensive technical guidelines on testing, abatement, clean_up and disposal of LBP were developed. As directed by the 1990 HUD_Independent Agencies Appropriations Act, HUD issued the Guidelines on April 1, 1990. These Guidelines represented the first national compilation of technical protocols, practices, arid procedures on testing, abatement, worker protection, clean_ up, and disposal of LBP (HUD), 1990). Section 1017 of the 1992 Residential Lead Based Paint Hazard Reduction Act provided guidance for the conduct of federally supported work involving risk assessments, inspections, interim controls, and abatement of LBP hazards (FIA, 1995). HUD is currently reviewing proposed revisions to the 1990 Guidelines.

The Environmental Protection Agency (EPA) has historically addressed lead in terms of its role as an environmental contaminant in water, soil, and air, and has regulated the disposal of hazardous and toxic materials which may include some LBP debris. Under a Memorandum of Understanding, EPA is assisting HUE) in the current LBP research and demonstration program. In the September 2, 1994 Federal Register, EPA published a proposed model accreditation plan for LBP activities. Under Section 402 (a)(I) of Tide IV of the Toxic Substances Control Act (TSCA), EPA is required to promulgate regulations to ensure, among other items, that contractors engaged in LBP activities are certified, The proposed rule, 40 CFR Part 475, includes provisions for training requirements for LBP inspectors, risk assessors, supervisors, abatement workers. and planner/project designers. As previously stated, the rule is in its proposed stages and has not been finalized.

Other agencies within the Federal government have participated in the issues of lead poisoning associated with LBP. ATSDR (under the Department of Health and Human Services (HHS) published a major report to Congress in 1988, entitled, "The Nature and Extent of Lead Poisoning in Children in the United States: A Report to Congress." The National Institute of Occupational Safety and Health (NIOSH) is carrying out studies of worker protection methods in conjunction with HUD's demonstration program, and the Centers for Disease Control (CDC) developed Childhood Lead Poisoning Prevention Programs under its Bureau of Maternal and Child Health and Resources

Department. Within the occupational environment, the Department of Labor's Occupational Safety and Health Administration (OSHA) has developed permissible exposure limits (PELs) for workers to lend including workers within the construction sector. applicable to LBP abatement

REGULATORY LIMITS ON LEAD

The following exposure limits for lead have been promulgated by the various agencies previously mentioned.

Paint

600 ppm Consumer Product Safety Commission
1.0 mg/cm2 or 5,000 ppm or 0.50% by weight_ HUD definition of lead based paint requiring abatement

Dust

40 ug/ft2 HUD Clearance Level for Floors
250 ug/ft2 HUD Clearance Level for Interior Window Sills
800 ug/ft2 HUD Clearance Level for Window Wells

Blood

10 Mg/dl _ CDC threshold for lead poisoning in children
30 Mg/dl _ OSHA permissible blood lead level
50 Mg/dl _ OSHA blood lead level requiring medical removal of worker

Soil

400 ppm _ EPA draft soil screening guidance

Water

0.015 milligrams of lead per liter of water (mgL) or of 15 parts per billion (ppb) _ EPA Action Level
1.5Mg/m3 _ EPA National Ambient Air (Quality Standard)
30 Mg/m3 - OSHA Action Level (8 hour time_weighted average)
50 Mg/m3 _ OSHA Permissible Exposure Limit (PEL) (General Industry)
200 Mg/m3 _ OSHA Permissible Exposure Limit (Construction Industry)

Hazardous Waste

5 ppm _ analyzed as "leachable" using Toxicity Characteristic Leaching Procedure (TCLP)

Chain of Custody
&
Laboratory Analytical Results

TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112 • 804-739-1751 • fax: 804-739-1753

LEAD IN PAINT SAMPLE ANALYSIS SUMMARY

(EPA METHOD 7420)

CLIENT: ARS ENVIRONMENTAL, INC.
10097 Cleary Boulevard #305
Plantation, FL 33324

TESC LOGIN #: 100812K

DATE OF RECEIPT: 8/12/2010
DATE OF ANALYSIS: 8/12/2010
DATE OF REPORT: 8/13/2010

CLIENT JOB #: 2010-0707-Lead

JOBSITE: 9011 Collins Ave

ANALYST: F. Jiang,M. Eltilib

TESC SAMPLE #	CLIENT SAMPLE #	SAMPLE WEIGHT (mg)	TOTAL LEAD (ug)	LEAD CONCENTRATION (% by Weight)	LEAD CONCENTRATION PPM
1	1	328	3,612.7	1.101	11,014
2	2	342	< 10.0	< 0.003	< 29
3	3	344	39.4	0.011	114
4	4	344	8,349.0	2.427	24,270
5	5	310	10,300.0	3.323	33,226
6	6	318	2,929.9	0.921	9,214
7	7	330	17.9	0.005	54

Total Sample(s) Analyzed: 7

Reviewed By Authorized Signatory:

Feng Jiang, MS Senior Geologist, Laboratory Director
Yuedong Fang, Senior Geologist

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the customer. Sample information was provided by the customer. This report must not be reproduced, except in full,without the written consent of Triangle Environmental Service Center, Inc. The test report related only to the item(s) tested. This analysis was performed by an AHIA accredited laboratory. AIHA/ELLAP ID: 100527, NYELAP/NELAC ID: 11413.
Minimum Reporting Limit: 20 ug. Lead Based Paint contains 0.5% lead by weight per Federal statute. The OSHA Lead in Construction Standard, 29 CFR 1926.62, is invoked if any lead is present in the sample. Lead-free paint is defined as <0.06% by weight (CPSC).
[LEGEND: mg= milligram, ug= microgram, ppm= parts per million]

Friday, August 13, 2010

Page 1 of 1

100/12K

ARS ENVIRONMENTAL, INC.

Asbestos Consulting • Lead Assessments • Radon Gas Measurements • Indoor Air Quality • Mold Investigations

CHAIN OF CUSTODY

Lead Paint Chip Samples

Sampling Date: [illegible] Sample Taken By: [illegible] Page 1 of 1

Project Number: [illegible] Project Location: [illegible]

Sample Id	Sample Description	Sample Color	Sample Condition
1	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]
	[illegible]		
	[illegible]	[illegible]	
	[illegible]		
	[illegible]		

Please Circle Turnaround Time: [illegible] Received By: [illegible] Date: [illegible]

URL [illegible] • Email [illegible]