Respondent's Exhibit 13

C-1

Leadtec Services, Inc.

VISUAL INSPECTOR COURSE

Exhibit 5

C-2

LEADTEC SERVICES, INC.
LEAD PAINT VISUAL INSPECTOR
AGENDA

DAY I

I.	Welcome/Introduction	8:15 - 8:30
II.	Background and history of lead paint use - Nature and extent of the problem - Understanding where and why lead paint was used	8:30 - 9:00
III.	Routes and Pathways of Exposure - Lead dust as a risk factor - Characteristics of lead dust - Sources of lead dust in the living environment - Ingestion vs. inhalation as an exposure route	9:00 - 10:00
	BREAK	10:00 - 10:15
IV.	Health Effects of Lead Poisoning - Children - Pregnant women and the fetus - Adults	10:15 - 11:15
V.	Other Sources of Lead in the Environment	11:15 - 12:00
	LUNCH	12:00 - 1:00
VI.	Federal Regulations, Guidelines, etc.	1:00 - 1:45
VII.	Building Component Terminology	1:45 - 2:15
	BREAK	2:15 - 2:30
VIII.	Lead Hazard Identification - Lead paint inspection - Risk assessment	2:30 - 3:30
IX.	Treating the Problem: Lead Abatement vs. Hazard Reduction - Hygiene and work practices to reduce lead exposure - Worker protection equipment and gear - Work practices necessary to minimize lead dust concentration - Containment, cleanup, and disposal of lead dust and debris	3:30 - 4:30
X.	Final Questions	4:30 - 4:45

STANDARDS

LEAD PAINT

Abatement or hazard reduction action levels for lead in paint

XRF 1.0 mg/cm² (HUD Standard) Some states may be more stringent. (MD > 0.7 mg/cm²)

PAINT CHIP SAMPLES - ATOMIC ABSORPTION SPECTROSCOPY (AAS) (Wet Chemistry)
0.5% or 5000 ppm

Note that these are not health based standards. If paint is being sanded, scraped, or otherwise converted to dust or fume, no level should be considered perfectly safe.

CPSC standard for maximum levels of lead in new residential paint

Pb < 0.06% by weight

LEAD DUST (Surface wipe sampling, analysis by AAS)

Maximum allowable lead dust levels post-abatement (clearance standards)

has changed to 150 ug/ft²

	Maryland	HUD
Floors	200 mcg/ft²	100 mcg/ft²
Window Sills	500 mcg/ft²	500 mcg/ft²
Window Wells	800 mcg/ft²	800 mcg/ft²

EPA has recently published a "health-based guideline" for lead in dust. That guideline is 100 μg/ft² for floors, and remains the same for window sills and wells.

LEAD IN SOIL

Standards do not exist. EPA has recently published a "health-based guideline" for action levels. These action levels are as follows:

Bare residential soil with which there is child contact:	400 ppm	Action: Take measures to eliminate contact
Bare residential soil with minimal or no child contact:	2,000 ppm	Action: Interim control measures to cover soil or eliminate contact
Maximum levels for bare residential soil:	5,000 ppm	Action: Abate the soil by removing or covering permanently

LEAD IN WATER

EPA action level is 15 ppb

BLOOD LEAD

Workers	50 mcg/dl is the OSHA/HUD standard for medical removal; 25 mcg/dl is recommended as a more reasonably protective standard.
Children	10 mcg/dl is the current level established by the CDC as a level of concern, above which permanent neurological effects may occur.
Pregnant Women	No standard at present. 10 mcg/dl recommended as the level of concern, above which possibly permanent neurological and developmental deficits may occur in the fetus.

DEFINITION OF KEY TERMS

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt.

Complete Abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards.

Deteriorated Lead-Based Paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Interim Controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs.

Lead-Based Paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm^2 as measured by XRF or laboratory analysis, or 0.5 percent by weight (5,000 ug/g, 5,000 ppm, or 5,000 mg/kg) as measured by laboratory analysis. (Local definitions may vary.)

Risk Assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Targeted Sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multi-family housing when it is not possible to select a worst-case sample.

Worst-Case Sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building.

C-6

Pb

WHAT IS LEAD? WHERE IS IT FOUND?

1

In this chapter you will learn about:

- What lead is
- Why lead was used
- Where lead is found today
- How you can be exposed to lead
- What jobs and hobbies can expose you to lead
- The lead paint problem in the United States

C-7

Pb

True / False Quiz

This is an exercise to see how much you already know about lead. It is not a test. Please take a few minutes to read the statements, then circle T for "True" or F for "False." Your instructor will go over the answers when everyone in the class is done.

1. Lead is dangerous only to children age 6 or younger. T F

2. We have known for thousands of years that lead is dangerous. T F

3. Experts can identify lead paint just by looking at it. T F

4. Lead can affect a man's ability to have children. T F

5. Lead is so dangerous that there is no way you can protect yourself from it. T F

6. The law says that if you find lead-based paint in a building, you must remove it as soon as possible. T F

C-8

Pb

Lead is dangerous

LEAD = POISON!

Lead is a dangerous poison. You can't see or feel the lead that can make you sick. Lead is most dangerous when it is in the form of dust or fumes.

Lead dust particles can be very small. Sometimes they are so small, you can't see them. They are easy to breathe if they are in the air. They are easy to swallow if they are on anything you put in your mouth—like food, cigarettes, or fingers. Lead dust settles on flat surfaces. When you touch those surfaces, you get lead on your hands. If you put your hands to your mouth, you will swallow lead dust. Young children put their hands in their mouths a lot. They are at a high risk for lead poisoning.

Lead is poisonous when you breathe or swallow it.

Lead causes health problems

Lead has caused sickness for a very long time. Ancient Egyptians knew that lead could kill people if they swallowed too much of it. In the Middle Ages, doctors realized that the health problems of painters, miners, and artists were caused by exposure to lead on the job.

In 1786, Ben Franklin wrote to a friend about work-related lead poisoning cases.

In the early 1900's, doctors found that lead-based paint caused reproductive problems for workers and their families. Doctors from all over the world began to study lead-based paint as a cause of childhood diseases. Many doctors in the United States studied and wrote articles about childhood lead poisoning. In 1913, Dr. Alice Hamilton—an American occupational health doctor—wrote about painters and the hazards of their work. She documented their exposure to lead and their health problems.

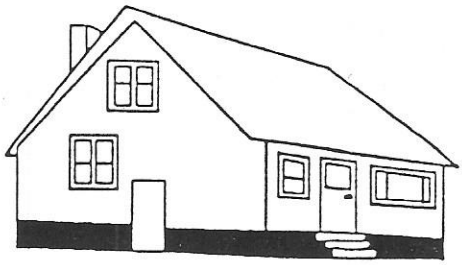
Lead poisoning was recognized 2,000 years ago.

1 - 5

C-9

Pb

House paint. Lead-based paint in the home is a major source of lead poisoning.



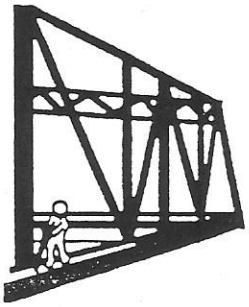
Lead paint can be found on any painted surface—inside or outside.

Any home built before 1978 may contain lead-based paint. Homes built before 1960 are more likely to contain higher levels of lead.

Lead-based paint was used inside homes on woodwork, walls, floors, windows, doors, and stairs because it stood up to wear and tear. It was also used on the outside of homes, porches, windows, and doors because it stood up to weather changes.

Lead-based paint kills mold and mildew. Mold and mildew grow in moisture. So, lead-based paint was often used in places where moisture is found, like kitchen and bathroom walls and on windows and doors.

Industrial use of lead-based paint. Lead-based paint is still used on bridges and on the inside and outside of steel structures to prevent rust and corrosion. This is called "industrial use."



Sand blasting paint off a bridge can pollute the community.

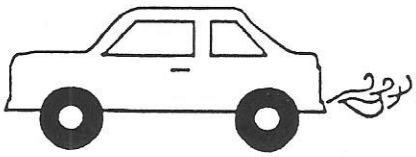
Lead-based paint is still allowed for industrial use today. It is used in shipbuilding and repair. About 90,000 bridges in the United States are coated with lead-based paint. Blasting or grinding lead-based paint off steel structures creates huge amounts of lead dust. Workers can be exposed to this lead dust. The community may be exposed to this lead dust. The lead dust gets into the air and nearby soil, plants, and water. You will learn about the industrial use of lead-based paint in Chapter 11.

1-7

C-10

Pb

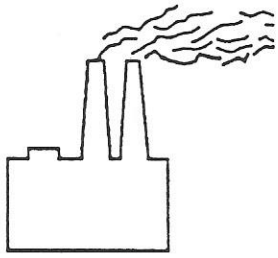
Leaded gasoline. In the past, lead was added to gasoline as an anti-knock agent. The lead was released into the air through car exhaust. This lead polluted the air and soil.



Exhaust from leaded gas polluted the air and soil.

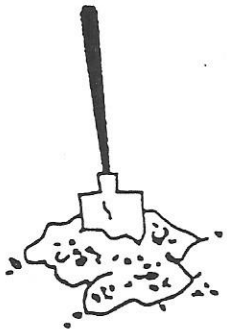
In 1978, the Environmental Protection Agency reduced the amount of lead that could be added to gasoline. By 1982, the U.S. national average level of lead found in people's blood dropped by 37%. Use of leaded gasoline should continue to decline in the USA. A higher amount of lead is allowed for farm vehicles and equipment. Leaded gas is still used in some other countries such as Mexico.

Industrial releases. Many industries use lead. Lead is used in many different types of products. It is used to make batteries, ceramics, lead crystal, bullets, and plastics. When these products are made, lead can be released into the air. Lead in the air can pollute anything it lands on. The use of these products can pollute soil, water, and air.



Soil. You can find traces of lead in most soil. High levels of lead in soil can come from paint dust, leaded gas exhaust, and industrial releases.

Some playgrounds have soil that contains very high levels of lead. Such playgrounds are very dangerous to children. Children who play in them get dirt that has lead in it on their hands. They can get lead poisoned if they swallow the lead on their hands when they touch their mouths with their hands.



Soil can have high levels of lead.

1-9

C-11

Pb

Occupational exposure. Many jobs or occupations can expose people to lead. These workers are in danger of getting lead poisoned. They may also contaminate their cars and homes by bringing home lead dust on their clothes, shoes, hair, or skin. If they do this, they could poison their own families.

Many workers are exposed to lead on the job.

Some jobs that have a high risk of lead exposure include:

Construction trades

- Lead abatement workers
- Carpenters
- Remodelers
- Renovators
- Demolition workers
- Ironworkers
- Steel welders and cutters
- Sheet metal workers
- Painters
- Plumbers and pipe fitters
- Cable splicers

Industry

- Lead miners
- Lead smelter workers
- Lead refinery workers
- Lead crystal makers
- Ceramic glaze manufacturers
- Plastic manufacturers
- Wire and cable manufacturers
- Electronics makers

Others

- Firing range employees
- Police officers
- Artists
- Radiator repair workers
- Car mechanics
- Printers
- Scrap yard workers and recyclers

1-11

C-12

Pb

Damaged and deteriorating lead-based paint is in many of our homes, day care centers, schools, hospitals, and other buildings. Lead-based paint is also on many bridges and steel structures. When lead-based paint deteriorates or is disturbed, it creates lead dust. Lead dust from paint removal on steel structures can pollute a whole community if it is not removed properly.

Doing lead abatement safely is very important. When you work safely with lead, you prevent lead poisoning. Removing lead-based paint from buildings and structures in our communities helps prevent serious lead exposures and lead poisoning.

1 - 13

C-13

Pb

For more information

These publications have more information on the topics covered in this chapter. Your instructor has a copy of the publications marked with a star (*). You can order your own copy by using the order forms in the back of the manual.

* EPA, Home Water Treatment Units: Filtering Fact from Fiction, (September 1990).

* EPA, Lead in Your Drinking Water, (April 1993).

* EPA, Toxics Information Series on Lead, (Pamphlet TS-793).

* Environmental Defense Fund, The Hour of Lead: A Brief History of Lead Poisoning in the United States over the Past Century and of Efforts by the Lead Industry to Delay Regulation, (June 1992).

National Lead Information Center, Lead: Some Questions and Answers, (April 1993).

National Lead Information Center Clearinghouse Hotline: 1-800-LEAD-FYI

C-14

HEALTH EFFECTS

PART 1: HOW LEAD AFFECTS THE BODY

2

In this part of Chapter 2 you will learn about:

- How lead enters and affects the body
- Lead poisoning and children
- How lead levels in the body are measured
- How lead poisoning can be prevented

C-15

Joe: I wish I could get some sleep. The past week I got these headaches and people just bothered me. You know, people are getting on my nerves. The doctor says it's because I'm constipated.

Al: You all sound like you got the flu or some kind of bug. Stay away from me. I'm feeling just fine and I want to stay that way.

Discussion questions

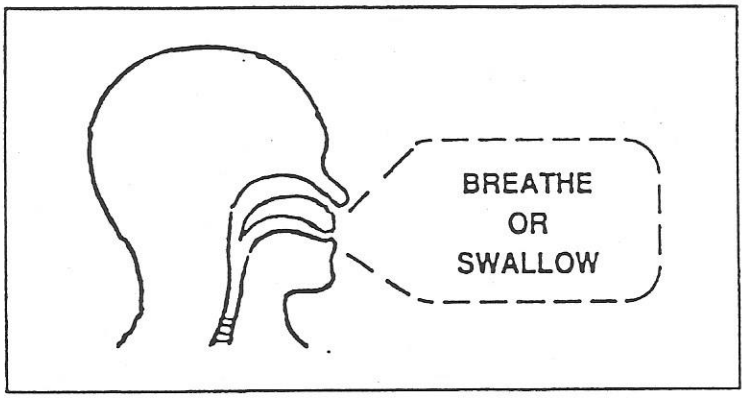
1. What is going on in this conversation?
2. What were the workers' complaints? Circle them in the script. Is everyone feeling sick?
3. Do any of the workers share the same problems?
4. List some things that could be causing these complaints.
5. What suggestions were made to fix the problems? What would you suggest?

2-3

C-16

How does lead get into your body?

Lead can make you sick if you breathe or swallow it.



You can breathe or swallow lead.

Breathing lead

When lead is in the air, you breathe tiny lead particles into your lungs. The lead particles travel quickly from your lungs as they are absorbed into your bloodstream.

Swallowing lead

If you swallow lead particles, the lead eventually goes through your digestive system and then slowly gets into your blood. You can swallow lead particles if you eat, drink, smoke, or chew your fingernails without washing your hands after working with lead.

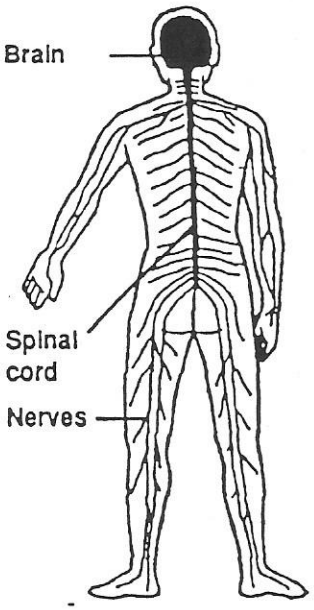
You may swallow lead if you don't wash before you eat or smoke.

Up to 50% of the lead that children and pregnant women swallow is absorbed into their bodies. About 10 to 15% of the lead that adults swallow is absorbed into their bodies. Your body will hold more lead if you don't have enough calcium or iron in your diet.

2-5

C-17

Nervous system



The nervous system is the system in your body most affected by lead. The nervous system includes your brain, spinal cord, and nerves. The damage lead causes to the nervous system can be permanent.

Lead damages the brain. It can even kill brain cells. Lead damage to your brain can make you depressed, irritable, forgetful, clumsy, and even less smart. At very high doses, lead poisoning can cause hallucinations, swelling of the brain, coma, and even death.

Lead damages the ability of your nerves to give and take messages. Lead can damage the nerves that go to your hands and feet. This nerve damage can cause your hands to shake. It can also cause your hand or foot to drop. If you get wrist drop or foot drop, you may never have full use of your hand or foot again.

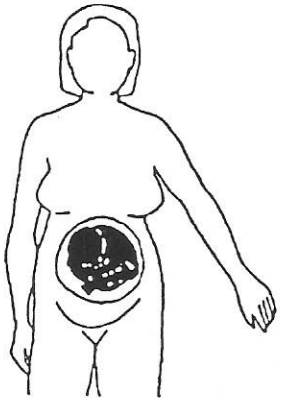
The nervous system of a fetus, infant, or child is affected by even small amounts of lead. Lead poisoning can decrease the intelligence of children. Lead can cause behavior problems in children.

Lead can damage your brain and nerves.

2-7

C-18

Female reproductive health and pregnancy



Lead poisoning is very dangerous to the female reproductive system. It can make women less fertile. It can cause abnormal menstrual cycles and affect menopause.

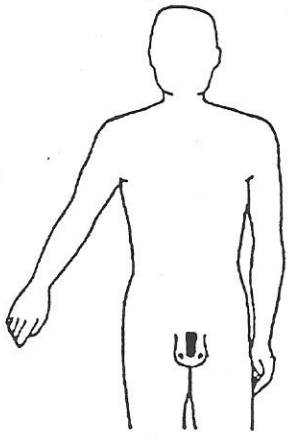
When a woman is pregnant, her body must take in nutrients for herself and for the developing fetus. Her body works hard to do this. If she is exposed to lead, her body will take it in very quickly. A pregnant woman's body absorbs 50% of the lead that she takes in. (A non-pregnant woman's body absorbs only 10%.) This lead will stay in her body. Lead stored in her bones will be released into her blood. **Even if her exposure to lead was 20 years before this pregnancy, that lead could be released from her bones into her blood now.** This is dangerous. Very small amounts of lead can make a pregnant woman sick.

The fetus gets blood and calcium to make bone from the mother. If the mother has lead in her blood or bones, it will go to the fetus. Very small amounts of lead can hurt the fetus. The cells of the fetus are developing rapidly. Lead can cause brain damage and even death to the fetus. It can cause miscarriages and premature (early) births.

Even small amounts of lead can make a pregnant woman sick.

Lead can cause miscarriages and birth defects.

Male reproductive system



Lead is very dangerous to the male reproductive system. Lead can make men lose interest in sex. It can cause men to have problems having an erection.

Lead can cause infertility. It damages sperm. Lead causes the sperm to have an odd shape. It makes sperm move slowly. Wives of lead-poisoned workers have more miscarriages and premature births. Their children have more birth defects.

Lead can cause men to have difficulty having an erection.

2-9

C-19

Children are at high risk

Children can get lead poisoned very quickly. Even a small dose of lead can poison a young child. A child's rapidly developing brain, nervous system, and entire body are affected by lead. Toddlers (age 1 to 3) are at a very high risk of lead poisoning. Toddlers are always crawling on the floor and putting everything in their mouths. Therefore, they can swallow a lot of lead dust. Children absorb up to 50% of the lead that they take in.

Even low levels of lead can cause permanent damage to a child.

Children's developing bodies and brains are easily damaged by lead.

Recent medical research shows that lead may affect a child's intelligence even at blood lead levels as low as 10 to 15 micrograms per deciliter. Lead poisoned children have a higher high school dropout rate than non-poisoned children. Lead poisoning can cause children to be less smart than they could have been. It can also cause:

- Poor muscle and bone growth
- Poor hearing
- Speech and language problems
- Coordination problems

Lead is the most significant environmental health hazard for children in the United States. Lead interferes with the development of a child's nervous system. It can make a child hyperactive. Lead can also make a child react very slowly. Lead can make it hard for a child to pay attention. It can make a child very clumsy. Lead kills brain cells and blood cells. The effects of childhood lead poisoning can last a lifetime.

Lead is the most significant environmental health hazard for children in the U.S.

C-20

Health effects of lead poisoning

Lead poisoning can affect you in many different ways. A large amount of lead can make you sick right away. A small amount of lead day after day can make you sick over a long period of time.

The health effects of lead poisoning are often difficult to recognize. There are many different signs and symptoms of lead poisoning. Signs and symptoms are things you see and feel when you are sick. The signs and symptoms for lead poisoning can also be caused by a number of other things, like the flu or a cold. Lead poisoning can easily be mistaken for a cold or the flu.

You may not know that you have lead poisoning.

Signs and symptoms of lead poisoning

- Tiredness (fatigue)
- Sleep problems
- Dizziness
- Irritability
- Nervousness
- Headaches
- Difficulty concentrating
- Depression
- Forgetfulness
- Hyperactivity (children)
- Numbness
- Wrist or foot drop
- Weakness
- Clumsiness
- Joint and muscle pain
- Vomiting
- Loss of appetite
- Stomach aches
- Constipation
- Metal taste in the mouth
- Problems having healthy children

Lead poisoning is sometimes mistaken for the flu.

Sometimes the signs of lead poisoning come and go. You have them one day and then they disappear. Then the signs come back again. This can happen for several months.

Lead can cause damage without symptoms. You may not know you have lead poisoning. Lead poisoning often goes unnoticed. A child with lead poisoning may seem healthy while damage is being done to their bodies. Signs and symptoms of the damage usually don't develop until the condition is serious.

Lead can cause damage without signs or symptoms.

2 - 13

C-21

Testing for lead in your body

Blood tests find out how much lead is in your blood.

The only way to tell for sure that you are lead poisoned is to get a blood test. When lead enters your body, it gets into your blood. A blood test is the only way to find out how much lead is in your blood. The amount of lead in your blood is called your **blood lead level.**

There are two kinds of tests to monitor blood lead levels. Both tests can be done from blood taken from either your arm or your finger. Both can be taken from the same sample of blood.

1. Blood lead level test

This test measures the amount of lead in your blood. It shows how much lead you have been exposed to in the **last 6 to 8 weeks.** The blood lead test is the most accurate test. Your blood lead level is measured in **micrograms** of lead per **deciliter** of blood.

2. ZPP test (Zinc Protoporphyrin)

ZPP is a chemical in your body. Your ZPP level becomes abnormal when a lot of lead has entered your body over the last **few months.** It tells how much lead your body has absorbed by looking at some of your body proteins. It does not measure the amount of lead in your blood. Results are measured in **micrograms per deciliter.** Normal results for the ZPP test are 35-50 ug/dl. The ZPP test is not as accurate as the blood lead level test for early or low level lead exposures. ZPP results can vary because of diet, anemia, and other factors.

A **microgram** is a measure of weight. There are 1 million micrograms in a gram. The abbreviation for microgram is ug.

A penny weighs about two grams. Imagine cutting a penny into 2 million pieces. A microgram would weigh the same as **one** of those 2 million pieces.

A **deciliter** is a measure of volume. It is equal to a little less than half a cup. A person weighing 165 pounds has about 60 deciliters of blood. The abbreviation for deciliter is **dl.**

C-22

Every child is also different in his or her reaction to lead. The following chart is a very rough scale of children's reactions to different levels of lead. A lead poisoned child may not look or act sick, but his or her body is being damaged. The health effects of lead sometimes may not be seen.

The effects of lead can be different for each child.

Researchers have known for a long time that children are especially sensitive to lead exposures. Scientists have discovered that even very low exposures to lead can cause serious health effects in children.

In 1991, the Centers for Disease Control and Prevention lowered the level of concern for children's blood lead levels from 25 ug/dl to 10 ug/dl. About 10 to 15% of all preschool children (3 to 4 million children) are estimated to have blood lead levels above 10 ug/dl. The major source of lead exposure for children is lead-based paint and lead dust in their homes.

CHILD REACTIONS TO LEAD

Blood Lead Level	Possible Health Effects
10 ug/dl	Slight loss in IQ (not as smart as they should be); hearing and growth problems
20 ug/dl	Moderate loss in IQ; hyperactivity; poor attention span; difficulty learning; language and speech problems; slower reflexes
40 ug/dl	Poor bone and muscle development; clumsiness; lack of coordination; early anemia; fewer red blood cells to carry oxygen and iron; tiredness; drowsiness
50 ug/dl	Stomach aches and cramps; anemia; destruction of red blood cells; brain damage
100 ug/dl and above	Swelling of the brain; seizures; coma; death

A child who has lead poisoning may not look or act sick.

C-23

Good nutrition

Good nutrition is important. A diet with enough iron and calcium prevents worse lead poisoning. When you eat a diet high in iron and calcium can reduce lead absorption. People with low amounts of iron and calcium have increased lead absorption. If you have enough iron and calcium in your body, lead will be absorbed less quickly. Vitamin C, zinc, and protein—found in a well-balanced diet—appear to decrease lead absorption as well. Stay away from foods high in fat. Foods with a lot of fat, such as fried foods, appear to increase lead absorption.

Eat a balanced diet with foods high in iron and calcium.

Eat foods high in iron.—cheese, fish, seafood, meat (especially liver), eggs, spinach, beans, raisins, apricots, seeds (pumpkin, squash, sunflower), black walnuts, almonds, barley, wheat germ

Eat foods high in calcium.—milk, cheese, ice cream, yogurt, bread, fish, seafood, meat, beans, broccoli, leafy green vegetables (spinach, etc.), cherries, blackberries, raisins, fruit juice (orange, prune, grapefruit, pineapple), peaches, apricots, dates, sunflower seeds, almonds, hazelnuts, pecans

C-24

You can protect yourself against lead poisoning.
Make sure your employer provides a safe workplace.
Wash your hands and face carefully when you leave the work area.
Use safe work practices that you will learn in this class.
Eat a balanced diet that has enough iron and calcium.

For more information

These publications have more information on the topics covered in this chapter. Your instructor has a copy of the publications marked with a star (*). You can order your own copy by using the order forms in the back of the manual.

* Centers for Disease Control. Preventing Lead Poisoning in Young Children (October 1991).

* Environmental Defense Fund. Legacy of Lead: America's Continuing Epidemic of Childhood Lead Poisoning (March, 1990).

Murphy, J. "Fetal Protection v. Women's Jobs: Case Is Before the Supreme Court." The Nation's Health: Official Newspaper of the American Public Health Association. (November 1990).

National Lead Information Center. "Lead Poisoning and Your Children"

Respondent's Exhibit 14

J-1

Page 17

LEAD IN PAINT SAMPLE RESULTS

FAIRMONT HARTFORD INSTITUTE

September 17, 1996

Sample ID	Location	Paint color - top layer	% lead
091796-456-Pb1	1st floor, east hallway, ceiling	green	2.7
091796-456-Pb2	1st floor, east hallway, ceiling	cream	0.11
091796-456-Pb3	Head Start Room 135, wall	yellow	4.8
091796-456-Pb4	Head Start Room 122, ceiling	white	11.0
091796-456-Pb5	basement at stairway 3, ceiling	yellow	2.1
091796-456-Pb6	basement, east end, duckwork	yellow	5.1
091796-456-Pb7	basement, west end, wall	blue	0.18
091796-456-Pb8	basement, west end, ceiling	blue	0.30

Samples collected by the Division of Safety, III Unit. Analyses performed by Gascoyne Laboratories using EPA method 7420.

tlkdisk3:F11Pb

Exhibit B A

EXHIBIT #14 Respondent's AR 8.26.99

Respondent's Exhibit 15

J-76

Lead Dust Wipe Sampling Results
Harford Fairmount Institute # 456
October 10 and 11, 1996

Location/Surface	Results (ug/ft²)*	Location/Surface	Results (ug/ft²)
Outside Room 339-floor	<12.5	Outside Room 114-floor	<12.5
Blank	<12.5	Outside Room 101-2-floor	13.25
Outside Room 323-floor	<12.5	Room 122-floor	35.7
Outside Room 301-floor	<12.5	Room 122-window sill	13.5
Top of locker #17, 3rd floor, adj. to room 302	99.3	Room 122-window well	126.65
Room 212-floor	45.05	Room 135-floor	14.85
Room 212-window sill	<12.5	Room 135-window sill	<12.5
Room 212-window well	123.32	Room 135-window well	57.85
Room 205-floor	<12.5	Room 137-floor	<12.5
Room 205-window sill	14.55	Room 137-window sill	<12.5
Room 205-window well	36.68	Room 137-window well	29.78
Top of locker #321, 2nd floor, near room 205	1836.0	Room 139-floor	16.75
Room 310-floor	12.5	Room 139-window sill	<12.5
Room 310-window sill	664.35	Room 139-window well	25.48
Room 310-window well	74.58	Room 115-floor	53.7
Room 303-floor	<12.5	Room 115-window sill	<12.5
Room 303-window sill	23.9	Room 100-floor	<12.5
Room 303-window well	30.5	Room 100-window sill	17.0
Outside Room 201-floor	<12.5	Room 110-window well	45.29
Outside Room 222-floor	14.95	Basement, near loading dock-floor	1295.5
Outside Room 237-floor	<12.5	Basement, east wing-floor	1598.25
Top of locker #2199, 1st floor near room 138	1093.75	Basement, west wing-floor	31325.0
Outside Room 136-floor	<12.5		

* ug ft² - microgram per square foot

Samples collected by Sports, Steam and Met

HUD clearance guidelines: floor-100 ug ft²; window sills-500 ug ft²; window wells-800 ug ft²

Exhibit 19

EXHIBIT #15 Respondents APR 8.26.99
PERGAD-Bayonne, N.J.

Respondent's Exhibit 16

Jj-20

11FE893_0941_03_N1002

92

SSM /Laboratories

ANALYTICAL REPORT

Client: Baltimore Dept of Education

Report to: B.M. Carlberg
SSM/Spotts, Stevens and McCoy, Inc.
555 Fairmount Avenue
Suite 230
Towson MD 21204-5497

Project:
Received: 08-FEB-93
Reported: 11-FEB-93

WORK ORDER:

Project Description: Lead Paint Survey
Fairmount Harford Inst./main

Sampled: 03-FEB-92 By: B.M.C.

> 0.5 % , lead based paint

	RESULT	UNITS	METHOD	DATE	ANALYST
HI-200/Wall,Yellow,BA-Boiler Room Office					
SSM Sample: 1073909					
Lead, Total	0.45	%	7420	10-FEB-93	SMB
HI-201/Wall,Green,BA-Boiler Room Engineers Office					
SSM Sample: 1073910					
Lead, Total	0.74	%	7420	10-FEB-93	SMB
HI-202/Wall,Yellow over Green,BA-Hall Across From Boiler Rm.					
SSM Sample: 1073911					
Lead, Total	1.98	%	7420	10-FEB-93	SMB
HI-203/Wall,Orange,1st Floor Hall at Rm. 133					
SSM Sample: 1073912					
Lead, Total	1.54	%	7420	10-FEB-93	SMB
HI-204/Wall,Green,1st Floor Hall at Rm. 133					
SSM Sample: 1073913					
Lead, Total	0.84	%	7420	10-FEB-93	SMB

PENCAD-Bayonne, N. J. EXHIBIT #16 Respondents AR 8.26.99

Exhibit 17

SSM /Laboratories

Client: Baltimore Dept of Education
Project: 119188

	RESULT	UNITS	METHOD	DATE	ANALYST
HI-205/Wall,Yellow,1st Floor Outside of Auditorium					
SSM Sample: 1073914					
Lead, Total	3.92	%	7420	10-FEB-93	SMB
HI-206/Wall,Pink,1st Floor Outsite Rm. 101-2					
SSM Sample: 1073915					
Lead, Total	4.80	%	7420	10-FEB-93	SMB
HI-207/Wall,Blue,2nd Floor Hall Outside Rm. 225					
SSM Sample: 1073916					
Lead, Total	7.40	%	7420	10-FEB-93	SMB
HI-208/Wall,Lavender,3rd Floor Hall Outside Rm 3202 &322					
SSM Sample: 1073917					
Lead, Total	1.85	%	7420	[illegible]	[illegible]
HI-209/Wall,Yellow,1st Floor Room 135					
SSM Sample: 1073918					
Lead, Total	1.04	%	7420	10-FEB-93	SMB

Respectfully submitted,

Craig L. Stewart

Craig L. Stewart
Inorganics Supervisor

LEAD PAINT SAMPLING DATA

Page 44 JJ-22

CLIENT NAME Baltimore City DATE 28 Jan 93

W.O. NO. 2969-04B PAGE 1 OF 11

Bruce Carlberg Bruce Carlberg 1/28/93
PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: Fairmount Harford Apt. BUILDING Main

XRF 1.0 mg/cm² DATE/TIME
METHOD VALIDATION AVERAGE

0001
X-RF ID NO. BADGE NO.

* More detailed report of Lead based paint on substrates in 1993

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-1	Wall Buck	yellow	BA-Boiler Rm office	K-0,956 > sc L-0,373 K-1,206 > T L 0214
HI-2	Wall Brick	Green	BA-Engineer's office	K2,091 L 0.737
HI-3	11	11	11	K1,158 L 0.442
HI-4	Wall Brick	yellow	BA-Boiler Room office	K1.824 L 0,151
HI-5	Poor Frame wall	Black	BA-ENT TO Boiler Room office	K9,900 K2.280
HI-6	Toilet Partition	Black over Gray	BA-B.R. Toilet area	K0.000 > sc L 0.173 K 0000 L 0.1051 (-)
HI-7	Wall Plaster	yellow	BA. B.R. Toilet Area	1.526 K 0.390
HI-8	Wall concrete	yellow	BA Boiler Room exterior	0,000 K > S 0,350 L 0,039 K 0,[illegible] L
HI-9	11	11	Ba-Boiler Room interior wall	0,000 K 0,019 L

SSM
WOLFE, STRAUB and McCOY, INC.
ENGINEERS • PLANNERS • SCIENTISTS

TOTAL P.02

Exhibit 17

LEAD PAINT SAMPLING DATA

Pag 29

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 2 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-10	Wall Buck	yellow	BA BR. interior Wall	1.462 K 0.177 L
HI-11	Condensate Pump	DK green	BA Boiler Room Void	
HI-12	Wall Buck	yellow over green	BA Hall outside BR office	0.000 K 0.000 L
HI-13	Wall Buck	yellow over green	BA NEXT TO HI-12	4.554 K 1.283 L
HI-14	"	"	Ba. Across from office Above Crawlspace door	4.283 K 0.891 L
HI-15	Wall Buck	Green	BA Storage Rm NEXT TO BR Office	1.266 K 0.318
HI-16	Door/metal Elevator	Blue - 1 layer	Basement	0.642 K)SC 0.000 L 0.501) Test Good
HI-17	EXIT DOOR (METAL	Blue - 1 layer	Basement Loading dock	0.559 K)SC 0.000 L 0.751 K) Test 0.000 L
HI-18	Wall Buck	yellow Exterior Wall	Basement - By Loading Dock doors	Good 0.000 3.029 0.681

SSM

LEAD PAINT SAMPLING DATA

Page 78 JJ-24

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 3 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-19	Door	Green	Outside exterior Door	1.600 K 0.000 L
HI-20	Door	Red	outside exterior door	1.953 K 0.751 L
HI-21	Door Frame	Purple	BA TO exIT Door	3783 K 2.628 L
HI-22	Wall Buck	White over Green + Brown	Ba-to exIT Door	1.920 K 0.345 L
HI-23	Wall Plaster	Green	BA Store Room	0.400 K 0.387 L 2.455 K 0.573
HI-24	Wall Plaster	yellow	BA Shop Room	0.000 K 0.000 L
HI-25	Wall Plaster	yellow	BA - Shop Room Hall	3.891 K 0.001 L
HI-26	Column Plaster	yellow	BA Shop area Store Room	4.877 K 1.458 L
HI-27	11	11	11	14.457 3.315

SSM

LEAD PAINT SAMPLING DATA

Dec 92 JJ-25

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 4 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-28	Wall Masonry Block	yellow	BA Staff Room	3.533 K 0.646 L
HI-29	Wall Plaster	yellow	Gym	2.652 K 0.577 L
HI-30	Wall Brick	white	Basement Fan Room	0.616 >SC 0.338 1.424 >T 0.395
HI-31	11	Green	11	0.000 K >SC 0.428 L 1.756 >T 0.386
HI-32	Wall Brick	olive Brown	Basement Storage Room	~~1.556~~ 13.383 K 1.020 L
HI-33	Wall Brick	yellow	Basement Hall Westend	1.354 K 0.248 L
HI-34	Door	Purple	1ST Floor Ctr Landing entrance door	0.125 K >SC 0.000 L 0.336 0.000
HI-35	Door Frame	Purple	11	1.137 SC 0.000 0.125 0.052
HI-36	Wall Brick	Green	11	0.000 0.000

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LEAD PAINT SAMPLING DATA

Page 32 Jj-24

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 5 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-37	Wall Brick	Cream	1st Floor CTR. Stairwell	0.000K 0.023C
HI-38	"	"	"	0.000K 0.001C
HI-39	Wall Plaster	yellow	1st Floor main offices	2.949K 0.614C
HI-40	"	"	"	1.466K 0.965C
HI-41	Wall Plaster	Beige	1st FL Room 100-3	2.563K 1.464C
HI-42	Door Trim	Brown	1st Floor Room 100-3	2.929 0.3K
HI-43	Wall Plaster	LT Gray	1st Floor Room 100-2	1.313K >5C 0.139C 0.65Y 0.05Z
HI-44	Wood Trim	Gray	"	0.000K 0.000C
HI-45	Wall ~~Plaster~~ Masonry Block	Pink	1st FL. ENTRY Foyer	0.818K 1.686C

SSM

LEAD PAINT SAMPLING DATA

Jj-27

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 6 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-46	Wall Masonry Block	Pink	1ST FL entry Foyer	6.071 K 1.127 L
HI-47	Wall Brick	Cream	1ST F West Stairwell	0.000 K 0.055 L
HI-48	Wall Plaster	Pink	1ST Fl West Hall	3.150 K 1.146 L
HI-49	Wall Plaster	Green	1ST FL. Room 101-2	2.506 0.546
HI-50	Wall Plaster	Green	1ST Floor Rm 102	1.766 0.773
HI-51	Trim	Brown	1ST FL Rm 102	0.920 Pb sc 0.172 L 0.144 Pb T 0.104
HI-52	Wall Plaster	yellow	1ST Fl. Main Hall	0.654 Pb sc 0.223 L 0.803 Pb T 0.316
HI-53	"	"	"	3.644 K 1.050
HI-54	"	yellow	1ST Fl Room 106	0.000 0.331 0.672 Pb T 0.309

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LEAD PAINT SAMPLING DATA

LD-282 JJ-28

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 7 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-55	Wall Buck	Creme	1st Floor Printshop	0.000K 0.000L
HI-56	Wall Plaster	White	1st Floor mens Restroom	0.000K 0.020L
HI-57	Wall Plaster	yellow	1st Fl main Hall CTR	3.049K 1.87L
HI-58	Wall Plaster	Orange	1st Fl main Hall CTR	5.063K 7.486L
HI-59	11	White	11	0.451K >5C 0.146L 0.712K 0.246L X
HI-60	~~Wall~~ Trim	Red	11	0.000K 0.094L
HI-61	Wall	Lavender	1st FL Room 122	2.453K 0.536L
HI-62	Wall	Blue	Room 129-A	0.000 0.000
HI-63	Door	Pink	11	0.000 0.000

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LEAD PAINT SAMPLING DATA

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 8 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI64	Trim	Pink	Room 129-A	0.000 0.000
HI-65	Wall Plaster	Blue	"	0.000 0.000
HI-66	Wall Plaster	Orange	15TH Hall	3.976 K 0.000
HI-67	"	" East Wing	" East Wing	0.000 K 0.000 L
HI-68	"	White	" East Wing	0.000 0.000
HI-69	Wall	yellow	Room 135	0.000 0.000
HI-70	Trim	yellow	"	9,763 K 1,604 L
HI-71	Wall	"	"	93,616 K 17,591
HI-72	Trim	"	" E-	0.000 0.000

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LEAD PAINT SAMPLING DATA

FA#84Jj-30

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 9 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-73	Wall	yellow	Room 135	82.613 K 19.622 C
HI-74	Wall	yellow	Room 135	3.052 K
HI-75	Trim	11	11	0.000 0.000
HI-76	Wall	11	11	3.786 K 1.604 C
HI-77	Wall	Pink	Room 137	2.239 K 0.242 C
HI-78	Trim	Pink	11	0.250 >SC 0000 0000 0000 >T
HI-79	Wall	11	11	2.812 K 0.601 C
HI-80	Wall	11	11	0.019 K 0.236 C 0.400 <T 0.164
HI-81	Trim	11	V	0.000 K 0.050 V

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LEAD PAINT SAMPLING DATA

pg 85 of 31

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 10 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-82	Wall Plaster	DK PINK	Room 139	0.513 K 0.223 L 0.822 T
HI-83	11	11	11	0.4573 mg/cm²
HI-84	Trim	DK Brn	Room 139	0.000 K 0.055 L
HI-85	11	11	11	3.645 0.506
HI-86	Wall	Orange	1ST FL Hall East Wing By Room 139	2.067 K 0.926 L
HI-87	11	White	11	1.761 K 0.448 L
HI-88	Trim	Red	11	0.062 K 0.012 L
HI-89	Wall Brick	Creme	1ST Fl. Stairway 6	0.000 0.001
HI-90	Door	Purple	2nd Fl Stairway 6	4.685 2.206

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ENGINEERS • PLANNERS • SCIENTISTS

LEAD PAINT SAMPLING DATA

Page 86 JJ-32

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 11 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-91	Wall Plaster	Blue	2ND Floor Hall East side	1.990 K 0.587 L
HI-92	Wall	Green	Room 238	0.000 >5C 0.377 K 0.000 L 0.382 L
HI-93	"	"	"	2.456 K 0.376 L
HI-94	wall	Beige	Room 239	1.322 K 0.480 L
HI-95	"	"	"	2.199 K 0.590 L
HI-96	Wall	"	Room 236	0.047 >5C 0.873 K 0.482 L >5T
HI-97	Wall	yellow	Room 235	0.000 >5C 0.400 K 1.128 >5T 0.610 L
HI-98	Wall	yellow	"	0.000 >5C 0.378 K 12.821 >5T 2.449 L
HI-99	Wall	Blue	2ND Floor Hall	0.000 K 0.045 L

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LEAD PAINT SAMPLING DATA

CLIENT NAME Bolt City Schools DATE 3 Feb 93

W.O. NO. 2969-041 PAGE 1 OF

Bruce Carlberg - BRUCE CARLBERG 2/3/93
PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: Harford Fairmount INST. BUILDING MG, W

XRF
METHOD

1.639 K, 2.467 L 2/3/93
VALIDATION AVERAGE DATE/TIME

X-RF ID NO.

00001
BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-100	Wall ~~Wood~~ Plaster	yellow	auditorium Base exterior	0.000 PS (-) 0.178 K 0.114 L 0.253
HI-101	Wall Plaster	yellow	" interior	14.684 K 2.791 L (+)
HI02	"	"	" exterior	0.584 K 0.154 0.041 L (-) 0.220
HI-103	"	"	" interior	0.412 K 0.025 L 0.000 0.184 (-)
HI-104	Wall plaster	Beige	Auditorium interior	0.664 0.078 0.060 L (-) 0.043 L
HI-105	"	"	" exterior	0.000 0.000
HI-106	Door frame	yellow	Auditorium ext of Door Outside	10.385 K 2.128 L
HI-107	"	"	"	13.950 K 2.995 L
HI-108	Door	"	"	6.345 K 0000 L 0.000 0.000

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LEAD PAINT SAMPLING DATA

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 2 OF _____

_____
PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-109	Wall Brick	Creme	Stairwell 5 2nd Floor	0.000 7 0.191 0.000 > 1
HI-110	Wall Plaster	Blue	Main Hall 2nd Floor	3.092 1.043 4.668 16.470
HI-111	locker	Blue PL	and Floor	0.000 0.000
HI-112	Wall Plaster	yellow (medium)	2nd Floor Rm 224	0.000 0.000
HI-113	"	"	"	0.000 0.000
HI-114	"	"	"	10.215 0.000 < 0.023 0.000 <
HI-116	Wall Plaster	LT. Blue	2nd Floor Rm 223	0.000 0.000
HI-117	"	"	"	0.000 0.000
HI-118	"	"	"	0.000 0.000

1

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LEAD PAINT SAMPLING DATA

Pg 3 of 4 JJ-35

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 3 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-119	Wall Master	Green	2ND Fl. Janitor's Closet	0.000 0.000
HI-120	Ceiling Plaster	Green	"	0.000 0.000
HI-121	Wall Plaster	lt yellow	2ND Fl Rm 212	0.000 0.000
HI-122	"	"	"	0.000 0.000
HI-123	"	"	"	0.000 0.000
HI-124	Wall Plaster	Blue	2nd Fl Center of Main Hall	17.412 < 3.652
HI-125	Wall Plaster	yellow	2nd Floor Room 209	0.000 0.000
HI-126	Wall Plaster	yellow	2ND Floor Room 210	0.000 0.000
HI-127	"	"	"	

SSM

JJ-36

LEAD PAINT SAMPLING DATA

CLIENT NAME _____ DATE 7-07-88

W.O. NO. _____ PAGE 4 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-128	Wall Plaster	yellow	2ND FLOOR Room 210	0.000 0.000
HI-129	wall Plaster	Blue	2ND FLOOR Hall	3.119 K
HI-130	Wall Plaster	Green	2ND Floor Room 203	0.000 0.000
HI-131	"	"	"	0.000 0.000
HI-132	"	"	"	0.000 0.000
HI-133	Wall	Lt Blue	2ND FL Room 200	1.180 0.638 5.495 1.777
HI-134	"	"	"	3.898 0.269 18.574 0.240
HI-135	Wall Plaster	Beige	2ND FL Room 201	0.000 0.000
HI-136	"	"	"	0.000 0.000

SSM

LEAD PAINT SAMPLING DATA

Pg 89 Vj-3

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 5 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-137	Wall Plaster	Beige	Room 201 2nd Floor	0.000 0.000
HI-138	Door	Purple	3rd Floor ~~West Wing~~ Stairwell	0.000
HI-139	Wood Trim	"	3rd Floor West Wing	0.600 0.799 0.000
HI-140	"	"	"	0.000 0.000
HI-141	"	"	"	0.000 0.000
HI-142	Wall Plaster	Lavender	3RD Fl Hall West Wing	0.000 0.000
HI-143	Wall Plaster	Lavender	3rd Floo Room 301	4.650 0.142
HI-144	"	"	"	0.000 0.000
HI-145	"	"	"	4.356 1.849

SSM

LEAD PAINT SAMPLING DATA

CLIENT NAME _____ DATE _____

W.O. NO. _____ PAGE 6 OF _____

PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: _____ BUILDING _____

METHOD VALIDATION AVERAGE DATE/TIME

X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-146	Wall Plaster	Lavender	3rd Fl Room 380	0.715 > SC 0.618 1.363 > T 0.664
HI-147	"	"		8.000 8.403 0.0 0.0
HI-148	Wall Plaster	Lavender	3 Rd Fl Nursing Suite	0.322 > S 0.390 0.214 > T (-) 0.289
HI-149	Wall Plaster	Lavender	3RD FL ~~Nursing Suite~~ Hall West Wing	1.455 K 0.50 C
HI-150	Wall Plaster	Lavender	3 Rd Fl Hall West Wing	1.646 K 0.618 C
HI-151	Wall Plaster	"	3 Rd Fl Hall Cor Hall	1.991 K 0.806 C
HI-152	Wall Plaster	~~Yellow~~ Creme	3 Rd Fl, Cafeteria	~~19.456~~ ~~K.421~~ 0.000
HI-153	"	"	"	0.000 0.000
HI-154	"	"	"	0.000 0.000

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LEAD PAINT SAMPLING DATA

91 Jj-39

CLIENT NAME Baltimore City DATE 3 Feb 93

W.O. NO. 2969-041 PAGE 7 OF 8

Bruce Carlberg Bruce Carlberg 2/3/93
PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: Fairmount Harford Inst. BUILDING Main

Paint Chips N/A
METHOD VALIDATION AVERAGE DATE/TIME

N/A N/A
X-RF ID NO. BADGE NO.

SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HI-200	Wall	yellow	BA-Boiler Room Office	
HI-201	Wall	Green	BA-Boiler Room Engineers office	
HI-202	Wall	yellow over green	BA-Hall across from Boiler Room	
HI-203	Wall	Orange	1st Floor Hall at Rm 133	
HI-204	Wall	Green	"	
HI-205	Wall	yellow	1st Floor outside of auditorium	
HI-206	Wall	Pink	1st Floor outside Rm 101-2	
HI-207	Wall	Blue	2nd Floor Hall outside Rm 225	
HI-208	Wall	Lavender	3rd Floor Hall outside Rm 320A-322	

SSM

LEAD PAINT SAMPLING DATA

CLIENT NAME Baltimore City DATE 3 Feb 93

W.O. NO. 2969-041 PAGE 8 OF 8

BRUCE CARLBERG Bruce Carlberg
PERSON PERFORMING SAMPLING (SIGNATURE) DATE

PROJECT: Fairmount Harford INST. BUILDING Main

Paint Chips N/A
METHOD VALIDATION AVERAGE DATE/TIME

N/A N/A
X-RF ID NO. BADGE NO.

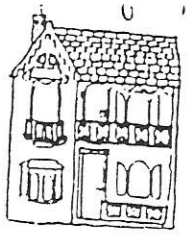
SAMPLE NO.	SURFACE TYPE	COLOR/LAYERS	LOCATION	RESULT
HF-209	Wall	yellow	1st Floor Room 13.5	

No More Samples

SSM

Respondent's Exhibit 17

LEAD PAINT HAZARD
FACT SHEET #1
Health and Safety



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D-10
D-9/10
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JANUARY 1995

THE ABATEMENT OF LEAD PAINT HAZARDS

Abatement, under Maryland regulations, means the "elimination of exposure to lead-based substances that may result in lead toxicity or poisoning by the removal or encapsulation of lead-containing substances, by thorough cleanup procedures, and by post-cleanup treatment of surfaces." This means that anyone who removes lead paint, or who conducts any other maintenance or home improvement activity which creates a hazard by disturbing lead paint, must follow safe practices which are included in Maryland's lead paint abatement regulations.

CAUTION: Work which spreads lead dust, fumes, or debris can be highly dangerous for adults as well as children.

HEALTH EFFECTS

There is no established safe level of lead in the human body. No exposure to lead can be regarded as free from potential harm. It has long been known that high levels of lead exposure can cause serious disability or death. Recent research has focused on the toxic effects of low level exposure.

The brain and nerves are particularly susceptible to lead poisoning. Lead poisoning interferes with the formation of blood cells, which may cause anemia. It can also damage the kidneys, digestive system, reproductive system (for both men and women) and other organs. Low level exposure can damage hearing, learning ability, and coordination.

Lead has been used in making paint, solder, plumbing, ammunition, gasoline and many other products. When lead is burned or heated, anyone who breathes the fumes will take lead into his/her body. People can also swallow lead; for example, lead dust can get onto food or cigarettes. Lead may also be found in drinking water.

Following exposure, lead accumulates in the body. Lead poisoning usually results from many small exposures over a period of weeks or years. Lead is stored throughout the body. Lead stays in the blood for weeks, it remains in the brain and other soft tissues for several months, and it can be stored in bones for many decades. Lead released from storage in bone can also cause lead poisoning years after the original exposure.

Lead Poisoning In Children - Young children, less than six years of age, are of special concern because their developing brains and other organs can easily be damaged by lead. It is normal for young children to put everything, including hands, pacifiers and toys, into their mouths. Anything which contains lead, from small dust particles to large paint chips, can cause harm if swallowed. Lead poisoning causes learning and behavior problems which may be permanent in young children.

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DIVISION OF LEAD POISONING PREVENTION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
2500 Broening Highway, Baltimore, Maryland 21224 (410) 631-3859

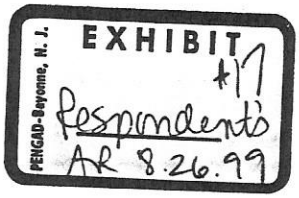
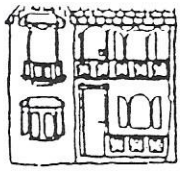


Exhibit 24



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LEAD PAINT HAZARD
FACT SHEET #2
How to Identify Lead Paint Hazards

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A complete survey is performed to determine the presence and location of lead paint hazards in a home or other building. Such a survey includes sampling of all painted surfaces on the interior and the exterior of the building. Neither a single paint chip sample nor a composite sample of several different areas within a building can give an accurate picture of the extent or location of lead paint hazards.

The condition of the paint should be noted because dust from peeling, chipping or chalking paint is the most common source of lead exposure in young children. Repainting, maintenance and other home improvement activities should be carefully planned. Without proper control measures to minimize dust or fumes, these activities may cause high level lead exposures for adults as well as children.

While lead paint continues to be the most important source of high level lead exposures, a full environmental assessment for a lead-poisoned child includes other sources, such as water, food and parental occupation.

A less extensive survey may be appropriate when home maintenance or improvement is planned and information is needed only for areas to be included in the planned project.

When is a survey necessary?

-when a child has been identified as being lead-poisoned.
-when a property owner is concerned that a lead hazard exists and wishes to abate that hazard.
-when a property owner is required to test for lead in order to be in compliance with Housing and Urban Development or other regulations.
-when a group day care center which may have lead paint is reviewed for licensing or plans renovations which may disturb lead paint.

Who can perform a survey?

-private testing companies
-some local health departments or environmental departments
-the Maryland Department of the Environment (MDE)
-some housing authorities

NOTE: Most government agencies have limited resources and are able to survey homes of lead-poisoned children only.

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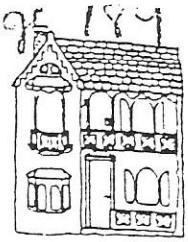

LEAD PAINT HAZARD FACT SHEET #3

Methods for Abating or Removing Lead Paint

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CHOOSING A METHOD

A range of methods have been approved for use in the abatement of lead paint hazards. Carefully plan the use of a method or combination of methods which suit your particular abatement project. In comparing methods, those which create less dust are generally safer. Consider the condition of the wood or other material under the paint; in most cases it is best to replace old, deteriorated windows or doors. Other considerations may include worker safety, convenience, generation of hazardous wastes, time requirements and costs.

METHODS FOR INTERIOR AREAS

WOODWORK:

Replacement - is the easiest and quickest way to get rid of lead paint. Windows and other woodwork which are in poor condition should be replaced with new materials.

Encapsulation - Vinyl, aluminum, wood or other approved products can be used to cover the woodwork. Seams must be caulked or sealed. Paint-on encapsulants are reviewed by MDE on a case-by-case basis (see below).

Off-Site Chemical Stripping - is recommended when it is desirable to keep old decorative trim, molding, and doors. Send these items from the work site for paint removal in a dipping tank.

Wet Scraping - may be used to remove loose or chipping lead paint prior to encapsulation or to remove lead paint from a limited area. Before you start, contact the Maryland Department of the Environment (MDE) Lead Poisoning Prevention Division at (410) 631-3859 to be sure that this method is appropriate for your particular job and for details on how to work safely. Wet the paint thoroughly with a garden mister before using a paint scraper, wire brush, or other abrasive tool. Do not use a hose or other equipment which will wash the lead debris from the surface.

Electric Heat Guns - are useful to soften very thick paint on flat surfaces. However, special care must be used to contain the old paint as it is removed. Workers must wear approved respirators to protect themselves from the fumes.

Caustic Strippers - may be effective on some surfaces. They are messy and usually must be followed by rinsing the wood surface with a vinegar/water solution to neutralize the wood surface before painting. This water must be contained and disposed of properly since it may contain enough lead to be classified as hazardous waste. Lead dust which remains following use of a caustic stripper may be difficult to clean. This method is generally inadequate for window sashes and other friction surfaces.

HEPA Sanders - use a special vacuum with a HEPA (high efficiency particle air) filter to control the very small lead particles that cause lead poisoning. Do not use any other type of sander or filter. Use on flat surfaces only.

Reversal of Wood Trim - Sometimes wood trim can be turned over so that the painted surfaces are no longer exposed. Seams must be sealed or caulked.

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WALLS AND CEILINGS:

Encapsulation - Wet and scrape loose paint and cover with durable materials that will not tear, chip or peel. Sheet rock, vinyl wall coverings, and wood paneling are among the material which you may select. Caulk seams if paneling is used.

FLOORS:

Encapsulation - Tile, wood, stone or vinyl coverings will seal lead paint on floors.

Heat Guns - are useful when floors need to be preserved for aesthetic reasons. Observe special requirements for worker safety and for containment of debris.

Non-Flammable Chemical Strippers - When floors are to be preserved for aesthetic reasons, this method can be used with care. Liquid waste must be disposed of properly.

HEPA Sanders - use a special vacuum that filters out the very small particles that cause lead poisoning. Do not use other types of sanders.

METHODS FOR EXTERIOR AREAS

Methods used for interior areas are also acceptable for exterior areas. Additional methods acceptable for exterior surfaces include:

Vacuum Blasting - can be used on a variety of surfaces, but it works best on flat surfaces. Respirators may be necessary.

Water Blasting - Waste water must be contained and disposed of properly.

PROHIBITED METHODS

-Do not sand or scrape dry lead paint (except with equipment using a HEPA filter, as noted above).
-Do not burn lead paint with an open flame torch.

CHEMICAL STRIPPERS

CAUTION - any chemical which can remove paint is likely to be harmful if:

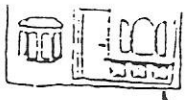
-it touches your skin;
-it gets in your eyes;
-it has toxic vapors which your breathe.

Be sure to carefully follow the printed directions which come with any paint remover. Most require good ventilation with open windows and exhaust fans. Some removers are highly flammable. Use removers containing methylene chloride only for touch-up work in well ventilated areas.

PAINT-ON ENCAPSULANTS AND OTHER ALTERNATIVE PROCEDURES

MDE continuously reviews new abatement procedures, including products such as paint-on encapsulants, which are not specifically allowed under Maryland regulations (COMAR 26.02.07). The use of such alternative procedures is encouraged, when appropriate, but must receive prior MDE approval. For more information about alternative procedures and products, contact the MDE Lead Poisoning Prevention Division at (410) 631-3859. A written plan must be provided to MDE for before final approval can be given for a specific project.

LEAD PAINT HAZARD
FACT SHEET #4
Containment of Lead Bearing Dust and Debris



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Follow the steps listed on this sheet to keep lead dust, fumes, and debris from spreading outside of the work area during lead abatement and renovations. Following these steps will also make cleanup of the work area much easier. A safe, complete lead paint abatement job cannot be done without containing all lead within the work area.

Any method of removing lead paint causes poisonous dust and debris to form. Using a heat gun will also create lead fumes. It is important to remember that lead fumes and dust are actually more dangerous than the large paint chips which are easy to see.

Containment is easier when methods which produce relatively low amounts of lead dust are used. When lead dust is likely to be produced, particularly during carpet removal, demolition, or cleanup, use a garden mister or spray bottle to wet the work area.

CONTAINMENT MATERIALS

- Polyethylene (plastic) sheets which are 6 mil thick
- Heavy duty tape, such as duct tape, to fasten and repair the plastic sheets
- Spray poly which can coat surfaces and then be removed by peeling
- Spray cement which comes in an aerosol can and is made to stick to polyethylene sheets
- Staple gun with industrial grade staples to fasten plastic sheets
- Disposable booties to cover shoes while in the work area
- Disposable coveralls

CONTAINMENT STEPS

A. Before Beginning To Remove Lead Paint

1. Removal all furniture and moveable items from the work area.
2. Cover all permanent items, such as radiators and refrigerators, with plastic sheets. Seal the sheets with heavy-duty tape.
3. Remove all carpeting from the work area. Carpeting which already has lead dust in it should be cleaned or replaced with new carpet <u>after</u> the project has been <u>completed</u>.

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